# WISCONSIN
## UNIVERSITY OF WISCONSIN–MADISON

# ACCESSIBILITY, USABILITY, AND SEARCH ENGINE OPTIMIZATION OF MYMONONA WEBSITE



# LIS 351: INTRODUCTION TO DIGITAL INFORMATION

## FALL 2016

**UNIVERCITY BETTER PLACES TOGETHER**

**MONONA**
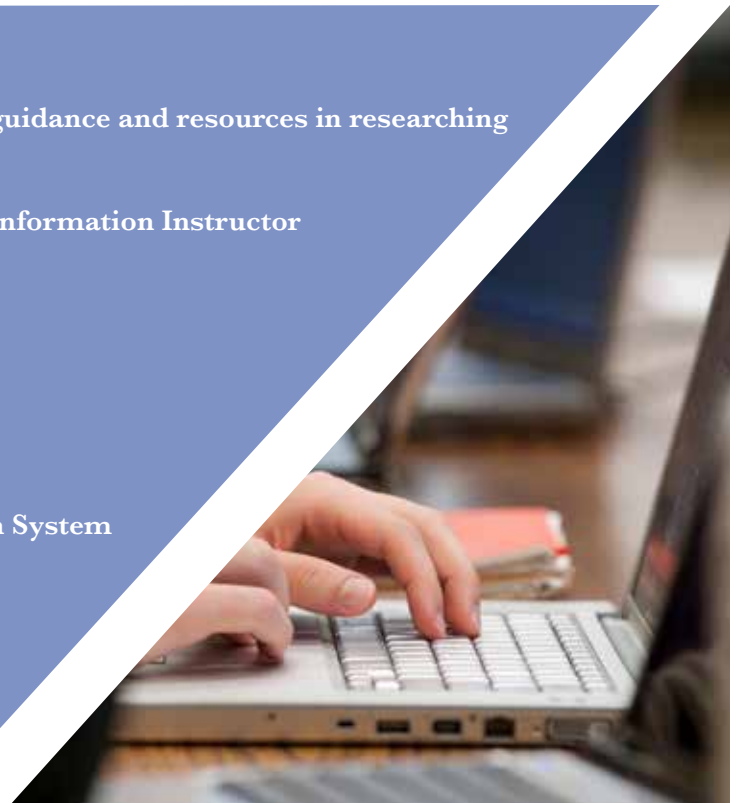
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# ACKNOWLEDGMENTS

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This report was produced in collaboration with the Library and Information Studies Department in the College of Letters and Science and the UniverCity Year at UW-Madison.

# EXECUTIVE SUMMARY

During the Fall 2016 semester at the University of Wisconsin-Madison, the Library and Information Studies 351 course studied the MyMonona webpage. Roughly 117 university students completed 45 final reports highlighting issues related to accessibility, usability and search-engine friendliness. Specifically, they analyzed these sites:

- Home Page/Overall MyMonona Website
- Applications and Permits
- Public Library
- Community Media
- Senior Center
- Open for Business
- Parks and Recreation

On many pages, small issues could be found. For a detailed analysis, refer to the students' final reports. Here we include a summary of the most common issues found and the most prevalent recommendations for MyMonona.

## Accessibility

- The majority of images do not have alternative text, and without this, screen readers, used by individuals who are visually impaired, cannot identify the images. To fix this, each image must have a short explanation of what it is displaying.

- There are multiple broken links that don't lead the user to another page. Make sure the link has an accurate URL.

- The color contrast between type and the background is difficult for users to see. To make the text easier to read, use a darker background with lighter font or vice versa.

- The type is often too small for the majority of viewers to read comfortably.

## Usability

- There is an overwhelming amount of text and menu options that are available, making the site appear to be disorderly and confusing.

- The site lacks a link that takes a user back to the main home page or the home page of the sub site they were previously on.

- Include the ability to submit forms or applications online, which can reduce the confusion of where and to whom to submit these forms.

## Search Engine Optimization (SEO)

- Pages have limited meta description, which gives information in HTML about a page's content. By increasing the meta description, a search engine can give a user a better idea of what will be on the page.

- There are missing header tags. These header tags distinguish a heading from a sub-heading or body text. By including header tags, search engines can distinguish the relevancy of the heading compared to the body text.

- The browser cache is disabled. Enabling this can reduce the server load and speed up response time.

- There is a lack of social media links on the site.

- Entering MyMonona to the DMOZ directory can help search rankings. This directory manages sites throughout the internet by the content's relevancy.
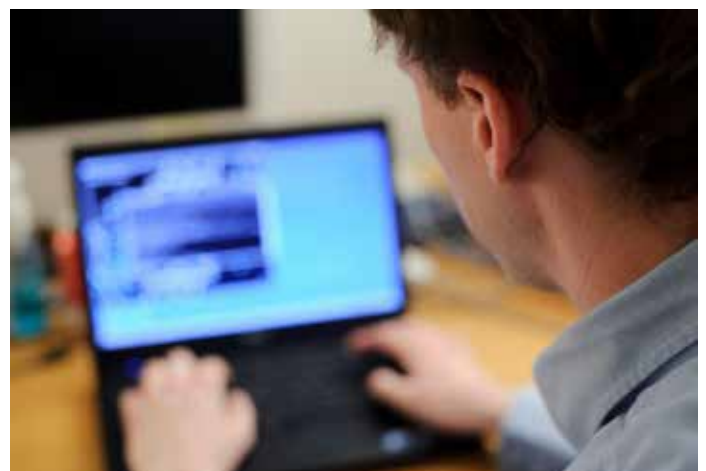


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# SECTION ONE:

# HOME PAGE/ENTIRE MYMONONA WEBSITE

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# UniverCity Monona Website Assignment

*www.mymonona.com*

By: Kali Krepline, Ashley Osbourne, Allison McGreaham, Abby Halla

# A. Overview

**Project Mission**

Assess the accessibility, usability, and search-engine friendliness of a portion of the City of Monona website, making actionable suggestions for improvement.

**Summary**

The following report includes a detailed assessment and analysis of the home page on UniverCity of Monona website. The home page went through accessibility testing through an accessibility website [Achecker](#) and usability testing by conducting one-on-one experiments with participants to test how easy they could find items on the website. Lastly, the search-engine friendliness of the website was assessed by using the website [Raven Tools](#). The results of each test and assessment were recorded and analyzed. Finally, we made reasonable suggestions to help improve the accessibility, usability, and search-engine friendliness of the UniverCity of Monona's website.

# B. Accessibility Test Results

Table 1 - AChecker Results

| Type of Problem | Error | Where the Error Occurs | Why it Matters | How to Fix It |
|---|---|---|---|---|
| Known Problem | Image used as anchor is missing valid Alt text. | Line 715, Column 1<br><br>Line 733, Column 1 | If an image is used as a link then it must have alternate (ALT) text that describes the link destination. The Alt text can't be null or all spaces. | Add Alt text that identifies the purpose or function of the image. |
| Known Problem | Header nesting - header following h1 is incorrect. | Line 130, Column 50 | The following header must be equal, one level greater or any level less. | Modify the header levels so only an h1 or h2 follows h1. |
| Likely Problem | List item used to format text. | Line 1295, Column 7<br>Line 1323, Column 6<br>Line 1337, Column 6<br>Line 1460, Column 5<br>Line 1498, Column 5 | OL element should not contain only one LI element. | Remove the OL and LI elements and replace them with other markup that properly formats the text. |

Accessibility defined is specialized jargon within the coding of a website for people with disabilities. It is important to have a fully accessible website to make sure everyone is able to actively participate.

We tested the Monona website's accessibility by using AChecker, an online web accessibility checker. The website was found to have 413 accessibility problems. AChecker splits the problems into three categories: known problems, likely problems, potential problems. Table 1 lists the three known problems and five likely problems that were identified. Potential problems have been left out as they are not as severe, but can be found in the appendix on page 17-29.

## Known Problem - Image used as anchor is missing valid Alt text
**Line 715, Column 1**      **Line 733, Column 1**

This error listed involves the image above that is being used as an anchor but is missing valid Alt text. The Alt text is a small sentence explaining what the image is and is only found in the html coding. Including Alt text is important for users who might be using a screen reader to navigate the page and need alternative text that describes the link destination.

**Example of the Error:**

<p><a href="rex.html"><img src="rex.jpg" alt=""/></a></p>

**Fixed Error:**

<p><a href="rex.html"><img src="rex.jpg" alt="a story about Rex the cat"/></a></p>

## Known Problem - Header nesting - header following h1 is incorrect
**Line 130, Column 50**

The error listed involves a incorrect use of headers by placing a header after h1 that does not follow the rules for headers. Any header after h1 must be equal or one level less than h1. For this error in the html the header in this line needs to either be h1 or h2, not h3 or lower.

**Example of the Error:**

<h1>The First Heading</h1>
<p>Here is some demo text.</p>
<div><div><h3>The bad Heading</h3></div></div>
<p>Here is some more demo text.</p>

**Fixed Error:**

<h1>The First Heading</h1>
<p>Here is some demo text.</p>
<h2>The Second Heading</h2>
<p>Here is some more demo text.</p>

## Likely Problem - List item used to format text
**Line 1295, Column 7**
**Line 1323, Column 6**
**Line 1337, Column 6**
**Line 1460, Column 5**
**Line 1498, Column 5**

The error listed involves a list that only contains one list item, which is seen as formating the text instead of creating a list. OL element should not contain only one LI element. There are two ways to fix this, either remove the OL and LI tags and use other markup that is appropriate for

formatting text or add more items to your list. The example below shows how to fix this error by adding more items to your list.

**Example of the Error:**

<ol>

<mark><li>Item text</li></mark>

</ol>

**Fixed Error:**

<ol>

<mark><li>Item text 1</li></mark>

<mark><li>Item text 2</li></mark>

</ol>

## Rules of Thumb for Accessibility

- Link text should be noticeable and make sense out of context
- It's better to have more text in a link than less
- Have strong text color contrast against the background
- Break the page up visually
- Write clearly and briefly
- Use "alt text" to describe images, transcribe audio, and to closed-caption or transcribe video

# C. Usability Test Results

We tested the Usability of the City of Monona's website by developing three test scenarios and recording the way four separate test participants in their early 20s went about finding the answers to our questions. We then compared our notes and looked for common trends in participant's experiences. We recorded the level of difficulty that each person experienced while looking for certain functions of the website as well as their thought process throughout their search. We asked them to go about the scenarios just as they would as if they were by themselves, but we asked that they verbalize every action they made and why they made it.

**Summary**
- In the first scenario the participants all agreed that the homepage was very cluttered and overwhelming.
- The News and Announcements section added to the clutter and the participants thought this information could have been better placed under the Calendar tab.
- The participants agreed that the navigation menu needed to be reorganized.
- The main tabs need to be very general so someone looking for something specific would know exactly which one to click on first then be able to find what they are looking for easily after.
- Every participant agreed that the website contained all the information they needed, it just needed to be sorted better. The organizational system was confusing and slightly repetitive in some cases.

## Suggestions
- Perform a card sort test to organize the excessive information on the homepage to reduce clutter
- Choose to keep one of the following on the homepage: News Section, Announcements Section. Relocate the one you choose to remove to the Calendar Tab.
- Perform a card sort to organize the navigation menu to reduce the number of options in the drop down tabs and rename the navigation menu headers.

If you would like to duplicate this test using the same script we used or see "word for word" the answers from our test participants, the script and answers are located in the appendix on page 10-16.

# D. SEO Test Results

Search engine optimization aims to increase the amount of visitors to a website by obtaining a high-ranking placement in the search results page of a search engine (SERP) -- including Google, Bing, Yahoo and other search engines. We tested the City of Monona's search engine optimization using RavenTools auditor which helped us identify problems such as broken links, redirects, and user experience (UX) improvements. We hope to provide key suggestions that will allow search engines to effectively lead people to Monona's site.

After compiling a list of all known SEO issues, there are some "best practices" that will allow the City of Monona to rank higher in search engines. By using site analytics such as Google Analytics, one can keep track of key search phrases and implement these keywords in the page's URL, <title>, <h1>, and site navigation links. Using consistent language and key terms in titles and headings will help with the page's ranking when these terms are searched for. Furthermore, by adding metadata and alt text to multimedia will help it rank higher in SEO. The more detail you provide through metadata, the easier it is for a search engine to filter through large sums of websites. Additionally, adding this metadata to multimedia will help with the website's accessibility.

We suggest fixing the broken links and redirects. In order to maximize search engine and user friendliness, it is imperative to make sure that navigation through the site is seamless and that no broken links hinder this. Additionally, browsing and adjusting the redirect links could also be beneficial. Lastly, Raventools hinted that there were a few problems in respect to mobile user experience. It was noted that the page content is too wide for the viewport, and forces the user to scroll horizontally. Additionally, some of the links/buttons on the webpage may be too small for a user to easily tap on a touchscreen.

## Summary
- Use consistent language and key terms in titles, headings, and URLs to improve page's ranking when these terms are searched for
- Add metadata and alternative text (alt text) to multimedia to describe the multimedia and what is in it
- Fix broken links and redirects

| Links Broken: | http://mymonona.com/CivicAlerts.aspx?AID=497 | |
|---|---|---|
| | http://www.mymonona.com/236/Maps-GIS | |
| | http://www.mymonona.com/FormCenter/Contact-Form-3/Contact-Form-43 | |
| Redirects: | http://www.mymonona.com/135/Community-Cable-Channel | redirected to http://www.mymonona.com/135/Community-Media |
| | http://www.mymonona.com/72/Intranet | redirected to http://www.mymonona.com/MyAccount?from=url&url=/72/Intranet&useSamlLo |

| | | gin=True&pageId=72 |
|---|---|---|
| | http://www.mymonona.com/960/Monona-Riverfront | redirected to http://www.mymonona.com/960/Riverfront-Redevelopment |
| | http://www.mymonona.com/accessibility.aspx | redirected to http://www.mymonona.com/Site/Accessibility |
| | http://www.mymonona.com/copyright.aspx | redirected to http://www.mymonona.com/Site/Copyright |

**Desktop page speed performance:**

- Leverage browser caching
- Eliminate render-blocking JavaScript and CSS in above-the-fold content
- Reduce server response time
- Optimize images
- Enable compression
- Minify HTML
- Minify CSS
- Minify JavaScript

**Mobile page speed performance:**

- Leverage browser caching
- Eliminate render-blocking JavaScript and CSS in above-the-fold content
- Reduce server response time
- Optimize images
- Enable compression
- Minify HTML
- Minify CSS
- Minify JavaScript

**Mobile User Experience (UX)**

- Size content to viewport
  - The page content is too wide for the viewport, forcing the user to scroll horizontally.
- Size tap targets appropriately
  - Some of the links/buttons on your webpage may be too small for a user to easily tap on a touchscreen

You can replicate these results by plugging in http://www.mymonona.com/ into RavenTools auditor at https://auditor.raventools.com/#sites

# Monona Usability Test Script and Observations

## Welcome and Purpose

Thank you so much for coming in today.  I wanted to give you a little information about what you will be looking at and give you time to ask any questions you might have before we get started.

Today we are asking you to serve as an evaluator of a Web site and to complete a set of tasks. Our goal is to see how easy or difficult you find the site to use.

## Test Facilitator's Role

I am here to record your reactions and comments of the Web site you will view.  During this session, I would like you to think aloud as you work to complete the tasks. I may ask you to clarify what you have said or ask you for information on what you were looking for or what you expect to have happen.

## Test Participant's Role

- Today I am going to be asking you to look for some information on the site and tell me how easy or difficult it was to find the information. These activities are all about how easy we have made it for people to use the site.
- There is no right or wrong answer.  If you have any questions, comments or areas of confusion while you are working, please let me know.
- If you ever feel that you are lost or cannot complete a task with the information that you have been given, please let me know. I will ask you what you might do in a real-world setting and then either put you on the right track or move you on to the next scenario.
-  As you use the site, please do so as you would at home or your office. I would ask that you to try work through the tasks based on what you see on screen, but if you reach a point where you are not sure where or how to find something, please feel free to use 'Search'.
- We will be recording this session for reference if needed. We are capturing your face, your voice and what you see on the screen. Your name will not be associated or reported with data or findings from this evaluation.
- I may ask you other questions as we go and we will have wrap up questions at the end.

Do you have any questions before we begin?

## Scenario #1:

Imagine you just moved to the city of Monona. Go to the home page (mymonona.com).

1. **What initially catches your eye?**
   - Watermarks on the heading, the beach, the cycling pictures, the layout of the webpage are nice and simple and they present relevant information
   - It looks very outdated and extremely basic
   - It seems really cluttered. There is a lot of text that you are presented with right away and it is a little overwhelming. I also noticed that the first picture that pops up is of two elderly women. It makes me think that most of the community will be senior citizens because that is the first thing i was presented with.
   - The big pictures on the front of the screen that are flashing and the titles. "Open for Business" was seen first title that caught my eye. Finally, I saw the images below the big flashing image.

2. **Would you prefer to see upcoming events in the News & Announcements section or on the sidebar under Calendar?**
   - Place them under both. Sidebar shows the information right away and the calendar can   show more events.
   - Prefer to see upcoming events in the sidebar under calendar in a place where you do not have to scroll down to see what events are coming up.
   - Definitely under the calendar. I would actually get rid of the news and announcements section all together. It makes the page seem cluttered. I also am confused about why there are two separate sections for the calendar and the community events… isn't that the same thing?
   - Under Calendar, considering I didn't even think to scroll down to see the most important things.

3. Is there any items or information that you would take off of the homepage?
   - The icons under the cycling pictures. They seem misplaced/inappropriate in that spot
   - All of the information seems pretty relevant for a citizen that just moved to the city.
   - Just the news and announcements section. I also might put the icons at the end of the page. There is just a lot happening.
   - A lot of it makes sense, but some of it is wasting space. I don't even know what "Intranet" is. The titles in the left side bar don't look clickable (even though they are) There are too many options in the left sidebar. Maybe you'd need them all if you were a Senior Citizen.

**Since you don't know many people in the area, you want to learn about the different recreational programs that are offered to the community. Do not use the search bar to look up the answer but use the navigation bar to find out about the movie schedule for October.**

**Please say aloud the different steps you take to find the schedule. If you cannot find the schedule, where would you expect to find the schedule?**

- Expect under community events. Not an actual movie sub tab, so let's try the agenda tab. Not so much. Under community? Not much there either. Community center? Not there. Classes and activities? I don't even think they have a movie. Go back to homepage and then to our community tab. Tried for a little while longer going through all of the side tabs and the top directory tabs and have yet to find it. Went to i want to tab and still did not find it. Expect to find it under our community and subsection recreational activities. Search in the tab and found it under the senior citizen tab. Facial expressions showed signs of confusion.

- Expected to find under our community in the parks & recreation subcategory. She then directed to special events to look there and still could not find the schedule. Lastly, she went to community media and was still unable to find the page. Finally had to search in the search bar to find what she was looking for.

- First ill check out the "Our Community" tab and see if there is anything about movies under there. I'm not really sure.. I'll check the "Your Services" tab next. Doesn't really seem like there is anything under that one either about movies. I guess I'll just go to the our community tab again and click on featured videos. Hmm this is not what I wanted. I guess I'll try parks and recreation. I honestly have no idea where the movie schedule would be. I would put it under a tab named something like "Things to do in Monona".

- I'm going to start by looking in "Our Community" drop down menu. Now I'm looking for anything that says movies or recreation; I see parks and recreation but do not see "movies" under there. I'm clicking on "Community center" and I see the address. Now I'm clicking on the Newsletter, but it's not in there. I'm starting over at the homepage again and I'm looking in "I want to…" but I don't find anything related to movies. Instead, I'll check the left side bar on the homepage and click on "Community Media" thinking that music might lead to movies. I found a "TV Schedule", but no movie schedule. I'm not sure where to find the movies so I'm going to type "October Movie" in the search bar. Only the October 2015 movie list came up but not the 2016 one.

**Now that you have found the schedule….What did you think of the *organization* of the navigation bar to find what you were looking for?**

- Awful, had to know what you're looking for and no one would have thought to look     under senior citizens to find movie times

- The navigation bar was super cluttered/busy and she was frustrated that she couldn't find a page even remotely similar to what she was trying to accomplish

- I think it was pretty awful. I had to use the search to find anything about movies. Then even after searching for the movies there was a huge list of documents that came up which was not what I was expecting.

- If I were a senior I would look there, but if the movies are meant for more than just seniors then I would not know to look there. I didn't feel I should click on it

because it's under the senior tab, but at the same time it states on the page that the movies are open to the public. Unless they are only advertising to old people, it makes sense.

- **What steps could be done to improve the organization of the navigation bar?**
    - Tab for just general recreations. One for senior citizens and one for all the recreational    activities.
    - Declutter!
    - There are way too many things that pop up under each tab. It is very confusing and not sorted well at all. I think there should be less than ten sections that come up when you hover over the tab.
    - More general categories.

- **Is there any sections you would combine?**
    - "I want to" can go within each of the four other tabs. Our services and community go together but also goes under your government. I suppose they are good to be on their own.
    - "Our Community" and "I want to Explore"
    - I'm not sure I would keep any of the sections honestly. I think there should be a things to do tab for sure and then a services tab for the things like snow removal, trash, or utilities, then maybe a government page.
    - I would combine agendas and minutes, city projects and bids, riverfront development into one group. Looking for employment opportunities and job openings into another group. And Police Department and Fire/EMS into another group.

- **How was the organization of the home page?**
    - Simple and nice. Have the information that you would want to look for on the homepage
    - The organization is fine, just very basic
    - Not good.
    - I like the big letters at the top of it because they show you what to do. When you hover over the words the drop down menus that show up have too much going on; So many options. Categorize them more and get rid of the little options. Otherwise, not too much on there so it doesn't give you a headache. In addition, it doesn't show the movies very easily.
- **Did you find it to be too busy, not enough information, or just right?**
    - Just right

- ○ I found there was a very bad system for organizing the information. It was confusing and it seemed like things were repeated or hidden behind three or four other pages.
- ○ I don't think that the right information is being displayed. There is enough word, photos, etc., but it could be more organized. The organization is the thing that is messing me up. Too much of the wrong thing and not enough of the right thing.

# Scenario #2

**Now, imagine you have received a citation and need to pay it to the City of Monona. Navigate to find the address where your fine can be mailed as well as the name of the Clerk of Court. Once you have found the address, navigate to the online payment link. If you cannot find where the citation can be paid, where would you expect to find the information regarding payment?**
- I want to.. Then pay, citation. There we go, pay citation online with a nice golden tab. On the same page, can find the address to mail your fine to the judge.
- She was looking for awhile on the "my government" and "I want to" navigation bar headings until she found court payments. Once directed to the page it was very easy to pay and find information.
- Went to the "I Want to.." Tab and clicked "Citations and court fees". I found the clerk's name and address and then quickly found the "Online Payments" link after that.

   **Did you expect to find this here?**
- Yes, because i would say i want to and then pay. It directs you in the direction you would want to look
- No, she thought it would be under "My government" initially
- Yes, it was logical.

- **How was this experience for you?**
  - ○ This one was a lot easier to find than the movie
  - Not too bad, much easier this time
  - This one wasn't as bad at the first one. I was able to find the place to pay citations pretty easily.
  - This one was easier. I knew the citations was under "I want to" because I saw it when looking for the movies. "I want to..." is very vague but was pretty good in helping me find the information.

- **Would a technologically impaired user be able to pay a citation they received with ease?**

- I suppose, but if I was my parents, they wouldn't know just because they wouldn't think to go to the i want to tab and then citations just because they are not good with technology
- Probably not. They would need lots of help finding the court payments webpage, but once directed there it would be pretty easy.
- Yea I think so.
- No, I think about my dad trying to pay it and would end up calling and asking where to pay. There are so many different steps, which causes an issue. Someone that is not as savvy might not find it. More important things should be on the homepage, like a button that says "Pay Citations" and takes you to that page.

- **How could Monona make it easier to pay a citation?**
  - Recommend bookmarking or putting a call out link on the homepage to pay a citation so it is easy to do right away if people are already on the homepage and it seems to be a relatively regular task people are coming to the website for.
  - Maybe just making the link a little more noticeable from the homepage.
  - By putting the more important things on the homepage with options to other important things.

# Scenario #3

**We are now going to ask you to sort the following into 1 of 5 categories where you expect to find relevant information:**

1. Your Government
2. Your Services
3. Our Community
4. Open for Business
5. I Want To…

**If you are unsure of where an item would fall, please say aloud what heading you would place the item under if not listed above.**

- Mayor
- Library
- Parks & Recreation
- Farmers Market

  - Mayor-government
  - Library-our community
  - Parks and rec-our community
  - Farmers market- our community or open for business

  - Mayor-government

- Library-your services
- Parks & Recreation-our community
- Farmers market- our community

- Mayor- your government
- Library- your services
- Parks & Recreation- our community or open for business
- Farmers Market- our community or open for business

- Mayor – Your Government
- Library  - Our Community
- Parks & Recreation  - Our Community
- Farmers Market – Our Community

**Do you have any final thoughts on the website that  you would like to share before we conclude this test?**
- Simple and straightforward. If you could read then you can navigate your way through it. Except for the movie one, that was tough
- Just restructure the navigation bar since it is so cluttered and hard to find things.
- I think that the website includes a lot of great information, the organizational system just kind of sucks. There are too many links and text on pretty much all of the pages. It could also be easier to include some more pictures or little emojis next to the links so it would be easier to locate things for people who don't use the internet very much.
- Nope.

Thank you for taking the time to help us in the usability testing of the City of Monona website.

# Accessibility Testing Observations -AChecker

| Error | Where the error occurs | Why it Matters (Rationale) | How to Fix |
|---|---|---|---|
| **Known Problems (3)** | | | |
| Image used as anchor is missing valid Alt text. | Line 715, Column 1<br><br>Line 733, Column 1 | If an image is used as a link then it must have alternate (ALT) text that describes the link destination. The Alt text can't be null or all spaces. | Add Alt text that identifies the purpose or function of the image. |
| Header nesting - header following h1 is incorrect. | Line 130, Column 50 | The following header must be equal, one level greater or any level less. | Modify the header levels so only an h1 or h2 follows h1. |
| **Likely Problems (5)** | | | |
| List item used to format text. | Line 1295 Column 7<br>Line 1323 Column 6<br>Line 1337 Column 6<br>Line 1460 Column 5<br>Line 1498 Column 5 | OL element should not contain only one LI element. | Remove the OL and LI elements and replace them with other markup that properly formats the text. |
| **Potential Problems (405)** | | | |
| img element may require a long description. | Line 140 Column 49<br>Line 471 Column 6<br>Line 478 Column 6<br>Line 697 Column 1<br>Line 706 Column 1<br>Line 715 Column 1<br>Line 724 Column 1<br>Line 733 Column 1<br>Line 1023 Column 153<br>Line 1463 Column 5<br>Line 1569 Column 14 | Complex images require a long description if the image is not described within the document. If the image does require a long description, then create the description file and link to it using the longdesc attribute. | Add a long description for any image that is not fully described by the Alt text. |
| Alt text is not empty and image may be decorative. | Line 140, Column 49<br>Line 205, Column 106<br>Line 265, Column 9<br>Line 316, Column 9<br>Line 471, Column 6 | Alt text for all img elements is the empty string ("") if the image is decorative. | Change the Alt text to an empty string ("") or confirm that the image is not decorative. |

| | | | |
|---|---|---|---|
| | Line 478, Column 6<br>Line 697, Column 1<br>Line 706, Column 1<br>Line 724. Column 1<br>Line 1023, Column 153<br>Line 1463, Column 5<br>Line 1569, Column 14 | | |
| Alt text does not convey the same information as the image | Line 265, Column 9<br>Line 316, Column 9<br>Line 471, Column 6<br>Line 1463, Column 5<br>Line 1569, Column 14 | Alt text for all img elements that are not used as source anchors conveys the same information as the image | Alt text must be appropriate and meaningful for an image |
| Img has title attribute and image may be decorative | Line 471, Column 6<br>Line 478, Column 6<br>Line 1023, Column 153<br>Line 1463, Column 5 | Title attribute for all img elements is absent or the empty string ("") if the image is decorative. | Remove the title attribute if the image is decorative |
| Tabular information may be missing table markup | Line 79, Column 1 | Table markup is used for all tabular information | Add table markup (table, tr, th, td) to tabular information |
| Visual lists may not be properly marked | Line 79, Column 1 | All visual lists are marked | Mark all lists |
| Unicode right-to-left marks or left-to-right marks may be required | Line 79, Column 1 | Unicode right-to-left or left-to-right marks are used whenever the HTML bidirectional algorithm produces undesirable results | Add unicode right-to-left or left-to-right marks to HTML |
| Dir attribute may be required to identify changes in text direction | Line 79, Column 1 | All changes in text direction are marked using the dir attribute | Add dir attribute to inline elements that mark blocks of text that have a reading order different from the documents primary language |
| Input element label, type of "text", is not positioned close to control | Line 204, Column 3 | All input elements, type of "text", have a label that is positioned close to the control | Position the label close to the control |
| Text may refer to items by shape, size, or relative position alone. | Line 79, Column 1 | All text references do not use shape, size, or relative position alone. | 1.View the document text and determine if there are references to |

| | | | |
|---|---|---|---|
| | | | other items in the document.<br>2. Determine if the references use shape, size, or relative position alone.<br>3. The references to other items must be indicated in ways that do not use visual perception. |
| Image may be using color alone. | Line 140, Column 49<br>Line 471, Column 6<br>Line 478, Column 6<br>Line 697, Column 1<br>Line 706, Column 1<br>Line 715, Column 1<br>Line 724, Column 1<br>Line 733, Column 1<br>Line 1023, Column 153<br>Like 1463, Column 5<br>Line 1569, Column 14 | You should not describe an image, or part of an image, using color alone. For example, when referring to a photograph, you should not say "my son is wearing a red coat". Instead say "my son is third from the left wearing a red coat". | For all img elements, text does not refer to the image by color alone. |
| Image may contain text with poor contrast | Line 140, Column 49<br>Line 205, Column 106<br>Line 265, Column 9<br>Line 316, Column 9<br>Line 471, Column 6<br>Line 478, Column 6<br>Line 697, Column 1<br>Line 706, Column 1<br>Line 715, Column 1<br>Line 724, Column 1<br>Line 733, Column 1<br>Line 1023, Column 153<br>Line 1463, Column 5<br>Line 1569, Column 14 | Make sure that users can read text that is presented over a background. | The luminosity contrast ratio between text and background color in all images is at least 5:1. |
| input possibly using color alone. | Line 204, Column 3 | input should not use color alone. | The input elements are expected to avoid using color alone. |
| script may use color alone. | Line 6, Column 2<br>Line 38, Column 2<br>Line 46, Column 2<br>Line 48, Column 2<br>Line 59, Column 2<br>Line 73, Column 2 | Color alone should not be used in the script. | View the operation of each SCRIPT in the document and make sure the script does not use color alone. |

| | | | |
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| | Line 110, Column 1<br>Line 151, Column 3<br>Line 152, Column 2<br>Line 153, Column 2<br>Line 258, Column 3<br>Line 309, Column 3<br>Line 377, Column 2<br>Line 467, Column 4<br>Line 486, Column 2<br>Line 551, Column 1<br>Line 601, Column 1<br>Line 758, Column 77<br>Line 980, Column 2<br>Line 1274, Column 1<br>Line 1332, Column 1<br>Line 1471, Column 1<br>Line 1511, Column 1<br>Line 1548, Column 2<br>Line 1553, Column 5<br>Line 1555, Column 1<br>Line 1571, Column 126<br>Line 1575, Column 10<br>Line 1578, Column 1<br>Line 1597, Column 2 | | |
| Image may contain text that is not in Alt text. | Line 140, Column 49<br>Line 471, Column 6<br>Line 478, Column 6<br>Line 697, Column 1<br>Line 706, Column 1<br>Line 715, Column 1<br>Line 724, Column 1<br>Line 733, Column 1<br>Line 1023, Column 153<br>Line 1463, Column 5<br>Line 1569, Column 14 | Alt text for all img elements contains all text in the image unless the image text is decorative or appears elsewhere in the document. | For each img element in the document, check if the associated image contains any text. If the image contains text, check if the text is decorative. If the text is not decorative, check if the text appears in the longdesc attribute or elsewhere in the document content. Any text in image is also in Alt text or text in image is decorative or redundant. |
| script user interface may not be accessible. | Line 6, Column 2<br>Line 38, Column 2<br>Line 46, Column 2<br>Line 48, Column 2<br>Line 59, Column 2<br>Line 73, Column 2<br>Line 110, Column 1<br>Line 151, Column 1 | User interface for script must be accessible. | View the operation of each script in the content. Check if the script user interface may be accessed by the keyboard. The script user interface must be accessible from the |

| | | | |
|---|---|---|---|
| | Line 152, Column 2<br>Line 153, Column 2<br>Line 258, Column 3<br>Line 309, Column 3<br>Line 377, Column 2<br>Line 467, Column 4<br>Line 486, Column 2<br>Line 551, Column 1<br>Line 601, Column 1<br>Line 758, Column 77<br>Line 980, Column 2<br>Line 1274, Column 1<br>Line 1332, Column 1<br>Line 1347, Column 2<br>Line 1471, Column 1<br>Line 1511, Column 1<br>Line 1548, Column 2<br>Line 1553, Column 5<br>Line 1555, Column 1<br>Line 1571, Column 126<br>Line 1575, Column 10<br>Line 1578, Column 1<br>Line 1597, Column 2 | | keyboard. |
| script may cause screen flicker. | Line 6, Column 2<br>Line 38, Column 2<br>Line 46, Column 2<br>Line 48, Column 2<br>Line 59, Column 2<br>Line 73, Column 2<br>Line 110, Column 1<br>Line 151, Column 3<br>Line 152, Column 2<br>Line 153, Column 2<br>Line 258, Column 3<br>Line 309, Column 3<br>Line 377, Column 2<br>Line 467, Column 4<br>Line 486, Column 2<br>Line 551, Column 1<br>Line 601, Column 1<br>Line 758, Column 77<br>Line 980, Column 2<br>Line 1274, Column 1<br>Line 1332, Column 1<br>Line 1347, Column 2<br>Line 1471, Column 1<br>Line 1511, Column 1<br>Line 1548, Column 2<br>Line 1553, Column 5 | script should not cause screen flicker. Important to not design content in a way that is known to cause seizures. | View the operation of each script in the document. |

| | Line 1555, Column 1<br>Line 1571, Column 126<br>Line 1575, Column 10<br>Line 1578, Column 1<br>Line 1597, Column 2 | | |
|---|---|---|---|
| Document may be missing a "skip to content" link. | Line 79, Column 1 | A "skip to content" link appears on all pages with blocks of material prior to the main document. | Determine if the document contains a block of material prior to the main content. Check if the document contains a link that bypasses the block of material and goes to the main content. Check if the "skip to content" link is the first link in the document. Check if the "skip to content" link is identified properly (i.e. the link text is "skip to content" or "skip navigation"). Document contains a "skip to content" link or does not require it. |
| Groups of links with a related purpose are not marked. | Line 79, Column 1 | When links are grouped into logical sets (for example, in a navigation bar or main menu that appears on every page in a site) they should be marked up as a unit. | View the document and find groups of links (anchor elements). Determine if the groups of links are related. Determine if the groups of links are marked. All groups of links with a related purpose are marked. |
| title might not describe the document. | Line 31, Column 2 | All contents, including individual frames in a frameset, should have a title element that defines, in a simple phrase, the purpose of the content. | View the text that is contained by the title element. Title describes the document. |
| Link text may not be meaningful. | Line 82, Column 1<br>Line 104, Column 29<br>Line 106, Column 17<br>Line 139, Column 4 | All a (anchor) elements that contains any text will generate this error. Link text is meaningful | Check each a (anchor) element that contains one or more characters. View the link text and |

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| | Line 205, Column 6<br>Line 272, Column 28<br>Line 273, Column 28<br>Line 274, Column 28<br>Line 275, Column 28<br>Line 276, Column 28<br>Line 277, Column 28<br>Line 278, Column 28<br>Line 279, Column 28<br>Line 280, Column 28<br>Line 323, Column 28<br>Line 324, Column 28<br>Line 325, Column 28<br>Line 326, Column 28<br>Line 327, Column 28<br>Line 328, Column 28<br>Line 329, Column 28<br>Line 330, Column 28<br>Line 331, Column 28<br>Line 332, Column 28<br>Line 356, Column 4<br>Line 360, Column 4<br>Line 364, Column 4<br>Line 368, Column 4<br>Line 372, Column 4<br>Line 477, Column 6<br>Line 696, Column 41<br>Line 705, Column 41<br>Line 714, Column 41<br>Line 723, Column 41<br>Line 732, Column 41<br>Line 804, Column 11<br>Line 807, Column 7<br>Line 816, Column 30<br>Line 817, Column 100<br>Line 822, Column 30<br>Line 823, Column 121<br>Line 828, Column 30<br>Line 829, Column 97<br>Line 834, Column 30<br>Line 835, Column 30<br>Line 840, Column 30<br>Line 841, Column 105<br>Line 934, Column 6<br>Line 937, Column 6<br>Line 940, Column 6<br>Line 943, Column 6<br>Line 946, Column 6<br>Line 949, Column 6<br>Line 952, Column 6 | when red out of context. | confirm that it is meaningful when read out of context. Link text is meaningful when read out of context. |

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| | Line 955, Column 6<br>Line 958, Column 6<br>Line 961, Column 6<br>Line 964, Column 6<br>Line 967, Column 6<br>Line 970, Column 6<br>Line 973, Column 6<br>Line 976, Column 6<br>Line 1023, Column 93<br>Line 1062, Column 12<br>Line 1065, Column 9<br>Line 1089, Column 46<br>Line 1091, Column 9<br>Line 1108, Column 46<br>Line 1110, Column 9<br>Line 1127, Column 46<br>Line 1129, COlumn 9<br>Line 1178, Column 12<br>Line 1181, Column  9<br>Line 1205, Column 46<br>Line 1207, Column 9<br>Line 1224, Column 46<br>Line 1226, Column 9<br>Line 1243, Column 46<br>Line 1245, Column 9<br>Line 1292, Column 9<br>Line 1313, Column 24<br>Line 1316, Column 18<br>Line 1324, Column 26<br>Line 1338, Column 20<br>Line 1503, Column 1<br>Line 1503, Column 24<br>Line 1503, Column 59<br>Line 1503, Column 141<br>Line 1503, Column 215<br>Line 1503, Column 264<br>Line 1503, Column 303 | | |
| Anchor text may not identify the link destination. | Line 82, Column 1<br>Line 104, Column 29<br>Line 106, Column 17<br>Line 139, Column 4<br>Line 205, Column 6<br>Line 272, Column 28<br>Line 273, Column 28<br>Line 271, Column 28<br>Line 275, Column 28<br>Line 276, Column 28<br>Line 277, Column 28<br>Line 278, Column 28 | All source anchors contain text that identifies the link destination | Add text within the source anchor that identifies the link destination. |

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| | Line 279, Column 28<br>Line 280, Column 28<br>Line 323, Column 28<br>Line 324, Column 28<br>Line 325, Column 28<br>Line 326, Column 28<br>Line 327, Column 28<br>Line 328, Column 28<br>Line 329,  Column 28<br>Line 330,  Column 28<br>Line 331,  Column 28<br>Line 332,  Column 28<br>Line 356, Column 4<br>Line 360, Column 4<br>Line 364,Column 4<br>Line 368, Column 4<br>Line 372, Column 4<br>Line 447, Column 6<br>Line 696, Column 41<br>Line 705, Column 41<br>Line 714, Column 41<br>Line 723, Column 41<br>Line 732, Column 41<br>Line 804, Column 11<br>Line 807, Column 7<br>Line 816, Column 30<br>Line 817, Column 100<br>Line 822, Column 30<br>Line 823, Column 121<br>Line 828, Column 30<br>Line 829, Column 97<br>Line 834, Column  30<br>Line 835, Column  30<br>Line 840, Column  30<br>Line 841, Column  105<br>Line 884, Column 4<br>Line 904, Column 3<br>Line 934, Column 6<br>Line 937 Column 6<br>Line 940, Column 6<br>Line 943, Column 6<br>Line 946, Column 6<br>Line 949, Column 6<br>Line 952, Column 6<br>Line 955, Column 6<br>Line 958, Column 6<br>Line 961, Column 6<br>Line 964, Column 6<br>Line 967, Column 6<br>Line 970, Column 6 | | |

| | Line 973, Column 6<br>Line 1023, Column 6<br>Line 1062, Column 12<br>Line 1065, Column 9<br>Line 1089, Column 46<br>Line 1091, Column 9<br>Line 1108, Column 46<br>Line 1110, Column 9<br>Line 1127, Column 46<br>Line 1129, Column 9<br>Line 1178, Column 12<br>Line 1181, Column 9<br>Line 1205, Column 46<br>Line 1207, Column 9<br>Line 1124, Column 46<br>Line 1126, Column 9<br>Line 1243, Column 46<br>Line 1245, Column 9<br>Line 1292, Column 9<br>Line 1313, Column 24<br>Line 1324, Column 26<br>Line 1338, Column 20<br>Line 1503, Column 1<br>Line 1503, Column 24<br>Line 1503, Column 59<br>Line 1503, Column 141<br>Line 1503, Column 215<br>Line 1503, Column 264<br>Line 1503, Column 303 | | |
|---|---|---|---|
| Site missing site map. | Line 79, Column 1 | Each site must have a site map. | Check is this page is part of a collection of pages. If part of a collection, check if there is a site map for the collection. Each collection is expected to contain a site map. |
| h1 may be used for formatting. | Line 130, Column 50 | h1 may be used for formatting. Use the proper markup. | Check the contents of each h1 element. All h1 elements are not used for formatting. |
| h3 may be used for formatting. | Line 265, Column 5<br>Line 316, Column 5<br>Line 804, Column 5<br>Line 883, Column 7<br>Line 903, Column 3<br>Line 1062, Column 8 | h3 may be used for formatting. Use the proper markup. | Check the contents of each h3 element. All h3 elements are not used for formatting. |

| | Line 1178, Column 8<br>Line 1292, Column 5 | | |
|---|---|---|---|
| h4 may be used for formatting. | Line 816, Column 6<br>Line 822, Column 6<br>Line 828, Column 6<br>Line 834, Column 6<br>Line 840, Column 6<br>Line 1088, Column 9<br>Line 1107, Column 9<br>Line 1126, Column 9<br>Line 1204, Column 9<br>Line 1223, Column 9<br>Line 1242, Column 9 | h4 may be used for formatting. Use the proper markup. | Check the contents of each h4 element. All h4 elements are not used for formatting. |
| Words or phrases that are not in the document's primary language may not be identified. | Line 79, Column 1 | If you use a number of different languages on a page, make sure that any changes in language are clearly identified by use of the lang attribute. | Check the document for any words or phrases that are not in the document's primary language. Check if these words are marked using the lang attribute. Words and phrases not in the document's primary language are marked. |
| Change of context may occur without user activation. | Line 697, Column 1<br>Line 706, Column 1<br>Line 715, Column 1<br>Line 724, Column 1<br>Line 733, Column 1 | Provide a method for activating things that is predictable by the user. | Move the keyboard focus through all document content. Watch for new windows to appear. If change of focus causes new window to appear check if there is a warning message to user. Change of context occurs only by user activation unless a warning is provided. |
| Repeated components may not appear in the same relative order each time they appear. | Line 79, Column 1 | Maintain consistent layout or presentation between Web units by presenting components that are repeated in these Web units in the same relative order | Determine which components are repeated on all pages within the site. Check that the components appear in the same relative order on this |

| | | each time they appear. Other components can be inserted between them, but their relative order is not changed. | page. Repeated components appear in the same relative order each time they appear. |
|---|---|---|---|
| Long quotations may not be marked using the blockquote element. | Line 79, Column 1 | The proper marking of text content makes it easier to understand. | View the text within the document and identify and block quotes. Check if the text blocks are marked using the blockquote element. Blockquotes within the document are expected to be marked using the blockquote element. |
| label may not describe its associated control. | Line 85, Column 9<br>Line 86, Column 2<br>Line 87, Column 2<br>Line 88, Column 2<br>Line 89, Column 2<br>Line 90, Column 2<br>Line 91, Column 2<br>Line 92, Column 2<br>Line 204, Column 3<br>Line 405, Column 85<br>Line 405, Column 144<br>Line 462, Column 9<br>Line 463, Column 9<br>Line 465, Column 2<br>Line 762, Column 2<br>Line 763, Column 2<br>Line 764, Column 2<br>Line 765, Column 2<br>Line 766, Column 2<br>Line 767, Column 2 | | |
| input element, type of "text", label may not describe the purpose or function of the control. | Line 204, Column 3 | All input elements, type of "text", have a label that describes the purpose or function of the control. | Check all input elements that have a type attribute value of "text". The element must have an explicitly associated label using one or more of the following methods. The input element has an id attribute value that matches the for attribute value of a label |

| | | | element. And/or the input element has a title attribute. And/or the input element is contained by a label element. Check if the label text describes the purpose or function of the control. All input elements, type of "text", have a label that describes the purpose or function of the control. |
|---|---|---|---|

Danielle Lindenbaum
Capstone Project

# Opening Explanation

Hi, _____. My name is Danielle. Thank you so much for choosing to participate today. First, I want to walk you through what will occur throughout this session. Please feel free to interrupt at any point if you have any questions.

For our research, we will be asking people to use a website that we are working to improve. This session should not take more than 20 minutes. Your responses will be kept confidential within our research group.

It is important to note that we are testing the website, not testing you. There is no such thing as making a mistake. In fact, your "mistakes" will help us improve the site.

As you navigate through the site, it would be so helpful if you could think out loud: to say what you're looking at, what you're trying to do, what you're experiencing, and what you're thinking. This will let us know if anything about the site is confusing or beneficial.

If you say anything negative, do not feel as though you are offending us - it will only help us in the end! In order for this to work, we appreciate any and all honest opinions.

If you have any questions as you navigate the site, you can ask them. However, we just might not be able to answer them right away because we are trying to see how someone interacts with the site as if we were not here. If you feel like you need a break, please do not hesitate to ask for one.

With your permission, we will be recording for reference if needed. This footage will only be used within our research group and your identity will remain anonymous.

We may ask you other questions throughout the session and we may have questions for you once the session is completed.

Thank you again for participating. If you have any questions before we begin please feel free to ask them now.

University of Monona Home Page Evaluation

**Classification "Minor Annoyance"**
**Platform "Windows 7"**
**Can it be reproduced? "Every time"**

**Scenarios/Usability Tests:**

SCENARIO 1:
Example: You're a new resident and are looking to find employment options and apply for jobs in Monona.
Task:
1. Navigate mymonona.com to find a listing of current employment opportunities
2. Successfully submit a job interest card
3. Save, download and print the card and bring to City of Monona officials

Scenario 2
Example: You are a resident looking to get involved in the sustainability initiatives in Monona.
Task:
1. Locate the city of Monona's list of sustainability partners
2. Locate information about how the UniverCityYear project will make it easier and safer to use active transportation.
3. Submit a citizen committee application for the Sustainability Committee

Scenario 3:
Example: You are looking to get more involved in city projects and activities in Monona.
Task:
1. Locate the city of Monona's city projects and bids
2. Locate information on current city projects that are available to you to take part in
3. Save, download, and print a copy of one of the Schluter Park project and go to the park's website

Scenario 4: As a Monona resident you're attempting to pay your water/sewer utility bill online.
Task:
1. Locate the online bill payment options
2. Find and note the Monona jurisdiction code used for submitting utility bill payments
3. Copy and paste the link of the external site used by the city of Monona for bill payment
   a. Note how many clicks it took you to get to this site


Scenario 5: As you just received a citation you want to pay it online
1. Locate the Police Department tab in the drop down menu
2. Find the link that leads to you paying the citation online
3. Click on the online citation paying link and fill it out


**Scenario/Usability Test Results and Struggles:**

Scenario 1 Notes:
- Took two clicks for most users to find the job interest card page
- The selection was limited so users were confused if they were in the right spot
- There was confusion in how to save, download, and print the card since there was not a button that clearly indicated "save", "download", "print"
- There was a lot of information regarding the few jobs that were available which distracted them from figuring out how to successfully submit the job interest card
- Font choice and color was easy to read

Scenario 2 Notes:
- Most users did not have any difficulty finding the sustainability tab
- Began to get confused when looking for sustainability partners as there are so many menus and information in the center of the page that they did not know where to look
- Once the users located partners they had no problem located the Active Transportation link
- Once here, the participants struggled to find where the application would be as there are again, so many menus and drop down bars
- The participants had to recheck her steps multiple times to make sure they were in the right place because they could not find the application
- Finally, most users found the application after struggling for a few minutes

Scenario 3 Notes:
- The instructions were very straightforward for the user
- The users did not seem to have any difficulty located each tab
- Most users were confused if there was a place to apply to work on the project as this was not so obvious on the website
- Only struggle was locating a place to submit a form to get involved

Scenario 4 Notes:
- This task was difficult for most participants
- Users did not realize that the image icons were clickable so were struggling to find the online payment tab/menu
- There was also some trouble finding the jurisdiction code because there were so many options of where to find this
- It took almost all the users 3-4 clicks to find the link used for online payments
- Most participants thought this was the hardest task they had to perform so far

Scenario 5 Notes:
- The tabs for this task were all easily accessible and straightforward
- The users did not have much trouble with this task as the connection from the first to third step was evident
- Little to no struggles performing this task

**Recommendations for improvement:**

- Concise the tabs and menu options
- Make the text all the same color within each column. A dark color would be best as it is easiest to see and read
- Make the background behind the picture slideshow a plain color so it does not distract from everything on the page, specifically the pictures
- Remove the picture icons and place that information under one of the top tabs
- Eliminate the amount of clicks necessary to get to a certain page as it confuses and/or annoys the user when there are so many different tabs to click

Danielle Lindenbaum, Isabel Schuss, Gabrielle Garten, Mollie Levine, Sam Helle
LIS 351 Final Report

University of Monona Home Page Evaluation

## Introduction

For this report we evaluated how people responded to using the mymonona home page. We asked participants to talk through the tasks we asked them to perform and let us know any problems they face when going through each step. Based on the results we gathered from the participants we created a recommendations for improvements section. We ran a test on the SEO Search and listed why each result is important. Additionally, we also ran tests to see how accessible the home page was and noted the errors, why they matter, what they mean and how to fix them.

## Opening Evaluation

Hi, _____. My name is (Isabel) (Danielle) (Gabby) (Mollie) (Sam). Thank you so much for choosing to participate today. First, I want to walk you through what will occur throughout this session. Please feel free to interrupt at any point if you have any questions.

For our research, we will be asking people to use a website that we are working to improve. This session should not take more than 20 minutes. Your responses will be kept confidential within our research group.

It is important to note that we are testing the website, not testing you. There is no such thing as making a mistake. In fact, your "mistakes" will help us improve the site.

As you navigate through the site, it would be so helpful if you could think out loud: to say what you're looking at, what you're trying to do, what you're experiencing, and what you're thinking. This will let us know if anything about the site is confusing or beneficial.

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We may ask you other questions throughout the session and we may have questions for you once the session is completed.

Thank you again for participating. If you have any questions before we begin please feel free to ask them now.

## Usability Tests:

SCENARIO 1:
Example: You're a new resident and are looking to find employment options and apply for jobs in Monona.
Task:
1. Navigate mymonona.com to find a listing of current employment opportunities
2. Successfully submit a job interest card
3. Save, download and print the card and bring to City of Monona officials

Scenario 2

Example: You are a resident looking to get involved in the sustainability initiatives in Monona.
Task:
1. Locate the city of Monona's list of sustainability partners
2. Locate information about how the UniverCityYear project will make it easier and safer to use active transportation.
3. Submit a citizen committee application for the Sustainability Committee

Scenario 3:
Example: You are looking to get more involved in city projects and activities in Monona.
Task:
1. Locate the city of Monona's city projects and bids
2. Locate information on current city projects that are available to you to take part in
3. Save, download, and print a copy of one of the Schluter Park project and go to the park's website

Scenario 4: As a Monona resident you're attempting to pay your water/sewer utility bill online.
Task:
1. Locate the online bill payment options
2. Find and note the Monona jurisdiction code used for submitting utility bill payments
3. Copy and paste the link of the external site used by the city of Monona for bill payment
    1. Note how many clicks it took you to get to this site

Scenario 5: As you just received a citation you want to pay it online
1. Locate the Police Department tab in the drop down menu
2. Find the link that leads to you paying the citation online
3. Click on the online citation paying link and fill it out

**Usability Test Result Notes and Struggles:**

Scenario 1 Notes:
· Took two clicks to find the job interest card page
· Only 2 job openings were listed, not much of a selection
· Job interest tab was in color and easy to find on the page
· There was confusion in how to save, download, and print the card since there was not a button that clearly indicated "save", "download", "print"
· There was a lot of information regarding the job or two that were available which distracted them from figuring out how to successfully submit the job interest card

Scenario 2 Notes:
· Easy to find information on UniverCity Year project
· More difficult to find the application
· You could click two possible links to get information on UniverCity Year Project and they direct you to different pages which could cause confusion
· Went straight to sustainability tab on the homepage
· Some trouble finding information on how to get a citizen committee application. The participant looked under application and permits and nothing was there
· Had to go back to figure out how to submit application and eventually figured it out, but was definitely not easy to do

Scenario 3 Notes:
· Took 4 clicks to get to the parks website
· Participants had a hard time figuring out where to click, as there are so many menus and options.

· The search tab had to be used in order to locate the parks website

Scenario 4 Notes:
· Takes more time to find
·  https://www.officialpayments.com/index.jsp?JSESSIONID=YpRBVcJLG8kQpn9!-1052541421!876390066 (link used for online payments)
· Took two clicks to get to this page and three clicks for other people
· The jurisdiction code is easily accessible on the utilities page
· Took a while to find online payment options for some people

Scenario 5 Notes:
· Police Department tab and citations tab were easily accessible
·  https://www.govpaynow.com/gps/user/plc/1128 this is the cite you use to pay online
· Took 3 clicks to get to ^
· Participants struggled since they thought they were doing something long since there were a lot of clicks to get to the correct page

**Recommendations/Improvements:**
· There are too many tabs/menu options that confuse the user
· Very text heavy- should make titles and information on home page more concise
· The information should be presented on a plain/simple background to provide more contrast. Having pictures in the back of the text is distracting and visually overwhelming.
· Choose between having top bar menu options versus the orange side bar options. Too many options in multiple places.
· Instead of having icons below the photo slideshow, relocate these icons to be part of the top menu or side bar menu.
· Instead of items on the right side of the home page be listed in orange, use a darker, more visible color that stands out to the user. This will make it easier to read.

**SEO Search Results/Recommendations for Improvement:**

-Website IP does not redirect to monona.wi.us
  • It is important to have an IP address that redirects to the site this way it does not cause trouble or confusion for the site users
-Meta description on Google too short
  • It is important to have a longer description so people know what they are about to view and what is on the website before actually clicking on the link
-Header tags are poor
  • It is important to have improved header tags so that they are clear and easy to read and understand. Otherwise, users may be confused with how to navigate the site and how to use and access the different headers
-Conversation form is not present
  • A conversation form is important to have so users can express feedback about the site or different parts/information listed on the site.
-STS is not present
  • This is important to have so that the user feels secure when using the system
-HTTP to HTTPS redirection
  • This is important so that the redirection is more secure
-Disabled browser cache

- This is important to have so that it is easy for the user to quickly load the page

-Slow response time
- This is important to improve so the user will want to stay on the website and not lose patience because the response time is slow

-No Facebook or Twitter page
- This is important to have so that users can be informed about information that is being uploaded on the website and gain momentum and attraction from Facebook and Twitter users so that they will hopefully access the site

-Website not listed in DMOZ
- This is important to fix so that the user can access the site if they are using this directory of internet links

-Server information is publicly available
- This is important so that the server is readily accessible

**Accessibility Results:**
Wave.webaim.org

-3 times missing alternative text
- What this means: Image alternative text is not present
- Why it matters: Each image must have an alt. Attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable
- How to fix it: Add an alt. Attribute to the image. The attribute value should present the content and function of the image effectively and in a concise manner. If the context or surroundings of the image, or if the image does not convey content or have a function it should be given empty/null alternative text (alt="")

-2 times linked image missing alternative text
- What this means: An image without alternative text results in an empty link
- Why it matters: Images that are not the only thing within a link must have description alternative text. If an image is within a link that contains no text and that image does not provide alternative text, a screen reader has no content to present to the user regarding the function of the link
- How to fix it: Add appropriate alternative text that presents the content of the image and/or the function of the link

-1 time spacer image missing alternative text
- What this means: A layout spacer image (which should have null/empty alternative text) does not have an alt attribute
- Why it matters: Spacer images are used to maintain layout. They do not convey content and should be given null/empty alternative text (alt="") so they are not presented to users and are ignored by screen readers
- How to fix it: If the image is a spacer image, give the image null/empty alternative text (alt=""). Alternatively, consider using CSS instead of spacer images to control positioning and layout

-2 times empty link
- What this means: A link contains no text
- Why it matters: If a link contains no text, the function or purpose of the link will not be presented to the user. This can introduce confusion for keyboard and screen reader users
- How to fix it: Remove the empty link or provide text within the link that describes the functionality and/or target of that link

Harley Maslin
Capstone
City of Monona Usability Test

## Overall Analysis of Test Results

My completion of a usability test for the City of Monona's community website should hopefully improve the quality, accessibility, and user experience of the Monona city website. My findings have determined that there is a huge sum of work that needs to be put forth to make the website, more accessible, clear, and easy to navigate. The results signify a lack of clear navigation and direction for users. Through the test I found that it was extremely difficult to locate clear and specific titles and subtitles as direction for the information I requested the user to try to find.

## Suggestions for Improvement

Moving forward, the City of Monona should focus on the clarity of their website by including clear, concise, and descriptive headings for sections. A menu bar may be helpful in creating these sections and subsections more clear. There are also many redundant links that lead users to the same information. This can be fixed by making more clear where these links exist, thus only needing one to direct users where they want to go. I suggest using more descriptive titles for links and headings so people know exactly where they are being directed and where to find information they are searching for. I think a major improvement would be seen in simplifying the website. I know there is a lot of information, but it seems to be overwhelming. There needs to be more concrete categories and classifications of information for people to find where they need to go. I hope this usability tests below in the document help the City of Monona to evaluate and improve their website to create a more navigable and user friendly experience. I enjoyed this experience, and hope that my evaluations of the website will pinpoint specific changes to be made in the future. There are a lot of great things going on in Monona and it should be known by the community.

## Opening Explanation

http://www.mymonona.com/

Hi, Brittany. My name is Harley and I am representing the City of Monona as we are working to improve our community's website. The purpose of this it to use your feedback to make desired improvements to the website. Thank you so much for choosing to participate today. First, I want to walk you through what will occur throughout this session.

This session should not take more than 20 minutes. I will ask you to complete a set of tasks on the website. You may ask questions as you go if you are confused or if you need more information. However, the purpose of this test is to determine the ease or difficulty users have while navigating the site. Thus, we may not be able to give you an immediate answer as we will

be using your feedback to make improvements. Your responses will be kept confidential within our research group.

It is important to note that we are testing the website, not testing you. There is no such thing as making a mistake. In fact, your "mistakes" will help us improve the site.

As you navigate through the site, it would be so helpful if you could think out loud: to say what you're looking at, what you're trying to do, what you're experiencing, and what you're thinking. This will let us know if anything about the site is confusing or beneficial.

If you say anything negative, do not feel as though you are offending us - it will only help us in the end! In order for this to work, we appreciate any and all honest opinions.

If you have any questions as you navigate the site, you can ask them. However, we just might not be able to answer them right away because we are trying to see how someone interacts with the site as if we were not here. If you feel like you need a break, please do not hesitate to ask for one.

With your permission, we will be recording for reference if needed. This footage will only be used within our research group and your identity will remain anonymous.

We may ask you other questions throughout the session and we may have questions for you once the session is completed.

Thank you again for participating. If you have any questions before we begin please feel free to ask them now.

**Scenario 1:**
Example: You're a new resident and are looking to find employment options and apply for jobs in Monona.
Task:
1. Navigate mymonona.com to find a listing of current employment opportunities
2. Successfully submit a job interest card
3. Save, download and print the card and bring to City of Monona officials

Notes Scenario 1:
• Brittany seemed hesitant at first, not fully knowing where to begin.
• She first scrolled over the main horizontal section of headers and subsections. This took her about two minutes to read through all of the subsections and realize that employment options were not listed there.
• She then scrolled down and saw employment opportunities listed vertically on the left hand side, which she then proceeded to click on.
• Immediately she noticed the "submit a job interest card" which she then clicked on, and said "that was quick"
• It brought her to a page that said job opportunities which made her a little confused, and she said she could not figure out where the job interest card was located

- Then she went back to the employment opportunities page and found two other links that said submit a job interest card, which took her to the same confusing and ill defined page.
- At this point even I became confused with the instructions to submit a job interest card and we moved forward to the next scenario.

**Scenario 2**
Example: You are a resident looking to get involved in the sustainability initiatives in Monona.
Task:
1. Locate the city of Monona's list of sustainability partners
2. Locate information about how the UniverCityYear project will make it easier and safer to use active transportation.
3. Submit a citizen committee application for the Sustainability Committee

Notes Scenario 2:
- Brittany went back to the home page and then began her search for sustainability partners.
- She immediately went to the vertical menu bar on the left side where she found the employment opportunities
- There she found a link that said sustainability
- When she got to the sustainability she paused for a while to gaze over the page, looking confused as to where the partners would be listed
- She scrolled over the left side menu bar, but did not find what she was looking for
- Then she scrolled down the page to find a header that said partners.
- She immediately was able to move to the next step as she located the link for the UniverCity Year project, but she did say that it was hard to see the link because the color blended in too much with the background
- Brittany was unsuccessful in locating the citizen committee application

**Scenario 3:**
Example: You are looking to get more involved in city projects and activities in Monona.
Task:
1. Locate the city of Monona's city projects and bids
2. Locate information on current city projects that are available to you to take part in
3. Save, download, and print a copy of one of the Schluter Park project and go to the park's website

Notes Scenario 3:
- Brittany located the Projects and Bids tab pretty quickly on the left-hand side bar. She mentioned that she was starting to pick up on the location of things on the website, which was helpful to her.
- To complete step two, Brittany then clicked on 2016 current projects, hoping she would find information on projects she could take part in.
- This brought her to a list of four projects, but she was unsure if she could take part in them, so she said she would click on each one to see if she could.

- After clicking through each one and reading the descriptions she still felt like she did not get the answer she was looking for. She then went to the search bar and typed "get involved with projects"
- Here she was brought to a page with the option to get involved in the projects such as volunteering and parks and recreation.
- Brittany then was able to complete the third step quickly because she had been through all the project pages previously.
- At this point 20 minutes had already passed, and we completed the usability test after she found the third part of the scenario.

Scenario 4: As a Monona resident you're attempting to pay your water/sewer utility bill online. Task:
1. Locate the online bill payment options
2. Find and note the Monona jurisdiction code used for submitting utility bill payments
3. Copy and paste the link of the external site used by the city of Monona for bill payment

Scenario 5: As you just received a citation you want to pay it online
1. Locate the Police Department tab in the drop down menu
2. Find the link that leads to you paying the citation online
3. Click on the online citation paying link and fill it out

Rachel Burns, Maggie Dunn, Pamela Miller, Alexa Schnurr, Ryan Wall
Group 1

**Search terms:**
1. Read
   - Synonyms: View
   - What happened in search engines? (synonym + Monona)
     - Read: Mymonona.com came up at the first hit on Google
     - View: Mymonona.com came up at the first hit on Google
2. Official
   - Synonyms: Certified
   - What happened in search engines? (synonym + Monona)
     - Official: Mymonona.com came up as the first hit on Google
     - Certified: Mymonona.com does not come up in the first few pages on Google, the first website is mononaterrace.com and talks about their sustainability practices.
3. Website
   - Synonyms: Web Page
   - What happened in search engines? (synonym + Monona)
     - Website: Mymonona.com came up at the first hit on Google
     - Monona: Mymonona.com came up at the first hit on Google
4. News
   - Synonyms: Bulletin
   - What happened in search engines? (synonym + Monona)
     - News: Mymonona.com came up as the seventh hit on Google
     - Bulletin: Mymonona.com didn't come up in the whole first page of Google when I made this search
5. Calendar
   - Synonyms: Agenda
   - What happened in search engines? (synonym + Monona)
     - Calendar: Mymonona.com came up as the fifth hit on Google
     - Agenda: Mymonona.com came up as the first hit on Google
6. Community
   - Synonyms: Public
   - What happened in search engines? (synonym + Monona)
     - Community: Mymonona.com came up as the first-fourth hits on google
     - Public: Mymonona.com came up as the first-fifth hits on google
7. City
   - Synonyms: Municipal
   - What happened in search engines? (synonym + Monona)
     - City: Mymonona.com came up at the first hit on Google
     - Municipal: Mymonona.com came up at the fifth hit on Google

**SEO Reports on Page Locas**

**Meta Description:**

Google

**Monona, WI - Official Website | Official Website**

**mymonona.com**

Description Length: 0 (Too Short)

Explanation:

Meta description is the small description which is available in the search result along with the url and your web page title.

Why is it Important?

Search engines uses meta description to get brief information about the website. If you can optimize your web page meta description in correlation with your web page content then you'll find more people clicking on your search result.

Improvement:

Although you want a short description of the web page that is helpful to the users, this meta description is too short and could be improved with a longer description that can get more people to find the Monona page.

*Recommendation:*

You should put a short meta description to give brief information about the website. People will be able to search for or find your website easier.

**Poor Header Tags:**

Explanation:

Header Tags are of real and vital importance in SEO landscape. Header Tags include: H1, H2, H3, H4, H5 and H6. Make sure every web page has one and only one H1 tags and then you can have any number of other header tags.

Why is it Important?

Header tags are used by search engines to get extra information about the website to provide relevant search results to the users.

Improvement:

Make sure every web page has one H1 tag and not multiple.

*Recommendation:*

Reconfigure your website code so that each page has only one H1 tag. Because header tags are used by search engines to get extra information about websites, so having having good H1 tags will make it easier for your page to be found.

**Report from Web Accessibility tool WAVE**

Errors on the home page included:

- Four pictures are missing an alternative text. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable.
    - *Recommendation*: Add an alt attribute to the image. The attribute value should accurately present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty alternative text (alt="").

- The linked images over the icons "Report a Concern" and "Online Forums" without an alternative text, resulting in an empty link
    - *Recommendation*: Add appropriate alternative text that presents the content of the image and the function of the link.

- A layout spacer image does not have an alternative text.  Spacer images are used to maintain layout. They do not display content and should be given null/empty alternative text so they are not presented to users and are ignored by screen readers.
    - *Recommendation*: If the image is a spacer image, give the image empty alternative text (alt="").

- Two links contain no text. If a link contains no text, the function of the link will not be presented to the user. This can make the keyboard and screen reader users confused.
    - *Recommendation*: Remove the empty link or provide text within the link that describes the functionality or target of that link.

**SCENARIOS**

**Scenario 1:**

- Task scenario and motivation: I am a mother/ father visiting the website to sign my 8 year old child up for summer camp. What camps are available and where do I go to sign up?
- User tasks:
  - Navigate to mymonona.com to find the information about the summer camp programs.
  - Look through the programs that best fit your child's age/ interests and your desired dates.
  - When you find the one you are interested in, click "register now" and add the program to your cart. Then check to make sure the program successfully added to your cart.
- My Notes:
  - I found two different ways to get to this information -- one through the "Our Community" tab and one through the "I Want To…" tab. They both can take you to the information about recreation programs.
  - A lot of different info on specific programs to look at based on child's age
  - Once finding a specific camp program it is fairly easy to register
- Participant 1 Notes:
  - The participant took a little longer to find the Recreation Programs information
  - Was frustrated reading through all the different links under each tab
  - When he found the recreation programs page the rest was very fast and easy
- Participant 2 Notes:
  - Can't find where the summer camp programs information is quickly- need more specifics to find it. Took me a while to find it.
  - Once I found it under "I want to…" and Recreation Programs, searching through the program descriptions and finding a camp was easy.
  - It was fairly straightforward to register and add it to my cart.
- Participant 3 Notes:
  - Took my a long time to find where the summer camp programs were. I almost resulted to the search tab, but I found information on under the Recreation Programs under the "I want to…" tab
  - Found the list of programs easily and was able to register with no problem.
- Participant 4 Notes:
  - I scrolled over the "Our Community" tab
  - Found "Recreation programs" under the "Parks and Recreation" tab
  - Then I clicked on "Summer Recreation and Camps"
  - Found the different tabs for camps and found the camps that applied to my child
- Participant 5 Notes:
  - Took me a while to find the right place to go
  - Found information under "Recreation Programs" under "Parks and Recreation"
  - Wide array of options, should be enough to find the right summer camp

**Scenario 2:**
- Task scenario and motivation: I am a father who would like to sign up for the neighborhood watch. Where do I go to get more information about it and participate?

- User tasks:
  - Navigate mymonona.com and find the information about police community programs.
  - Find the information about the Neighborhood Watch Program and find the name of the community officer to contact.
  - Send him an email if you are interested in participating or if you have questions regarding this program.
- My Notes:
  - It said to find information about police community programs so I immediately went to look under the our community tab on the navigation bar.
  - I quickly found the neighborhood watch program link under the police community programs header.
  - I clicked on the hyperlink of the officer's name--James Reiter--and my email browser opened up for me to send him an email.
  - It was very clear-cut and took me a few seconds to complete.
- Participant 1 Notes:
  - I put my mouse over the different tabs and found the one I needed.
  - I went to our services then neighborhood watch programs and found James Reiter and when I clicked his name it opened up my email app.
  - It took me 30 seconds to complete.
- Participant 2 Notes:
  - I went to the "Our Community" tab and was able to easily navigate to the Police Community Programs
  - Quickly found the neighborhood watch program under "Our Community"
  - Community Officer "James Reiter's" name was hyperlinked and I was able to click on it and have my email application pop up for me to send an email
- Participant 3 Notes:
  - I scrolled over the "Our Community" tab at the top of the page and was able to navigate to the Police Community Programs
  - I clicked on the neighborhood watch program
  - I was told to send an email to James Reiter, who had an email hyperlinked on the page.
  - I clicked on it and sent an email.
- Participant 4 Notes:
  - To look for the information about police community programs I went straight to the "Our Community" tab and found it very quickly
  - The community officer to contact for the Neighborhood watch (James Reiter) was underlined on the page making it very easily identifiable
  - The hyperlink to his email is very efficient and makes it very easy to be able to contact him about the Neighborhood Watch Program
- Participant 5 Notes:
  - Found Neighborhood Watch Program tab right away
  - Found the officer to contact
  - Hyperlink to his email works well and is quick

**Scenario 3:**

- Task scenario and motivation: My family and I have recently moved to Madison and I would like to sign up to receive alerts about any kind of city emergency or urgent information, and get alerts by email and text. Where do I go?
- User tasks:
  - Navigate mymonona.com and find the Alert Center
  - Find where to be notified and sign up for subscriptions
  - Subscribe to an email for "Public Safety" and "Monona Business Watch"
- My Notes:
  - Took a little time to find the Alert Center because it's not on the main navigation bar or the left gold sidebar, but on the right sidebar.
  - Clicked Alert Center and clicked on the "Notify Me" hyperlink.
  - Could subscribe to notification and sign up for emails for various alerts including the "Public Safety" and "Monona Business Watch".
- Participant 1 Notes:
  - Had difficulty finding the Alert Center. She scrolled over the top navigation bar and the left sidebar but still was struggling. No clicks.
  - She finally found the Alert Center on the left sidebar of the homepage. One click.
  - Easily clicked on the "Notify Me" hyperlink.
  - Signed up with her email without an issue and was able to choose to receive alerts for "Public Safety" and "Monona Business Watch".
  - Took about 2 minutes. Participant said where she had the most trouble was finding the Alert Center on the homepage.
- Participant 2 Notes:
  - Took some time to find the Alert Center because it is not in the navigation bar and it is on the sidebar and you have to scroll down.
  - Clicked Alert Center and then quickly found the hyperlink that said notify me. If I originally looked closer under the Alert Center and saw the "notify me" link right away I could have avoided one more step. However, after that it was very clear on where to subscribe. That brought me to a page where I could enter my email address or phone number for the alerts I want.
- Participant 3 Notes
  - I couldn't find where to go on the webpage.
  - I used the search function and typed in "alert center"
  - The website gave me an option to sign-up and receive notifications for alerts.
- Participant 4 Notes:
  - It took me a little bit to find where the Alert Center information was -- I looked through all the tabs on the menu bar and when it wasn't there I scrolled down and found it on the side of the page

- - - Finding the "notify me" hyperlink was easy because it was underlined and a different color than the rest of the text so it stood out
    - From there, typing in your email and signing up is very easy
  - Participant 5 Notes:
    - Took a while to find Alert Center
    - After scanning page for a while, finally typed it into search bar
    - Found the necessary information to sign up for alerts - quick process from there

**Scenario 4:**
- Task scenario and motivation: I recently got a library fine from one of the libraries in Madison. I would like to pay for the fine online. Where can I go to get this fine paid?
- User tasks:
  - Navigate mymonona.com and click on "online payments"
  - Under "online payments" click "library fines"
  - Follow directions for Online Payments in LINKcat to make your online payment
- My Notes:
  - I clicked on "online payments"
  - Under online payments I clicked "library fines"
  - I then was redirected to LINKcat and was able to follow the directions to pay a library fine
- Participant 1 Notes:
  - Found the "I want to…" tab at the top of the page and clicked on it
  - Under the "pay" section, he clicked "library fines"
  - He was redirected to LINKcat and could easily make his online payment
  - Took 17 seconds
- Participant 2 Notes:
  - Took me less than a minute to find this information. It was under Services and Online Payments. It was very direct and clear on how to pay a library fine.
- Participant 3 Notes:
  - Found the "online payments" icon on the homepage very easily.
  - Once I reached the "online payments" page, library fines was an easily displayed payment to make as a hyperlink
  - I was redirected to LINKcat and could easily make my online payment
- Participant 4 Notes:
  - I didn't notice the "online payments" link at first
  - Once I clicked on the link it was very easy to find the link to library fines
  - The LINKcat instructions were very simple to follow
- Participant 5 Notes:
  - Found "online payments" and clicked "library fines"
  - The fines webpage was laid out well and easy to navigate
  - It was easy to pay my fine once I was on the page

**Scenario 5:**

- Task scenario and motivation: My family and I have recently moved to Monona and I would like to find out more information about the high school I will be enrolling my children in. Where do I go?
- User tasks:
  - Navigate mymonona.com and click on "our community" and then "Monona Grove School District"
  - Doing this will open up the Monona Grove School District's homepage in another tab, hover over "schools" and select "Monona Grove High School"
  - Towards the top of the page on the left you will see a tab titled "About Monona Grove High School" that you can select
- My Notes:
  - Very straightforward, not much problem navigating through the process
  - Would maybe be easier if there was a better/quicker direct link to the Monona Grove School District webpage
  - However, once on their page there is a lot of information about all levels of schooling within the district
- Participant 1 Notes:
  - One click to find our community and Monona Grove School District
  - One click to find the Monona Grove High School page
  - One click to go to "About Monona Grove High School"
- Participant 2 Notes:
  - I was able to get to the "our community" page and the "Monona Grove School District".
  - I easily could find the "schools" tab and click the "Monona Grove High School".
  - I quickly found the "About Monona Grove High School" tab that I clicked to get more information.
- Participant 3 Notes:
  - Under the "Our Community" tab I found the "Monona Grove School District"
  - The page redirected me to the Monona Grove School District webpage, and I was able to click on "schools"
  - I then clicked on "About Monona Grove High School" to get more information
- Participant 4 Notes:
  - Very easily found the Monona Grove School District link under the "Our Community" tab
  - Finding the Monona Grove High School information was also very easy
  - Very easy website to navigate to find information about the high school
- Participant 5 Notes:
  - The instructions were very clear and easy to follow to get to the information
  - It took me very little time to complete this task and find out information about the local high school

- Very accessible website

**An Analysis of MyMonona.com:**

**Usability Test of The City of Monona's Website & Analysis of Results**


Sara Baillies

University of Wisconsin – Madison

A Capstone Project for Digital Studies Certificate

December 2016

**USABILITY TEST**

**Welcome and Purpose**

Hello, today I will be conducting this test. Thank you for being here. I want to give you a some information about what you will be doing today and give you time to ask any questions you might have before we get started.

Today I'm asking you to evaluate of The City of Monona's official website, MyMonona.com, and to complete a set of tasks on a specific portion of the site. The goal is to see how easy or difficult you find the portion of the site to use.

**Test Facilitator's Role**

I am here to record your reactions and comments of the site. During this session, I would like you to think aloud as you work to complete the tasks. I will not be able to offer any suggestions or hints, but from time to time, I may ask you to clarify what you have said or ask you for information on what you were looking for or what you expect to have happen.

**Test Participant's Role**

Today I am going to be asking you to look for some information on the site and tell me how easy or difficult it was to find the information.

There is no right or wrong answer.  If you have any questions, comments or areas of confusion while you are working, please let me know.

If you ever feel that you are lost or cannot complete a task with the information that you have been given, please let me know. I will ask you what you might do in a real-world setting and then either put you on the right track or move you on to the next scenario.

As you use the site, please do so as you would at home or in your office. I would ask that you try work through the tasks based on what you see on screen, but if you reach a point where you are not sure where or how to find something, please feel free to use the 'Search' bar.

I will be recording this session for reference if needed. I will not be capturing your face, but I will be recording your voice. Your name will not be associated or reported with data or findings from this evaluation.

I may ask you other questions as we go and we will have wrap up questions at the end.

Do you have any questions before we begin?

Please navigate to MyMonona.com. For these scenarios, we're going to pretend that you and your family are new to the city of Monona.

Scenario 1: You would like to learn more about the upcoming election.

- Task 1: Find out how you can register to vote at your new address.
- Task 2: Find out where your polling place is located.
- Task 3: Find a sample ballot.

Scenario 2: You want to connect with the community through the Library.

- Task 1: Find an event at the library for you and your family to attend (you don't have to register).
- Task 2: Find out how much it costs to get a library card.
- Task 3: Find out when the library is open.

Scenario 3: You want to register to receive alerts and notices about your community.

- Task 1: Find a place to sign up to receive emergency alerts from the city.
- Task 2: Find a place to sign up to receive notices about brush collection.
- Task 3: Try to connect with the city of Monona on any form of social media.

Scenario 4: You have a few things to register for while first settling in to the city. Using the "I Want To" Section…

- Task 1: Find a way to apply for a permit to own a cat or a dog.
- Task 2: Find a way to apply to be a volunteer firefighter.
- Task 3: Find a resource to learn about Monona's historic bike trail.
- Task 4: Find how you would register your bike.

**RESULTS**

I began the test with the introduction, and informed the user that they were to pretend that they were new to Monona for the sake of finding specific information on the website.

During scenario one, I asked that the user found out information on voting in Monona, such as finding a sample ballot, where to vote, and how to register. The user completed all three tasks quickly. The user was successfully able to find these tasks from the "Your Government" section. The tasks were easy to complete because the voting section of the website is easy to find, and it is well organized. Everything that a citizen might need to know about voting is easily accessed from the navigation bar at the top under "Your Government" and then "Elections". On the left hand site of the election page, there is a navigation bar linking to address changes, registering to vote, sample ballots, and more. This made it incredibly easy for my user to access all of the different information a citizen might need to know prior to voting in a new city.

During the second scenario, I asked the user to navigate the library portion of the website. This can be found using the drop down navigation bar at the top of the website under "Your Services" and then "Library". At this point, the user brought up a concern about the drop down navigation menu. The user was having trouble because it disappears as you try to navigate across it to click a link. The drop down navigation menu is large, and navigating the cursor from one side to the next takes a long time and the menu will accidentally get closed. For the first task, the user was asked to find an event to attend with their family. They found a few other things on the library site that they thought would lead to events before seeing the event button on the right-hand side bar labeled "Register for Events", such as the calendar at the bottom of the library page. They did eventually find the events page and find one to attend. The second task was to

find out how much a library card would cost. The user went right to "Services" from the left hand side bar, and then to "Library Cards". They discovered the answer to the task, even though they already knew the card would be free. Then they located the library hours, but they had to navigate back to the library home page portion to find them. In a previous trial test, I found that the user had trouble finding the library hours and social media, which is why I decided to include this task. Having the library hours only on the front page did confuse the user momentarily, but they remembered seeing them on the front page.

For the third scenario, the user was asked to sign up for notifications. The user found the "Notify Me" button from the library page. They were able to immediately sign up for brush collection and ems notifications from that page. However, the third task included finding social media links. This was a little more difficult for the user, even though the button is located on that page under the left hand side bar as an image link labeled "Connect with Monona". They looked in my services, but didn't find it. The user said they would connect with The City of Monona via the social media, not through the webpage anyway. They eventually located the buttons on one of the page's left hand side bar.

The fourth scenario's tasks were designed to be the hardest, although the "I Want To" section proved to be easy for the user to navigate through. The user was first asked to find out how to get a permit. The user found the permit for a cat or dog right away, noting that the I want to section was easy to use. However the next task was more difficult. The user was asked to sign up to become a volunteer firefighter. They were not able to find it, and I couldn't either once I was helping them. The user was having trouble with the dropdown menu again, and it disappearing as they were navigating their mouse across it. They also said that they don't want to have to click the link to get to the menu (bringing them to a new page with the drop down menu),

and that they really wished the drop down menu was easier as an option. They found a lot of other volunteer work, including the parks and library volunteer work, but not firefighter work. They checked on the EMS page that they were on before, but couldn't find the firefighter application. They then found the video on how to be a firefighter. In search results, there were 33 pages of volunteer work, and at this point the user was ready to give up (and I could not find it myself at this point). They searched in the jobs and business portion, with no results. They moved onto the next task. When looking for the historic bike trail information, they found it quickly under the "Bike Monona" section. The registering for a bike was on the same page, and after looking elsewhere briefly, they navigated back to the page they were on before and found it. I was able to find the link for "Application for Volunteer Firefighter" located under "Your Services" and "Application and Permits" after the test was completed.

Overall the website has a lot of strengths. The links within menus and drop-down menus are logical located and organized. This made it easy for my user to complete the tasks I was asking of them quickly because the user was able to locate links within the menus almost instantly in most cases. Additionally, the site is easy to read, with highly contrasting colors.

However, there were few issues I discussed with the users I tested. The first biggest issue was the drop down menu. While the menu itself is well organized, it's very large and hard to navigate across. When hovering over a link on the top navigation bar, the menu drops down. This menu takes up the entire width of the homepage. When moving a cursor across the entire page, the menu will disappear, and time is wasted reopening the drop-down menu. My suggestion would be to break it down further into smaller navigation menus that are easier to manage. For each link on the navigation bar, such as "Your Government", could have its sub-links drop down or open to the side independently.

The second issue encountered was that the user would often have trouble knowing where on the site they were. For example, on the library portion of the website, the links at the top of the page say "Library > Services". These links are very small and located above the page title. However, the title only says "Services". These links are important for navigating back to the home of the Library portion, and more generally for the user to know that they are still on the library portion of the site. My suggestion would be to make them larger in font so the user can more easily orient themselves on the website and know where they are. It would help with clarity and for the users to know how to return to pages without having to click "back".

The next issue is the changing left-hand side bar. On certain parts of the site, underneath the links, the sidebar contains information related to where you are on the site. On other pages, it contains links to social media. The fact that it changes from page to page is confusing. It needs to be consistent to the portion of the site for clarity. My suggestion would be creating individual pages for the information contained in that bar. Including a page for "library hours" and "social media" as separate pages a user can navigate to would be helpful.

For the final part of the analysis, the website was tested with the "Web Accessibility Evaluation Tool" or Wave.org. This tool searches webpages to find issues within the site that might make browsing the site more difficult for a person who has a disability. On the front page of the website, there were three missing alternative texts and two image links missing alternative text. When hovering over an image, there should be an alternative text describing what the image is about. This is important because people who cannot see rely on screen reading software to have images described to them. If there is no alternative text, they have no idea about what's on the webpage visually. It's even more difficult if it's an image used as a link, because the screen reader will not be able to describe the link whatsoever. Additionally, there are two empty links,

meaning the links lead to nothing. This is an issue once again for people relying on screen readers because if the user needs to access that link, it's incredibly hard for them to know that it didn't work and how to find the correct page the link should be going to.

Another issue for accessibility is that the website contains a lot of redundant links. On the hope page alone, there are twenty five redundant links. For a user that might be using a screen-reader, redundant links are very problematic because the user must have all the website's information read to them, they must hear multiple versions of the same link before than can decide what to click on. This wastes a lot of time for the user. Additionally, it's confusing in general for all users. The "I Want To" section contributes to a lot of the redundant links. Even though it's easy to use, users would naturally use the other sections first. The "I Want To" section just adds more links to search through, when they are mostly redundant. Additionally, there are redundant titles, and this clutters up the page and can lead to confusion. Simplifying the site by removing duplicate links and titles will make the site easier to use for all users.

Overall, the few improvements I mentioned are achievable fixes. In summary, those were making less lengthy navigation bars or breaking them apart into smaller bars, making heading navigation links on each page more noticeable, improving the overall consistency of the site, and improving accessibility by removing redundant links and titles. Other than those few issues, my conclusion is that the website is well organized and for the most part easy to navigate through.

## Opening Explanation

Hi, _____. My name is Kelsey, and I'm going to be walking you through this session today.

Before we begin, I have some information for you, and I'm going to read it to make sure that I cover everything.

You probably already have a good idea of why we asked you here, but let me go over it again briefly. We're asking people to try using the City of Monona's website that we're working on so we can see whether it works as intended. The session should take about an hour.

The first thing I want to make clear right away is that we're testing the site, not you. You can't do anything wrong here. In fact, this is probably the one place today where you don't have to worry about making mistakes.

As you use the site, I'm going to ask you as much as possible to try to think out loud: to say what you're looking at, what you're trying to do, and what you're thinking. This will be a big help to us.

Also, please don't worry that you're going to hurt our feelings. We're doing this to improve the site, so we need to hear your honest reactions.

If you have any questions as we go along, just ask them. I may not be able to answer them right away, since we're interested in how people do when they don't have someone sitting next to them to help. But if you still have any questions when we're done I'll try to answer them then. If you need to take a break at any point, just let me know.

You may have noticed the microphone. With your permission, we're going to record what happens on the screen and our conversation. The recording will only be used to help us figure out how to improve the site, and it won't be seen by anyone except the people working on this project. It helps me, because I don't have to take as many notes.

If you would, I'm going to ask you to sign a simple permission form for us. It just says that we have your permission to record you, and that the recording will only be seen by the people working on the project.

**Welcome and Purpose**
Hello, today I will be conducting this test. Thank you for being here. I want to give you some information about what you will be doing today and give you time to ask any questions you might have before we get started.

Today I'm asking you to evaluate of The City of Monona's official website, My Monona, and to complete a set of tasks on the site. The goal is to see how easy or difficult you find the site to use. I have four different scenarios for you to complete. The entire test should take about 15 minutes. We will try to complete as many of the tasks as possible, but it is all right if we do not finish.

**Test Facilitator's Role**
I am here to record your reactions and comments of the site. During this session, I would like you to think aloud as you work to complete the tasks. I will not be able to offer any suggestions or hints, but from time to time, I may ask you to clarify what you have said or ask you for information on what you were looking for or what you expect to have happen.

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As you use the site, please do so as you would at home or in your office. I would ask that you try work through the tasks based on what you see on screen, but if you reach a point where you are not sure where or how to find something, please feel free to use the 'Search' bar.

I will be recording this session for reference if needed. I will not be capturing your face, but I will be recording your voice. Your name will not be associated or reported with data or findings from this evaluation.

I may ask you other questions as we go and we will have wrap up questions at the end.

Do you have any questions before we begin?

**Let's begin the test!**
Please go to http://mymonona.com

**Scenario 1:**
You aren't very tech savvy and you don't have access to a computer.
- Try to reserve a computer at the library.
- Find out what you can do with the Internet/computers at the library.
- Try to find a way to learn about technology.

**Scenario 2:**
You are interested in sustainability and want to find out more about sustainability in the community.
- Find one of Monona's sustainability partners and go to their website to check it out.
- Find the regional and state bike trails.
- You're interested in working on the collaborative project called "UniverCity Year" with UW Madison. Find out more about the project.

**Scenario 3:**
You're new to the community and have some concerns about the safety of your family.
- Find out how you can have someone watch your house when you're on vacation.
- Go to where you can report a crime.
- Learn how you can prevent your identity from being stolen.

**Final Analysis of Test Results & Recommendations**

I analyzed the City of Monona website (http://www.mymonona.com) and tested its usability in order to report back to the City of Monona on the quality of their website, including suggestions for how to increase its usability for the public. I created a user test and conducted it on a member of the Monona community in a controlled setting. I gave the test subject an explanation of the project and asked her to browse the My Monona website as if she was alone, without the help of a facilitator. Additionally, the test was supposed to be a "think-aloud" test, which means I requested that the subject explicitly state everything she was doing as they navigated the website, including her opinions on what she was doing. I could not provide feedback or help if the subject became stuck on the assigned task in order to replicate the setting of the average person using the website. The user test contained three scenarios that the test subject completed in sequential order revolving around a theme. Overall, I found a few repeating major issues that test subject encountered while completing the scenarios, such as the layout and navigation of the website. I will describe test and its results below, as well as the issues I found and my suggestions for how to fix them in order to provide a more user-friendly experience for the users of the Monona city website.

For the user test, I created three scenarios for the test subject to complete. The test took about 10 minutes total. For the first scenario, I told the subject to imagine she is not very tech savvy and doesn't have access to a computer at home. When asked to try to reserve a computer at the library, the subject had no trouble. She immediately went to the library page on the website, clicked Services, and Reserve a Computer. Next, she was told to find out what she can do on the computers/Internet at the library. Since the subject

was already on the library page, this was easy, as she just clicked Internet and Computer Access and found the answer there. Last, the subject was told to try and find a way to learn more about technology. She went back to the Monona homepage and searched the top of the page where it said Your Services and realized the answer might be in the Library portion as well. She went to the Library page and clicked Services, then clicked Tech Tutoring, where she found Tech Tutoring with Dan. Overall, the test subject had no trouble with this scenario.

The second scenario asked the test subject to imagine she is interested in sustainability and wants to find out more about sustainability in the community. I instructed the test subject to find one of Monona's sustainability partners and check out the partner's website. This task took a little while for the subject to complete, as she first was looking in the header for a link related to sustainability. She ended up searching the word "sustainability" in the search bar, where she found the Sustainability page on the side navigation bar. She commented that the side navigation bar seems to be different on every page. When asked to find regional and state bike trails in the area, the subject struggled slightly. First, she went to the City Maps page because she thought it might be there, and when she couldn't find it, she navigated to the Parks & Recreation page using the side navigation bar, which had stayed the same as the home page. In the Parks & Recreation page, she clicked on Bike Monona on the side navigation bar, and then Regional & State Trails on the side navigation bar. Each time she clicked on the next link, she noticed the side navigation bar changed in the Parks & Recreation page. Lastly, the subject found information about a collaborative project with UW Madison called

"UniverCity Year." This was also under the Sustainability page found on the side navigation bar.

For the third and final scenario, I asked the subject to imagine she is new to the community and has some concerns about the safety of her family. To find out where she can find someone to watch her house while they're on vacation, the subject navigated to the Police Department page and clicked Community Programs on the side navigation bar. This is where she found the link called Vacation Checks, where police can check on your house while you're on vacation. To find out how to report a crime, the subject went back to the Police Department page and clicked on Self Report in the side navigation bar. The subject was confused because she wasn't sure what page she was on anymore, as she had navigated from the Police home page to the Community Programs page, which was different but very similar. Lastly, to find out how to learn how to protect your identity from being stolen, the subject went back to the Police Department page and then Community Programs, where there was a link to an Identity Theft page. These tasks weren't difficult for the individual as long as she remembered which page she was on.

One of the major issues I discovered while testing was that the test subject had trouble navigating around the site. She often had navigation problems because some of the navigation menus are counterintuitive. Some of the links were under certain subheadings, when they should have been under subheadings that would make more sense. For example, the bike trails were under the Parks & Recreation subheading, when the subject assumed it would be under City Maps. Another issue is that the side navigation bar is inconsistent. The menu on the side always changes when you click to a different page. On some parts of the site, it includes the library hours and other parts of

the site it includes links to social media. The individual often became confused because the side navigation bar changed so often, she wasn't sure when she could find new information there. Furthermore there is repetition and redundant subheadings, making the site look hectic. The subject described the look of the page as "busy." The person found that she often got lost trying to find specific links. Navigating this website seems to be easier for younger tech savvy people, but would be harder for people who aren't necessarily tech savvy. This is because the test subject was forced to use alternative ways to find what she was looking for, such as using the search bar. Another major issue I found was that it is difficult to navigate back to different home pages, such as the Police Department home page or Sustainability home page. Once the test subject navigated away from it, she could not find a way back. The last major issue was that the different pages didn't have separate looks. The police page, sustainability page, and the rest of the website all look like one website. The participant had trouble knowing when she had left the Library page and was on the general website.

For the first issue, I suggest reorganizing some of the links and subheadings. The subject suggested that the quick links on the right side of the website should be switched with the menu on the left because that is where people would tend to look. For the navigation bar issue, we suggest making it consistent for every page, and having additional navigation bars for the separate pages. Another suggestion is to include social media should be in the upper right of the website or in the footer. To solve the issue of redundant links, simply remove the extra versions of these links. This helps to make the site more concise and easier to find links. Additionally, it helps people who might have disabilities and rely on screen readers because there are fewer links to listen to. For the

issue of our subjects not being able to navigate back to the various home pages, a header that has links to the different pages could be added. Additionally, a large link or heading that says "Library," for example, would help to make each page look like it's own portion of the site, solving our final issue.

       In conclusion, the City of Monona has a good basis for a functioning, universally accessible site. However, major improvements should be made to be accessible and usable to every member of the community. By making the content more easily readable, formatting the webpage logically, and decreasing confusion by combining similar topics under one sidebar menu will greatly help in closing the technology gap for Monona residents and site users. By fixing these small issues on the website, the City of Monona will be able to include all audiences, and ultimately create a positive, inclusive reputation for the city.

**Capstone Report**
Meredith Johnson

**Tasks**

**Task 1** – You are having trouble adapting to a new technological gadget in your life and would like assistance from the Tech Tutoring service by the City of Monona. How do you go about seeking this assistance? **Searched for "Tech Tutoring"**
- Once you find the Library > Services page, where is Tech Tutoring?
- When you find Tech Tutoring, find the next available session. **Cannot find. Can only find a past, expired session. Seems frustrated with calendar system.**
- You cannot find the next available session. Contact the proper city authority to schedule a session. **Gave up on finding this.**

**Task 2** – You are planning a wedding and want to reserve a City of Monona banquet hall. How do you begin the process? **Cannot find Rentals & Events page. Eventually searches "rentals," clicks Rentals & Events option.**
- Once you find the Parks & Recreation > Rentals & Events page, choose a rental location. **Chooses community center.**
- Check if this location offers catering and bartending services. **Chooses "Main Hall" because description says bar and kitchen. Find services.**
- You find a location you like. Submit a *Room Rental Request* for that hall. **Clicks "Party & Event Rentals" (blue button, bottom right of page), scrolls to bottom and eventually sees "Special Event Application."**

**Task 3** – You know a senior citizen who needs help getting around. You'd like to see what kind of senior transportation services the City of Monona offers. How do you do this? **Clicks "Our Community" > "Senior Center"**
- Once you have found the *Monona Lift Bus Service for Seniors* page, how do you find the schedule? **Finds the service, sees the sentence regarding the schedule, but does not find schedule.**
- Find out if this bus needs to be reserved in advance, and if there is a cost. **Clicks underlined "Monona Lift" link at beginning of sentence. Finds schedule and cost.**
- Reserve a spot on this bus. (**Calls.**)

**Task 4 (Extra)** – You discover a pothole in your neighborhood. Using the website, report this problem to the City of Monona. **Clicks "I want to" tab but does not find what they are looking for. Searches "pothole." Frustrated that they must create an account.**

**Task 5 (Extra)** – Find out if the City of Monona offers swimming lessons. **Clicks "Your Services" > "Parks & Recreation" > "Recreation Programs." Hovers on all options but finds no swimming lessons. Searches "swim," clicks on "Swim Lessons"**
- When you find that they *do*, what ages do they offer these lessons for? **This page she's clicked on only offers information about child swimming lessons**
- What time do they offer lessons? **Clicks Swim Lesson Schedule, finds what she's looking for**
- Are these lessons offered year-round? **Clicks Course Description, doesn't find dates**

- Sign up for the lessons that sound most suited to the needs of a senior who wants to swim. **Clicks "Register Now" for one of the courses. Gets overwhelmed by calendar page**

**Suggestions:**
Task 1
- Under "Your Services" at top of screen, put "tech tutoring," because most people would not know this is a specific library service.
- Instead of "Tech Tutoring with Dan at Monona Library" on a specific date, create a general Tech Tutoring page under "Your Services," then list the dates offered with a direct link to registering for those dates – calling and emailing decreases likelihood these services will be used.

Task 2
- Don't keep "Rentals & Events" page hidden in Parks & Recreation subpage. Again, the correlation between the two is not clear. Perhaps put it under "Your Services."
- The "special event application" is very small and hard to find. Put this on every page that is describing a rental option in a large button so it is easy to find when someone decides that they like what they're reading about that location.

Task 3
- The initial description page of the bus service is one sentence. It is very confusing about where to find the useful information about this service until people see that "Monona Lift" is underlined in yellow, which does not stand out from the background. Eliminate this extra step and put all of the lift information on the first page. Also, offer an online reservation service for these buses! People would like that.

Task 4
- Under "I want to" tab, in the "Submit" section, include "Report of city problem" (or something along those lines for things like potholes)
- Rather than an account page, I suggest an online form that people can submit that would get sent to a general "Support" email, made especially for things like this
- There could be someone on the other end who then directs those emails to the proper people
- Having to create an account is a frustrating step that people might want to skip in lieu of just calling the City of Monona after all, when it could have been solved via email or an online form submittal

Task 5
- First, include Swim Lessons with the other sports leagues and lessons. Put all like activities in one page
- Second, streamline descriptions and naming of the swim lessons so they are easy to read, easy to determine when they are, and easy to understand who they are for
- Get rid of the current calendar system and swap it for something less complicated

# SECTION TWO:

# APPLICATIONS AND PERMITS

UNIVERCITY.WISC.EDU

# Applications and Permits Subsite Report

Dylan Kachigian, Jack Shaffer, Isabel Coff, Lucas Johnson

Dylan Kachigian
Jack Shaffer
Isabel Coff
Lucas Johnson

# Introduction

Dear City of Monona,

We are four freshmen at UW-Madison, and after taking a course on Digital Information, which focused partially on improving websites in various ways, we have constructed for you and comprehensive and cohesive report on a subsection of your website, the Applications and Permits page.

We hope that this report will assist you in re-formatting and redesigning your website, and that the improved usability and accessibility draw more users into the site, and enrich the information exchange and the community life in your city.

Thank you for the opportunity.

Dylan, Jack, Isabel and Lucas

Dylan Kachigian
Jack Shaffer
Isabel Coff
Lucas Johnson

# Accessibility

WAVE Test Results:

1. 5 linked images missing alternative text (links Notify Me, Online Payments, Report a Concern, Connect with Monona, Online Forms)
2. 2 empty links in the code
    a. `<a class="modalClose" href="#CloseThisWindow" title="Close this window"></a>`
    b. `<a class="modalClose" href="#CloseThisWindow" onkeypress="this.onclick();" onclick="Javascript:hideModal('notifyMeNew'); return false;" title="Close this window"></a>`
3. Use of large block of justified text
    a. `<div class="original-text"></div>`
4. 1 skipped heading level (skips from h1 to h3)

Why is this a problem?

1. If a linked image is missing alternative text, a screen reader is unable to communicate the function of the link to the user, and the user will not be aware of the existence of the link or feature of the site.
2. An empty link means that the link contains no text. This is a problem for the same reason as the absence of alternative text for an image: the user will not be able to determine the meaning of the link by using keyboard or screen reader technology.
3. Justified text means that the length of lines is forced to be consistent and even, by way of varying word or letter spacing. This can negatively impact readability by causing unfamiliar appearance of words and sentences.
4. Heading levels not only provide document structure to readers, but they also facilitate keyboard navigation by users with assistive technology. If there is a skipped heading level, the user or the technology may become confused.

Dylan Kachigian
Jack Shaffer
Isabel Coff
Lucas Johnson

How can you fix this?

1.  Adding alternative text to a picture is really quite easy! Suppose you have an image in your code as <img src="example.jpg">. In order to add alternative text, you ammend your code as such: <img src="example.jpg" alt="This is an example of alternative text.">

2.  In order to fix an empty link, you simply need to add a title to the link. This does not mean a title tag, as both empty links have title tags. However, the title tag is what you see when you hover over the link, not how the link appears. To fix this in your empty links, change them from <a class="modalClose" href="#CloseThisWindow" title="Close this window"></a> to <a class="modalClose" href="#CloseThisWindow" title="Close this window"> Close this Window </a>.

3.  While the amount of justified text is not particularly dangerous to accessibility, it is threatening. It's not necessary to fix, but if you are so inclined, you should eliminate the <div> tags when they apply to large chunks of text, and sacrifice the appearance of justified text in parts of the site.

4.  In order to fix the heading level discrepancy, simply change h3 to h2, and move up all the rest accordingly.

For more information on this usability test, you may visit the original Wave Report:
http://wave.webaim.org/report#/http://mymonona.com/264/Applications-Permits

Dylan Kachigian
Jack Shaffer
Isabel Coff
Lucas Johnson

# Search Engine Optimization (SEO)

Preliminary Observations:

1. Monona City Website is the first option given on Google when searching "Monona."
2. Narrowing the search to "Monona application," the Applications and Permits subsite is the second hit on Google, but the first option is still relevant.
3. Similarly, searching "Monona permits," the Applications and Permits subsite is the fifth hit on Google, but the other options are still relevant.

Pagelocus.com SEO Test Results:

1. IP Canonicalization: Website IP address and website URL do not resolve to the same exact URL
2. Meta Description: There is no meta description present for the page
3. Header Tags: Not all headers are correctly tagged
4. Number of Requests: The website makes too many requests to the server, slowing down the site as a whole
5. Mobile: Website is optimized for mobile, but poorly
6. Social: Links to Facebook, Twitter, etc. need to be more clear and obvious to increase social ranking

Why is this a problem?

1. This is important to fix because it would allow all links to the page help increase the page rank in SEO because all links would then refer to the same exact URL
2. If a meta description were to be added, it would be displayed along with the search results for the page.
3. Without correct header tags, search engines cannot accurately identify important words and get extra information from the website that is not directly obvious
4. Search engines take website speed into ranking consideration
5. Website is too slow on mobile, elements of the website are larger than the device screen size, links are too small to easily tap on mobile

Dylan Kachigian
Jack Shaffer
Isabel Coff
Lucas Johnson

6. Social ranking is important in order to make the website more accessible on social media, thus making it more popular

How can you fix this?

1. Make sure the IP Address and URL are linked to the same URL
2. Meta tag should be something along the lines of "Page containing all applications, permits, forms, etc. relevant to the city of Monona, WI"
3. There should also be only one h1 tag per page, with important information about that specific page
4. Server-side corrections should be made to prevent the website from making so many requests to the server itself
5. Caches can also be used on the client-side
6. Elements should be scaled down to fit smaller screens, links should be associated with large buttons for mobile users

Analysis by pagelocus.com

Dylan Kachigian
Jack Shaffer
Isabel Coff
Lucas Johnson

# Usability Analysis

As seen in the tests, this webpage has issues with its overall usability. The category system used for the different applications and permits was difficult to comprehend for some users, who felt that the document they were looking for may have been more suitably found under a different category. The location of certain documents also caused issues, such as how the page for snow and ice removal was located in the sidebar whereas most users felt their attention was directed towards the center of the page where all the other information seemed to be located.

This website could be improved with numerous simple changes. For one, the category system could be either remedied to fit user expectations better, or there could be a keyword system implemented that could allow users to enter what they are searching for (e.g. "snow", "loan", etc.) and bring up certain documents that would match those keywords. The items on the sidebar should also be moved to the center of the page, as most users seem to expect the sidebar to contain generic information about the website while the center should contain the actual content of the page.

Dylan Kachigian
Jack Shaffer
Isabel Coff
Lucas Johnson

# Usability Test
## Script

Introduction: This is a usability test for a subset of the Monona City website. In this test, I will provide you with a scenario and a task, and then ask you a few questions. Please narrate your thinking process aloud as we go through the test; this will help me to understand how to improve the website to suit you as a user. The scenario is: You have just moved to the city of Monona, and you bought an older house that is in need of substantial system improvements to bring it to modern standards. You've heard of a program called Renew Monona that offers 0% loans, which you're very interested in.

Task: Locate the Scoring Criteria for this Loan Program from the Applications & Permits site. Please narrate your process.
1. Was the main page difficult to navigate? Why or why not?
2. Was the link for the Renew Monona Loan Program where you expected it to be?
    a. If not, where did you expect it to be?

Task: It's winter now, and there is a big snow coming. Locate the page for Snow & Ice Removal. Please narrate your process.
1. Was this page difficult to find? Why or why not?
2. Was the link for this page where you expected it to be?
    a. If not, where did you expect it to be?

Conclusion: Thank you for participating in our usability test. Your input will be very important in helping us improve the City of Monona website.

Dylan Kachigian
Jack Shaffer
Isabel Coff
Lucas Johnson

# Dylan's Interview Notes

## Test 1:

- Seemed to think website looked ugly in general
- Confused by scoring criteria phrase, so they were told to focus more on the loans part
- Read through the section headers and was confused
- Found link in roughly 1 minute and 15 seconds

Question 1:

- Thought section headers were the most confusing
- Thought links were kind of small

Question 2:

- Kind of, but not really
- Looking back on it it makes sense but it was really hard to even have expectations on where it would be

## Test 2:

- Looks at each header
- Assumes public works
- Not there
- Assumes licenses and permits but realizes that would be dumb
- Just stares at page without moving for about 15 seconds
- Starts to read literally every link on the main section of the page
- Gave up after 2 minutes and 30 seconds

Question 1:

- Very difficult to navigate obviously
- Pretty much ignored sidebar as sidebars usually don't have that kind of info

Question 2:

- Very heavily assumed that the link would be on the main center section of the page
- Very surprised to find out it was on sidebar

Dylan Kachigian
Jack Shaffer
Isabel Coff
Lucas Johnson

# Jack's Interview Notes

## Test 1:

- Likes background picture
- Looking for license and permits first
- Found loan program
- Scrolled down then came back to the top
- Clicked on loan program
- Found form in 1 minute exactly

Question 1:

- Thought subsite page was straightfoward
- Would be easier for adults who understand these forms better

Question 2:

- Initially expected link to be under license and permits or possibly housing
- Admits he thinks he was wrong for looking under permit section
- Site testing would be better done with older people who know more about housing

## Test 2:

- Looks through all subsections
- Biggest though is it would be under public works maybe
- Gets very lost about 40 seconds in
- Looks under license and permits again
- Never glances at sidebar, minute and a half in
- Feels very lost
- Noticed sidebar at about 1 minute and 30 seconds in
- Thought he might have been on the wrong page

Dylan Kachigian
Jack Shaffer
Isabel Coff
Lucas Johnson
Question 1:

- More difficult
- Though it would be under a subsection on main page
- Thought guiding question may have been slightly misleading
- Thinks he may have checked whole page if he wasn't part of this test

Question 2:

- Expected mainly to be under center section of the page

Would be better suited there

Dylan Kachigian
Jack Shaffer
Isabel Coff
Lucas Johnson

- 

# Isabel's Interview Notes

Task 1: User tried scanning the Licenses and Permits sub-heading first for the Renew Monona Loan Program, but had some trouble locating the link, so used a command-F page search for "Renew". The fact that the user had to use a page search indicates that the location of the link on this page in non-intuitive, and that the organization is lacking.

Task 2: User had no difficulty locating the link for Snow & Ice Removal, despite the fact that this link is on the sidebar menu but not on the main page. This was surprising.

Dylan Kachigian
Jack Shaffer
Isabel Coff
Lucas Johnson

# Lucas's Interview Notes

Task 1: User decided against looking manually for the loan program. Instead, the user took a shortcut and simply searched the name of the loan program and found it with ease. The user mentioned that he didn't originally see the link on the page, so he decided to take an easier route. Since the user searched for the link rather than finding it on the page, he was unable to identify if the link was where he expected it to be. Given that the user was unwilling to take the time to look for the link suggests poor organization and overcrowding on the page.

Task 2: The user immediately found the snow and ice removal page despite the fact that it was located on the sidebar and under one of the website subheadings. The user mentioned that it was where he expected it to be given that he found it so quickly.

# UniverCity Monona Website Assessment

Joe Bedermann, Carly Chelstrom, Kristian Haag, Elizabeth Soto
UW-Madison

December 16, 2016

## I.    Introduction

Accessibility, Search Engine Optimization (SEO), and Usability are three ways to evaluate the effectiveness and compatibility of a website. The following study was conducted on the mymonona.com website, and specifically the Applications and Permits section of the webpage. The methods used, results, and recommendations below are ways in which the Applications and Permits page as a whole can become more user friendly and widely available for use.

## II.    Methods

### *Accessibility Testing*

Web accessibility refers to the inclusive practice of removing barriers to prevent interaction with, or access to websites, by people with disabilities. When sites are correctly designed, developed and edited, all users have equal access to information and functionality In order to evaluate the access ability of mymonona.com applications and permits page, we used two tools: WAVE and AChecker.

WAVE is a web accessibility evaluation tool developed by WebAIM.org. It provides visual feedback about the accessibility of your web content by injecting icons and indicators into your page. No automated tool can tell you if your page is accessible, but WAVE facilitates human evaluation and educates about accessibility issues.

In addition to WAVE, we used another accessibility evaluation tool called AChecker. AChecker is an open source web accessibility evaluation tool. It can be used to review the accessibility of web pages based on a variety of international accessibility guidelines.

For both tools, we entered the URL for the Applications and Permits page on MyMonona. This URL is http://mymonona.com/264/Applications-Permits. The evaluation results for these tests are discussed later in the results portion of this report.

### *SEO Testing*

Search Engine Optimization, typically known as SEO, is a tool used to make a website more visible to search engines and make it appear higher on the search engine results page. Search engine optimization both makes sure that all pages in a website are visible to search engines and that the website ranks high in search engine results on the website's key terms.

The first SEO tool used was Page Locus. Page Locus is an online SEO auditor that checks for SEO issues, page speed issues, and traffic information. They then use this

information to assign scores to all of the areas of focus and eventually give the website and overall score. The overall score is Page Locus' way of ranking the website and showing webmasters where they can improve.

The second SEO tool used was RavenTools. RavenTools is another site auditor that ranks a site's current SEO and gives recommendations on how to improve it. RavenTools calls itself a tool that can be used to "discover the unique onpage SEO issues keeping your website from ranking and attracting more visitors from search engines like Google."

Once again, both SEO tools were used to evaluate the Applications and Permits page on MyMonona. Both tools gave different suggestions to improve the page and make it more visible to search engines, and therefore making the site more visible to users.

### *Usability Testing*

To test the usability of the mymonona.com website we conducted a series of tests with various participants. These tests included four separate scenarios where participants were asked to complete a set of tasks to achieve the goal of the scenario. Participants were read the purpose of the tests, what it will be used for, logistical directions, each scenario, and then asked to complete the various tasks (see Appendix "Usability Test Script"). They were not allowed to ask the facilitators for assistance or any other questions. They were also not allowed to utilize the search function on the website. The facilitators monitored each participant as they navigated the website to try achieve the goal of each scenario, taking notes and paying special attention to areas the participant struggled with. Our first scenario was as follows:

*"You are a home owner looking to make an addition onto your house. Where do you go to find the building permit application for this addition?"*

The goal of this scenario was for the participant to locate the building permit form. In this scenario, participants had four tasks to accomplish:
- Task 1: Find the Applications & Permits page on mymonona.com's website.
- Task 2: Locate the application specific to the Building Permit.
- Task 3: Open the application form and begin filling out the application.
- Task 4: Decide how you will submit the permit.

Our second scenario for each participant was:

*"You are having a fundraiser next week that you would like to advertise on the Monona electronic community message board. Where do you go to find information about this and submit a request?"*

The goal of this scenario was for the participant to create a message that would be posted on the electronic community message board. In this scenario, participants had four tasks to accomplish:

- Task 1: Locate the request form for posting a message to the community message board by navigating the provided drop-downs.
- Task 2: Once you've located the "Post a message on the community sign" request form, open the page within the browser.
- Task 3: Begin filling out the form.
- Task 4: Describe how you would submit the request.

Our third scenario for each participant was:

*"You are having a family reunion in one of the Monona City Parks and would like to reserve a park shelter for your event. Where do you go to find this form to request a park shelter reservation?*

The goal of this scenario was for the participant to find the park shelter reservation form. In this scenario, participants had four tasks to accomplish:
- Task 1: Locate the application to reserve the park shelter on the mymonona.com website. Do so by navigating the provided drop-downs.
- Task 2: One the "Park Shelter Reservation Form" is located, open the form within the web browser.
- Task 3: Save the application to your computer as a PDF
- Decide/Discuss how you will fill out the application and where you will submit it.

Our fourth scenario for each participant was:

*"You recently moved to Monona and were a volunteer firefighter in your last city. You want to become a volunteer firefighter in Monona. Where would you go to find an application to become a volunteer firefighter in Monona?"*

The goal of this scenario was to locate the volunteer firefighter application. In this scenario, participants had four tasks to accomplish:

- Task 1: Look for the Application to become a Volunteer Firefighter on the website without using the search option.
- Task 2: Click on the application to open it up.
- Task 3: Export the application as a PDF
- Task 4: Discuss what you would do with the completed application (i.e. where would you submit it? Online? Email? In person? Mail?).

# III.   Results

*Accessibility Testing*

Through the use of WAVE and AChecker accessibility tools, we discovered 5 issues pertaining to accessibility that should be addressed:

WAVE
- **No alternative text for 5 linked images.** See appendix for images. This means that alternative text was not included with five images as they were added to the page. Therefore, if an individual is using a screen reader, the screen reader will not be able to describe the image.
- **70 instances of contrast errors.** This suggests that all links on the page are considered to have poor contrast. This means that the colors selected for identifying links on this page have poor contrast and may not be easily identified for some individuals.
- **Unidentified linked PDF's.** All linked PDFs do not identify a document language or a page title. This means that there is less information provided to the user about the document than could be provided.

AChecker
- **Header nesting error.** This error is found on line 129, column 50. A header following h1 is incorrect. This suggests that there was an improper header used. If an individual is using a screen reader on this page, this could cause an inaccurate reading on the page.
- **Ordered list error.** Ordered lists only contain 1 list item. The ordered lists should contain more than 1. This is found on line 931, Column 5 and line 969 column 5. This suggests that the ordered list element is being used incorrectly for formatting purposes. For an individual using a screen reader, this could result in an inaccurate reading of the page.

*SEO Testing*

The site auditing tools used, PageLocus and RavenTools, gave similar results on what needed to be changed in the MyMonona site. These are the results that were given by each:

PageLocus
- **Metadata Description too short.** The metadata used to describe the website is nonexistent. This data is used by search engines to see what the page is about and helps decide where it should be in the search engine results.
- **Missing Header Tags.** Header tags are also used by search engines to assign it priority in search engine results. MyMonona.com is missing header 1 and header 2 tags, which are high class tags typically used in titles.
- **Slow Server Response.** This is an issue of speed. When a website runs too slowly, it has an effect on the experience of the website visitor.
- **No links to Facebook or Twitter.** No links to Facebook or Twitter on pages means that website visitors may be missing out on chances to connect with the City of Monona. Linking to social media on all pages means more chances for the visitor to click and stay in touch with the city and their updates.

RavenTools
- **Missing Google Analytics.** Google analytics allows Monona to see what people are doing on the site and where they are going from the Applications and Permits page. Without a Google Analytics code, there is no way of knowing how many people are visiting it.
- **Internal link is missing an anchor.** An internal link that uses an image for the user to click on but has no ALT text doesn't tell search engines what that link embedded in the image is about.
- **External links are missing anchor or ALT text.** An external text link without anchor text means the link is invisible to the user. An external link that uses an image for the user to click on but has no ALT text doesn't provide any context to search engines, who can't see images like humans do.
- **Images are missing ALT text.** Because search engine bots don't see images, either, they learned that HTML accessibility attributes could be useful to them too. Include ALT text for your images to ensure that all users, human and bot, can understand the images on your site.

*Usability Testing*

In scenario one regarding the building permit application, participants had the most difficulty with tasks 1 and 4, and found tasks 2 and 3 less challenging. When trying to accomplish the goal of this scenario, some participants bypassed task 1 (find the Applications & Permits page on mymonona.com's website). They used alternate routes to locate the permit such as the "Open for Business" dropdown where they were able to locate the Building Permit Application form. With task 2 (locate the application specific to the Building Permit) participants' hesitations were mainly regarding appearance. They thought the laundry lists of links was somewhat cluttered looking and that there was poor contrast between the background and text color. Aside from that, participants were able to locate the Building Permit Application form fairly seamlessly. For the third task (open the application form and begin filling out the application), participants understood they could fill out the form online, and appreciated the ease of filling out the form it created for them. Our fourth and final task (decide how you will submit the permit) posed as the largest challenge to participants. Not a single participant saw instructions on how to submit the form--one thought they may appear after you complete the form. In the end, most participants decided they would print out the form and either mail it or drop it off at the address listed on the top of the form.

In scenario two dealing with creating a message for the electronic community message board, participants had the most trouble with task 1--finding the request form for posting a message to the community message board. When searching for this form, it was not evident to participants to search the Applications and Permits. Many initially went to the community media tab and then hit a dead end. It wasn't until they resorted to the Applications and Permits page that they were able to find the message board application. For tasks 2, 3 and 4 (open the page within the browser, begin filling out the form, and submit the form) participants found it very

simple and easy to fill out the form on the page and submit via the "submit" button once they completed it. The only confusion for some participants was upon their initial glance at the page, not seeing the form immediately until they realized they had to scroll down on the page to access the form.

In scenario three, participants were asked to find a form that allowed them to request a park shelter reservation. Overall, it was evident that it was fairly easy for each participant to find the park shelter reservation form and to download it onto his or her computer (tasks 1 through 3). Most of the confusion or uncertainty came from where to submit the form itself via task 3. Some participants knew right away how they were going to submit the form (i.e. by email or mail), while others seemed to struggle with this task. One participant in particular, when navigating the website for the form, found that there are potentially two routes to fill out a park reservation request. The most direct way to this form is by hovering over 'Your Services' and selecting 'Applications and Permits'. The form was found under 'Parks & Recreation' without any issue. This particular participant, however, used a unique way to find the form by using the drop down menu under 'Our Community', clicking on 'Parks & Recreation', clicking 'Rentals and Events' on the left-hand side of the page, and finally, clicking on 'Park Shelter Rentals' also on the left-hand side of the page. The common way to find this form, as described above, resulted in the form being automatically downloaded to the computer. Conversely, the second way to find this form brought up a new web page with more information and resources on how to make reservations and included shelter availabilities and fees. There is even a 'View Availability' button at the bottom that will direct the user to a new website to check if a shelter can be rented. This proved to be an issue for this participant because this information is not provided in the traditional way to access the form. He found it confusing and misleading that the information was not consistent and that people would have to potentially navigate to two different parts of the website to find one thing they are looking for.

In scenario four, participants were asked to find an application to become a volunteer firefighter in the city of Monona. Overall, this application was easy to find, but a couple participants struggled slightly when trying to find the form. Participants generally used the 'Fire/EMS' link on the side-menu of the website and then clicked on 'Recruitment' where the form was found. One participant noted that the application was 'too buried' within the website because it took a while to navigate and locate the form. Most users decided the best way (and seemingly only way) was to mail the form once filled out. While the form might have taken a little longer to find, ultimately this scenario was straightforward and users were able to navigate mymonona.com to find this form.

## IV.   Recommendations

Based on our research and testing we conducted on the Applications and Permits page of the mymonona.com website, we have developed a comprehensive list of recommendations

for the City of Monona to implement. We believe these recommendations will enhance the accessibility, SEO, and usability of their website.

## *Accessibility Testing*

The accessibility testing tools, WAVE and AChecker, provided an evaluation of criteria that can be improved upon on the MyMonona website. Based on these methods used and the results of these methods, the following are recommendations to improve the accessibility of MyMonona.

- Add alternative text to all images.
- Choose a color that will remove the contrast errors for all links on page.
- Modify the header levels so only h1 or h2 follows h1. This will fix t header nesting error on line 129, column 50.
- Address the issue of ordered lists that are being used for formatting on line 931, column 5 and line 969, column 5. Reformat so the lists contain more than one list item or remove the use of the ordered list element completely.

## *SEO Testing*

The site auditing tools, PageLocus and RavenTools, provided a framework for what could be improved on the MyMonona website. The following recommendations are being made in order to improve the SEO of MyMonona:

- Add metadata descriptions for all pages
- Add social media links to all pages
- Include Header 1 and Header 2 on pages as titles
- Make sure all images have title texts and alternate texts
- Subscribe to Google Analytics for all pages to see and track traffic.

## *Usability Testing*

After conducting our usability tests and compiling the results, we have developed some usability-specific recommendations for mymonona.com.

- Our tests showed that participants took a while searching the Applications and Permits page to find their respective link/form. This process would be made easier if the list of links/forms was in alphabetical order.
- Applications that can be downloaded onto a computer and then submitted via mail, fax, etc. should have the same format once downloaded. For example, the forms should all have the option to be filled out via computer and should have pertinent information (contact information) listed at the top of the page so users don't need to search the form to find submission information they need.

- - There is also potential that it could be difficult for some users to print and mail or even fax applications, so it might be helpful to the community if there was a way to electronically submit the form.
- The colors of the link text versus the background of the webpage should be changed so there is more of a color contrast, making it easier for viewers to see.
- As many participants looked for the electronic community message board form in the "Community Media" tab on the website, it may be beneficial to add a link to that form under this tab, or to change the order of the dropdown box so that "Community Electronic Sign" appears in an alphabetic order prior to the "Community Media" link.
- When searching for the Park Shelter Reservation form, users can find two different links with two different sets of information. There should be one or the other. The part of the website that listed shelter prices and how to reserve the shelter and looking to see if the shelter is available is better than having the shelter form automatically download.
  - The following site: http://mymonona.com/321/Park-Shelter-Rentals lists information about the rentals and goes more in depth than the form does when found under application and permits.

## V.   Conclusion

Through utilization of Accessibility, Search Engine Optimization, and Usability testing, this assessment aimed to provide the City of Monona practical recommendations they can implement to improve these elements of their website, specifically the Applications and Permits page. Our comprehensive report will make the mymonona.com Applications and Permits page more user friendly and widely available. We hope the City of Monona finds this study helpful and is used to further improve their website.

# VI.   Appendix

*Accessibility*



5 images missing alternative text

*Usability Test Script*

Hi, (name). Thank you so much for taking the time to participate in our test today. My name is _____, and I will be walking you through this session today in hopes of improving a portion of the mymonona.com website.

You are here today to help us test the usability of the "Applications and Permits" page of the mymonona.com website. We are looking to test how easy or difficult it is for users to navigate this webpage. Before we begin, I would like to go over our roles here today.

As the facilitator, I will be here to give you a series of scenarios and tasks. As you complete these, I will be taking some notes on any difficult sections of the website you encounter as well as easy to navigate sections of the website. As we complete this test, please keep in mind that I will be testing the *site*, not you. Throughout our session today, I will be recording your dialogue with my phone, this audio will be used solely to understand how you navigate the website and what portions of the site you find easy or difficult to use. This session should take 15 to 20 minutes.

As the test participant, you will try to complete the set of tasks I set forward in the easiest and most efficient way possible without using the 'search' option. I am going to ask that you think aloud and tell me your every move. This is so we can analyze your thought process when you are navigating through the tasks. Again, we are trying to test the site, not you, so please do not feel the need to hold back on any thoughts you may have about the website.

**Tasks**

**Scenario 1**: Locate building permit form.
You are a home owner looking to make an addition onto your house. Where do you go to find the building permit application for this addition?

Task 1: Find the Applications & Permits page on mymonona.com's website.
Task 2: Locate the application specific to the Building Permit.
Task 3: Open the application form and begin filling out the application.
Task 4: Decide how you will submit the permit.

**Scenario 2**: Create a message for electronic community message board.
You are having a fundraiser next week that you would like to advertise on the Monona electronic community message board. Where do you go to find information about this and submit a request?

Task 1: Locate the request form for posting a message to the community message board by navigating the provided drop-downs.
Task 2: Once you've located the "Post a message on the community sign" request form, open the page within the browser.
Task 3: Begin filling out the form.
Task 4: Describe how you would submit the request.

**Scenario 3**: Park Shelter Reservation form
You are having a family reunion in one of the Monona City Parks and would like to reserve a park shelter for your event. Where do you go to find this form to request a park shelter reservation?

Task 1: Locate the Application to reserve the park shelter on the mymonona.com website. Do so by navigating the provided drop-downs.
Task 2: Once the "Park Shelter Reservation form" is located, open the form within the web browser.
Task 3: Save the application to your computer as a PDF
Task 4: Decide/discuss how you will fill out the application and where you will submit it.

**Scenario 4**: Application for Volunteer Firefighter
You recently moved to Monona and were a volunteer firefighter in your last city. You want to become a volunteer firefighter in Monona. Where would you go to find an application to become a volunteer a firefighter in Monona?

Task 1: Look for the Application to become a Volunteer Firefighter on the website without using the search option.

Task 2: Click on the application to open it up.

Task 3: Export the application as a PDF

Task 4: Discuss what you would do with the completed application (where to do you submit it? Online? Email? In Person? Mail?)

Photo Credit: mymonona.com

UniverCity Monona Website Usability Test Report
Kristian Haag
UW-Madison

December 16, 2016

# I.    Introduction

Usability testing is just one of the many ways in which a website can be evaluated. The following report details a usability test that was conducted for use in the evaluation of the mymonona.com website. This report will outline the method used, results found, and recommendations based on the usability testing.

# II.    Method

In order to test the usability of the website, mymonona.com, a usability test complete with situations and questions to ask users was created. The complete usability test is posted in the Appendix below. The test was created to look at two subsets of users that would typically use the mymonona.com website (Developers, Contractors, and Builders and City of Monona Staff/Government).

An introduction to the testing welcomes the users, explains their roles, and gives an overview of the testing procedures.  The role explanation section is designed to let the subject know that they are not being tested, the website is. It also serves as a basis to lay out guidelines for once the testing has begun. The introduction concludes with an opportunity for the user to ask any initial questions they may have.

Once the introduction has concluded, the testing may begin. In this study, the test scenarios conducted depended on which subset being tested the user would fall into. Scenarios were set for the two groups in order to explain why they would be doing the tasks they are about to complete. A set of tasks was set for each scenario and the user was instructed to follow the task while speaking aloud and explaining their every move on the website. The tasks were designed to see how easy or difficult it is for the various subsets being tested to find information that is important or necessary for their job.

The first test subset was developers, contractors, and builders. These tasks focused on portions of the website having to do with applications, permits, and licenses these people would need to fill out before they can begin or finish their job. Questions ranged from applying for a building permit to contacting a building inspector.

The second test was designed for the City of Monona staff/government or those attempting to become a part of it. This subset was important to look at because they need to be familiar with the mymonona.com website in order to do their job efficiently. This subset focused on looking up information from the past as well as applications. The questions ranged from finding minutes from the previous Board of Review meeting to finding architects for jobs similar to those done for the city in the past.

The testing concludes with exit questions designed to allow the user to explain the difficult portions of the website or any problems they had while taking part in the testing. This section is important because it allows the user to speak freely and address the any concerns about the website while being a part of the test. It also is important to hear how the user felt about the overall user-friendliness of the website when assigning recommendations.

## III.   Results

The results of the testing can be broken down once again into the two subsets that were tested. Similarities that occurred between both subsets of the testing will be listed in both sections in order to show the importance of the issue. The results given below will be the building blocks onto which the recommendations section will be built. The results will be referencing specific scenarios from the testing.

(The testing script is included in the appendix if there are questions regarding the scenarios and tasks being described.)

The users in the developers, contractors, and builders subset ran through their tasks and were able to identify a number of issues regarding the usability of the website. In the first scenario, users in the subset were able to easily find the Applications and Permits page using the dropdown menu, and were also able to easily find the Building Permit Form on the page. After the form was opened was where some issues arose. The form is compatible to be filled out and completed online, but the two users in this subset wanted to print off the form and take it to city hall or mail it in. Once the users saw it was possible to fill out the form online, they were able to easily complete it, however when they finished, they were surprised that the could not submit it online immediately or send it in an email.

The second scenario was easy to the subset. They could easily navigate to the page to find their local building instructor. Due to some experience in their respective fields, both users knew the process of contacting a building instructor. Overall the second scenario was simple for the users to complete because they had done it before and the inspector's information was easy to find on the website.

The last scenario for the developers, contractors, and builders proved to be their toughest. It asked for the user to find information and the permit to excavate a city street. The first task was to go onto the Water and Utilities page and then enter the Permits and Standards page. Finding the Water and Utilities page was easy for users, but they struggled to find the Permits and Standards page. They both said the link seemed to blend into the side bar and was difficult to see at the beginning. After entering the page, they easily found where to go for information on excavating in the street. The process of obtaining permission seemed confusing to them though. It is not clear when they will hear back about the application and if a permit is granted, and who they should contact regarding questions about the Right-of-Way Permit.

Overall, the users in the developers, contractors, and builders subset were able to complete their tasks with only a few questions or concerns. The areas they saw as problematic came from filling out applications or permits online, where to direct questions regarding some of the online forms, and the contrast in some sections of the website.

The City of Monona staff/government subset was able to find some of the information easily, but ran into issues on other aspects of the website. The first scenario was the easiest for this subset of the usability testing. They were able to easily navigate the website using the dropdown menu to get to the Board of Review page and locate the minutes from the last meeting. They scrolled through the agenda until they were able to find the presenter in the last 7:00pm slot. Finding minutes to a meeting is an essential ability when looking at local government, the ease of finding the information is positive because nothing was hindering the user from doing their job.

The second scenario for this subset was to apply to a city committee. The first task in the scenario was easy, because the user had to simply navigate to the Boards, Commissions, and Committees page. However, this is where the ease stopped. The form to apply to be on a board, commission, or committee is hidden in a link at the top of the page in an easy to pass over sentence. The link itself is a different color than the text, but it blends in with the background and was missed by both participants. Once in the page of a specific board, commission, or committee, there is nowhere to click to apply to the respective committee. Within the application to serve on one of the committees, there is once again a lack of contact information. If customers have questions, they have no information on who to contact with them and may give up on the application altogether.

The third and final scenario was designed to be a tough one. It involved looking up an architect that did a job for the city in the past. The information was hidden in a 2015 annual report. The scenario was designed to look at how inefficient it may be for an employee to look for specific information from past reports. Surprisingly, both users were able to find the annual report quite easily. Once in the report, they needed to scroll or use a find function to seek the necessary information. The ease of finding the necessary information hidden within the document was impressive, and the final scenario led to only a few concerns.

Overall, the users in the City of Monona staff/government subset seemed very savvy using the mymonona.com website. They could navigate the pages and documents throughout and could find the necessary information with ease. Issues of contrast however once again were noticed. Both users scrolled over the application to join a board, commission, or committee multiple times before seeing it at the top of the page. Searching inside of documents was easy for both, but could still be streamlined for more efficient searching in the future.

## IV.    Recommendations

According to the findings from both subsets of the usability testing, a set of recommendations has been created for the City of Monona to consider. These recommendations were created to enhance the usability of the mymonona.com website. The following recommendations are being made to create the most user-friendly website possible:

- Correct issues of color contrast on all pages of the website.
    - When it is difficult to see the links a user is looking for or needs to use, it can create frustrations for the user. If a link is hard to see or blends in, the user may continuously scroll over the link they are looking for. When words blend into the background, it is also not as visually appealing for the user. By making sure the color of texts and backgrounds contrast one another, the site will be easier to use because the words will pop off the page and be easy to read.
- Make all forms and applications online friendly.
    - When only some applications or permits have the ability to be filled out online, and others need to be printed off, it creates confusion for the user. If all applications and permits are online friendly and able to be filled out online, it should also be listed at the top that users can type in the form to complete. After completion, if users could email the completed application or permit to a separate City of Monona email, the process of completing applications and permits on the site would change. Users would no longer have to mail or take the completed form into city hall, they could simply email from the same computer they competed the form on. Adding these simple steps would mean the users are happier with their experience.
- Add contact information on all online forms.
    - Some online forms, the Application to Perform Work in a City of Monona Right-of-Way for example, require users to go back to the last page they were on in order to see contact information about who to contact with questions or concerns with the application. Adding that information on the page with the form would the enhance the user experience, because the less hassle the user goes through to find information, the happier they will be with their experience.
- Make PDFs and online documents more search friendly.
    - Looking for specific information in Annual Reports can take time. Without knowledge of the find command on computers, users would have to scroll aimlessly until they found the information they were looking for. Adding a simple Table of Contents in reports and documents on the website would be one solution. If PDFs were scanned in as search friendly, it would be even easier to find information on the page. A search bar could appear at the top

of the report and the user could type in the key word or concept they are looking for. Doing this will make searching for information in mymonona.com documents easier than ever for users.

## V.   Conclusion

The user-friendliness of a website is important. People want ease of use in everything they do. By researching the recommendations given in this report further and eventually implementing them on the mymonona.com website, the City of Monona can enhance the experience those that visit the site have. The improvement of the usability to the next level will create a mymonona.com that is easier to use and more user-friendly, therefore improving the overall quality of the website and users' relationships with the City of Monona.

## VI.   Appendix

**<u>Usability Testing Script</u>**

# An Introduction to mymonona.com Site Testing

## Welcome
Thank you so much for coming in today.  I wanted to give you a little information about what you will be looking at and give you time to ask any questions you might have before we get started.

Today we are asking you to serve as an evaluator for the city of Monona's web site and to complete a set of tasks. Our goal is to see how easy or difficult you find the site to use.

## Test Facilitator's Role
My name is Kristian Haag and I am going to be the test facilitator today. I am here to record your reactions and comments as well as take notes and observe your interaction with the city of Monona's site.

During this session, I would like you to think aloud and describe to me your every move as you work to complete the tasks. I will not be able to offer any suggestions or hints, but from time to time, I may ask you to clarify what you have said or ask you for information on what you were looking for or what you expect to have happen.

## Test Participant's Role
- Today I am going to be asking you to look for some information on the site and tell me how easy or difficult it was to find the information. These activities are all about how easy we have made it for people to use the site.

- There is no right or wrong answer. If you have any questions, comments or areas of confusion while you are working, please let me know, and I will answer your questions to the best of my ability without harming the outcome of the test. But remember, we are testing the site, not you.
- If you ever feel that you are lost or cannot complete a task with the information that you have been given, please let me know. I will ask you what you might do in a real-world setting and then either put you on the right track or move you on to the next scenario.
- Please do not feel that you need to hold back any opinions about the site, we are trying to improve it in order to make it better and easier to use for all.
- As you use the site, please do so as you would at home or your office. I would ask that you to try work through the tasks based on what you see on screen, but if you reach a point where you are not sure where or how to find something, please feel free to use 'Search'. If you do choose to use the 'Search' option at any point though, I may ask you why you chose to do so.
- I will be recording this session for reference later if needed. I am capturing your voice and what you see on the screen. However, your name as well as any other significant identifiers to your identity will not be associated or reported with data or findings from this evaluation.
- I may ask you other questions as we go and we will have wrap up questions at the end.

Do you have any questions before we begin?

## Tasks
Testing #1: Developers, Contractors, Builders

**Scenario 1:** Locate the Building Permit Form
A client of yours wants to add onto their current home in the city of Monona. They ask you to help them find the building permit they need in order for you to continue with the addition. Where do you find the building permit on the mymonona.com website?

Task 1: Using the dropdowns from on mymonona.com's main page, find the applications and permits page.

Task 2: On the Applications and Permits page, find the online Building Permit Form.

Task 3: Open the permit and decide how to fill out the permit.

Task 4: Once you have finished filling out the permit, decide how you will turn in the permit.

**Scenario 2:** Contacting the Building Inspector
You are almost done building the framing of a new house on the edge of the city of Monona. You need to contact the building inspector to get the go ahead to continue with the build. How can you find the information about the building inspector?

Task 1: From the home page, find the building inspections page using the drop downs.

Task 2: Once on the page, find out who the building inspector is for the city of Monona.

Task 3: Explain how you would go about contacting the building inspector.

**Scenario 3:** Excavation in Streets

You are building a new home in the city of Monona and need to attach the sewage from the house to the main line in the street. In order to do this you need to excavate out into the street. Where can you find information about the contacts and permits you need to obtain before beginning the excavation?

Task 1: From the home page, use the drop downs to locate the water and utilities page then find the permits and standards page.

Task 2: Once on the page, find where you would go for more information on excavating in the streets.

Task 3: Find who you would contact with questions regarding the excavation.

Task 4: Talk about how you would go about obtaining permission to excavate in the street.

Testing #2: Monona Staff/Government

**Scenario 1:** Board of Review Minutes

You need to look at the minutes from the last Board of Review meeting to prepare for the next meeting coming up. Find the minutes from the last meeting so you can create an agenda.

Task 1: Use the drop down tabs on the main page to find the Board of Review page.

Task 2: On the Board of Review page, find and open the most recent agenda.

Task 3: Find who presented to the Board of Review at 7:00 pm in the last meeting.

**Scenario 2:** Apply to a City Committee

You have always loved the benefits of the library and how it positively impacts the city. You want to apply to be a part of the Library Board of Trustees online, so you too can be a part of the library system that is so important to you.

Task 1: From the main page, using the drop down menu, find the Boards, Commissions, and Committees page.

Task 2: Find the section to apply for an appointment to a city committee.

Task 3: Begin filling out the form to become a member of the Library Board of Trustees.

Task 4: Talk about how to submit the form.

**Scenario 3:** Finding Architects to do a Similar Project

You are working with a company by the lake that wants to get their building redesigned in a similar manner as the concepts given in the Riverfront

Redevelopment project. The project was highlighted in the 2015 Annual Planning, Community, Development and Economic Development Summary.

Task 1: From the home page, find the page for the Planning and Community Development Department.

Task 2: Once on the page, find the 2015 Annual Planning, Community Development and Economic Development Summary.

Task 3: Open the Annual Summary to find information about the Riverfront Redevelopment Project.

Task 4: Find the name of the architecture firm that drew concepts for the city of Monona.

## Exit Questions/Conclusion

1. How would you rate the overall user friendliness of the website?
2. What were the most difficult parts of this testing for you?
3. What suggestions would you make in order to improve the website?
4. Do you have any final comments?

Thank you for your time!

## UniverCity Monona: Accessibility, SEO, and usability test results

## Testing done on Application & Permits Page

http://mymonona.com/264/Applications-Permits

## SEO (Search Engine Optimization) Test

Raven scored the Application and Permits page 85 out of 100. The results showed no critical issues, however, there were smaller issues that could improve the performance of the website and SEO test score. Getting the best SEO score for your website can be very helpful attracting the appropriate users for the site. This in turn brings more intentional traffic and helps more people of Monona.

### Analysis

The Raven results give the SEO score and then display what issues in the code are causing the point deductions. Most of the points taken off for the page were because there are render-blocking javascript files and missing expirations for resources that could leverage caching. Also, images can be compressed and resources minified. These issues are for both the desktop and mobile version of the website. These issues are not critical and with them the site still has a high SEO score.

### Accessibility Test

Accessibility tests are used on websites to know if there are tools setup for handicapped needs of accessibility. Both a WAVE, http://wave.webaim.org/, and an Achecker, http://achecker.ca/checker/, test were completed on the tested page and results shown are percieved as most important results from both tests.

- Add alt text to image tags for the "Notify Me", "Online Payments", "Report a Concern", "Connect with Monona", and "Online Forms" button images. This would help in the case where a person with bad vision is hovering over the images relying on the alt text to be read aloud to them.
- The bulleted lists are unordered, it would be easier to read and navigate if they were alphabetically ordered.
- In terms of style, the page has very low contrast, people who have defective vision might have a hard time recognizing the words.

## Analysis

Accessibility is a huge deal for any website that is trying to reach a more public audience. Every issue bulleted above should be addressed to some degree. The issues are small, but could give some users better ease-of-use. The small amount of time it would take to make the changes could save someone more than that time alone and more users add up to more saved time.

## Usability Test

A usability test is performed on a website in order to acquire data on how a website holds up to public use. This is done case by case and experiences can vary greatly from one user to the next. The whole idea is to improve the site to its user's experience.

### Welcome and Purpose Script
"Thank you for taking time out of your day to meet with us. I wanted to give you a little information about what you will be looking at and give you time to ask any questions you might have before we get started. Today we are asking you to serve as an evaluator of the City of Monona's Application and Permits web page. We will ask you to complete a set of scenarios where we will have you to navigate the links of the site. Our goal is to see how easy or difficult it is for you to navigate the page."

### Test Facilitator's Role
"I am here to record your reactions and comments of the web page you will use. With your permission I will record our conversation using my phone, in order to reduce the amount of note taking during this interview and for use by other members of the team only. During this session, I would like you to think aloud as you work to complete the tasks. I will not be able to offer any suggestions or hints, but from time to time, I may ask you to clarify what you have said or ask you for information on what you were looking for or what you expect to have happen. This interview will last roughly 15-20 minutes and consist of 3-5 scenarios. Do you have any questions before we begin?"

### Scenario 1
You are a the owner of a construction company that is contracted to build a home in Monona. You will need to find all the necessary permits to make this happen. First, you need a building permit in order to build in a residential zone. You'll also need to obtain a variance in order to make an extra-large front yard needed to accommodate handicapped needs for the owner. Also, you'll need to install piping to the sewer and cables to the electricity which involves tearing up the sidewalk along the property; since this will be done in a City of Monona right-of-way, you'll need a specific permit for it. Once this work is done you'll need to submit another application for a final inspection.

**Scenario 2**

You are the owner of a very successful food cart that travels the nation. This is your first time in Monona and need all the necessary permits to sell your food. Also, there are weekends you'd like to set up a canvas and tables at the park and sell food there while playing some music over speakers.

**Scenario 3**

You just retired, and you plan to travel around the states with your wife or husband for half a year. Your daughter is away at the University of Minnesota, and she does not come back often. In this case, there would be no one watching your house while you are away for your trip. However, you do not want your house to be unattended for a long time.

**Scenario 4**

You're a concerned citizen living in the City of Monona who wants to help make the community a safer place. After researching ways to get involved in progressing the safety standards you decide to join the Public Safety Commission. You'll need to apply for this position.

**Scenario 5**

You're jealous of all the fun the UW students get to have on state street during freak fest and decide to host the same thing except in Monona. In order to do this you will need to get permission from the City of Monona to block off a street so that they can ask the police department to enforce the new flow of traffic.

**After Scenarios**

Ask them questions such as: How difficult was each task? How well do you feel others would complete this same task? If you were the person described in the scenario, then how much help would the website be? Did you find it easy to navigate the links on the page, and if not how do you think they could be better organized?.

"Thank you for taking the time to help us test the usability of the City of Monona Applications and Permits webpage. Do you have any followup questions now that we are done?"

## Usability Test #1

Interviewer: Tyler Lamb
Interviewee: Kathryn Ager

Initial thoughts about the webpage:
- Nice looking background, but the box panel with all the links is crowded and badly colored.
- It's organized fairly well by the headers, so it's not too tough finding what you're looking for, it's just not very appealing to look at.

- Another note on organization, none of the sections are aligned with each other.
- There's too many words/links on this one page.
- Not all the bullets are colored the same, some of the links have the bullet included in the hyperlink, making it orange.
- The lists could be alphabetically ordered.

Thoughts while completing the scenarios:
- Scenario 1: The 3 categories lined up on the top of the page could be combined since they're all kind of related. The link "Right-of-way permit" is not very informative.
- Scenario 2: Fairly easy to complete task, no struggles.
- Scenario 3: Easy to find, one would assume this is under the Police category.
- Scenario 4: No struggles.
- Scenario 5: The wording of the links under the Licenses and Applications category is inconsistent. Some say, "Application for _____ license" while others say, "_____ license application". It should be consistent for ease of use.

End of interview thoughts:
- Completed each scenario with medium difficulty.
- She felt she was an appropriate tester for the average person, most people would agree with her comments/suggestions.
- If someone is a first time user in searching/purchasing permits, then it may be quite confusing knowing which permits to get. More generalized headers could help condense the forms and make it easier.

## Usability Test #2

Interviewer: Tony Koerwitz
Interviewee: Myrisa Schubert

Initial thoughts about the webpage:
- Looks nice, pretty background picture
- Appears well organized and informative
- Colors make words a bit hard to see on the links and side tabs

Things to notice while completing the scenarios:
- Scenario 1: Used side tabs which have different links than the headers on the page, this got her off page a little bit. Got lost into a different part of the website and needed my intervention to get interviewee back to the Applications & Permits page. Links pretty easy to find once/if they're noticed.
- Scenario 2: Had to read through every link to find the specific ones. Very general header Licenses & Permits
- Scenario 3: Very quick and easy.

- Scenario 4: Little confusion between the meaning of committee and commission but form contains necessary information to let one know its the correct application.
- Scenario 5: Had to read through every link to find the ones worded correctly enough to fit the scenario. Felt monotonous while autonomically reading through all links.

End of interview thoughts:
- Completed all scenarios but after questions interview ran over 20 minutes.
- Thinks someone knowing their own profession would be able to easily traverse the Application & Permits page getting all necessary permits.
- Feels eyesight is a big issue for a lot of people and the color scheme is off.
- Suggested a FAQ page or a place to hear feedback quickly on questions pertaining to licenses and permits.

**Usability Test #3**

Interviewer: Taylor Liu
Interviewee: Liam Wang

Initial thoughts about the website:
- A lot of texts in the center part
- It might be hard to find the right application form since there are so many options shown all at once
- The sidebar looks decent

Things to notice while completing the scenarios:
- Scenario 1: There are a lot of clickings back and forth between the main page and subpage. Hard to find the right application form via sidebar.
- Scenario 2: Unable to find the form through sidebar navigation.
- Scenario 3: Unable to find the from through sidebar navigation at first, find the right form through the cluster in main page
- Scenario 4: Used the sidebar again this time and find the right form.
- Scenario 5: Based on the previous scenarios, the interviewee figured that the application he needed was probably on the main page of application and permit under the Police Department section. Yet he couldn't find it on the main page. After some clickings back and forth between main page and subpage, he was still not sure if he found the right application or not.

End of interview thoughts:
- Some tasks were pretty hard to do.
- The page should have some visual cues and symbols to make redundant signals for different section
- The page should group the permits better in the main page as well as in the subpages, so people don't go to somewhere unnecessary.

- Better not display all the names of the forms on the main page. Instead, it is better to put the links with classifications that would take people to applications accordingly.
- Since it is a page about application and permit, it is not that useful if the page contains too much description and information.

## Analysis

Overall the webpage is very usable and in only a few cases did it take more than one click to get to the final destination. The suggestions that were given are very low in severity and only minorly affect the users ease of use. After applying our usability test to three people there were a few things that consistently came up in conversation. First, there are some organizational aspects of the page that could be improved. Also, there was an agreement that for a person who buys permits as part of their profession it wouldn't be too difficult for them to navigate this page. However, to the average Joe it might be hard due to the lingo and use of ambiguous words. All suggestions to the webpage mentioned in the interviews will be condensed and elaborated upon below.

## Improvement Suggestions

- Color scheme: the colors chosen for the text and the panels make it difficult to read, we suggest using colors of higher contrast. This will make navigation easier.
- Aesthetics: the categorial sections are not consistently horizontally aligned with each other and some of the bullet points are of different color. Addressing these inconsistencies will make for a much more aesthetically pleasing web page.
- Organization: links are not alphabetically organized and the page seems crowded with too many links/words. To address this concern, we suggest creating more generalized headings that will either take you to another page or a drop down list; it could save time when the user is searching for something. These additions will improve the user's experience with navigating the page.
- Additional Feature: there was a suggestion to add a feature, which we agreed with, that concerned the category of people who may have difficulties finding what they need due to lack of experience in the permit purchasing world. An FAQ page or similar feature which allows people to ask questions and promptly get a response would allow for less confusion and an easily accessible place to go for questions.

# SECTION THREE:

# PUBLIC LIBRARY

Ben Hurley, Luke Zheng, Tony Ruiz and Manuel Gomez

## Monona City Library Website Final Report

The overall usability, accessibility, and SEO of the Monona Library website was not all that bad, but there are some things that could be improved about it.

The accessibility of the website when ran through the WAVE website only showed two major errors. The errors shown were empty text links, meaning that the links had no text connected to it. The issue with that is the purpose of the link will not be presented to the user, which can also confuse keyboard and screen reader users. To fix this, either:

- o Remove the link
- o Provide text within the link that provides the purpose of the link.

The usability of the website was good for the most part; however, there were still important issues with the website when we held testing usability tests with actual people, particularly with the home user interface. Based on our usability tests on four different test subjects, the buttons on the right side of the screen are clearly far too difficult to spot. The user's attention is almost entirely focused on the left side of the screen where the menu bar is prominently located. The buttons almost blend in with the big slide-show, located in the center of the home screen. The large slide-show was also considered slightly overwhelming for a couple of the subjects. Another issue that came up while navigating the site was the fact that there was no obvious way to quickly return to the library home page. The only way anyone could navigate to the library home page was a small piece of clickable text that was difficult to see.

The SEO of the website seemed alright, but showed problems when ran through PageLocus. The full report showed the following problems:

- o Skips first two level of header tags
  - ▪ Search engines weigh first two levels of header tags greater than the rest. The first two headers are not present.
- o Conversion form
  - ▪ Not present on this website; would be convenient to have because it would allow for users to follow up with librarians in a much more efficient fashion.
- o Social media report
  - ▪ No Facebook and Twitter page linked
- o Authority Report
  - ▪ Not listed in DMOZ. Noted by Page Locus; however, its application is not as relevant anymore.

Overall, fixing the changes listed above would increase the overall quality of the Monona Website. These changes will make the Library website more useful for the library, the website as a whole, and the city itself.

**Katherine Vitalbo Test Notes**
**7:20-7:32**

**Scenario 1 - Sara**
 You're a senior citizen and you want to learn about Alzheimer's.
- ○ Find an event related to your interest.
- ○ Register for this event.
- ○ Find a book for this subject.

Clicked on adults
Clicked on friday morning book group
Clicked on services
Went back
Clicked on adults
Clicked on enewsletter
Clicked on summer one on one help
Clicked on 'register for events'
Filtered audience by senior
There was no related event
Went back to start page
Clicked 'search the catalog'
Searched 'alzheimers'
Found a book *Alzheimer's: Finding the words*

**Scenario 2 - Merina**
You're hosting a book club event soon with all your friends.
- ○ What hours are the library open?
- ○ Find information on how many books a person can check out at one time, as well as how many DVDs you can check out that accompany the book.
- ○ You realize you've lost your library card. Find out how much it costs to get a new one.
- ○ You then see that the book you want to read for your book club isn't actually available at the library. Request that the library get the book. **Pretend that you have a library card number**
- ○ Subscribe to a newsletter for updates on events at the library in case your club wants to go to one.

Found it right away on the start page
Went to about the library
Clicked library policies
Clicked 'library card and borrowing policy'
Found on the same document it costs $1 for a new library card
Went back to the start page
Clicked on 'search catalog'

Searched the book
Clicked 'place a hold'
Went back to the start page
Clicked 'e-newsletter sign up'

**Scenario 3 - Kayla**
You are new to Monona and you love to read.
- ○ Try to find out how to get a library card.
- ○ Find an event to meet other avid readers.
- ○ <span style="color:red">Try to connect with the monona library on social media.</span>

Clicked services
Clicked library cards
Went back to start page
Clicked on adult programs and events
Found 'storytelling get together club'
Went back to start page
Clicked 'about the library'
Clicked 'support the library'
Couldn't find social media

**Scenario 4 - Kelsey**
You aren't very tech savvy and you don't have access to a computer.
- ○ Try to reserve a computer.
- ○ Find out what you can do with the Internet/computers at the library.
- ○ Try to find a way to learn about technology.

Went to start page
Went to services
Clicked 'reserve a computer'
Went back to start page
Clicked services
Clicked internet/computer access
Went back to start page
Clicked 'register for events'
Searched 'technology' in events
Went back to adult events
Went back to start page
Clicked services
Clicked book a librarian

Aliesha Biersack
Kelsey Daykin
Amanda Hopkins
12/16/17

**UniverCity Monona Report**
Monona Public Library Page

We ran usability, search engine optimization, and accessibility tests on the Library page of mymonona.com. In addition, we also analyzed the overall searchability of this portion of the site. Below is our analysis, its results, and our recommendations to improve the function of the library page to better service the city of Monona and its residents.

## Accessibility

After running a Wave accessibility test on the Library Home page, About page, and Services page, we found the following issues and suggestions:

- 9 images without alternative text
  - Alternative text is important for those with disabilities using a screen reader as it provides them with a description of the picture if they are unable to see it
  - This can be fixed by adding an "alt=" attribute to the image link
- 4 empty links
  - An empty link is a link that is made without a text attribute. This text attribute is important for those with disabilities using screen readers because without the text attribute, the reader will have nothing to describe the link to the user
  - This can be fixed by adding text between the link and the closing tag in the link coding: <a href="http://www.mymonona.com">My Monona</a>

## Usability

A site should be usable and effective in helping people accomplish tasks. It is important to get user input by testing it on actual people and hearing their thoughts and feedback. To make sure that visitors can use the Library page easily, we had three participants navigate the webpage and complete three different tasks in order to asses the Library page's usability.

Scenario 1: I lost my library card and would like to replace it. Where do I go?
  - Users all navigated to library homepage from mymonona.com by hovering over the tabs at the top of the homepage and selecting the 'Your Services' tab and then clicking 'Library' within the drop down menu.
  - Once on the 'Library' page, each participant hovered over the 'Services' tab in the sidebar menu.
  - One of the participants realized that there was another pop-up menu if you hovered over the 'Library Cards' tab and then clicked on 'Lost or Replacing Cards & Items'. However, the other two participants did not wait to see the next

drop down menu under 'Library Cards' and simply clicked the tab. Both people scrolled the page quickly realizing it was just general information about library cards and revisited the top of the page finding the 'Lost or Replacing Cards & Items' option in the corner.

○ All participants eventually found their way to the correct page and gathered the information needed.

Suggestions: None really. Not seeing the 'Lost or Replacing Cards & Items' pop-up menu right away was an error by the users. This mistake was proved unimportant as the 'Library Card' link which they clicked on had another link to 'Lost or Replacing Cards & Items' at the top of the page so they could still easily find and access that information despite being on a different page.

Scenario 2: I am writing a paper on William Shakespeare's *Romeo and Juliet* for my English class and would like to find a summary of the book. Where do I go?

○ All users successfully navigated to the Library homepage again.

○ One participant hovered over the various sidebar options eventually selecting 'Tweens and Teens'. Another participant attempted to search 'Romeo and Juliet Summary' in the search bar at the top of the page but the search revealed nothing. She then returned to the Library homepage and selected 'Search the Catalog'. The third participant did the same. Both soon realized that they were looking for the actual full book on the library's e-catalog and returned to the Library homepage and hovered over the different tabs finally selecting 'Tweens and Teens'.

○ Once all participants had hovered over 'Tweens and Teens', they all selected the 'Help With Homework' tab in the pop-up menu.

○ From there, they all clicked on the 'Schoolbytes' link and then clicked the 'English - summaries of short stories and books' link.

○ They then searched for "Romeo and Juliet" and found a summary.

Suggestions: Not restricting book summaries to only "Tweens and Teens" would be a good idea. People of other ages could be looking for synopses of books and may not think to select the 'Tweens and Teens' tab as they do not fit into that category. Furthermore, the summaries should probably not be located under 'Help with Homework' as users may not be searching for a book summary for a homework assignment.

Scenario 3: You're interested in Monona Library's Pick-a-Book program, where you can you buy a book for the library's collection. Where do you go to learn more about this program?

○ Each user began on the Library homepage.

○ Two participants selected the 'Support the Library' option in the sidebar menu. Both soon found that it was not the correct tab and returned to the Library homepage.

- ○ One of the users decides to peruse the sidebar tabs once more and selects the 'Children and Families' tab and then the 'Group and School Services' option in that pop-up menu. On this page she finds information about the Pick-a-Book program.
  - ○ The other two participants decide to search 'Pick a Book' in the search bar on the homepage and the page with information about the program came up as the first result.
  - ○ All users eventually ended up on the correct page.

Suggestions: The Pick-a-Book program was difficult to find by simply navigating the library page. Two of the three participants had to utilize the search tool. Although that method was very effective, having a tab with different programs would probably be helpful. That way, users do not have to continue guessing which tab the program they are looking for is under. The Pick-a-Book program is located under the 'Children & Families' tab and then on the 'Group and School Services' page which does not make much sense because anyone could be looking to partake in the program by purchasing a book and may not necessarily fit under either the children, family, or school category and would therefore not think to look there.

## Search Engine Optimization

After running a SEO test on the Library Home Page, we found the following issues and suggestions:

- ● The site lacks a metadata description. Metadata provides a short description of the website and provides Google crawlers with information to better rank the page.
- ● The website does not use the "h1" and "h2" header levels, but goes straight to "h3" and "h4" headers. Header levels range from 1-4, and Google prioritizes them in that order. Placing important information and keywords in h1 and h2 rather than lower headers will improve the site's SEO as Google search engine crawlers will pay more attention to these upper level headers.
- ● The page does not have links to the Monona Public Library's Facebook page or Twitter. As the Monona Public Library has an active Facebook page, linking to this social media site will improve the website's SEO.
- ● This site is not listed in DMOZ, an open-content directory of the web. Google ranks pages listed in the DMOZ higher than those that are not listed.

## Searchability

To evaluate search engine friendliness of the Monona Public Library subsite we identified seven commonly used words or phrases within various library web pages, then Googled "Monona" along with each of these terms. We also generated synonyms of these words or phrases and repeated the Google search with the synonyms. As we conducted each search we observed whether any library web pages showed up within the first page of search results.

In general, we found that the search terms we identified while browsing the library subsite returned a library page (or two) within the top results. When a library page didn't rank highly for that search term, there was often a different page or subsite from the MyMonona site that showed up within the first page of search results. The synonyms were a little more hit and miss. For example, the synonym we came up with for "computers," "internet," returned a library page sixth in the results, while the synonym for "registration,""sign up," did not return any Monona Public Library web pages within the first 10 results.

The Monona Public Library subsite overall has good keyword searchability, but here are a few of our recommendations to improve searchability:
- Look at site-internal search analytics to see what users are searching in order to come up with the most effective keywords
- Choose words or phrases that users actually search, even if they aren't perfect
- Be consistent with keywords (but don't re-write content completely or make copy forced or stuff with keywords and synonyms)
- Try to put the keywords in each respective page's URL (e.g. if "computer access" is a key search phrase, put that phrase in the URL for the web page containing information about it: http://mymonona.com/FAQ.aspx?TID=15)

Below are the searches we conducted in the format "original search term/phrase: synonymous search term/phrase" for your reference.

computers: internet
- "Computers" - library page does **not** appear in the first 10 results (but the MyMonona.com "Computer Classes With Dan" is the first result)
- "Internet" - "Internet & Computer Access" page is sixth in the results, "Frequently Asked Questions" (a general mymonona.com page) is seventh and "Internet Filtering & E-Rate" is eighth

program: activity
- "Program" - ranks highly ("Summer Library Program" page is the first result!)
- "Activity" - library page does **not** appear in the first 10 results (but the mymonona.com page "Recreation Programs" appears first)

registration: sign up
- "Registration" - ranks pretty highly; the "Summer Reading Program Registration" page is the second result
- "Sign up" - library page does **not** appear in the first 10 results

calendar: events
- Library page does **not** show up in the top 20 results when "events" or "calendar" is searched
- If you type monona + (actual event: e.g. "story time") it is the first two links

<u>newsletter: report</u>
- "Newsletter" - the current newsletter page is the first result
- "Report" - brings up results from mymomnona.com toward the middle of the page, however they are all pages regarding police reports

<u>volunteer: get involved</u>
- **Neither** term leads to the library volunteer page but the first result is the general MyMonona volunteer page

<u>book group: book club</u>
- "Book group" - ranks highly; "Friday Morning Book Group" and "Monona Library Adult Programs & Events" pages are the first two results
- "Book club" - ranks highly; returns practically the same results with the aforementioned pages still the top two results

# Monona Public Library Website

Overall, participants thought that the Monona Library website was a little bit confusing in terms of finding specific services. Because there are multiple ways to get to the same destination it can be confusing to remember how they got there. We suggest that the site limits its pathways so that there is only one menu option for each service. For example, there are two links for "support the library" on the homepage alone. Our test participants said having less options would be helpful. We also noticed that throughout the duration of our project the clickable menus have changed and have different sections. We believe that if there was a more consistent format it would be easier for users to navigate the website and in turn increase usage. In addition to the suggestions above, we have included our accessibility testing results and recommend that the website becomes more accessible in general. Our full usability test synthesis and transcripts have also been included at the end of this report. We asked different groups of people to navigate the sites in areas that we saw as potential problems and got their feedback as can be seen in the transcripts.

## **Accessibility**
## **USING WAVE**

**Library home page** accessibility problems:
- 3 ERRORS
  - Missing alt text
    - fix by adding an alt attribute to the image
  - Empty link (2)
    - Fix by removing the empty link or providing text within the link that describes the functionality and/or target of that link
- 52 ALERTS
  - Justified text
    - Fix by removing full justification from the text
  - Skipped heading level (2)
    - Fix by restructuring document headings
  - Broken same-page links (30)
    - Fix by linking the location and target location properly OR taking out link completely
  - Redundant links (10)
    - Fix by combining redundant links into one link
  - Noscript element (2)
    - Fix by ensuring that scripted content is accessible. The <noscript> content will be presented to very few users, but must be accessible if used.
  - Redundant title text (7)

- ■ Fix by removing title attribute

**Children & Families page** accessibility problems:
- ● 11 ERRORS
  - ○ Missing alt text
    - ■ fix by adding an alt attribute to the image
  - ○ Linked image missing alt text (5)
    - ■ Fix by adding appropriate alternative text that presents the content of the image and/or the function of the link.
  - ○ Empty link (5)
    - ■ Fix by removing the empty link or providing text within the link that describes the functionality and/or target of that link
- ● 71 ALERTS
  - ○ Justified text
    - ■ Fix by removing full justification from the text
  - ○ Skipped heading level
    - ■ Fix by restructuring document headings
  - ○ Broken same-page links (26)
    - ■ Fix by linking the location and target location properly OR taking out link completely
  - ○ Suspicious link text
    - ■ Fix by rewording link text so it's more appropriate/descriptive of the destination; remove any extra text
  - ○ Redundant link (8)
    - ■ Fix by combining redundant links into one link
  - ○ Link to PDF
    - ■ Fix by making sure PDF documents are natively accessible
  - ○ Noscript element (2)
    - ■ Fix by ensuring that scripted content is accessible. The <noscript> content will be presented to very few users, but must be accessible if used.
  - ○ Underlined text (3)
    - ■ Fix by removing the underline from the text
  - ○ Redundant title text (28)
    - ■ Fix by removing title attribute

# Search Engine Optimization (SEO)
# Using Raven

## Library Home Page
- ● Site score = 97%
- ● Address at the top of the page is too long

- This page is missing google analytics (how we see what people are doing on the site)
- 11 images are missing text
- The page is missing schema.org microdata

## Children & Families Page
- Site score = 93%
- This page is missing google analytics (how we see what people are doing on the site)
- 1 external link is broken resulting in poor search result performance and bad user experience
- 7 external links are missing anchor or ALT text which means the link will be invisible to the user
- 5 images are missing ALT text, so someone who is visually impaired won't know what the image is about.
- 11 images are missing title text which gives a description of the image

# Usability Tests

## Results:

### Tested by Aya

I first asked the participant to imagine she was a mother trying to register for a library account and how easy was it for her to create this account?  The first issue arose when she started on the Monona homepage and couldn't find the library page.  She first went to the 'I Want To..' at the top of the page hoping she would see 'I Want to Get a Library Account.'  When she saw that she couldn't find what she was looking for there, she went to 'My community' and found the library tab and went there.  From the library page, she was looking at the left hand side reading off all of the different categories.  She became confused about the difference between library card and account, and then thought it would be under library card & services.  At this point, I guided her back to the library homepage and pointed out the many buttons on the right side describing links to different pages.  She then found the 'My Library Account' button after not seeing them at first.  I then asked her if she was able to see the advantages she would get as a library account holder.  After looking for a while, she decided she couldn't see any of the advantages.

When she tried to go back to the homepage, she realized there was no home button or way to click the back button.  Instead, a new tab was created.  I then asked her, say you want to be able to access your account on your phone, do they give you instructions on how to access the page on a mobile device?  When she clicked mobile, she realized there were no directions on how to do any setting up accounts on her phone, leading her to the conclusion that it would

not be easy to create this library account.  I then asked her to imagine she was having trouble with one of her technological devices and didn't know where to go for help. How do you find out where to go? Is it easy for you to schedule a time that works for you?  Again, she went to the 'I Want To' tab and 'Our Community' tab and found nothing.  She then went to 'Community Media' and quickly realized this was for music and movies, so she went to the 'Report a Concern' and realized that was also wrong.  Once I led her to the technological tutoring page, she tried to see if she could schedule a time that worked for her, but couldn't see which events were tech tutoring.  After searching for a while, she still couldn't find where the sign up link was.  It was too time consuming for her to go through every day to find tech tutoring and she thought it would be helpful if there was a specific sign up page.  Therefore, she drew the conclusion that she would NOT come to this website if she needed to fix something technological.

   I then asked her to imagine she was a mother of two children, both under the age of five, and are looking for a schedule of Monona Library's story times that you can take your children to. How do you find this schedule and register for the program?   She went to the library homepage, then calendar at the bottom of the page and clicked on 'family story times' and found the link to register.  She realized she couldn't see the 'register now' button.  Registering was simple, but getting there was difficult because the link/button is so hidden.

   After I guided her back to the library home page, I asked her if there was another way to find the library story times.  She looked under services and then children, where it says find storytimes.  She wondered why there were 2 ways to get to children's story times, both hard to find.  She thought the links on the left side were easier because it listed all of the story times and was easier to register, while the calendar on the bottom, the register now button was hidden.

   I then asked her to imagine you want to sign your kids up for the summer camps at the library.  Is it easy for you to find information about these summer programs and sign up for them?  She went from library home page to children and families to summer programs.  She clicked on 'register for events' and realized that wasn't the place and that they were only offering day to day things.  I guided her back to the homepage to the summer program link on the left hand side and asked if that would be an easier route.  She wondered why you could get from 'Children & Families' to 'Summer Programs' and then from 'Summer Programs' to 'Summer Programs.'  It is useless to have multiple links to the same page because it makes the page much more cluttered and confusing.  She didn't know if she had to go to the summer program or kids section to schedule her kids for programs which becomes stressful.  She didn't think this would be the website she would use to send her kids to a summer program.

   In conclusion, the participant thinks the website is unorganized and too.  She thinks the site looks pretty, however, there are so many colors that it could be difficult for someone who's visually impaired to read.  Some of the important links are hidden (small, same color as font) which could also make it difficult for a visually impaired person to find.  She was frustrated by all of the words and options and she thinks it could be toned down and made simpler.

**Tested by Kaley:**
Overall, Meghan didn't find the Monona Library website too confusing, but definitely thinks it could be more organized. It took her the longest time and most difficulty finding the option to

create an account for the library. For the first question, she initially clicked on the "I want to…" tab on the homepage and looked under the "Find" option for somewhere to find information about library accounts. Further down, she found the "Sign up for" option and clicked on "Library Programs," which directed her to the library homepage. She was frustrated that the "Library Programs" option did not take her directly to the programs offered by the library and thought that there should be a more clear "Library Homepage" option on the Monona Homepage. Once she got to the Library Homepage, she didn't find difficulty finding options to for library cards, tech help, storytimes, e-books, or the newsletter. Each time that she went to one of these options, however, it was hard for her to get back to the Library Homepage without having to go back to the Monona Homepage first. All the different colors, options, and links on multiple parts of the pages made it confusing for her. For example, there was an option to go back to Library Home under the "Children and Families" tab. This was really random. She didn't like the button-like tabs on the right side of the page. She also thought these were random and should be more organized. She wondered why there were so many different ways to get to different things. She liked how each tab hovered so she could view her options without clicking, but there were too many options, which made it harder to find what she needed. There also needs to be a more organized calendar on the Homepage. Meghan's overall impression: "there are a lot of different things I could click on and take me to different places but I think I guessed pretty well and used common sense to get to where I was trying to go."

**Tested by Emma:**

1. Pam found it easy to find the library link on the homepage of the Monona website. When she got to the library page she originally had trouble finding a link to register for the account because her eyes naturally started on the left side of the page and then moved to the right side where she found the "my library account" icon. Upon reaching the page she had difficulty finding the benefits of having an account and also had trouble setting up an account because she found she needed to have a library card first. She also mentioned that it was hard to get back to the library homepage from the account page. However, she was satisfied with the mobile abilities of the page.

2. Pam started her search on the left sidebar of the page where she located the services tab, and then navigated her way to the tech tutoring option. Upon reaching the tech tutoring page, she was unsure as to which service she should use—tech tutoring or book a librarian—as it seemed to her that they were the same thing. She also noticed that there was a calendar link for technology related events, but after clicking on it she realized that it took her to a calendar that listed overall library events and not just ones to help her out with her tech problems.
She also said that it was hard for her to set up an appointment with Matt. There was only a link to email him, and not his actual email address. Pam said this was a problem because she did not have an email service downloaded on her computer, and instead used the internet to access her email. She said this made it hard because the link didn't have anywhere to open up in when she opened it.

3. When Pam was looking for the children's story times she first went to the children and families tab and then to the find storytimes tab. She then chose the "click here to register for storytimes" option. After arriving at the page she realized that some of the activities listed weren't actually storytimes. She also said that there were a series of clicks before she got to her destination which took up more time.

In order to find the summer programs offered, Pam went back to the summer programs page and again clicked register for events. She noted that clicking on this link took her back to the same exact page that she had been directed to for story time sign up. She made the comment that it was a long series of clicking for something to just end up being the same page.

## Summary of Key Findings:

### Library Home page

- From the Homepage, participants couldn't find the Library page
- Participants had a hard time finding the page to create an account for the library
- Once in a subsite, participants had a hard time getting back to the Library page without having to go to the Monona homepage.
- Could be more organized (too wordy and too many options)
- Needs a more organized calendar
- Too many different ways to get to different links/sites
    - Getting from one place to another on the site takes too much thinking
- Was hard for the participants to schedule an appointment to fix a technological issue
- Too colorful making it hard for someone who is visually impaired to read
- Participants found it hard to find the benefits of having a library card

### Children and Families page
- Participants found it difficult to register for family storytime
- Participants thought there were too many ways to get to family storytime (multiple links to the same place)
- Participants thought this site was very time consuming
- Participants thought there should be a more obvious and put together calendar to find and sign up for events (such as storytime)

# Appendix

**Transcript**

## Welcome and Purpose

Thank you so much for participating today. I wanted to give you a little information about what you will be looking at and give you time to ask any questions you might have before we get started.

Today we are asking you to serve as an evaluator of a Web site and to complete a set of tasks. Our goal is to see how easy or difficult you find the site to use.

## Test Facilitator's Role

I am here to record your reactions and comments to the Web site you will be using. I have a colleague helping me take notes and to observe your interaction with the site as well.

During this session, I would like you to think aloud as you work to complete the tasks. I will not be able to offer suggestions or hints, but from time to time, I may ask you to clarify what you have said or ask you for information on what you were looking for or what you expect to have happen.

## Test Participant's Role

- Today I will be asking you to look for some information on the site and tell me how easy or difficult it was to find the information. These activities are designed to help us see how easy this site for people to use.

- There is no right or wrong answer. If you have any questions, comments or areas of confusion while you are working, please let me know.
- If you ever feel that you are lost or cannot complete a task with the information that you have been given, please let me know. I will ask you what you might do in a real-world setting and then either put you on the right track or move you on to the next scenario.
- Please use the site the same way as you would if you were at home or your office. I encourage you to try to work through the tasks based on what you see on screen, but if you reach a point where you are not sure where or how to find something, please feel free to use 'Search'.
- I may ask some additional questions as we go and we will have wrap up questions at the end.

    Do you have any questions before we begin?

**Usability Questions & Scenarios**

1. Imagine you are a mother trying to register for a library account. How easy is it for you to create this account? Are you able to see the advantages you get as a library account holder? Is the library account page easy to navigate? Is it easy to get back to the library homepage? Say you want to be able to access your account on your phone, do they give you instructions on how to access the page on a mobile device?
2. You are having trouble with one of your technological devices and don't know where to go for help. How do you find out where to go? Is it easy for you to schedule a time that works for you?
3. You're a mother of two children, both under the age of five, and you are looking for a schedule of Monona Library's storytimes that you can take your children to. How do you find this schedule and register for the program? Now, imagine you want to sign your kids up for the summer camps at the library. Is it easy for you to find information about these summer programs and sign up for them?

(extra)
4. Imagine you are trying to checkout an e-book from the Monona library, how easy is it for you to find the e-book checkout page on the website?
5. Say you're very interested in the events at the Monona Public Library. How easy is it for you to sign up for a newsletter?
6. What was your overall impression of the website? What did you like? What frustrated you?

**Aya's Usability Test Transcript:**

**Facilitator:** Welcome & Purpose; Test Facilitator's Role; Test Participant's Role; Imagine you are a mother trying to register for a library account. How easy is it for you to create this account?

**Participant**: *Started on the homepage, and couldn't find the library page.* She first went to the 'I want to..' at the top of the page hoping she would see 'i want to get a library account.' When she saw that she couldn't find what she was looking for there, she went to 'My community' and found a library tab and went there. From the library page, she was looking at the left hand side reading off all of the different categories. She became confused about the difference between library card and account. She thought it would be under library card & services.

**Facilitator**: Here, I helped her and told her to go back to the library home page. I guided her to the right, where there are multiple buttons

**Participant:** Found 'My library account' button after she didn't see them at first.

**Facilitator**: Are you able to see the advantages you get as a library account holder?

**Participant**: After looking for awhile: "I don't think so"

**Facilitator**: Is the library account page easy to navigate?

 **Participant**: "No, I couldn't find it"

**Facilitator**: Is it easy to get back to the library homepage?

**Participant**: "I'm trying to press the back button and I can't." She realized a new tab was open and had to go to the other tab that was the library homepage.

**Facilitator**: So there is no link to get back to the homepage

**Participant**: No, you just have to go back to the other tab.

**Facilitator:** Say you want to be able to access your account on your phone, do they give you instructions on how to access the page on a mobile device?

**Participant:** She clicks on link called 'mobile' and it goes to a page with just a section that says 'login to my account'. "I think it thinks I'm on my phone right now."

**Facilitator:** Okay so, it's not easy for you to create this account correct?

**Participant:** "It doesn't give me directions on how to do this on my phone, it just assumes I'm on my phone right now.

**Facilitator: Okay, so you would say it was difficult for you to get from the homepage to the library page in general?**

**Participant:** Correct

**Facilitator: And then you would say it was difficult to get from the library page to the account page?**

**Participant:** Correct

**Facilitator: And then from the account page back to the library home page there was no easy button to get back to the home page**?

**Participant:** Correct

**Facilitator:** Ok so you are having trouble with one of your technological devices and don't know where to go for help. How do you find out where to go? Is it easy for you to schedule a time that works for you?

**Participant:** "Like my phone is broken or something and I want to find a place in Monona to fix it?"

**Facilitator:** yes

**Participant:** "Okay, so I'm going to go to 'I want to'" She was looking for something under the 'I want to' section but couldn't find anything. She decided to go to the 'Our Community' tab and after searching for something that had to do with technology, she went to 'Community Media' and quickly realized this was for music and movies, so she went to the 'report a concern' button and realized that was wrong.

**Facilitator:** So overall you would not use this website as a resource to fix some technological device?

**Participant:** "No, do you know where to go"

**Facilitator:** I guided her back to the library page and guided her to look at all of the links on the left side.

**Participant:** She went to services and found tech tutoring. She clicked on the calendar for upcoming classes

**Facilitator:** So here, now that you're on the tech tutoring/calendar web page, is it easy for you to schedule a time that works for you?

**Participant:** She saw the next available event was Nov 5, but she found it only named what was going on at what time and she didn't know what events were for tech tutoring and which weren't. After searching for awhile, she still couldn't find where the sign up link was. She saw what events were going on on each date, *but she thought it would be helpful if there was a specific sign up page. It was too time consuming for her to go through everyday to find tech tutoring. It was difficult for her to get back to the library homepage from here, no link to home.*

**Facilitator**: You're a mother of two children, both under the age of five, and you are looking for a schedule of Monona Library's storytimes that you can take your children to. How do you find this schedule and register for the program?

**Participant:** She went to the library homepage, then calendar at the bottom of the page and clicked on 'family story times' and found the link to register. She realized she couldn't see the 'register now' button. Registering was simple, but getting there was difficult because the link/button is so hidden. After I guided her back to the library home page, I asked her if there was another way to find the library story times. She looked under services and then children, where it says find storytimes. She wondered why there were 2 ways to get to children's story times, both hard to find. She thought the links on the left side were easier because it listed all of the storytimes and was easier to register, while the calendar on the bottom, the register now button was hidden

**Facilitator:** Now, imagine you want to sign your kids up for the summer camps at the library. Is it easy for you to find information about these summer programs and sign up for them?

**Participant:** She went from library home page to children and families to summer programs. She clicked on 'register for events' and realized that wasn't the place and that they were only offering day to day things.

**Facilitator:** I guided her back to the homepage to the summer program link on the left hand side and asked if that would be an easier route.

**Participant:** Here, she thought it was easier to sign up for the summer programs. She thought it was difficult to find the programs but once she found them, it was easy for her to sign up for them. ***She wondered why you could get from children&families to summer programs and then from summer programs to summer programs. It is useless to have multiple***

*links to the same page.  Makes the page much more cluttered and confusing.  She didn't think this would be the website she would use to send her kids to the summer program.  She thinks the website is unorganized and too cluttered.  She thought it could be much simpler.  She thinks the site looks pretty, however, there are so many colors that it could be difficult for someone whose visually impaired to read.  Some of the important links are also hidden which could make it difficult for a visually impaired person to find.  She was frustrated by all of the words and options and she thinks it could be toned down and made simpler.  She didn't know if she had to go to the summer program or kids section to schedule her kids for programs which becomes stressful.*

## Kaley's Usability Test Transcript

**Facilitator:** Thank you so much for participating today.  I wanted to give you a little information about what you will be looking at and give you time to ask any questions you might have before we get started. Today we are asking you to serve as an evaluator of a Web site and to complete a set of tasks. Our goal is to see how easy or difficult you find the site to use. I am here to record your reactions and comments to the Web site you will be using. I have a colleague helping me take notes and to observe your interaction with the site as well. During this session, I would like you to think aloud as you work to complete the tasks. I will not be able to offer suggestions or hints, but from time to time, I may ask you to clarify what you have said or ask you for information on what you were looking for or what you expect to have happen.Today I will be asking you to look for some information on the site and tell me how easy or difficult it was to find the information. These activities are designed to help us see how easy this site for people to use. There is no right or wrong answer.  If you have any questions, comments or areas of confusion while you are working, please let me know. If you ever feel that you are lost or cannot complete a task with the information that you have been given, please let me know. I will ask you what you might do in a real-world setting and then either put you on the right track or move you on to the next scenario. Please use the site the same way as you would if you were at home or your office. I encourage you to try to work through the tasks based on what you see on screen, but if you reach a point where you are not sure where or how to find something, please feel free to use 'Search'. I may ask some additional questions as we go and we will have wrap up questions at the end. Do you have any questions before we begin?

**Participant**: No

**Facilitator:** Imagine you are a mother trying to register for a library account.  How easy is it for you to create this account?  Are you able to see the advantages you get as a library account holder?  Is the library account page easy to navigate?  Is it easy to get back to the library homepage?  Say you want to be able to access your account on your phone, do they give you instructions on how to access the page on a mobile device? So you're trying to register for a library account. Please speak out loud to tell me what you're clicking on and why.

**Participant**: I'm going to the "I want to" page because this is something I want to do. "I want to" find bid posting, community police programs… no, no no… "sign up for" "library programs". Yes, clicking it. Monona Public Library home page… now I'm clicking on services because library card is a service offered by the library. Library cards. Obtaining a library card… so I have to go

to the Monona Public Library with a photo I.D. and proof of current residence. Now what am I supposed to do?

**Facilitator:** How easy is it for you to create this account?

**Participant**: I don't think I can create the account online but I don't really know how to be sure… I'd probably call the library and ask but it looks like I have to do it in-person. Oh wait, wait, wait. There's something on the left that says "online forms". "Applications and permits," "administration," "parks and rec…" yeah, I don't think you can do that here.

**Facilitator**: Are you able to see the advantages you get as a library account holder?

**Participant**: Let's see, "about the library," "support the library…" Nope, back to services and back to library cards. *Hovering over services tab* Looks like you get internet and computer access, e-books, online resources, you can reserve a computer, you can book a librarian… that's kind of cool… tech tutoring, that could be helpful… yeah I think those are all of the advantages.

**Facilitator:** Would you say that the library account page is easy to navigate?

**Participant:** Yeah, it's pretty easy.

**Participant**: Yeah, you just click library.

**Facilitator:** You are having trouble with one of your technological devices and don't know where to go for help. How do you find out where to go? Is it easy for you to schedule a time that works for you?

**Participant:** Oh yeah, I saw tech help earlier. So I go back to your services… library… then services and click on tech tutoring. Yes, I found "tech tutoring with Dan" on the second and third Saturdays of the month. 30 minute sessions between 1 and 3:30. So I can call or email to set up a 30-minute time slot. That was pretty easy.

**Facilitator**: You're a mother of two children, both under the age of five, and you are looking for a schedule of Monona Library's storytimes that you can take your children to. Where do you go?

**Participant**: I'm gonna try "services" on the library page because storytimes seem to be a service at the library. Don't seem to see anything in there. I'm gonna try "children and families" because it's a service for kids. Oh yeah, there's a "find storytimes" tab right there. "Click here to register for current storytimes" right on the front page. Okay, the schedule is on this page now. That was easy.

**Facilitator:** How do you find this schedule and register for the program?

**Participant:** Yep under all the storytime events there is a "register now" button or I can call the library to register. They really need a calendar on this page though so I can look at them all at once.

**Facilitator**: Now, imagine you want to sign your kids up for the summer camps at the library. Is it easy for you to find information about these summer programs and sign up for them?

**Participant:** So I'm gonna go back to "children and family" because this is a service through the library offered for my kids. Under the hover there is a tab for "summer program." This gives me a nice thing that says "register for events" on the side. Clicking on that. Oh no, that takes me back to the storytime page. Going back back to the "summer program" page. It says "click on a date to find out what's happening"... maybe this is harder because it's October and I wouldn't actually be signing up my kids for a summer program right now because summer just ended. I'm assuming this would be easier in the summer or spring months. Clicking on a date just to see

where it takes me… back to the storytime page again. Maybe this is their overall registration page? They really need a bigger calendar because the registration website is just a really long list.

**Facilitator**: Now imagine you are trying to checkout an e-book from the Monona library, how easy is it for you to find the e-book checkout page on the website?

**Participant:** Back to the library home page because I want to check out a book. Services because this is one of the services offered by a library account. Online resources? Let's try that because e-book is an online resource. No I don't think that's it. Let's go back. Adults? No it has to be under a service. Oh, "overdrive" and in parentheses they have these "e-books." That's kind of confusing. But I'll click on that. Oh, wow, this takes me to an entire digital library. From here I'd just search for the e-book that I'm looking for.

**Facilitator**: Say you're very interested in the events at the Monona Public Library.  How easy is it for you to sign up for a newsletter?

**Participant:** I'm going to go "about the library" because this should have the same kind of information that I think would be in the newsletter. Nope, don't see it in there. Maybe "support the library"? Nope. Okay I'm going back to library and then let's see… Adults because adults are probably the ones who would want to read this newsletter. Yep there's e-newsletter right there. Clicking on it, then it takes me to a page to register for it. I don't know if I like that it, it was kind of hard to get to, but once I got there the registration seems pretty easy.

**Facilitator:** What was your overall impression of the website? What did you like? What frustrated you?

**Participant:** I really liked how Lake Monona was in the background, that was pretty. I like the tabs on the left side that I could just hover over to look for something. I like the changing thing in the middle that shows different events and stuff. I like that it shows a couple different things. Maybe the font could change. It's kind of boring. And there are too many colors going on. Especially with the little buttons on the right side. Those kind of confused me. Now I see that there's one for e-newsletter and e-books but like why are there only buttons for those certain things? Not really sure what those are for. Maybe those should be tabs at the top of the library page? I don't know. But it was pretty easy to navigate. There are a lot of different things I could click on and take me to different places but I think I guessed pretty well and used common sense to get to where I was trying to go.

**Facilitator**: Thanks for participating.

***She found it confusing that she could click on multiple different links and end up at the same page. It would be more convenient if there were less ways to get to the same page. She liked the hovering tabs but didn't like how some of them didn't seem to be placed under the right category. Once she found her way to the Monona Library page, she found it less difficult to get to each page she was looking for. After being on the site for a few minutes, she found less difficulty finding the pages because she remembers where she saw them before. She used common sense and memory to find the pages. There could be a more straight-forward and less confusing calendar showing events to sign her theoretical children up for. The website had a lot going on, which frustrated her. The colors and different tabs everywhere on the screen distracted her. She did not like how there were menus on both the left and right side of the screen. The colors and website***

***layout were pretty but distracting. It could be a lot simpler. She didn't find this website overly bearing or difficult to use but sees how someone who doesn't have as much common sense or strong memory as her could easily get lost.***

**Emma's Usability Test Transcript:**

**Facilitator:**  Welcome & Purpose; Test Facilitator's Role; Test Participant's Role; Do you have any questions before we begin?
**Participant:** No
**Facilitator:** Imagine you are a mother trying to register for a library account.  How easy is it for you to create this account?  Are you able to see the advantages you get as a library account holder?  Is the library account page easy to navigate?  Is it easy to get back to the library homepage?  Say you want to be able to access your account on your phone, do they give you instructions on how to access the page on a mobile device?
**Participant:** I'm having trouble finding the link for account registration… Clicking on "my library account" icon. But now I'm not sure if I can actually create the account online?
**Facilitator:** Can you see what the advantages of having an account are?
**Participant:** Let's see… it looks like there is a place to see the benefits but I think I have to have an account first? But I can't make the account right now so I can't really tell what the benefits are.
**Facilitator:** How easy was it for you to learn about creating the account?
**Participant:** It was kind of difficult and confusing to get to the page and also to get back to the library homepage, and it looks like mobile services on the site work pretty well too.
**Facilitator:** Okay, so now let's pretend that you are having trouble with one of your technological devices and don't know where to go for help. How do you find out where to go? Is it easy for you to schedule a time that works for you?
**Participant:** Okay I'm going to start on the services tab, and then here is "tech tutoring" so I'll click on that. Wait.. I'm not sure if I should use "tech tutoring" or "book a librarian", they look like the same thing but I'm not sure.
**Facilitator:** So is it easy to make an appointment with one of these services?
**Participant:** Well I'm going to click on tech related events… wait that just took me to an overall calendar. Let me try setting up an appointment with Matt, but there isn't an email address for him only a link and I don't have my email on my desktop.
**Facilitator:** Did you think this process was difficult?
**Participant:** A little bit, because there were different options and I had trouble setting up an actual appointment.
**Facilitator:** Okay so for our last test of the day I want you to imagine you're a mother of two children, both under the age of five, and you are looking for a schedule of Monona Library's storytimes that you can take your children to. How do you find this schedule and register for the program?

**Participant:** Okay I'm gonna go to the children and families tab and now I'm clicking on "find storytimes". Now I'm going to "Click here to register". Wait.. Some of these aren't actually storytimes. But I can still register for a story here so that works.

**Facilitator:** Now, imagine you want to sign your kids up for the summer camps at the library. Is it easy for you to find information about these summer programs and sign up for them?

**Participant:** I'm going to children and family and to the "summer program". Now I see there's a link to register for events so I'll click that. But it just took me back to the story time page so that's not right. I can't find where to actually sign up for the summer program which is kind of frustrating.

**Facilitator:** Okay so overall what did you think of the site?

**Participant:** It was a little frustrating at times when I was trying to sign up for specific events, because it took me to some of the same pages when I was trying to do different things. I think the site could be easier to navigate but it's not the worst website I've ever used.

**Facilitator:** Thank you for participating.

*She thought that the site was somewhat difficult to use and that some popular links would be difficult for people to find. She tried to use her general knowledge about websites to find different links but it didn't appear to her that there was a specific pattern or layout of the website. Additionally she thought the website was a bit cluttered with information throughout and also a little displeasing to the eye with color choices. She thought it would have been easier to use if there was a single menu on the left hand side of the page that was used for all of the site's navigation. She thought that the services offered by the library were really cool and useful, but just thought it was a bit too difficult to find more information about them online and sign up for them. She commented that she would probably have just gone to the library to sign up for things in person instead of trying to use the website.*

LIS351- Lab 303
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**Monona Library Accessibility, SEO and Usability Site Final Report**
Subsite: http://www.mymonona.com/131/Library

- **Accessibility Suggestions for Improvement**
  Overall, the accessibility tests we ran for the  Monona Library site showed positive results, so we just have a few suggestions to make the site a little more accessibility friendly. First, we will outline the most important improvements that can be made and then some just suggested, but less critical changes.
  - **Add alt attributes to all images/photos:**
    One simple addition you can do is make sure that all images on the site have an alt attribute that describes the image/gives its context so people using screen readers for example, can still understand what the image is showing.
  - **Delete empty links or fill empty links with proper links**
    When we ran the tests we saw 2 empty links. We were unable to see which links contained no text within the link alt, so the link alt needs to be deleted if it isn't needed or provide a link for any missing links.
  - **Change color of background or font to create more contrast**
    Another problem we saw was that there was little contrast between text color and the background. We suggest that you change the font color to be darker against the current beige/gray background so it is easier to read or you could change the background color. Either way, just try and create the most contrast to improve the accessibility.
  - **Edit the header navigation on the site (h1, h2, h3)**
    Next, we found that the header navigation on the site is incorrect. Currently the headers don't go in the order they should be where an h1 or h2 follows an h1. Right now it appears that the site is titled with h1 and then side menus use h3 and then under that another h1 follows. Fix these so they follow the h1, h2, h3 proper format for headings.

  There are other smaller alerts that were flagged in the tests we ran that should be considered, but are not as critical as the errors addressed above.
  - **Edit broken same-page links**
    There are several broken same-page links on the Monona Library website. The broken links that should be fixed with accurate links include "Create an Account", "Sign In" and, the search bar.
  - **Reduce number of redundant links**
    For example, on the homepage at the bottom in the calendar section, the "Storytime at Monona Library" is linked to 3 times. Instead, try to just link to it once for accessibility reasons.
  - **Shorten the title text to not be so long**
    Lastly the title text may be too long currently as the html reads "<title>Monona Public Library             1000 Nich …". Consider closing the title attribute right after the title name and putting the address of the library in a heading or separate attribute of its own.

- **SEO Suggestions**
  Similar to the accessibility results, overall the SEO is fairly strong on the city of Monona Public Library subsite, but there are a few areas that are key to improvement.The tests we ran to test SEO

were called Raven and Page Locus. There were only a few critical fixes and then more less critical ways that could improve the SEO. Our suggestions include:

- **Improve page speed performance**
  To start, the page has low speed performance. To improve this, try to compact and make HTML, CSS and JavaScript code more concise if possible. Also, eliminate render-blocking JavaScript and CSS in the above-the-fold (top) area of the website. The way to do this is to remove or defer these codes.

- **Improve mobile user experience performance**
  To improve mobile performance of the site consider making the page content more narrow and less wide so the user can scroll more easily in addition to making the links/buttons bigger so they can click on them more easily. Popular links/buttons like "About the Library" and other high traffic subsite pages should definitely conform to the bigger size to make it easier to click.

- **Add Alt text/attribute to images**
  As mentioned in the accessibility suggestions, all of the images on the website should have alt text/attribute and adding this will help with SEO as well.

- **Consider using resources like Google Analytics and schema.org**
  Lastly, utilizing other resources such as google analytics and schema.org vocabularies will help bots search the page and will therefore improve the SEO.

- **Usability Suggestions**
  The usability of the Monona Library subsite could make several changes to make it more friendly for users. We saw more area for improvement on the usability of the site than we did for the accessibility or the SEO. In general, our usability tests with actual interviewees weren't very easily able to complete the scenarios and tasks that we set up for the test, illustrating that the site could have better usability. A few of our suggestions for improvement are:

  - **Consolidate buttons on the right hand side with the menu on the left hand side**
    Users said that the menus were confusing because there are so many of them. It would be easier if there was just one main menu to work off of. So maybe instead of having the buttons on the right, include them in the main menu on the left or at least include them in both places.

  - **Make the library card information more visible**
    One of the tasks multiple individuals had problems finding was information on obtaining a library card. They didn't think the tab menu "Services" was descriptive or where information about library cards made sense to be found. It felt "hidden" to one individual who took the usability test. For something like library cards, maybe consider making a button or link right on the landing page as it seems like it would be a popular topic people would look for.

  - **Revise/change the page navigation**
    Users struggled with navigation and returning to the main library page. This issue could be fixed with static "parent" navigation tabs and drop down navigation from these "parent" tabs. At least including an easy way for the user to return to the home page from any of the site's pages rather than having to hit the back button over and over to return to the library home.

  - **Include Library Hours under the tab "About the Library" as well as the front page**
    One user particularly had a tough time finding the library hours because they weren't expecting it to be on the bottom half of the front page. This same user said that they would expect the hours to be listed under the "About the Library" tab. It would be beneficial to not only include it on the homepage, but also under that tab especially because if someone is

viewing the library page on a tablet or mobile screen, they might not see the hours unless they scroll all the way to the bottom.

- **Order content on site by importance**

  A few of the usability interviewees said that they felt that some of the parts of the page they thought were important to find were hidden and mixed in with other content and links. For example, multiple users had a hard time finding the catalog to search for a book because you could only access it from the button on the right hand of the page. It should maybe also be included within the menu on the left. One user suggested that it made sense to put the catalog under the "Services" tab. So other important content that you have found people search for frequently should be in the left hand menu and should be closer to the top versus on the bottom or only able to access from the front page.

- **Use lists to be more concise**

  There is a lot of content and text on many pages of the Monona Library site. Users said that it would be easier to find what they were looking for if it wasn't as text heavy or if important information was bulleted in list format when possible to make it easier to skim and quickly find what they were looking for.

- **Add hyperlinks on both pictures and text**

  There are several hyperlinks are only linked on pictures without captions. Users said that by hyperlinking on both pictures and relative text content would be more helpful to find information they were searching.

- **Improve accuracy of search results**

  The ranking of results by using search bar should be more relevant with the keywords users typed in. One user commented that the top result of keywords "library card" was "Monona Library Foundation", while the most relevant result to library card was listed as the fourth. Improving the accuracy of search result could largely improve the efficiency when users are using this site.

**Appendix**

Accessibility, SEO and usability test results
Subsite: http://www.mymonona.com/131/Library

1. Accessibility Results
   - Results from WAVE (test run on 10/23/16)
     - Overall: 3 errors, 52 alerts
     - Errors:
       - 3 Missing Alternative Text- image is missing the alt attribute
         - This is an easy fix. Add an alt attribute to the image that describes/gives it context.
       - 2 Empty Links- link alt is present but no text is there so the link will not function for user.
         - Need to delete the empty link or provide a link following the attribute.
     - Alerts:
       - 1 Justified Text- text spacing makes readability worse
       - 2 Skipped Heading Level- missing next level heading because skipped
       - 30 Broken same-page links-  links to a different part of the page don't work/take user to the correct target
       - 10 redundant links- adjacent links go to same URL
       - 2 Noscript elements- the script/content is inaccessible
       - 7 redundant title texts- title attribute text is the same as text or alternative text
   - Results from Achecker (test run on 10/23/16)
     - Overall: 3 Known Problems, 3 Likely Problems, 418 Potential Problems
     - Known Problems
       - Little contrast between text color and background
         - To make sure the text is readable, change the background or text to create more contrast.
       - Header Navigation incorrect
         - 2 different instances where header structure is incorrect- header following h1 is incorrect
           - Double-check the header navigation and correct the headers follow h1 to be succeeding header numbers.
     - Likely Problems
       - Title text too long
       - 2 instances where a list item used to format text but list items must not be used to format text

<u>Summary of Accessibility:</u> Overall the Monona Library site has good accessibility. The errors can be easily fixed by adding alt attributes, checking all links and making sure they are present when they should be, having the correct header navigation, etc. Another consideration that should be made is to change the color of text or the background to create higher contrast to improve readability. It will just take a few small changes in order to make the site even more accessible.

2. Usability
    a. Interview 1:
       I interviewed a 21 year old girl. I had her start from the Library home page and then we walked through only scenario one because it took her the full 15 minutes just to complete the questions from the first scenario from the script. See below for comments about each question/task:
       1. She had a tough time finding where to find information about the library card. She clicked on the "About the library" tab first, not knowing or checking what tab in the left hand menu it would be over. She looked on this page for a minute or two and then had a tough time figuring out how to get back to the main library home page to restart and try a different way to find information about the library card. Finally she found it. Next, to find the hours, because she wasn't on the library homepage she couldn't see them displayed anywhere. After a few minutes she used the search bar to find them and she also said that by now for how long it was taking her to find this information she would have just googled it. She also voiced that she thought the hours should be in the "about the library" section. Once she got to the information about the library card she was more easily able to answer the following questions about obtaining a library card. This question took her the longest to get all the answers (around 7 minutes).
       2. She found information about the book club fairly easy because she started by looking at the menu on the left hand side of the website and this information was found here. Once she found adults she then clicked Friday Morning Book Group and was able to find all of the needed information about when the group starts and the current book. For part C, she clicked back to the library home page and tried to find if she could rent the specific book at the library. She spent several minutes looking at the menu and submenu options before clicking on services and then collections, but because this isn't the catalog she was unable to search for a specific book. After looking for a while she tried to search it in the search bar and still was unable to find it. She voiced her opinion and said she thought the catalog should be under the services tab.
       3. For the last question about volunteer information she easily navigated to this page using the menu on the left side of the website and clicked on support the library and then volunteers. She got through this task very quickly and had no problem finding the volunteer information.

4. Overall comments/feedback
   At the very end she gave me feedback about the website as a whole and how she felt navigating it. She said that she thought it was confusing that there was a menu on the left side of the menu and buttons on the right but that the button content wasn't included in the main menu on the left side. She said it would make more sense if these were all consolidated into one main menu or else put important content in the buttons and in the menu. She also thought that it felt really text/paragraph heavy and that it wasn't easy to skim to find the information requested in the tasks.

b. Interview 2:
   I interviewed, a junior majoring in journalism at UW. I had her start from the homepage of the City of Monona. Below are the comments summarized:
   ● It was a struggle to find the Monona Public Library subpage. The library page was not categorized well under the tabs on the homepage.
   ● She wasn't be able to find the information about the library card so she used the search bar instead. However, the top result after searching keywords of "library card" was "Monona Library Foundation", while the "library card" result was listed as the fourth.
   ● The result followed by the "library card" link found through search bar was targeting group library card instead of card for individuals.
   ● When she was looking for the information of availability of a certain book, she commented the link was not clear. She eventually find the information by clicking the page under Book Group page. She commented a more straightforward instruction or sign should be given to look for rental info.
   ● Overall, she commented that the number of tabs listed on the library page were too many and some of them are not helpful. She couldn't understand the meaning of some tabs.
   ● She also commented that the links are sometime hyperlink on words, while others are on pictures. It was confusing and inconsistent.

c. Interview 3:
   I interviewed a graduate student in the Accounting program at the Wisconsin School of Business. I had him begin from the City of Monona Homepage. For the first question of the first scenario 1a, he clicked on "Your Services" → "Library" → "About the Library" → "Library Policies" → " Library Card and Borrowing Policies" where he finally found the information about how to acquire a library card.
   1b He clicked back from the "Library Policies" page, and on the "About the Library" page, he found the hours listed.
   1c He clicked on "Library Policies" again, back to the "Library Card and Borrowing Policies." He scrolled down to the bottom of the page, and didn't see it, but when he scrolled back up, he found that there is no checkout limit on the "New Adult Fiction" category.

1d Scrolled down on this same page and found that there is a $1.00 fee.

1e After this exercise, Scott told me that it was all pretty easy to find, except that the "Library Policies" didn't stick out to him because of the layout. He suggested that the paragraph on the side of the page could be moved to the center, and change the links below to buttons. He also noticed that on www.mymonona.com/151/About-the-Library has two different listings of hours but they are different.

2a Clicked on Library policies again because he couldn't see the original menu items that are listed on the Library homepage once he moved into the About the Library page. Tried "Bulletin Board Policy" and "Code of Conduct" links. Then went back and tried "Friends of the Library" but found out that's for donating. Finally he started over by clicking on "Your Services" and "Library" again where he was then able to see the main menu of the Library homepage and clicked on "Adults" and "Friday Morning Book Group."

2b Found what book they are discussing by scrolling down on the same page.

2c When he clicked on the Malala book to see if it was available for checkout, it led to LinkCat which was good, but it led to the wrong book! "Olive Kittridge." Ended up having to search on LinkCat for the Malala book.

2d Comments: the next meeting is listed as being in September, even though it is almost November. So if the book group is still being held (and even if it is not) this page needs to be updated.

3a Went back to "Your Services" and "Library" now that he understood the way the menu system works. Clicked on "About the Library" and "Volunteers." Found info under "Become a Volunteer" heading.

3b Scrolled down to find the qualifications.

We were getting close to the time limit, but Scott wanted to complete both scenarios so we did the second one.

1 Went back to "Your Services" and "Library" as usual to begin. He looked through several of the pop-out menus such as "Children & Families" and "Tweens & Teens." Then tried "1000 Books B4 Kindergarten." Then went back to the Library homepage and tried "Children & Families" → "Summer Program." Didn't find it and went back to the Library homepage. Tried "Tweens & Teens" and found a Goodreads heading but this was not the reading list. It mentioned something about the eNewsletter though, which triggered him to go back to the Library homepage and click "Adults" → "eNewsletter." This wasn't it either. Went back to "Tweens & Teens" and tried "Books for Teens" but didn't find it there either. At this point he was getting pretty frustrated so he searched in the search bar "Goodreads" and "Goodreads Math List." He couldn't find it this way either, and gave up entirely.

2a Started with "Your Services" → "Library" as usual, and then clicked on "1000 Books B4 Kindergarten." He scrolled down and found the incentives but he didn't

understand what the incentive "Creative Poem & Craft" meant. In fact, the only one he did understand was the free pizza incentive.

2b Found the date of the next graduation party below the incentives.

2c Found how to register right below that

3 Went back to the Library homepage and clicked on "Children & Families" → "For Children." Before finding the information about the Friendly Foxes Family Storytime, he noticed the link for the "Goodreads Top Rated Educational Math Books!" Then he clicked on the "Find Storytimes" on the side menu, and found that the Friendly Fox Storytime is on Fridays.

4 Back on the Library homepage, he found the green "E-Newsletter Sign-up."

Overall impression: Scott said the website was okay, just lacks some functionality. It is a decent website but some is not nice to look at because some is not organized nicely, but graphically it is nice to look at.

d. Interview 4:
    i.    I interviewed a 21 year old undergraduate student. I had her begin on the Monona Public Library home page and walked her through the scenario.

1a. She first scrolled over about the library and didn't see anything that would indicate a library card, and then she saw services, and hovered over it. From there she clicked on library card. At the top of the page she found the 2 required items for the library card.

1b. To find the times you can get a library card she tried looking for the hours of the library. The library card sub page does not have a bar on the left hand side that directs her back to the library's home page so she clicked on library on the top of the page where it showed the page progression she took to get there. On the page she saw the hours of the library on the left corner at the bottom of the page.

1c.She then clicked on Library card again to see if there were fees for checkouts on the card, couldn't find anything, so went back to the homepage and clicked on "Library Policies" and found that there is not a checkout limit for the New Adult Fiction books.

1d. Scrolled down on the same page to find that there is a $1.00 fee.

1e. After this scenario, she said that the hardest part was finding the late fee policies.

e. Interview 5:
    i.    I interviewed a 22 year old UW-Madison nursing school student. I had her start from the City of Monona home page and had her click through the website to find the Monona Public Library page and follow the scenario directions from there. She quickly found the Library page by first hovering over the "Your Services" tab and then clicking "library." It took the full 15 minutes for her to complete all of the tasks in both scenarios.

[Scenario 1]

1a. Quickly found information about how to obtain library card. Clicked services->Library Card-> information.

1b. Quickly found hours of library

1c. Took her a while to find out where the information on the limit of New adult Fiction per check out was. Clicked on "Collections" and a few other tabs before finally finding the borrowing information. Stated "I feel like I'm pretty good with computers and it took me a while to find the information so if a Senior Citizen were trying to find the information I feel it would be difficult."

1d. Quickly found the information on the cost of replacing a library card, but said it was only easy as the stolen card fee was on the page near the borrowing rules/terms where she was already. She thought if she had not already been on the page it would have been more difficult to find.

1 Overall comments: she thought the general information about library cards was easy to find, but thought that the lost/stolen fee was not connected enough to the rest of the information on library cards.

2a. Found the date/time of Book Club meetings quickly by hovering over the adults tab and clicking on the "Friday Morning Book Club" tab.

2b. Could not find the book for October as the website still had the September book up.

2c. First clicked on the book to find its availability, but it took her to a completely different site. Had to search in the search bar, but it only went to the Friday Morning Book Club page. Couldn't complete the task.

2 Overall: The site needs to make sure they keep up to date with each month's book so everyone is able to participate that wants to.

3 Overall: Found volunteering information easily and felt it was all in a good location.

[Scenario 2]

1. Found information on math books quickly and efficiently

2. Thought all of the information with the "1000 Books Before Kindergarten" was easy to find and liked that all of the information was together

3. First went to "Children" tab looking for story time information and could not find any. She then realized there is a separate tab for story times and then quickly found the information she was looking for. Even though she realized it shortly after clicking the Children tab she thinks it might be efficient to have story times within the Children tab.

4. Found this quickly by clicking the "E-Newsletter Signup" button.

ii. Overall Site Impressions: she felt the site was fairly easy to use and navigate, but that condensing the amount of tabs and putting like information together would make it simpler.


3. SEO

- Raven
  - Page analysis for http://www.mymonona.com/131/Library conducted 10/25/16
  - Overall score: 88
    - Critical fixes: 0
    - Could improve: 82
      - 25 issues with desktop page speed performance and 46 issues with mobile page speed performance
        - Need to eliminate render-blocking JavaScript and CSS in above-the-fold content (critical)
        - Leverage browser caching- set an expiry date or a maximum age in the HTTP headers
        - Prioritize visible content by reducing the amount of HTML needed to render above-the-fold content
        - Reduce server response time
        - Optimize images by formatting and compressing images properly (saves bytes of data)
        - Compact HTML code to save bytes of data
        - Compact CSS code to save bytes of data
        - Compact JavaScript code
      - 9 issues with mobile UX performance
        - Size content to viewport- make the content less wide so the user can scroll easily
        - Size tap targets appropriately- make some of the links/buttons larger so a user can easily click on them on a touchscreen like mobile.
      - 1 page has a page title that is too long- The page title of the website includes the address and phone number. Consider taking this out of the title.
      - 1 page is missing Google Analytics- the website doesn't have google analytics, consider utilizing this resource.
    - Needs attention: 12
      - 11 images are missing title text- add title text to images
      - 1 page is missing Schema.org microdata- Use this source to find the best structured data vocabulary to use on the website to help bots search the page.
- Page Locus
  - Page analysis for mymonona.com (whole site) (conducted 10/25/2016)
    - Overall score 72/100
      - Onsite SEO score: 75/100
        - SEO reports
      - Page Speed score: 77/100
        - Page Speed reports: 3 critical issues

- - - ■ Web page is making too many requests to the server which can slow down the website resulting in poor user experience
      - ■ Browser cache is disabled. Enabling can improve user experience and even lower server load
      - ■ Server response time is slow
  - Site is mobile friendly but loads slow
  - Social score: 0/100
    - Social Media reports: 2 critical issues
      - ■ Page Locus does not recognize:
        - Facebook presence
        - Twitter presence
  - Authority score: 38/100
    - Authority reports: 1 critical issue:
      - ■ Site is not listed in the DMOZ directory, getting listed is a great way to boost your search engine ranking

Summary of SEO: The Monona Public Library website generally has decent SEO. One of the more critical issues is different aspects of the site which slows down the page speed. One solution to help this is to enable browser caching. Next, consider adding social media icons because currently all there are is links to social media as well as listing the site in the DMOZ to boost SEO.  Lastly, changes to make the website faster on mobile and more mobile friendly will create a better user experience.

4. Usability Script
Opening Explanation

Thank you so much for taking the time to help us today. I want to give you a little background information about what you will be looking at and give you the opportunity to ask any questions you have before we get started.

Today we are asking you to serve as an evaluator of the Monona Public Library section of the City of Monona website and to complete a set of tasks. Our goal is to see how easy or difficult you find the site to use. Don't worry that you're going to hurt our feelings. We're doing this to improve the site, so we need to hear your honest reactions.

Test Facilitator's Role

I am here to record your reactions and comments of the Monona Public Library website that you will view. In a conference room nearby, one of my group partners is helping me take notes and observe your interaction with the site as well.

During this session, I would like you to think aloud as you work to complete the tasks. So please voice your opinions and thought process as you go through each step. I will not

be able to offer any suggestions or hints, but I may ask you to clarify what you have said or ask you for information on what you were looking for or what you expect to have happen throughout this process.

<u>Test Participant's Role</u>

Once again, I will be asking you to look for some information on the Monona Public Library website and just want you to tell me how easy or difficult the information was to find. Remember, there is no right or wrong answer so if you have any questions or comments please let me know. If you ever feel that you can't complete a task or find the information I ask you to find, please let me know and you can move on to the next task. When navigating the site, try and use what you find on the screen but if you can't find the information you are looking for, feel free to use the search bar as a last resort.

Do you have any questions before we start?

<u>Scenarios and Tasks</u>

Scenario 1:

Imagine you are a senior citizen that has just moved to Monona. At your previous home in a different city, you frequently visited the city public library to volunteer, check out books and attend book clubs since you love reading. Pretend you are interested in learning more about the Monona Public Library and what it has to offer for you. You may want to start from the homepage of City of Monona.

1. You want to learn how you can obtain a library card.
   a. What 2 things do you need to do in order to obtain a library card?

   first scrolled over about the library,

   b. What times can you go to the Monona Public Library to obtain a library card?
   c. What is the limit per checkouts on New Adult Fiction books that you are especially interested in?
   d. What is the fee if you lose or have your library card stolen and you want to get a new one?
   e. Comments. (Ask for comments after each specific task, to make sure all feedback is recorded.)
2. You are interested in joining the Friday Morning Book Group:
   a. What time does this group meet on Friday mornings?
   b. What book is the club discussing this month?
   c. Please find out if this book is available to rent at the Monona Public Library.
   d. Comments.
3. Lastly, you want to start volunteering regularly at the library:
   a. What do you need to do to become a volunteer?
   b. How many hours at a minimum must you work per week to volunteer here?

        c.  Comments.

Scenario 2 (if there is extra time):

Pretend you are the mother or father interested in getting their child involved in reading and events at the Monona Public Library.

1. Find the "Goodreads Top Rated Educational Math Books" book list and name 2 books you could rent for your child to learn about math.
2. You are interested in signing you and your child up for the 100 Books Before Kindergarten reading program…
   a. What is the incentive if you and your child read 100 books?
   b. When is the next special graduation party to be held?
   c. How can you register?
3. What day can you go to the library for "Friendly Foxes Family Storytimes?
4. How can you subscribe to be notified about library news and program updates?

<u>Overall impression</u>

Do you have any other comments or feedback about the site after being asked to complete the previous tasks? How would you rate this website overall? What changes would you make if you could?

<u>Closing</u>

Do you have any questions for me, now that we are done? Thank you again for your time today to help us test the usability of the Monona Public Library website.

5. Other comments/notes about the site:
   - "Search the catalog" function is on the right-hand side bar instead of part of the main side menu on the left
   - Under "Summer Program" there is a random link to "Library Home Page" that just takes you back home. "Children and Families" tab has "Library Home" under it. First, it is an inconsistent way to refer to the home page, and also, only these two tabs have this link, so it is inconsistent that way too.
   - Once you click into a page on the subsite, the only way to get back is via the back button. They do not have a good way to click back through the menus, or view other options on the main menu from one of the more internal/specific pages once you click into it. There is a tiny link on the top that says "Library" in super small font, but again it doesn't allow you to view the other main menu options from an inside page.
   - "Book group" might be found better if referred to as "Book Club"
   - "Children and Families" "Teens and Tweens" and "Summer Program" all have weird overlapping hierarchies… very repetitive!

- website IP - 208.90.191.65 doesn't redirects to - mymonona.com. http://[website IP] should be able to redirect to http://[website url], otherwise search engines treat those versions as duplicate content.
- No meta description (0 length, nothing shown under Google search results).
- No H1 headers but 6 of H3 and 9 of H4.
- No Facebook page and Twitter page links detected. Low priority.

# SECTION FOUR:

# COMMUNITY MEDIA

UNIVERCITY

BETTER W

PLACES

TOGETHER

# UniverCity Monona: Community Media

Usability, Accessibility and SEO

For Community Media

Report by UW Students:

Anna Henrich, Kayla Hietpas, Angie LaQua, Hyeju Son

## <u>Accessibility</u>

### Assessment

We assessed the Community Media home page ([http://www.mymonona.com/135/](http://www.mymonona.com/135/)

[Community-Media](http://www.mymonona.com/135/Community-Media)) using a website called Wave.Webaim. This website looks at the code of the

website itself and identifies any possible problems for accessibility and categorizes them as errors, alerts and contrast errors.

The most common error that the website detects was the "linked image missing alternative text" as there were 5 images that appear next to links to other parts of the website. Without this alternative text, screen readers that allow the blind to use the internet do not work as well. These programs cannot interpret what an image is in words without the code explicitly saying what it is in words. The same problem can be found in the error "empty heading, a heading contains no content". Without this content, there is now a boundary to usability.

In addition to errors, the page also showed a lot of alerts. Among these alerts were "redundant title text", "suspicious alternative text", "broken same-page link", and "underlined text". The first two of these alerts deal with alternative text, much like the errors above. "Redundant title text" is when the title attribute text is the same as text or alternative text, and "suspicious alternative text" is when the alternative text is likely insufficient or contains extraneous information. "Underlined text" is a problem because it often implies a link. In this case, it is an email that is underlined and it doesn't lead to another website. Our tool also reported 24 cases of a "broken same-page link", meaning the link does not have a target and will most likely fail in helping the user navigate the website.

Lastly, Wave.Webaim detected many contrast errors. Contrast is key for users who may be color blind or have poor sight. On the community media page, the blue/white contrast is very good although the tan/orange and white/orange do not pass the contrast standards (AA/AAA).

**Suggested Improvements**

In order to improve the experience that those visiting your website have, we suggest that you make a few slight changes to accessing the website. For the error about alternative text, it is important to make sure there is alternative text for images. It is suggested that when you do

add alternative text for your images, you ensure the text accurately explains what is in the image and the function of it. Alternative text that states, "image of…" is unnecessary since screen readers will tell the user when they come across an image. You may utilize a null/empty alternative text if the content of the image is nearby or if there is not content in the image. Additionally, it is imperative that all headings contain content. As stated above, some users that use screen readers utilize heading elements to navigate webpages. It may cause confusion if there is a heading element with no information. It is suggested that all headings have informative content. Also, ensure that links navigate to another webpage and are not broken; the target webpage must exist. If a link is underlined, make sure it is an actual link. This could cause confusion for users if it not a link and is underlined. Consider using bold or italics to differentiate text, instead of underlines. For the error with title/redundant text, the title attribute value should provide advisory information. The advisory information presented should not be identical to or very similar to the element text or alternative text; it should not contain redundant text.

AA and AAA standards for font contrast, the smaller text requires more contrast...

## Usability Tests

### Description of Tests

Usability describes how effective tools and information sources are in helping people accomplish tasks. In order to make good usability, knowing types of users and contents is important. If your users are mainly retirees, seniors, some families with kids, you may want to

maintain your website as simple as possible so that they do not have difficulties to find certain information on your site even without having certain technology skills.

**Method**

Each of us came up with a scenario for web users to follow. The web users we tested and observed are mostly college students. While the users were visiting Our Community Media on City of Monona website, an observer was taking notes on how the users were completing the task. The notes are mainly describing how a user found a site and clicked things to follow the instruction described in a scenario. Observers did not assist nor interrupt users during scenarios test time so that the collected data indicates objective and accurate observation results. We have sixteen data in total collected from four different web users who tried four different scenarios. The given scenarios are mainly focusing on finding video, TV schedule, Radio program schedule, and contact information.

**Qualitative Data**

Scenario 1: We gave each person the prompt, "I am a student at Monona Grove High School that missed the school's daily announcements." We hoped that they would navigate mymonona.com to find the community media section of the website and find the "Monona Community Media" YouTube channel. After finding the YouTube channel, they can watch the daily announcements video. Each person's response is recorded below.

Person 1

- She hovered over Our Community and spent a while looking at all the options.
- Found Monona Grove School District and was redirected to their website
- Selected the High School specifically
- Found Daily Announcements on the left hand menu
- Selected Oct 19th and got really excited about lunch
- Could not find video

Person 2

- Evaluated the home page for awhile, looking for all the options
- Clicked on "community media"
- Found the "featured videos" tab
- Looked through all the videos and clicked on MGHS announcements
- Watched the 9/8/14 announcements video

Person 3

- Copy and paste mymonona.com.
- Type community on their search box
- Clicked the third one on the list "community media"
- Clicked Community media committee, and come back to community media home
- Could not find the video, so type daily announcements video on the search box
- Could not find what she wanted
- Could not find video

Person4

- Had trouble finding Community Media Link at first
- Wanted to click on TV schedule
- Found YouTube Channel (weird that there are 2 different YouTube links on the same page-one opens new tab, one doesn't)
- Found daily announcements

Scenario 2: We prompted each person with "I am a member of the community looking for information on local radio stations." We wished that each person would navigate mymonona.com to find the community media section of the website and find the link to Radio Program Schedule. Then, they could discover the "voice of monona" station's website. Each person's response is recorded below.

Person 1

- Hovered over Your Services and selected Community Media
- Said "Welcome to Community Media"

- "This looks like…" while reading the menu on the left hand side before selecting 98.7 FM/The Voice of Monona and then Radio Program Schedule

Person 2

- Starting at the community media home page again, she clicked on the tab "98.7 FM-WVMO"
- She then picked the tab of the radio program channel, which lead to the station's website
- She thought this task was much easier than the first one

Person 3

- Clicked 98.7 FM-WVMO, The Voice of Monona
- Clicked radio program schedule
- She said "this one is easy"

Person 4

- Found Community Media
- Scrolled all the way down to find radio schedule, couldn't find it
- Finally clicked "Listen Now to WVMO" (unnecessary to have graphic for this and link at the bottom?)
- Navigated it a different way than I would have, but still got there. (Clicked big graphic instead of side bar and went to radio's site before finding the schedule-rather than the opposite)
- Wasn't too difficult for her to find this one

Scenario 3: We prompted each person with the following situation, "I am an alumni of UW-Madison (majored in Communication Arts), I want to know who are involved in media project for our community. Also, I would love to be a part of media committee if they have." Ideally, they would navigate mymonona.com to find if there is a page where they can find media committee and then find a way to contact a member of the committee. The approach each person took is recorded below.

Person 1

- "I don't know about this one" she said

- Hovered over Our Community and clicked what's new...did not find what she wanted
- Hovered over I Want To.. and then clicked View Agendas, said "well that's frustrating" when it wasn't what she wanted
- Hovered over I Want To.. again and this time clicked Apply for Appointment

Person 2

- Starting at the Community Media homepage, she directly went to the "community media committee" tab
- She took some time looking for a button to click on the contact a member
- Then she quickly laughs and says "it's right in front of her on the right hand side of the page"
- Finds the phone number and email needed to contact

Person 3

- Clicked community media committee
- She laughs about the description of members "can they have better description about people rather than "Citizen Member"?"
- She found contact information on the right side of corner and said "only one contact person?"

Person 4

- Went to Our Community
- On the side bar, Community Media Committee
- Couldn't find contact right away, but then found director's email on left side
- Clicked on it. Opens blank window with only email address (not actually an email format)

Scenario 4: We prompted each person with the sentence, "Imagine you are a family member of one of the high school choir concert students and heard that the concert will be airing on our local TV station but I am not sure what time it will be on." Ideally, they would navigate mymonona.com to find the community media section of the website and find the TV schedule and determine what channel number and time it will air, or watch online. The route each took is recorded below.

Person 1

- "A TV schedule!" she said and then quickly hovered over Our Community
- Found the Community Media section and selected the TV schedule

Person 2

- Starting at the "community media" section, she quickly finds the "tv schedule" tab on the left
- From there it's easy for her to navigate through what show she is trying to look for

Person 3

- She clicked TV schedule
- She clicked "see the entire schedule" under "Schedule"
- There was nothing on the page saying "nothing scheduled at this time"
- She clicked the arrow to see other program scheduled and found there were some schedule
- So she clicked the arrow to see dates in the future and found the same message "nothing scheduled at this time"
- She said "have they not updated the page yet?"

Person 4

- Community Media, but wasn't sure where to go from here
- TV schedule
- Entire schedule
- Went back because that is not right since it shows daily schedule
- Scrolled down
- 10-10-16 choir concert found
- Not sure how to view when it will be on actual TV? She kept navigating and gave up. Only found "On Demand" video (YouTube Channel and under TV schedule this is the link that she first found).

**Suggested Improvements**

The collected data indicates there were difficulties for web users to find certain information on the website. Finding certain videos on the website was certainly a thing that

some users were able to find, whereas some were not. Also, there is only one person's information to contact to community media committee. Furthermore, web users fairly easily found radio schedule on the site. It was also easy to find tv schedule as well, but a user found the schedule was not updated properly. Considering the web users were college students who are familiar with using technologies, those difficulties they had during the scenario test time are something that other users (seniors, people with lack of technology knowledge) would definitely encounter.

Therefore, in order to improve those issues, we highly suggest these: facilitating search engine tools, having a directory search to find person or a department, and updating tv/radio schedules on time. By improving these pieces of the website, it will improve accessibility as a whole for any user. Having an easy search bar where users can go to directly look up what they need would shorten the time taken to find the specific page they are looking for. The continued update of the tv and radio schedules will make sure that the information is accurate and useful to anyone. It is suggested that these schedules be updated on a set basis, whether that is every week, twice a week, or whatever amount of time would seem adequate. In addition to updating TV and radio schedules, making sure to enable users to find the same date schedules via search engine will also enhance usability on the site.With these suggestions put into action, it would not take a lot of additional work to improve the website would but have a large positive outcome.

## Search Engine Optimization

**Ratings and Explanation**

Search Engine Optimization is a strategy to increase the number of people visiting a certain website. We have used two online website analysis tools (Raven, Page Locus) to find some issues related to SEO, accessibility, and so on. The below results indicate the score of the

website and some issues that need to be handled. Potential suggestions are provided end of the results.

**RavenTools: 94/100**

This results show there isn't a critical issue on the site

- There are four errors which could improve
    - 1 page is missing a meta description
        - A meta description is a brief sentence or two that describes your page and potentially (hopefully!) gets shown in the search results to entice visitors to click to your site. These descriptions aren't visible via a browser but are hidden in the site's HTML.
    - 1 page is missing Google Analytics
        - Google Analytics (GA) is a free way to collect insights about what visitors are doing on your site
    - 5 external links are missing anchor or ALT text
        - Either of these errors will render a link invisible. An external text link without anchor text means the link is invisible to the user. An external link that uses an image for the user to click on but has no ALT text doesn't provide any context to search engines, who can't see images like humans do. To increase your site's accessibility to both users and search engines, make sure that your links show context in anchor or ALT text.
    - 5 images are missing ALT text
        - ALT text for images started out as an accessibility attribute. For example, if someone is using a text browser or a browser for the visually impaired, the ALT text can tell them what the image is about. Because search engine bots don't see images, either, they learned that HTML accessibility

attributes could be useful to them too. Include ALT text for your images to ensure that all users, human and bot, can understand the images on your site.

- Two errors which need attentions
  - 10 images are missing title text
    - The title text for images started out as an accessibility attribute.
  - 1 page is missing schema.org microdata

**Pagelocus: 73/100 SEO**

Yellow: alert

Red: Crucial issue

- Yellow: IP Canonicalization. Your website IP - 208.90.191.65 doesn't redirects to - mymonona.com
  - It is said to be present when http://[website IP] redirects to http://[website url] . The canonicalization problem occurs, when a website's IP address and domain name redirects to the same web page, but does not resolve to the same URL.
  - If non-www version of your website does not redirect to www version of your website then search engines treat those versions as duplicate content.
- Yellow: HTTPS: STS is not present. HTTP to HTTPS Redirection
  - Google has officially announced on their blog post that HTTPS will be a ranking signal.There are couple of things though you should follow to get most of this update from Google.
  - Make sure that your HTTP website redirects (301 Permanent) to HTTPS for all URLs
  - Include Strict-Transport-Security Header (STS Wikipedia)

- ○ Buy SSL from a recognized Company eg Comodo, Godaddy

- ● Yellow: Link Analysis

  - ○ We analyse your website for Internal and External links and provide you information about how to optimize your link strategy for on page and off page.

  - ○ If you have to many internal links then search engines can become little suspicious about the website and can even penalize your website.

  - ○ Add maximum of 100 links to any page on your website.

  - ○ If you are linking to other website use rel="nofollow" tag.

  - ○ Do not link to pages with low reputation or with low quality content.

- ● Yellow: Google Plus: No Google Plus Page Present

  - ○ Google uses signals from Google+ about your social presence and if you are active on Google+ then it definitely affects your search engine rankings.

- ● Yellow: Mobile Friendliness Report- Your website is mobile friendly, but loads slow.

  - ○ User experience: 94 (out of 100)

  - ○ Mobile Speed: 58 (out of 100)

- ● Red: Meta Description: Description Length : 0 (Too Short)

  - ○ Meta description is the small description or the snippet which is available in the search result along with the url and your web page title.

  - ○ Search engines uses meta description to get brief information about the website. If you can optimize your web page meta description in accordance with your web page content then you'll find more people clicking on your search result.

- ● Red: Header Tags: Make sure every web page has one H1 tag (not multiple).

  - ○ Header Tags are of real and vital importance in SEO landscape. Eg of Header Tags H1, H2, H3, H4, H5 and H6. Make sure every web page has one and only

one H1 tags and then you can have any number of other header tags (according to your need).

- ○ Header tags are used by search engines to get extra information about the website to provide relevant search results to the users.

- **Red: Conversion Form:** Conversion Form is not present in your website.

  - ○ Adding conversion forms on your web page give user an option to get in touch with you easily. That user can be your prospective customer.

  - ○ Making most of the traffic coming to your website by adding a conversion form can really boost your conversion rate and can get you more customers.

  - ○ Add a conversion form above the fold (First half of your website) and don't ask for too much information. Simply ask Email, Name and Message. Then the rate of conversion will increase.

- **Red: No. of Request(s):** Total Requests - 60

  - ○ We emulate your website as a browser and check how many CSS, JavaScript or other Requests your website is making to the server.

  - ○ If your web page is making too many requests to the server then it can result in server overload and high server response time. This can slow down your website resulting in poor user experience.

  - ○ Search engines take website speed into consideration and page speed does affect your website's SEO.

- **Red: Browser Cache:** Disabled - Enabling Website Cache can improve user experience and even lower server load

  - ○ Helps in making a cached copy of the website locally . Makes the website load from cache.

- **Red: Server Response Time:** Slow - Your server is slow in responding to any request.

- ○ Server response time measures how long it takes to load the necessary HTML to begin rendering the page from your server,You should reduce your server response time under 200ms.
- Red: Facebook Page- no facebook page present
  - ○ Having a facebook fan page is always a great way for new users to know about your product, website or service. How many people like your product, and it helps having feedback on your services.
  - ○ Try to link facebook page to every web page of your website and make it easier for users to visit your facebook page.
- Red: Twitter Page- no twitter page present
  - ○ We check if you have a twitter page that is linked to your website or not. If you have a twitter page that is not linked with your website we might not be able to find it and possibly the search engines too.
  - ○ Again connecting with the customer over twitter is great . Providing them information about your new release, updates and more.
  - ○ It's important that you link your website with your twitter page. Try to get a twitter name that accurately represents your brand, product, service or website.
- Red: Dmoz- Your website is not listed in DMOZ, try submitting your website to DMOZ. This can definitely boost your search engine ranking.
  - ○ Getting listed in DMOZ is a great signal to search engines as your website gets manually reviewed before it can get listed.
  - ○ DMOZ is updated less frequently and it's not easy getting listed on DMOZ nowadays.
- Red: Server Signature: Warning - Your server information is publicly available (Less Secure)

- If your website is providing information about what kind of server your website is hosted on and includes the server version , then attackers can use this to exploit existing vulnerabilities in your server and can get unauthorized access.
- Remove server header for precautionary measures.

Search Terms (+Monona)

1. First result: Monona Community Media
2. Fourth result: Media Literacy, Fifth result: their Facebook page
3. First result: Local Television, TV, Television
4. First Result (goes to subpage for radio) and second respectively: Local Radio Station, Radio
5. Featured Videos, Videos, Video - first result (subpage for featured videos link, community media page is third result) and if not plural, first result (main mymonona.com page)

**Suggested Improvements**

Looking at the Raven tools specifically, there are some improvements that would be helpful to the city of Monona's website as a whole to help accessibility and usability. Moving through the website, it is important to make sure all the links and and small details are included on every page. For example, there were alt text missing on some of the images. This may not seem like a big deal but due to the rights of accessibility, it is important to include them so that if any image would go down, users could still access the information that should be displayed by that image. Additionally, the missing external links are a problem that should be addressed first hand as well. If links are down, they don't do much for the user in any capacity. Fixing these missing or broken links should definitely be on the 'must improve' list. Finally, the lack of google

analytics is not an issue that is critical compared to the others, but could be a great tool that isn't being optimized. The ability to gain insight and see what visitors are doing on the site can be a great tool to assess what is working and what isn't in the future. By looking at these suggested improvements, we hope you take them into consideration and come out with a site that is equally accessible and useful to all users.

**Final Report**
Kelsey O'Hara, Peyton Hofherr, Zachary Yafai, Jeremy Yu
LIS 351

## Introduction

This fall, each group focused on a different component of the city of Monona, WI website where our group analyzed the accessibility, usability, and the search-engine friendliness of the Community Media page of the website. For this report, we will explain the findings for the accessibility and SEO assessment tools with comments about problems and suggestions for possible solutions. We will also discuss a series of usability tests we conducted where participants would be assigned tasks for navigating the Community Media portion of the Monona site and indicate where they saw problems and/or confusion.

We divided our report by each of the three core analyzes in our overall examination. Below we will start each section with a definition of the concept and examining the significance of this to the website and the over-arching design. There will also be a follow-up of common problems and possible solutions for that particular section.

We will recommend any further improvements to bring clarity and ease to the Monona website for each individual section to the end of the report. We hope our insights and suggestions can help Monona create a more user-friendly and accessible website for its users.

## SEO

1. **What is SEO?**
    a. SEO stands for "Search Engine Optimization." SEO is important to the City of Monona's website because it helps determine where a website, or webpage, will determine in a web search engine's results. The better your site's SEO, the more likely you are to see your site earlier in search results.
2. **City of Monona's SEO**
    a. Overall, the SEO score for the City of Monona website is good at 75/100.
    b. Resolve, Robots.txt, Sitemaps, Clean URL, Title Length, Keyword Consistency, Link Analysis, Total Content Length, W3C Validity, Custom 404 Page, IFrame, and Charest were all sufficient as they scored in the range listed above
3. **Problems with SEO**
    a. There is no meta description.

        i.     The meta description is the small description in the search result with the url and web page title.
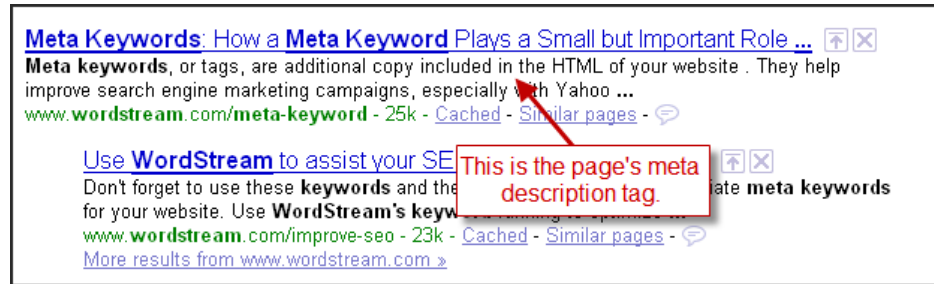


   b.  Header Tags

        i.     Used by search engine to get extra info about the site to provide more relevant results to the user



4. **Recommendations for SEO**
   a. You will need to optimize meta description in accordance with content to obtain more clicks and drive more traffic to your website.
      i. Tip: Do not use a lot of keywords. Instead, use a short description of what the page is.
   b. Please, make sure to incorporate only one "Level 1 Heading tag <h1>" on the page. This will help search engines determine the content on your site and help drive users to the appropriate subpages.

## Accessibility

1. **What is Accessibility?**
   a. Accessibility means to have the ability for everyone, regardless of disability or special needs, to access, use and benefit from everything within their environment. In terms of website design, it's important to consider the accessibility of your design for more than just your targeted audience. Website designers need to make sure that anyone who comes to the site will be able to navigate and use the site correctly.
      i. When viewing the accessibility of the Monona site, we viewed each subpage under the Community Media tab to see how accessible it would be for everyone including people with sight, hearing, or other disabilities.

In our issues with accessibility, we listed each pressing error for the subpage and how we recommend to fix that problem.

2. **Issues with Accessibility (Page break down)**
   a. *Community Media Home Page*
      i. All the 5 linked images in the sidebar are missing alternative text. If an image is within a link that contains no text and that image does not provide alternative text, a screen reader has no content to present to the user regarding the function of the link.
      ii. Underneath Related Documents, they have an empty heading that would provide no information for screen and keyboard readers.
      iii. The select a language feature at the bottom of the page doesn't have any alternative text.
   b. *What's New subpage*
      i. All the 5 linked images in the sidebar are missing alternative text. If an image is within a link that contains no text and that image does not provide alternative text, a screen reader has no content to present to the user regarding the function of the link.
      ii. The Title and "Notify Me" are both links that contain no text. A screen reader can be confused if the function of a link is not presented clearly.
      iii. The select a language feature at the bottom of the page doesn't have any alternative text.
   c. *The Voice of Monona Page*
      i. Image is missing alternative text (need alt text so screen reader users know the content of the image, or for when the image is missing).
      ii. 5 linked images are missing are missing alternative text (without alternative text the link is empty, a screen reader wouldn't convey any content). Occurs with the "Notify Me, Online Payments, Report A Concern, Connect with Monona, and Online Forums" tabs.
      iii. 2 empty links (links contain no text).
   d. *Radio Program Schedule*
      i. Image is missing alternative text (need alt text so screen reader users know the content of the image, or for when the image is missing). .
      ii. "Selected Month" search and "Artists" drop down menu are missing form labels (form control without a text label makes it so function or purpose of that control might not be presented to screen read users).
   e. *Featured Video*
      i. Sidebar links (Notify Me, Online Payments, Report A Concern, Connect with Monona, and Online Forums) are images with no alternative text, five total. Screen readers would not be able to read these important links

       ii.    Two empty links on the page, so the purpose of the link is not presented to the user, causing confusion for keyboard or screen reader users.

      iii.    24 broken same page links, meaning the link has no target.

   f.  *Community Media Committee*

      i.    Image is missing alternative text. There should be an alt attribute to each images. Without alternative text, users won't know the content of the images.

      ii.    Five linked images are missing alternative text. This means that images without alternative texts result in empty links. This is important, because users won't know the content of the images.

      iii.    There are two empty links, and this means that links don't contain any texts. If links don't contain texts, the purpose of the link will not appear to the user.

**3. Recommendations**

   a.  A majority of the issues here can be fixed by adding alternate text to the image links.

      i.    Another fix for this would be to make the sidebar links actual text, as opposed to an image of text. This will remove the problem of necessary alternate text and allow screen-readers to read the links.

   b.  To fix any empty headings, adding some informative content to the heading will provide clarity for screen readers.

   c.  To fix a form control with label visible, use <label> to associate with its respective form control.

      i.    To fix form control without a label, provide associated label, add a descriptive title attribute to the form control, or reference the label with "aria-labelledby."

## Usability

**1. What is Usability?**

   a.  Usability describes how effective tools and information sources are in helping people accomplish tasks.

      i.    The more effective the tools are in helping your website's users, the more enjoyable their experience will be on your site.

   b.  To analyze the Usability of the Monona site, we had to deeply examine the "User experience" which encompasses everything a user thinks and feels while using a tool or information source.

      i.    If we can see the user experience firsthand, we can see common issues or problems within the site and suggest recommendations based on our tests to make the site more user-friendly.

**2. Testing Procedures**

a. To test the usability of the site, we used the Think-Aloud protocol which means that each member of our group asked one different person to take the usability test.
  i. Each person was given 20 minutes to complete all four tasks, each task with a unique scenario.
  ii. The objective of this test was to find if mymonona.com was easy to navigate and to see if it was user friendly.
  iii. For each task, users had to navigate to different parts of the Community Media component of the website and find the information needed for the scenario.
  iv. When users navigated through out the website they explained out loud the actions they were making, and our group members would record users' actions and any additional notes.
  v. Finally, we asked our participants a series of questions about the task: Did you have any trouble completing the task? What made this task difficult? What could this section of the site do to make navigation easier?

3. **Results and Common Problems**
  a. Ideally, these tests could be done with only two to three clicks, but because of some difficulties, each users took more time than they needed.
  b. The first scenario was to navigate the website and find out what is on at 98.7 FM at 6AM. All four users didn't have any trouble accomplishing this task, but some participants said that the fonts were too small and it was difficult for them to read.
  c. The second task was to download the minutes for the August 4th meeting. Three out of four participants thought that the second task was a lot harder than the first. One of the participants said, "It was difficult not knowing where the dates were in particular. I wish they showed the dates on the main page instead of downloading all the minutes from previous meetings." Another participant said that he wasn't able to find it in the search engine.
  d. The third task was to find media coordinator's contact. All of the participants were able to find the media coordinator's contact easily, but they did make a suggestion that it would be easier for people to see and use if there was a subtab for the contact information.
  e. The last task was to find how much dubbing a movie would cost. A lot of our participants found this task to be difficult, and they said it was difficult to find it because they thought that dubbing was not under appropriate category. Some of the participants suggested that dubbing should be under "Your services" rather than "Community media".

4. **Recommendations Usability**
  a. Overall, Usability of the site is relatively good. However, there are some minor issues that need attention.

i. Fonts should made larger so users can easily view the contents of the site.
ii. Make all community dates available rather than forcing users to download minutes from previous meetings that they are not interested in.
iii. Use language to direct the audience to their destination.
iv. Include Community Media Committee in the search engine.
v. Develop a tab for the media coordinator's contact information subpage.
vi. Transition dubbing to "Your Services" section of Community Media.

## Conclusion

Throughout our three different examinations of the website, we found that even though there are issues in all three categories for the Community Media component of the Monona website, there are relatively fixable through our simple recommendations. If you follow through with these recommendations in all three sections of our overall analysis, it will increase usability and the overall design for a wider audience. You will be able for more people to use your site, and they will be able to use your site more efficiently which would result in increasing repeating visitors. We hope that our results and exams were easy to navigate and understand for any repetitions of exams or further analysis.

City of Monona Usability Test
Final Report: Community Media Page
Harley Maslin, Orli Ozer, Jesse Freeman, Sophie Ferro, Alexa Mach

http://www.mymonona.com/135/Community-Media

**Overall Analysis of Test Results:**
Each member of our team completed a usability test for the community media page for the City of Monona's community website. Our findings have determined that there is a huge sum of work that needs to be put forth to make the website, more specifically the community media page more accessible, clear, and easy to navigate. Our results signify a lack of clear navigation and direction for users. We found through our tests that most people could not locate clear and specific titles and subtitles as direction for the information we requested they try to find.

**Suggestions for Improvement:**
Moving forward, the City of Monona should work on making clear headings for sections. A menu bar may be helpful in creating these sections and subsections more clear. There are also many redundant links that lead users to the same information. This can be cleaned up and made more clear. We suggest using more descriptive titles for links and headings so people know exactly where they are being directed and where to find information they are searching for. We hope our usability tests below in the document help the CIty of Monona to evaluate and improve their website to create a more navigable and user friendly experience.

**Accessibility**
We found there to be multiple issues with accessibility as we tested the community media site through Achecker.ca. And wave.webaim.org. The images on the community media site lack alternative text, in that if someone has trouble loading the image, there is no alternative text to give a description of what the person failed to load. We also found that there should be a more distinct difference between the font type/color and the background of the website. Achecker determined that text can be made more distinguishable by repairing bold font elements in the document. There are also issues regarding navigation in that the headers have been set up incorrectly in html. Below is a list of the problems from each respective site.

      Achecker.ca Issues
- Image used as an anchor is missing valid alternative text
  - This is an issue with five separate images
- Trouble making background distinguishable from text
  - Issues with font and bold type
  - Repair bold element in two lines

- ○ Remove font element
  - Issues with navigation and finding content
    - ○ Header nesting, header following h1 is incorrect
  - Likely problem with predictability in how pages are shown


Wave.webaim.org Issues
- Missing alt text
- 5 Linked images missing alt text
- Empty headings
- 2 Empty links

**SEO**
- No meta description
  - ○ It is important to have a meta description so that people can see what the site is about before clicking on the link
- The website IP does not redirect to the website
- STS is not present
- HTTP to HTTPS redirection
  - ○ Make sure that users are directed to the secured version of the website
- Header tags are poor
- Does not include a GA tracking code
- No facebook link
- No twitter link
- No google+ page present

**Key words**
Media
Tv schedule
Youtube channel
Videos
Community
Radio
Television
Charter- doesn't come up
On demand
Program- doesn't come up
Wvmo radio
Local radio
Fm radio

**Usability Test Script and Results**

Hi, _____. My name is (Harley, Orli, Alexa, Sophie, Jesse). We are representing the City of Monona, as we are working to improve our community's website, specifically the community media page. The purpose of this is to use your feedback to make desired improvements. We appreciate your participation. Thank you.

This session should take no longer than 20 minutes. I will ask you to complete a set of tasks on the website. You may ask questions as you go if you are confused or if you need more information. However, the purpose of this test is to determine the ease or difficulty users have while navigating the site. Thus, we may not be able to give you an immediate answer as we will be using your feedback to make improvements.

It is important to note that we are testing the website, not testing you. If you feel like you are making a mistake or doing something wrong don't be discouraged. These struggles are in fact what will help us pinpoint the problems we must work to resolve.

As you complete the different tasks presented to you we ask that you walk us through the steps you are taking. This will help us understand your thought process as well as the difficulty or ease you experience while navigating the site. We are here to record your reactions and comments to ensure we make all the necessary improvements.

We want to hear both your positive and negative feedback. We hope you will be honest with us so that we can make improvements to the best of our ability. Be clear and straightforward with your critiques.

Feel free to ask questions during the session and if you feel like you need a break, please do not hesitate to ask for one.

For reference purposes, we will be recording this session. Your name will remain anonymous. This is just to help us refer back to the feedback you will give us.

We may ask you other questions throughout the session and we may have questions for you once the session is completed.

Thank you for your participation. We appreciate your help in bettering the city of Monona's community website. If you have any questions before we begin please feel free to ask them now.

1. Imagine your son is on the Monona Grove Football team and you had to miss his game on October 14th. Use the http://www.mymonona.com/135/Community-Media to find out the final score of this game.

2. You're interested in buying a song you heard on Sunday October 16th, during "Go Deep with Bruce Rave." Find the playlist that you heard.

3. Imagine you have a great new idea for a television show. The media coordinator would love to hear from you. Explain how you will get in contact with them.

4. What was on the Broadband Telecommunications Committee agenda under "New Business" on July 9th, 2009?

5. What was playing at 5:30 PM on October 21st, 2016?

6. You are going to be driving to work on Thursday morning. What can you listen to on the radio to entertain yourself?

Thank you again for participating. Your feedback was extremely helpful and we really appreciate your cooperation and help.

**Orli Ozer Usability Test**
Hi, S. My name is Orli. We are representing the city of Monona, as we are working to improve our community's website. The purpose of this is to use your feedback to make desired improvements. We appreciate your participation. Thank you.

This session should take no longer than 20 minutes. I will ask you to complete a set of tasks on the website. You may ask questions as you go if you are confused or if you need more information. However, the purpose of this test is to determine the ease or difficulty users have while navigating the site. Thus, we may not be able to give you an immediate answer as we will be using your feedback to make improvements.

It is important to note that we are testing the website, not testing you. If you feel like you are making a mistake or doing something wrong don't be discouraged. These struggles are in fact what will help us pinpoint the problems we must work to resolve.

As you complete the different tasks presented to you we ask that you walk us through the steps you are taking. This will help us understand your thought process as well as the difficulty or ease

you experience while navigating the site. We are here to record your reactions and comments to ensure we make all the necessary improvements.

We want to hear both your positive and negative feedback. We hope you will be honest with us so that we can make improvements to the best of our ability. Be clear and straightforward with your critiques.

Feel free to ask questions during the session and if you feel like you need a break, please do not hesitate to ask for one.

For reference purposes, we will be recording this session. Your name will remain anonymous. This is just to help us refer back to the feedback you will give us.

We may ask you other questions throughout the session and we may have questions for you once the session is completed.

Thank you for your participation. We appreciate your help in bettering the city of Monona's community website. If you have any questions before we begin please feel free to ask them now.

1. Imagine your son is on the Monona Grove Football team and you had to miss his game on October 14th. Use the http://www.mymonona.com/135/Community-Media to find out the final score of this game.

   - Sammy looked at the options in the navigation bar on the left
   - She clicked on featured videos and scrolled through to find MGHS football
   - She clicked on that and found the football team's youtube
   - She clicked on the homecoming game and was able to find the score

2. You're interested in buying a song you heard on Sunday October 16th, during "Go Deep with Bruce Rave." Find the playlist that you heard.
   - Sammy exited the Youtube window
   - She clicked the back button to get to the home site
   - Sammy clicked on the button that said 98.7 FM-WVMO, The Voice of Monona and then chose the Radio Program Schedule
   - On the calendar on the left she found the date we are looking for
   - She clicked on the date and then saw a list of three playlists
   - She clicked on the one that said Go Deep (Music) Bruce Rave and found the playlist

3. Imagine you have a great new idea for a television show. The media coordinator would love to hear from you. Explain how you will get in contact with them.

- Sammy clicked the back button three times to get to the home screen
- She said that it was annoying that there wasn't a button that could lead her back to the media page
- She found a contact us section on the right side of the home page and located the media coordinator's name
- She clicked on the link that said email
- The link brought her to a new tab that was completely blank
- She looked confused and said "Did I do something wrong?"
- She went back and pressed it again and the same thing happened
- I told her that there is still a way to find the email
- She went back to the home page
- Sammy scrolled through the page to find the email
- On the bottom of the page she found the section that says program ideas and found the email under there

4. What was on the Broadband Telecommunications Committee agenda under "New Business" on July 9th, 2009?
- Sammy said "ugh" when asked this question and said "that is going to take forever"
- She clicked on the Community Media Committee tab on the left of the page
- She found the archives agenda heading and clicked view all agendas
- Sammy then found the agenda from july 9th
- She read to me the items that were named under New Business

5. What was playing at 5:30 PM on October 21st, 2016?
- Sammy exited two tabs that she had up from answering the previous question
- She still had the home page tab open so returned to that
- She clicked on the 98.7 FM-WVMO, The Voice of Monona tab
- She clicked on the radio program schedule and found the date on the left hand calendar
- When she clicked on the date she said there was nothing at 5:30 PM and that only 6 am and 6 pm show up
- I told her to look for what was on TV instead
- She pressed the back button four times which she said was annoying
- She clicked on the TV schedule on the navigation bar
- The site didn't load
- She said it wasn't working and she kept pressing refresh
- It finally loaded
- She scrolled down and said none of the videos had that date or time
- She clicked on see the entire schedule

- She saw the date in the right hand corner and scrolled through backwards until she found the 21st

6. You are going to be driving to work on Thursday morning. What can you listen to on the radio to entertain yourself?

Thank you again for participating. Your feedback was extremely helpful and we really appreciate your cooperation and help.

**Jesse Freeman Usability Test**
Hi, D. My name is Jesse We are representing the city of Monona, as we are working to improve our community's website. The purpose of this is to use your feedback to make desired improvements. We appreciate your participation. Thank you.

This session should take no longer than 20 minutes. I will ask you to complete a set of tasks on the website. You may ask questions as you go if you are confused or if you need more information. However, the purpose of this test is to determine the ease or difficulty users have while navigating the site. Thus, we may not be able to give you an immediate answer as we will be using your feedback to make improvements.

It is important to note that we are testing the website, not testing you. If you feel like you are making a mistake or doing something wrong don't be discouraged. These struggles are in fact what will help us pinpoint the problems we must work to resolve.

As you complete the different tasks presented to you we ask that you walk us through the steps you are taking. This will help us understand your thought process as well as the difficulty or ease you experience while navigating the site. We are here to record your reactions and comments to ensure we make all the necessary improvements.

We want to hear both your positive and negative feedback. We hope you will be honest with us so that we can make improvements to the best of our ability. Be clear and straightforward with your critiques.

Feel free to ask questions during the session and if you feel like you need a break, please do not hesitate to ask for one.

For reference purposes, we will be recording this session. Your name will remain anonymous. This is just to help us refer back to the feedback you will give us.

We may ask you other questions throughout the session and we may have questions for you once the session is completed.

Thank you for your participation. We appreciate your help in bettering the city of Monona's community website. If you have any questions before we begin please feel free to ask them now.

1. Imagine your son is on the Monona Grove Football team and you had to miss his game on October 14th. Use the http://www.mymonona.com/135/Community-Media to find out the final score of this game.
- First, he clicked on the "TV Schedule"
- From here he scrolled down and was able to find the game from the listed date
- He proceeded to then click the link, which only brought him to the schedules for the game and not actual video
- Next he went back to the Community Media home page and clicked on "Featured Videos"
- From here Doug clicked on the "MGHS Football" page and was redirected to the Youtube page
- On the Youtube page, Doug was able to see that the final score was 42-13 in favor of Monona Grove

2. You're interested in buying a song you heard on Sunday October 16th, during "Go Deep with Bruce Rave." Find the playlist that you heard.
- Naturally Doug's first reaction to this question was to click on the "98.7 FM-WVMO, The Voice of Monona" tab
- This brought him to the Monona Radio home page, which was very confusing to him because it does not have many options
- His next step was to click on the "Radio Program Schedule" tab and this brought him to a new page, separate from the original website
- Doug then clicked on the date "October 16" on the side calendar
- The "Bruce Rave" playlist was linked to this page and he was able to then access the playlist
- Overall he was very confused by the Monona Radio home page, which didn't have many answers he was looking for

3. Imagine you have a great new idea for a television show. The media coordinator would love to hear from you. Explain how you will get in contact with them.
- The first thing Doug did was click on the "Community Media Committee" tab, which brought him to an administrative page on the website
- He noticed that meetings were on the "Second Thursday of Every Month at City Hall," but thought this was an inefficient way to convey his idea

- After navigating around this page he was able to see the "Director of Community Media" contact information under the large "Contact Us" heading
- Doug thought this was an inefficient use of his clicks

4. What was on the Broadband Telecommunications Committee agenda under "New Business" on July 9th, 2009?
- After previously seeing the meeting agendas listed on the "Community Media Committee" page from the usability test prior, Doug returned here
- He then clicked on "View all Agendas" under the "Archived Agendas & Minutes" heading
- From here he was able to go to the listed date and click on the correct file
- However Doug said that had he not been on the page before, he would have been completely lost in this test

5. What was playing at 5:30 PM on October 21st, 2016?

6. You are going to be driving to work on Thursday morning. What can you listen to on the radio to entertain yourself?

Thank you again for participating. Your feedback was extremely helpful and we really appreciate your cooperation and help.

**Harley Maslin Usability Test**
Hi A, My name is Harley. We are representing the city of Monona, as we are working to improve our community's website. The purpose of this is to use your feedback to make desired improvements. We appreciate your participation. Thank you.

This session should take no longer than 20 minutes. I will ask you to complete a set of tasks on the website. You may ask questions as you go if you are confused or if you need more information. However, the purpose of this test is to determine the ease or difficulty users have while navigating the site. Thus, we may not be able to give you an immediate answer as we will be using your feedback to make improvements.

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As you complete the different tasks presented to you we ask that you walk us through the steps you are taking. This will help us understand your thought process as well as the difficulty or ease you experience while navigating the site. We are here to record your reactions and comments to ensure we make all the necessary improvements.

We want to hear both your positive and negative feedback. We hope you will be honest with us so that we can make improvements to the best of our ability. Be clear and straightforward with your critiques.

Feel free to ask questions during the session and if you feel like you need a break, please do not hesitate to ask for one.

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We may ask you other questions throughout the session and we may have questions for you once the session is completed.

Thank you for your participation. We appreciate your help in bettering the city of Monona's community website. If you have any questions before we begin please feel free to ask them now.

1. Imagine your son is on the Monona Grove Football team and you had to miss his game on October 14th. Use the http://www.mymonona.com/135/Community-Media to find out the final score of this game.

● First, Amanda typed in Monona Grove Football into the search bar. It came up with no results which prompted it to ask "Did you mean *moon*?" Amanda found this to make no sense so she resorted to a new search method.

● Amanda went back to the community media page, but was confused as to where to head next. She skimmed over the drop down tabs at the top and when to the recreations page where she also did not find her answer.

● She asked if she was doing something wrong, so I prompted her to go back to the community media page. She asked if it was maybe a video. So then she thought to click on the link to the youtube page.

● On the youtube page are videos with Monona Grove School Announcements. The videos are dated so she found the one that was titled Monona Grove Football vs Deforest 10/14/16 Homecoming Game.

● Once she found it she literally said, "what the hell that was so stupid."

2. You're interested in buying a song you heard on Sunday October 16th, during "Go Deep with Bruce Rave." Find the playlist that you heard.

- For this one Amanda was primed to go back to the youtube channel to see if any music would be listed. She realized she was wrong and went back to the Community Media page.
- Next she went for the sidebar and ruled out some options that she thought would definitely be the wrong link. She then clicked on featured videos and didnt find it.
- She then scrolled over the Voice of Monona, and clicked on the subtitle "Radio Program Schedule" where she found a link to Go Deep with Bruce Rave.
- She noted that she was confused because there were two separate hyperlinks in the words, but she clicked on the first one and it gave her a list of the playlists and their respective dates.


3. Imagine you have a great new idea for a television show. The media coordinator would love to hear from you. Explain how you will get in contact with them.

- For this there were two places Amanda had already noticed that email addresses were located. She immediately went to the side-bar on the right and saw the email. Also she scrolled down to the bottom of the page where the same email existed.

4. What was on the Broadband Telecommunications Committee agenda under "New Business" on July 9th, 2009?

5. What was playing at 5:30 PM on October 21st, 2016?

6. You are going to be driving to work on Thursday morning. What can you listen to on the radio to entertain yourself?


Thank you again for participating. Your feedback was extremely helpful and we really appreciate your cooperation and help.

**Alexa Mach Usability Test**
Hi, J. My name is Alexa. We are representing the city of Monona, as we are working to improve our community's website. The purpose of this is to use your feedback to make desired improvements. We appreciate your participation. Thank you.

This session should take no longer than 20 minutes. I will ask you to complete a set of tasks on the website. You may ask questions as you go if you are confused or if you need more information. However, the purpose of this test is to determine the ease or difficulty users have

while navigating the site. Thus, we may not be able to give you an immediate answer as we will be using your feedback to make improvements.

It is important to note that we are testing the website, not testing you. If you feel like you are making a mistake or doing something wrong don't be discouraged. These struggles are in fact what will help us pinpoint the problems we must work to resolve.

As you complete the different tasks presented to you we ask that you walk us through the steps you are taking. This will help us understand your thought process as well as the difficulty or ease you experience while navigating the site. We are here to record your reactions and comments to ensure we make all the necessary improvements.

We want to hear both your positive and negative feedback. We hope you will be honest with us so that we can make improvements to the best of our ability. Be clear and straightforward with your critiques.

Feel free to ask questions during the session and if you feel like you need a break, please do not hesitate to ask for one.

For reference purposes, we will be recording this session. Your name will remain anonymous. This is just to help us refer back to the feedback you will give us.

We may ask you other questions throughout the session and we may have questions for you once the session is completed.

Thank you for your participation. We appreciate your help in bettering the city of Monona's community website. If you have any questions before we begin please feel free to ask them now.

1. Imagine your son is on the Monona Grove Football team and you had to miss his game on October 14th. Use the http://www.mymonona.com/135/Community-Media to find out the final score of this game.
- She first clicked on featured videos
- She found a box that said MGHS football, and clicked on it
- She found the link to the homecoming game on October 14th
- She scrolled to the end of the video to find the final score:
    - Monona: 42
    - Deforest: 13

2. You're interested in buying a song you heard on Sunday October 16th, during "Go Deep with Bruce Rave." Find the playlist that you heard.

- She returned to the community media home page
- Clicked on the 98.7 link on the navigation bar on the left
- She clicked on radio program schedule on the new navigation bar on the left
- She clicked on Oct. 16 on the calendar located on the left side
- Found "Go Deep with Bruce Rave" and clicked on playlist
- Found the playlist she was looking for

3. Imagine you have a great new idea for a television show. The media coordinator would love to hear from you. Explain how you will get in contact with them.
- Pressed backspace until she reached the community media home page
- Clicked on the community media committee tab on the navigation bar on the left
- Went back to the home page
- Clicked on tv schedule on the navigation bar on the left
- Went back to the home page
- Clicked on what's new on the navigation bar on the left
- Read the text and found the email for Will Nimmow, the media coordinator of Monona

4. What was on the Broadband Telecommunications Committee agenda under "New Business" on July 9th, 2009?
- Used backspace to get back to the home page
- Clicked on community media committee on the navigation tab on the left hand side
- Clicked view most recent agenda
- Clicked "view all agendas" under archived agendas
- Opened the agenda for July 9, 2009
- Read the 8 numbers of the agenda for the Broadband Telecommunications Committee agenda

5. What was playing at 5:30 PM on October 21st, 2016?
- Clicked on TV schedule
- Clicked through the images in the box at the top
- Clicked "see entire schedule"
- Clicked on the arrow until she got to October 21, 2016
- Found 5:30 pm and read that the high school choir concert was playing

6. You are going to be driving to work on Thursday morning. What can you listen to on the radio to entertain yourself?
- Closed out the tv schedule tab to get back to the community media home page
- Clicked on the 98.7 FM link on the navigation tab on the left
- Clicked on radio program schedule on the left
- Found the information for Thursday's radio schedule

- Said she'd either be listening to the "Americana Music with The More You Listen- The More You'll Hear" program or the "987 Countdown to Country with Jody" show
- She closed out all tabs

Thank you again for participating. Your feedback was extremely helpful and we really appreciate your cooperation and help.

**Sophie Ferro Usability Test**
Hi, E. My name is Sophie. We are representing the city of Monona, as we are working to improve our community's website. The purpose of this is to use your feedback to make desired improvements. We appreciate your participation. Thank you.

This session should take no longer than 20 minutes. I will ask you to complete a set of tasks on the website. You may ask questions as you go if you are confused or if you need more information. However, the purpose of this test is to determine the ease or difficulty users have while navigating the site. Thus, we may not be able to give you an immediate answer as we will be using your feedback to make improvements.

It is important to note that we are testing the website, not testing you. If you feel like you are making a mistake or doing something wrong don't be discouraged. These struggles are in fact what will help us pinpoint the problems we must work to resolve.

As you complete the different tasks presented to you we ask that you walk us through the steps you are taking. This will help us understand your thought process as well as the difficulty or ease you experience while navigating the site. We are here to record your reactions and comments to ensure we make all the necessary improvements.

We want to hear both your positive and negative feedback. We hope you will be honest with us so that we can make improvements to the best of our ability. Be clear and straightforward with your critiques.

Feel free to ask questions during the session and if you feel like you need a break, please do not hesitate to ask for one.

For reference purposes, we will be recording this session. Your name will remain anonymous. This is just to help us refer back to the feedback you will give us.

We may ask you other questions throughout the session and we may have questions for you once the session is completed.

Thank you for your participation. We appreciate your help in bettering the city of Monona's community website. If you have any questions before we begin please feel free to ask them now.

Imagine your son is on the Monona Grove Football team and you had to miss his game on October 14th. Use the http://www.mymonona.com/135/Community-Media to find out the final score of this game.
● Emily first clicked on "Featured videos"
● She found a box that said "MGHS Football" with a photo, so she clicked on it
● She saw the list of videos, found that the 12th one was the Homecoming game on 10/3/14
● She began to watch, but then fast forwarded until the end of the video where it stated that the final score was Monona: 42 Deforest: 13

2. You're interested in buying a song you heard on Sunday October 16th, during "Go Deep with Bruce Rave." Find the playlist that you heard.
● Emily clicked "Home" to get back to the Community Media home page
● It brought her to the actual home page, so she realized she had to click back to get to the Community media home page
● She then clicked on the "98.7 FM-WVMO, The Voice of Monona" link on the navigation bar on the left
● When she hovered over it, she clicked on "Radio program schedule" on the new navigation bar on the left
● She clicked on Oct. 16 on the calendar located on the left side
● She found "Go Deep with Bruce Rave" and clicked on playlist
● She was able to find the playlist from October 16th during "Go Deep with Bruce Rave"

3. Imagine you have a great new idea for a television show. The media coordinator would love to hear from you. Explain how you will get in contact with them.
● Emily realized that there was no button to lead her back to the Homepage
● So, she pressed the back button until she reached the Community Media home page again
● She then clicked on the "98.7 FM-WVMO, The Voice of Monona" link on the navigation bar on the left
● She saw the text stating, "Do You Have an Idea for a Great Radio Program?"
● She clicked the link to email the media coordinator, Will Nimmow.
● It brought her to a new window, which opened her email.

4. What was on the Broadband Telecommunications Committee agenda under "New Business" on July 9th, 2009?
   - Emily used the back button to return to the home page.
   - She then clicked on "Community media committee" on the navigation tab on the left hand side
   - Clicked "View most recent agenda"
   - She realized that wouldn't show her what happened in 2009.
   - She went back and clicked "View all agendas" under archived agendas
   - She opened the agenda for July 9, 2009
   - It led her to a new window which included the items that were named under New Business.

5. What was playing at 5:30 PM on October 21st, 2016?
   - She went back using the back button to the home page
   - Emily clicked on TV schedule
   - She then clicked "see entire schedule" on the right side of the page
   - She clicked on the calendar to change the date to October 21, 2016
   - She saw 5:30 pm and read "Monona Grove High School Choir Concert."

6. You are going to be driving to work on Thursday morning. What can you listen to on the radio to entertain yourself?

Thank you again for participating. Your feedback was extremely helpful and we really appreciate your cooperation and help.

## Final Report
( www.mymonona.com/135/Community-Media )

Community Media Page

Tanner Hanson, Alix DeBroux, Ivy Cyr, Laura Oberwetter, Bridget Behrens

Discussion: 302

## SEO Audits
- Top result in the search query
  - "Monona Community Media" (works - Community Media homepage)
  - "Monona Director of Community Media email" (works - Community Media Homepage)
  - "Monona TV Schedule" (works - Community Media homepage)
    - Charter Channel 990
    - AT&T Channel 99
- Second result or lower in search query
  - "Monona 98.7 FM" (works - Voice of Monona Radio homepage)
    - Radio
    - Broadcasting
    - "The Voice of Monona"
  - "Monona Director of Community Media email" (works - Community Media Homepage)
  - "Monona video(s)" (works - Featured Videos homepage)

## Accessibility Issues
- Notify Me, Online Payments, Report a Concert, Connect with Monona, & Online Forms buttons have text only as an image
- Hyperlinks provide very low contrast between the link and background color

Many of those who are visually impaired rely on screen readers to use the web. Text included on images that are not accompanied by alternative (plain) text are not able to be read by screen readers, and are then ignored entirely. Text and links that are colored similarly to its background behind it create low contrast between the two, and therefore become difficult to read. Creating high contrast to distinguish text (i.e, dark-colored background behind light text or dark-colored text upon a light background) would improve this accessibility issue.

## Usability Issues

**User Report #1**
- The Community Media link was initially hard to find from the mymonona.com homepage.
- The user also had difficulty finding various items within the Community Media page.
  - There were often too many links related to one idea, which made it hard for the user to navigate the website.
  - Links have inconsistent and unclear naming conventions
  - There are duplicate links which can be found in various places on the website.

Removing some of the links to subpages under the "Our Community" tab will eliminate confusion and redundancy. Links should be named in a consistent way and clearly state what the web page is about. The Monona Youtube page should have it's own tab or be found within the "Featured Videos" page to make it more accessible and easier to find. Links to pages like the Community Media Committee should only be found in one location to make it easier for the user to find and remember. For example, when the Community Media Committee link is accessed through the Community Media page, it appears to redirect you to the "Boards, Commissions, and Committees" page found within the Your Government tab. This makes it difficult for the user to get back to the Community Media page and understand where they are on the website. Additionally, the Community Media homepage should be clearly visible from each page within the Community Media page. This will make it easier for the user to go back to a more central location and access what they need to.

**User Report #2**
- User could not find information Monona's local radio station
- Inconsistent, confusing directory system
  - Links redirecting to the Community Media homepage are awkwardly placed and appear too frequently (it appears 3rd from the top in the sidebar navigation list; last in 98.7 FM-WVMO sidebar navigation list; also appears in the dropdown menu when hovering over the 98.7 FM-WVMO link in the sidebar navigation)
  - Each subpage beneath "Community Media" does not share the same sidebar navigation system (Community Media Committee redirects to an unfamiliar page format; "What's New" page's navigation sidebar is limited only to "TV Schedule", with no simple way to return to "Community Media" or any other previously visited page)

The large amount of subpages could be simplified into a more cohesive and comprehensive categories. The inconsistency of pages all bound together by the same larger directory (i.e., Community Media) should be held together with consistent navigation systems and page appearance so the user does not view a particular page out of context--this was a large part of the confusion experienced by my test user. Considerably one of the most important places to redirect to, the Community Media home, should be located in an easy-to-see, separate location for instant access. Perhaps this can be identified as a larger hyperlinked button that always appears at the top of the page, colored differently, and maybe even slightly separated from the standard sidebar navigation. If a user fails to find something they're searching for, they at least should have an simple starting point to try again.

The radio programming page should provide the schedule (or a direct link to it) similar to the TV schedule, because information outside of the "listen now" option is not as intuitive to access. If an entire subpage was bothered to be created, then it should include much more relevant content to fill it out; if it is rather a page only with an external link, that link should be placed in the navigation bar without its own subpage for clarity.

**User Report #3**
- Initial location of the Community Media page is a challenge
- There is no way to access the page without scrolling
- Once on the community media page, finding the YouTube channel took more scrolling and clicking around

- A suggestion for the YouTube channel would be to organize the YouTube channel into sections based on the category the video would fall into
- There is no clear information on how to make a contribution to the City of Monona's website
- Contacting the head of the Community Media Committee's page was seen as the only solution to making a submission

The Community Media page should be more accessible from the home page for the City of Monona website. If it is easier to locate, more people will be able to find what they need at a faster rate. Also, if there is a way for residents to submit YouTube videos, it would be helpful to have it clearly labeled with instructions. There is a contact name and email available, but if it clearly stated something about the YouTube channel that would be helpful seeing as my user struggled with finding that information.

Lastly, if there is any better way to categorize the YouTube videos on the channel, that would be beneficial to the users and allow them to find exactly what they're looking for on the website. Another thing to consider fixing is how to get back to the Community Media homepage without have to go through the big drop down menu. Once the user clicks any of the links within the Community Media page it becomes confusing on how to get back to the original page with the basic information on the radio station and contact information. Overall the biggest thing to fix would be the navigation to get *to* the Community Media page and the navigation to get *around* the Community Media page.

**User Report #4**
- User could not easily find video archives of high school football games from the "community media" page
    - Some information located on the community media page seems like it should belong in a different tab or should be expressed more clearly
        - Instead of having video archives of all football games, there should be a different page that just summarizes the scores and highlights of the games
- The Community Media homepage could be laid out more coherently
    - The navigation menu on the Community Media homepage isn't very logical or user friendly
    - I worked primarily in the "What's New" and "Featured Videos" tabs. Below is a summary of flaws that were identified within those tabs of Community Media navigation menu
        - The "What's New" tab brings the viewer to a short paragraph with no images or graphics that looks like it may not have been updated for a while
        - The "Featured Video's" tab doesn't offer any explanation before the user clicks on it regarding what these featured videos could be
            - The videos on this page do not seem to be organized in any certain way, this is just a gallery of random videos
                - What is good is that each of the videos on the Featured Videos homepage links out to a YouTube page with all the other videos of that related content. For example, if you click on the "City Council" video, you will be brought to a YouTube page that holds all of the City Council video archives.

- o What's not so good about this page is that the user doesn't know that there is an entire library of related content behind every video in this page.
- o Additionally, these videos could be organized in a more logical way. Perhaps having the front page divided into "City Politics", a area that would hold all of the city council, finance videos, and plan commission videos, "Monona School District", a link that would bring you to all the videos of High School sporting events, band performances and school announcements and a "Community News and Information" tab that would have all the content regarding the parks and rec department, the local radio station, and local news.
- o These three separate galleries should be designed in a way that it is clear to the user that one click will bring them to a page that holds all the content that they are looking for, instead of scrolling through one huge gallery of randomly arranged video thumbnails.
  - • In addition to organizing theses video thumbnails in a more coherent way, this page could also be more aesthetically pleasing after the organization
  - • One big and professional thumbnail photo to represent the "City Politics", "Monona School District", and "Community News and Information" video galleries will look much better than having a web page that is filled with tiny video stills as thumbnails for a bunch of different videos.
    - ▪ There were some redundant links
      - • There was a link on the main "Community Media" navigation menu that was labeled "Community Media" that would simply refresh the page that the user was on instead of bringing them to a new web page.

**User Report #5**
- • Initially it was difficult for the user to find the community media page
- • Upon first glance the user had a pleasant reaction to the layout of the community media committee page and the simplification of the links
- • The link to "apply to serve on a community committee" should have a link within the first header of the Community Media Committee page
- • The link to find the agendas for past committee meetings is in an appropriate place, but within that link there are only select agendas presented
- • The link to apply to be on one of the committees offered by the city can only be found through scrolling down the page

It must be easier to find the community media link from the home page on the monona website. The community media committee page does a good job of having a lot of relevant information right on the home page, as well as having links to relevant contact information.

What could be better is the layout of the link to view the past agendas within the committee. There are only a select number of agendas present and there should be a way to access all of the past files easily. The "View all Archives" link brings one to a screen with many options and search queues, and this is not appealing to a user and can lead to more confusion. I suggest placing in a search query that asks for a range of dates, which will allow for a user to quickly find

past agendas based on the time and date they took place. Lastly, I suggest the link to apply to community committee, or at least the one involving community media, be found within the first couple headers of the page.

# UniverCity Monona Project Report

**Evan Watters, Tianshuo (Stanso) Su, Peng Cheng, Joe Omelina, Logan Rusch**

## Automated Tools Test Results

### Accessibility:

Accessibility checks are used to help designing websites that easy to read for elders and people with disabilities.

***Achecker:***
***http://achecker.ca/checker/index.php***
Several images are missing alt text. "Bold" element should be switched to "em" or "strong." The "font" element should be in CSS rather than HTML. The wrong element is used to close H1 Header.

***Wave:***
***http://wave.webaim.org/***
Under "Contact us" column in "Related Documents" section, there is an empty heading. Several images have redundant header text, for example, the WVMO logo and the photographs. Images should have different title text than alt text. `<noscript>` elements cannot be read without javascript. Alt text on the photos is useless. We suggest adding simple description in the alt text.

### SEO:

SEO stands for "search-engine optimization." It is a set of practices to help websites/pages rank highly in search-engine results pages.

***Raven:***
***https://raventools.com/site-auditor/***
Raven gave a score of 84. There are some page speed issues. No script elements, images should be optimized. There should be an expiry date or maximum age in the headers so that they load from the locale disc and not from the network. The HTML, CSS, and Javascript can all be compacted. For mobile, they can prioritize visible content to reduce HTML needed to render above the fold content. For nonpage issues, they can size page content to the view port, otherwise it's too wide. They can make the tap targets wider. They can add a meta description or Google analytics.

***Page Locus:***
***https://www.pagelocus.com***

On-Site SEO: 75. The site IP does not redirect to the website. There is no meta description and no conversion form. The site should redirect to HTTPS. They should get an HTS header.

The pagespeed score was a 77. Similar to the Raven, There should be an expiry date or maximum age in the headers so that they load from the locale disc and not from the network. Their server is also very slow.

They received a Social Score of 0. Their Facebook was attached despite Page Locus thinking it was. If they have a twitter or  google + they could add these options.


## Usability Test Interview

To test for usability, we conducted five interviews asking subject to attempt to accomplish specific tasks on the website. Our results are as follows.

**Question One**: You want to listen to the Monona radio station between 6 and 7 on Monday, and you don't know what will be on. Can you find a way to see Monday night's schedule?

All of the interview subjects had an easy time getting this information. They couldn't think of a situation where somebody would struggle to accomplish this task.

**Question Two:** Imagine you have Charter cable service. You want to watch the Monona Grove High School Choir Concert on public access. Find what channel this is and read the TV schedule to see when this plays on October 23.

The interview subjects had a tougher time finding this information. The main issue was that the actual TV schedule was frustrating because they had to use the scroller to find a specific date. One subject had difficulty because the drop-down menu under "Your Government" repeatedly got in their way. Some subjects felt that the link to the public access schedule should be more specific than "TV Schedule."

**Question Three:** You are a musician who wants to perform on the Monona local radio station. Find a way to contact the station as a potential performer.

The subjects had a very easy time finding this information.

**Question Four:** You want to know what was discussed at the City Plan Commission meeting. Can you find two ways to watch the recording of the meeting?

Almost all subjects had difficulty accomplishing this task. Part of this comes from our question's ambiguity, but even after told to look for a video the subjects still had difficulty. Two

tried to use the search function to find the video of the meeting but were unsuccessful. The video section of the site should be more specific and refined, and the search function should also include videos in the results.

**Question Five:** From http://www.mymonona.com/135/Community-Media, open up "What's New" and "Community Media Committee" pages. Brief read the information on both pages about meetings concerning community media. Can you explain the difference of the two meetings? Does the information need to be clarified?

The subjects all agreed that this information is unclear. These two meetings need to be more specifically labeled so that people using the site can understand the difference between them. It may also help to place both parts about meeting information on the same page.

**Question Six:** What is final score of the 2/6/16 Monona Grove Boys Basketball game? (hint: watch the video)

This was not difficult for the subjects. However, it may help to have the score or whether Monona Grove won or lost somewhere aside from just in the video.

## Summary of Major Suggestions

1. Add simple descriptive alt text in pictures.
2. Separate CSS and HTML elements.
3. Delete redundant and unused elements in HTML code.
4. TV schedule page needs to be reformatted and a more convenient date selector module should be added to the page.
5. A search utility should be added to video section.
6. Details should be added to important meetings on the website so that it is more accessible for the public to contact people in Community Media.

*Appendix:*

<u>Interview Script</u>

This interview will test the usability of the Monona Community Media webpage on the City of Monona's official website. I will take you through a few scenarios in which you will use the site to accomplish a task. As you work through these tasks, please explain the decisions you are making and point out any difficulties you encounter.

**Scenarios** (Need to be timed for each scenario):

Imagine you are a senior citizen who

1. You want to listen to the Monona radio station between 6 and 7 on Monday, and you don't know what will be on. Can you find a way to see Monday night's schedule?

2. Imagine you have Charter cable service. You want to watch the Monona Grove High School Choir Concert on public access. Find what channel this is and read the TV schedule to see when this plays on October 23.

3. You are a musician who wants to perform on the Monona local radio station. Find a way to contact the station as a potential performer.

4. You want to know what was discussed at the City Plan Commission meeting. Can you find two ways to watch the recording of the meeting?

5. From http://www.mymonona.com/135/Community-Media, open up "What's New" and "Community Media Committee" pages. Brief read the information on both pages about meetings concerning community media. Can you explain the difference of the two meetings? Does the information need to be clarified?

6. What is final score of the 2/6/16 Monona Grove Boys Basketball game. (hint: watch the video)

**Questions after each scenario:**
1. Do you feel it is hard to find the information? Why do you think it is hard to find the information?
2. Would you be able to find the information if you are in hurry?
3. Do you think there is an obvious way for this to be easier understood?
4. How long do you think you spent on finding the information.
5. Can you think a situation that someone have difficulty to accomplish this task?

**<u>Usability Test Interview Notes</u>**

***Tianshuo (Stanso) Su:***
**Q1.** The interviewee took 30s.
   1. The information is not difficult to find.
   2. The interviewee not sure if the information can be found in hurry.
   3. It is easy enough already.
   4. The interviewee thinks he used less than 1 min to find.
   5. Elders or disabled may have difficulties.

**Q2.** The interviewee took 5min 35s.
   1. Yes, it difficult to find. He thinks that the date on the TV schedule web page is confusing and

the schedule button is not obvious.
    2. The interviewee thinks that he cannot find the information in hurry.
    3. Make button bigger and use larger fonts.
    4. He thinks that he finished in 5 min.
    5. The interviewee thinks he cannot find the info in hurry.

**Q3.** The interviewee took 15s to find the information. Since the contact information just on the page gave to the interviewee, he just straight to the answer.
    1. No, the interviewee thinks that it is easy.
    2. He believes that he can find the information in hurry.
    3. He thinks that it is easy enough to find.
    4. He thinks he used fairly short time. Maybe 15s or less.
    5. He thinks that it is not quite possible that someone cannot find the information except disabled people.

**Q4.** The interviewee used 6:32s and did not find the information. The interviewee tried to rely on the in site search engine, but the search engine did not perform well on video searches.
    1. Yes, it is very hard to find the information. He thinks that the information is not organized well on the website.
    2. He do not think that he can find the information in hurry.
    3. The City Plan Commission meeting videos supposed to put in Plan committee under Community media committee.
    4. He thinks that it is long since he did not found the information.
    5. It is very likely that someone cannot find the info.

**Q5, Q6.** The interviewee did not have enough time to finish in the 25 minute interview.

***Logan Rusch:***
**Q1.** The interviewee took 1 minute and 5 seconds.
    1.  The information is easy to find.
    2.  It would be hard to find the information in a hurry, but it could be done.
    3.  It is already pretty easy to understand.
    4.  Thinks about a minute.
    5.  Someone who isn't good with computers could have trouble.
**Q2.** The interviewee took 3 minutes and 50 seconds.
    1.  It was hard to find the information. There was trouble loading. It was hard to find the date because you have to scroll back and forth. Easy to find the times that it was playing, but trouble finding the channel. Couldn't find the channel and decided to move on to the next question.
    2.  It would be hard to find the information in a hurry.
    3.  It would be much easier if the information was displayed in an easier to read fashion.
    4.  Thinks about 5 minutes.
    5.  This task would be difficult for most people trying to see the TV schedule.
**Q3.** Interviewee took about 20 seconds.

1. The information was easy to find.
2. Yes you could find the information in a hurry.
3. No it is very easy already.
4. About 10 seconds.
5. It would be difficult if you were actually pursuing this task because I had problems with the link.

**Q4.** Interviewee took 3 minutes.
1. It was extremely hard to find the information. I used the search engine and it yielded no results. I thought about contacting them, but there is nothing under the contact list. Can't find a second way to get the information. Moving on to the next question.
2. No.
3. Improve the search engine and include information to contact
4. It would've took forever if I didn't stop.
5. All situations this would be difficult.

**Q5.** Interviewee took about 2 minutes.
1. The information wasn't too hard to find, but both sections were missing information.
2. I would be able to find the information, but because some of it is missing I don't know how helpful it would be.
3. Have both meetings be more cohesive with the information that they display.
4. A few minutes.
5. It would be difficult for someone who really needs to know the information for the meetings.

**Q6.** Interviewee took about 1 minute.
1. The score of the game was easy to find after watching the video.


*Joe Omelina:*
**Q1:**
1. The information was easy to find.
2. The information could be found in a hurry.
3. The interviewee though it simple enough.
4. The information was found in less than a minute.
5. No situation.

**Q2:**
1. The information was found, but it took longer than the first question. The schedule website's information was difficult to sift through for the interviewee.
2. No, the information would be difficult to find in a hurry if you didn't have prior knowledge.
3. No suggestions. Schedule is straightforward.
4. Interviewee took about 5 minutes.
5. If the person missed the upper-left menu, the information would have been missed.

**Q3:**

      1. The interviewee very easily found this information.

      2. First thing you'd see on the site.

      3. No suggestions, he found it easily and had seen the contact information many times navigating the site.

      4. Instantly found.

      5. No situation.

**Q4:**

      1. The information was not found. The interviewee gave up looking due to disorganization on the site.

      2. No chance.

      3. The links need to be organized and consolidated.

      4. More than 5 minutes.

      5. Anyone would have difficulty finding this.

**Q5:**

      1. Found clearly and easily, but information wasn't very clear. Couldn't clearly distinguish between the meetings

      2. This section was easy to find for the interviewee. The information was unclear between the meetings.

      3. Clearer information.

      4. 2-3 minutes.

      5. No.

**Q6:**

      1. Score found easily.

      2. Easy section for interviewee.

      3. Interviewee seemed to think this was a straightforward section to find.

      4. Less than a minute.

      5. No, simple find.

***Peng Cheng:***
**Q1**: Radio Station

      1.  No it is not hard at all.

      2.  Yes. You should be able to find the information in hurry.

      3.  It is fairly straightforward, though it is confusing that there are two links with the same text, "radio schedule", but point to two different pages.

      4.  About 2 mins.

      5.  People with blindness might find it hard.

**Q2**: TV Schedule

      1.  No, finding the information is not hard.

      2.  Yes, you can still find the information easily even if you are in hurry.

3.  Resize the contact information column on the main page to make it smaller and put the TV schedule on top of it.
4.  About 3 mins.
5.  People with blindness might find it hard.

**Q3**: Music Performer
1.  No, it is not too hard to find the information.
2.  Yes. You should be able to find the information in hurry.
3.  Make the text of the contact information bold.
4.  About 5 mins.
5.  The target information is buried in a long paragraph without any highlight. People with difficulty in seeing text and people who don't have much patience might not be able to find it.

**Q4, Q5, Q6.** The interviewee did not have enough time to finish in the 25 minute interview.

***Evan Watters (subject is 60 years old):***
**Q1:**
        The subject had a relatively easy time, as the information was easy to find on the front page. The subject had some difficulty with the slide-out menu. She didn't think of a situation in which this could be difficult for someone.
**Q2:**
        The subject went to a YouTube livestream instead of the TV schedule page. The drop-down menu on the top page kept getting in the way. The subject had some difficulty understanding this question, as she didn't realize the TV schedule was for Charter service.
**Q3:**
        The subject had an easy time figuring out this scenario. She couldn't think of situations that would cause difficulty.
**Q4:**
        The subject actually went to YouTube to find this information, which was an option we didn't consider. Eventually, she realized she could find out what she needed on the Featured Videos page with some help from me. She would not have thought to check the TV schedule to look for the meeting.
**Q5:**
        The subject could not understand the conflicting meeting schedules. This information needs to be clarified on the site.
**Q6:**
        The subject had a very easy time finding the game site. She did not think that anyone would have much difficulty with this.

Kamaludin Abdullahi ● Christopher Wilson ● Kevin Hunt ● Alex Ching

# Website Report for the City of Monona Media Website

## Accessibility

- ✓ The "Notify Me", "Online Payments", "Report a Concern", "Connect with Monona" and "Online Forms" image links on the sidebar do not have alternative text for any pages they appear on. A screen reader will have no information to explain the functionality of the link. Simply adding alternative text to these images should fix this.
- ✓ There is an empty heading beneath the "Related Content" area on the side. Some people navigate through header elements. An empty header provides no information about the content following the header. Simply giving the header a name should fix this.

## Search Engine Optimization

- ✓ Your website has no meta description, which is the snippet of text that is provided along with the name of the website and the URL when searching for the website using a search engine. Meta descriptions give a brief description of the website to the search engine which both makes the website easier to find using the search engine and will attract more people to click on it when searching. Simply adding a meta description to the website will fix this.
- ✓ Your website doesn't have a H1 header tag. H1 header tags are used by search engines to gain extra information about the website so they can provide relevant search results to users. Giving the website a H1 header tag should fix this problem.
- ✓ This isn't a browser cache of your website. Providing a browser cache can improve the experience of users and even reduce server load.
- ✓ Your website is slow in responding to requests. You should try and keep your server response time to under 200ms.
- ✓ You should try and provide links to social media accounts, such as Facebook or Twitter, so users can keep in touch with you easier.
- ✓ Your page has multiple links leading to the same website. Search engines might register this as shady behavior and purposefully put you behind other sites if possible.

## Usability Script

- ✓ Where would you go to find the TV schedule for the Monona Community Television channel?
- ✓ Find a video of the most recent Monona Grove High School boys basketball game.
- ✓ Figure out the responsibilities for the Monona community media committee.
- ✓ Figure out the schedule for The Voice of Monona radio station.
- ✓ Find the Members of the Community Media Committee.
- ✓ Go to Community Media Committee and find who the President of the Police & Fire Commission is.

## Usability Results

- ✓ We interviewed a total of 12 people. All said that the tasks were easy to complete and manageable. The subjects said the functionality of the page was good.

Alex Ching

14 December 2016

<p align="center">Accessibility, SEO, Usability Analysis</p>

We tested the Community Media section of the Monona website for issues regarding usability, accessibility and search-engine optimization.

Usability:

A test was administered to several people concerning the usability of the Community Media section of the Monona website. Specifically, we asked them, when starting from the Community Media homepage, to find:

1. The TV schedule for the Monona Community Television channel.

2. A video of the (at the time) most recent Monona Grove High School boys basketball game.

3. The responsibilities for the Monona community media committee.

4. The schedule for Monona's local radio station.

In my case, the subject tested was able to find all of the items given with no real difficulty, and commented that they couldn't imagine someone having difficulty finding these items.


Accessibility:

To test accessibility, the Community Media section of the website was plugged in to WAVE, at http://wave.webaim.org/. Some issues found were:

● The "Notify Me", "Online Payments", "Report a Concern", "Connect with Monona" and "Online Forms" image links on the sidebar do not have alternative text for any pages they appear on. A screen reader will have no information available to explain the functionality of these links. Simply adding alternative text to these images should fix this issue and

allow those that require a screen reader to browse the Internet to better navigate this website.

- There is an empty heading beneath the "Related Content" area on the side. Some users might navigate using header elements. An empty header provides no information about the content following the header. Giving the header a name should fix this issue.

Search-Engine Optimization:

To test search-engine optimization, the Community Media section of the website was plugged in to Page Locus, at https://www.pagelocus.com/. Some issues found were:

- Your website has no meta description. Meta descriptions are the snippets of text that is provided along with the name of the website and the website URL when searching for the website using a search engine. They give a brief description of the website to the search engine which both makes the website easier to find using the search engine and will attract more people to click on the website when searching. Simply adding a meta description to the website will fix this issue.

- Your website doesn't have a H1 header tag. H1 header tags are used by search engines to gain extra information about the website so they can provide relevant search results to users. Giving a H1 header tag to the website should fix this problem.

- This isn't a browser cache of your website. Providing a browser cache can improve the experience of users and even reduce server load. Simply providing a browser cache of the website should fix this.

- Your website is slow in responding to requests. You should try and keep server response times to under 200 milliseconds to improve user experience.

- You should try and provide links to social media accounts, such as Facebook or Twitter accounts, so users can keep in touch with you easier.

- Some pages have multiple links leading to the same URL. Search engines might register this as shady behavior and purposefully put you behind other sites if possible. Removing the extra links should fix this issue.

Conclusion: The usability of the Community Media section of the website is good, but there are several problems with accessibility and search-engine optimization that might need to be looked into in order to provide the users of your website a better experience.

# SECTION FIVE:

# SENIOR CENTER

**UNIVERCITY**
BETTER
PLACES
TOGETHER

# UniverCity Monona Website Assessment
## Senior Citizen Page

## **USABILITY**

For the usability test we conducted live interviews that simulate specific experiences on the Senior Center Website. You can find the script that was presented to the test subjects below.

Opening Explanation:
"We are four students currently enrolled in an online class called, Intro to Digital Information at the University of Madison Wisconsin. Our current project involves analyzing the Monona Website for its usability and giving critical feedback with our results. You will be tested specifically for the accessibility of the Senior Citizen Page as you try to navigate through our scenarios.

*Question 1:*

*You are senior citizen and the city of Monona requires you to register the new pet you just bought to keep you company. Starting at the senior center homepage navigate to where you can find the necessary materials to register your cat or dog.*

*Question 2:*

*You are a senior citizen and wanting to take computer classes to increase your tech abilities. Starting in the "Programs and Activities" find out where you can take these classes and what the month of November's featured class is.*

*Question 3:*

*You are a senior citizen. You've heard about the "adult coloring" craze and you want to know more. Starting on the senior center homepage find out when and where you can participate.*

*Question 4:*

*You are a senior citizen. You want to ride the Monona Express to the UW Hospital and arrive around 7 am. Starting from the homepage find out what loop should you take and how much it is going to cost you. After you have located this, find out how/if you can transfer to the Madison Metro."*

# TEST 1 (MAX)

Proctor: You are senior citizen and the city of Monona requires you to register the new pet you just bought to keep you company. Starting at the senior center homepage navigate to where you can find the necessary materials to register your cat or dog.

Participant: Okay... none of these links go directly there. Hm. Maybe online forms..? This looks promising... Found it.

Proctor: Yep, that's it! Was this a difficult task?

Participant: I don't think so. But senior citizens would probably have more trouble. Connecting "materials" to the online forms link isn't easy.

Proctor: Okay. Now you are a senior citizen and you want to take computer classes to increase your tech abilities. Starting in the "Programs and Activities" find out where you can take these classes and what the month of November's featured class is.

Participant: Okay. I'm on Programs and Activities. Scrolling down... Computer Classes with Dan. Every tuesday in the Monona Room computer lab. The monthly featured class is listed in the newsletter. Okay. Wait.. Is there a link to it? *sigh* Okay so I'm going back to the senior center page. Quick links? No... Oh! There it is. I'm clicking on current and past issues of the Senior Connection Newsletter. This took me to a totally new site. "Ourseniorcenter.com" I'm downloading the latest newsletter... Okay this is a dense newsletter. Since I'm being a senior does that mean I can't assume they know Ctrl + F?

Proctor: Yeah the majority of seniors probably wouldn't use that.

Participant: Well that's unfortunate... Okay now I'm scrolling down. I don't like this. There's way too much information here. I'm still scrolling down... Finally! There's Dan. Teaching about holiday letters and mailing labels.

Proctor: Good job. How do you feel about the difficulty of that task?

Participant: That was hard because they hid the information about the monthly class in their newsletter, and they didn't offer a link.

Proctor: Okay. So now you've heard about the adult coloring craze and you want to know more. Starting on the senior center homepage find out when and where you can participate.

Participant: Okay I saw this link earlier. I'm clicking "Adult Coloring." It is every Monday. Materials provided by friends of Monona. No information on where it is though. That's not helpful... Um... I have no idea.

Proctor: Do you want to move on to the next task?

Participant: Sure.

Proctor: Okay. Last One. You are a senior citizen and you want to ride the Monona Express to the UW Hospital and arrive around 7 am. Starting from the homepage find out what loop should you take and how much it is going to cost you. After you have located this, find out how/if you can transfer to the Madison Metro.

Participant: Okay… so I'm on the senior center page looking for transportation or something. I assume the Madison Express is a bus. Maybe the Monona Lift Bus Service… Okay, this time they offer a link! I can work with this. Hmm.. this page doesn't say anything about Monona Express.. Oh, there's a link to it. This says seniors pay $1.50 per ride. Now I'm going to the bus schedule and looking for UW Hospital… Well Loop 1 arrives at 6:32 AM and Loop 2 arrives at 7:17, so if I want the closest one to 7 then I'm going with Loop 2.

Proctor: Awesome. Now can you transfer from Monona Lift to Madison Metro?

Participant: Um… honestly I don't know where to start to find that. I've used public transportation like twice so I don't even know what transferring buses entails.

Proctor: Okay that's fine. That's all I have for you today. Thanks for completing the survey. However, I do have one final clarifying question. What was your overall impression of the Monona senior citizen webpage?

Participant: It seemed like the website was really scattered. Finding Dan's computer classes stuck out as a major problem because navigating there was such a hassle. I was lucky to find it and I feel like seniors would have an even harder time getting there. Overall it seemed like the structure of the website wasn't well-suited for finding information.

**TEST 2 (LUCY)**

Proctor: You are senior citizen and the city of Monona requires you to register the new pet you just bought to keep you company. Starting at the Senior Center Homepage navigate to where you can find the necessary materials to register your cat or dog.

Participant: So far I don't see anything about pets. Trying to find how to register the pet. Okay let's see, not foot care clinics. Okay maybe I'll try clicking on programs. I'm scrolling through. I don't think it's going to tell me anything about pets. Reflexology no, bingo no. Clicking the back button. I'm clicking on Special Events. Now I'm clicking the back arrow again. They are making this hard. Now I'm clicking on Case Management Services. General Brochure, Day Center. I'm clicking the arrow again. I've done all of this already. I just clicked on Scholarly Scoop. There's nothing here. Clicked the back arrow. Giving up, can I try another one?

Proctor: Okay, we'll come back to it. You are a senior citizen and wanting to take computer classes to increase your tech abilities. Starting in the "Programs and Activities"  find out where you can take these classes and what the month of November's featured class is.

Participant: Okay so I'm on the Programs and Activities page. This is about computers. Oh! Computer classes with Dan. Clicking on it. This month...every Tuesday I can take classes and then I can check the Senior Connection Newsletter for the monthly class. Okay so I'm going to go back to the arrow button to find the newsletter. So now I'm on the Programs and Activities page. Nothing here. Back arrow again so I'm on the Senior Center page. Scrolling down, oh there's the current and pass issue of the Senior Connection Newsletter. Clicking it, okay so now what. I think I'm in the wrong section.  Oh okay, I need to download the newsletter, that step wasn't that clear to me. Okay so now I need to scroll a lot. Where is Dan? Oh probably on the Calendar. There he is! He's going to teach us to do Holiday Letters and Mailing labels.

Proctor: Do you feel like that took you an okay amount of time?

Participant: Yeah that felt okay.

Proctor: Okay. You are a senior citizen. You've heard about the "adult coloring" craze and you want to know more. Starting on the senior center homepage find out when and where you can participate.

Participant: Okay I'm on the homepage. Looking along the left, clicked on Adult Coloring. Join us every monday.

Proctor: Do you know where it is?

Participant: I'm rereading the thing but it doesn't say. I guess I have to go back to that stupid calendar. Okay...they should have put it where the dates were. Shoot, I forget where the calendar was. Um, oh ya here it is. This is a pain. I should have kept the tab open. They said it was on Mondays so I'll check there on the Calendar in the Newsletter. Oh there it is...12:00 but it doesn't say exactly where. But, I assume all of these take place somewhere in the building.

Proctor: Okay we'll go on to the next one. You are a senior citizen. You want to ride the Monona Express to the UW Hospital and arrive around 7 am. Starting from the homepage find out what loop should you take and how much it is going to cost you. After you have located this, find out how/if you can transfer to the Madison Metro.

Participant: Okay I'm on the homepage. Looking for transportation. I can't find it on this page. Oh, Menona Lift bus. That took too long. The title was hard because I wasn't looking for that. It should say something like transportation. Okay clicking on it. Clicked on Monona Lift. Clicked on Monona Express in the left corner. Scrolled down and clicked on schedule. I'm looking for the UW Hospital. I'm going to take loop 1 if I want to be there around 7ish.

Proctor: How much is that going to cost?

Participant: Okay now I got to go back. I'm having trouble with all the different pop ups and tabs now. Found it, $1.50.

Proctor: Can you transfer to the Madison Metro from this bus?

Participant: No, the Monona Lift accepts transfers from Madison Metro, but they do not accept transfers from our bus system.

Proctor: Was that easy to find?

Participant: Yes, it was down as a note at the bottom of the page. Maybe it could be a bit larger though because it seems important to know.

Proctor: Okay let's go back to the pet question.

Participant: I'm starting at the homepage. I'm going to click on Friends of the Monona Senior Center. It's not there. I'm clicking on the Volunteer Opportunities. Nothing there. I'm going back to Programs and Activities. Every time I click on it I forget that the left bar changes. Okay going back. I'm looking for a form. Oh there it is under the contact info. Online Forms. Clicked it. The yellow isn't great to read but it's not terrible. Scrolling to look at Licenses & Permits. Clicked on Dog/Cat License Application. Okay so then I just fill it out.

Proctor: Good job. Can you give me your overall impression of the site?

Participant: There was a lot of back and forth. I didn't like all the pop ups. It was nice to look at. Specific activities were listed but not their locations and it was confusing how somethings were in the calendar and some were not in the calendar. I got confused when the side left tab would

change with the page. It was hard to find the online forms because it's part of the contact information. I don't look at that part unless I want to email somewhere. The print was kind of small. The calendar was kind of hard to get through. Too many routes to get everywhere. I wish the newsletter was easier to spot if it's such a big way to find out information. I like the overall look of the website though and some things were easy to find.

## TEST 3 (Hailee)

Proctor: You are senior citizen and the city of Monona requires you to register the new pet you just bought to keep you company. Starting at the senior center homepage navigate to where you can find the necessary materials to register your cat or dog.

Participant: First, I'm on the senior page. I go to friends? No… umm I doesn't really say anything. Online forms? Umm… I'm having kind of a hard time.

Proctor: Perhaps you should try clicking on items to see if that will get you anywhere.

Participant: Okay...I'm on the application and permits page. Go to sign permit application? Hmm.. public works, community events… dog and cat license registration!

Proctor: Congrats, you've found it! Was it hard performing the specific task?

Participant: I'd say it was frustrating and unnecessarily time consuming. How is an old person supposed to find this?

Proctor: That's exactly the question we are trying to explore. Let's move onto the next scenario. You are a senior citizen wanting to take computer classes to increase your tech abilities. Starting in the "Programs and Activities" find out where you can take these classes and what the month of November's featured class is.

Participant: Okay I'm at programs and activities… Oh! I'll click on computer classes with Dan…What? So every Tuesday afternoon Dan offers computer class in our Monona room computer labs. Each month there is a featured class from 12:30 to 2:30pm offering some kind of specialized training. You can check the Monona senior connections Newsletter for this month's featured class.

Proctor: Okay, now navigate yourself to the Newsletter.

Participant: Wow. That's inconvenient. So I found the Newsletter... Where is computer class with Dan? Umm Dan's open lab! The 22nd at 2:45!

Proctor: Good job. Let's continue. You've heard about the "adult coloring" craze and you want to know more. Starting on the senior center homepage find out when and where you can participate.

Participant: So you scroll down to adult coloring and click it. You hear about it everywhere. The new adult coloring craze has hit the nation and we are now part of the action. Join us every Monday as other adults and this new fun social event… Well that doesn't help answer the question of where and what time but I can't don't know where I could possibly start to find it.

Proctor: That's okay. Let's move onto the last scenario. You are a senior citizen. You want to ride the Monona Express to the UW Hospital and arrive around 7 am. Starting from the homepage find out what loop should you take and how much it is going to cost you. After you have located this, find out how/if you can transfer to the Madison Metro.

Participant: First you go to Monona lift bus for seniors.. And then it says anyone can ride the handicap bus… let me click on it. For senior disabled riders it's $1.50 per ride.

Proctor: Okay now find the bus schedule for someone who wants to arrive at 7am.

Participant: That's early… okay lift schedules. Nope! No do, there isn't a ride early enough. That's unfortunate.

Proctor: Now determine if you can transfer to the Madison Metro.

Participant: Hmm let me scroll down a bit… Again nope! It say Monona Lift accepts transfers from Madison Metro but Madison Metro does not accept Transfers from Monona Lift.

Proctor: Well, that's all I have for you today thanks for completing the survey. However, I do have one final clarifying question. What was your overall impression of the Monona senior citizen webpage?

Participant: It was hard to navigate through.. You had to do a lot of extra work for example, Dan's computer class. I would have been way more convenient to have a link directing me to the Newsletter instead of having to go find it myself, which was frustrating. Also, a lot of the information is confusing such as the transfer situation for the Monona and Metro buses. I think it would be hard for older people to understand especially with so much information on a page as well as the disorganization. Overall, the website is okay. It is not aesthetically pleasing to me personally, but it's not awful.

# TEST 4(MARC)

(I didn't provide the entire transcript, but rather I'm summarizing the results from the test.)

There are a few key issues that the situations highlighted when the test was run. In question one a couple of concerns came to light. First, it took a long time to find the Dog and Cat License. First, because the online forms button is kind of hidden and it doesn't seem clear that that is where you would find the cat and dog applications. Second, if you knew to look there the tiny mad it tough to locate.

The second situation also highlighted some major concerns. There is a major disorganization of the activities. We had to frame the question to start under the activities tab because it would have otherwise been much more difficult to locate. There are activities on the home page, under the activities tab, and in the calendar. Then, under the tab there is no organization to the activities. So, it took some time to find the tech option. However, once they found it, there wasn't all the information they needed. They eventually figured out that they needed to redirect to the homepage and download the newsletter which was not easy to navigate digitally. Overall, the activities are disorganized and don't provide situation once they are found.

The subject didn't even get through this entire question. They spent a ton of time looking through the calendar trying to find the time and place for adult coloring.

## Overall Usability Problems

- Didn't like the pop-ups
- Didn't have locations
- Hard to read colors
- Side left tabs changing as you changed pages
- Forms section looks like contact section
- Trouble finding activities in pdf form
  - Couldn't even download, too many ways to find things
- Liked left tabs
- Hard to find newsletter and there's where too much info rested, newsletter on front page
- "Transportation" had unclear title , and should have sub-tabs

In order to resolve these issues they can start by reorganizing their categories of the sites left tabs. A lot of the information on activities and times also relied on the users ability to repeatedly access the activity newsletter. The usability of this is difficult because the user has to take unnecessary steps to download the pdf and scroll through the entire document to find even new events. The events also need very clearly noted times, dates, and destinations. The overall appearance of the site was fine but in the user testing it was observed that some of the font colors were hard to read. Another difficult thing was finding the forms to fill out for licenses and other things. It was hidden in the lower half of the sidebar making it appear a part of the contact section.

Solutions

- Have an upcoming activities section
- Have a weekly activity section
- Clearly specify time, date, location under the name of each event
- Change fonts to black if they conflict with the background
- Add subtabs to Transportation that have headings for the different options
- Avoid popups, instead allow the user to travel with the page
- Add steady side tabs to the left so that when on a new page can still navigate to the main pages of the site

# <u>ACCESSABILITY</u>

Below are the accessibility tests we conducted across a variety of websites in relation to the Senior Citizen Page.

The following statements are in regards to the website Achekcer ([http://achecker.ca/checker/index.php](http://achecker.ca/checker/index.php)). These problems are specific to the senior centers website. Plug in the url: http://www.monona.wi.us/251/Senior-Center

**ACHECKER:**

There are a few blatant accessible concerns on the senior center page.
- The most offensive of the problem is the lack of alt tags with some pictures. The specific lines are:

**Line 1142, Column 1**:

`<img src="/ImageRepository/Path?filePath=/Documents/Design/25/notifyme3_201312190922243879.png"`
`...`

**Line 1149, Column 1**:

`<img src="/ImageRepository/Path?filePath=/Documents/Design/25/onlinepayments3_201312190922244191.png ...`

**Line 1156, Column 1**:

`<img src="/ImageRepository/Path?filePath=/Documents/Design/25/citizenrequest3_201312190922244504.png ...`

**Line 1163, Column 1**:

`<img src="/ImageRepository/Path?filePath=/Documents/Design/25/connectwith3_201312190922244660.png"`
`...`

**Line 1170, Column 1**:

`<img src="/ImageRepository/Path?filePath=/Documents/Design/25/onlineforms3_201312190922244816.png"`
`...`

● These are some pretty important clickable elements that need to be universally accessible.
● The font should also be changed to a more legible size on lines:

**Success Criteria 1.4.4 Resize text (AA)**

**Check 177:** font used.

**Repair:** Remove the font element from the document.

**Line 853, Column 5**:

`<font class="subhead2">Diane Mikelbank</font>`

**Line 857, Column 1**:

`<font class="subhead2">Monona Community Center</font>`

**Line 863, Column 1**:

`<font class="subhead2">Hours</font>`

● And lastly: This specific font should be changed to allow for a more accessible, readable website.

**Success Criteria 1.4.4 Resize text (AA)**

**Check 177:** font used.

**Repair:** Remove the font element from the document.

❌ *Line 853, Column 5:*

`<font class="subhead2">Diane Mikelbank</font>`

❌ *Line 857, Column 1:*

`<font class="subhead2">Monona Community Center</font>`

❌ *Line 863, Column 1:*

`<font class="subhead2">Hours</font>`

**WAVE ASSESSMENT: input http://www.monona.wi.us/251/Senior-Center into http://wave.webaim.org/**

- Two Errors
  - Missing or Uninformative Page Title
  - Document language missing
- Fix: Make sure the page title has been coded correctly or get user opinion on what a more informative page title could be for the site.
- Fix: `<html lang="en">`, declare primary language inside the html tag

One Alert
1. Missing first level heading
Fix: add a first level heading
One Structural Elements
1. Heading level 2

Fix: add a second heading level two if needed

**Details**

Filter: Full

**Errors (2)**
☑ 1 X Missing or uninformative page title ⓘ
`title`

☑ 1 X Document language missing ⓘ

**Alerts (1)**
☑ 1 X Missing first level heading ⓘ
`h1`

**Structural Elements (1)**
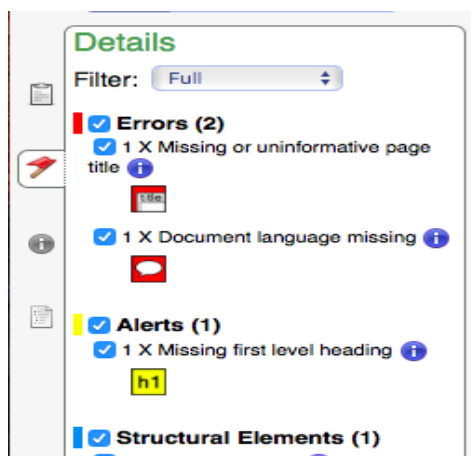
**PAGE LOCUS**

Page Locus will not focus on the actual senior citizen webpage therefore the results are not reliable to include in the data.
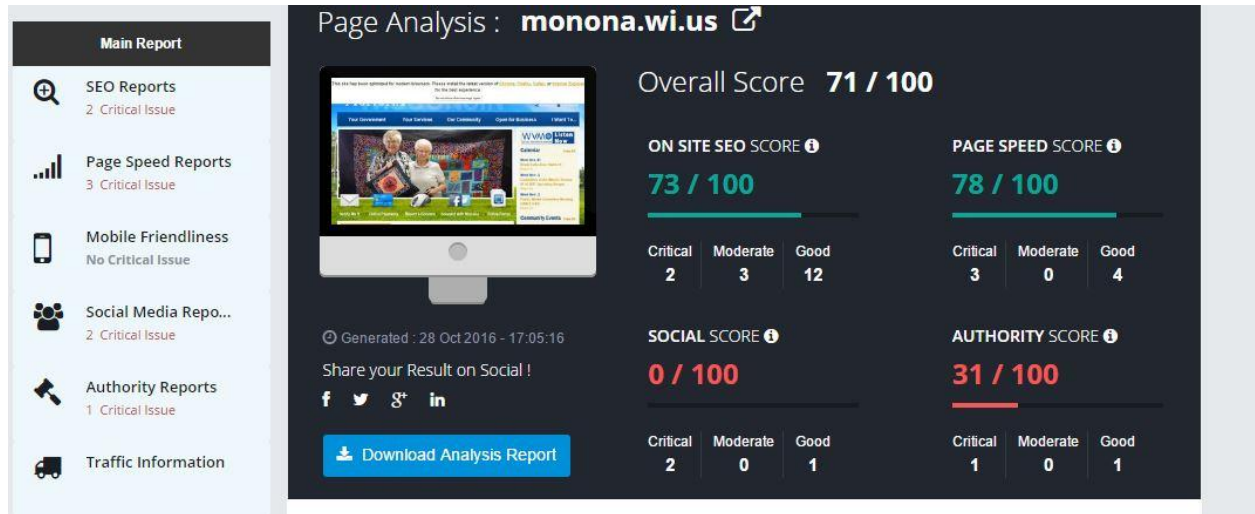


Testing

SEO Analysis

*Raventools Assessment:*

| ● critical fix | ■ could improve | ◆ needs attention | ● no problems | ○ hidden from score |

**Show Less**

■ **1 page is missing a meta description**
A meta description is a brief sentence or two that describes your page and potentially (hopefully!) gets shown in the search results to entice visitors to click to your site. ⚙

■ **1 page is missing Google Analytics**
Google Analytics (GA) is a free way to collect insights about what visitors are doing on your site. ⚙

■ **6 external links are missing anchor or ALT text**
Either of these errors will render a link invisible. An external text link without anchor text means the link is invisible to the user. ⚙

■ **5 images are missing ALT text**
ALT text for images started out as an accessibility attribute. For example, if someone is using a text browser or a browser for the visually impaired, the ALT text can tell them what the image is about. ⚙

◆ **10 images are missing title text**
The title text for images started out as an accessibility attribute. For example, if someone is using a text browser or a browser for the visually impaired, the title text could provide a description of the image. ⚙

Raventools provides overall analysis of the senior site's functionality, which indicates that there are no severe problems, but there are several milder issues that could be fixed.

Page Analysis : **monona.wi.us** ⬈

**Main Report**

🔍 **SEO Reports**
2 Critical Issue

📶 **Page Speed Reports**
3 Critical Issue

📱 **Mobile Friendliness**
No Critical Issue

👥 **Social Media Repo...**
2 Critical Issue

🔨 **Authority Reports**
1 Critical Issue

🚚 **Traffic Information**

Overall Score  **71 / 100**

⏱ Generated : 28 Oct 2016 - 17:05:16

Share your Result on Social !
f  🐦  g+  in

⬇ Download Analysis Report

**ON SITE SEO** SCORE ⓘ
**73 / 100**

| Critical | Moderate | Good |
|----------|----------|------|
| 2 | 3 | 12 |

**SOCIAL** SCORE ⓘ
**0 / 100**

| Critical | Moderate | Good |
|----------|----------|------|
| 2 | 0 | 1 |

**PAGE SPEED** SCORE ⓘ
**78 / 100**

| Critical | Moderate | Good |
|----------|----------|------|
| 3 | 0 | 4 |

**AUTHORITY** SCORE ⓘ
**31 / 100**

| Critical | Moderate | Good |
|----------|----------|------|
| 1 | 0 | 1 |

# UniverCity Monona
## Usability, Accessibility & SEO Website Assessment
## Subsite: Senior Center Homepage

## Usability Test Results

**Processes of Data Collection:** *These results were collected from a variety of usability tests we performed on middle-aged and elderly adults. The transcripts of the featured tests can be found in the Appendix at the bottom of this document.*

## User 1

Problem 1:

This user was mislead by the blue navigation bar at the top of the Senior Center pages. They thought it was related only to the Senior Center, rather than the City of Monona site a whole. This led them in the wrong direction a couple of times.

Suggested Solution 1:

You should consider getting rid of the blue navigation bar on all the subsites. Simply including the 'City of Monona' text that links back to the city's homepage is enough to help users navigate to the other subsites without cluttering the pages with information.

Problem 2:

The user had a hard time finding information regarding the Monona Lift bus service. They eventually gave up and said that they would have just called the senior center phone number if they were actually in the given scenario.

Suggested Solution 2:

Make the Monona Lift page (http://www.monona.wi.us/246/Monona-Lift) pop up right away when users click the 'Monona Lift Bus Service for Seniors' on the left

side of the screen. Delete the middle page
([http://www.monona.wi.us/292/Monona-Lift-Bus-Service-for-Seniors](http://www.monona.wi.us/292/Monona-Lift-Bus-Service-for-Seniors)).

## User 2:

### Problem 1:

This user was a bit overwhelmed when asked to navigate from the Monona Lift page ([http://www.monona.wi.us/292/Monona-Lift-Bus-Service-for-Seniors](http://www.monona.wi.us/292/Monona-Lift-Bus-Service-for-Seniors)) to the Senior Center's information on Pilate's classes. ([http://www.monona.wi.us/290/Exercise-Classes](http://www.monona.wi.us/290/Exercise-Classes))

### Suggested Solution 1:

Make the Monona Lift page part of the Senior Center subsite. Also, make the small orange text that allows users to navigate back to their previously visited pages much bigger using more contrasting color. Having this navigation option is great, but many of your users might not be able to see it right now.

### Problem 2:

This user was confused by the Volunteer Application being read-only, and wanted to know if they had to print it out or if there was a way they could fill it out and submit it online.

### Suggested Solution 2:

If you have the time and resources, it would be helpful to create an application that can be completed and submitted online. However, if that is not an option right now, you should explicitly indicate that the application is meant to be printed (call it a 'Printable Application') and give information on where to mail or drop it off directly below the application link.

## User 3:

### Problem 1:

This user found much of the site's text to be too small, especially the text on the Veterans Group page.

### Suggested Solution 1:

Simply make the text a couple sizes bigger. You don't have much text here, so you have enough room. This is recommended. Otherwise users must use the zoom function on the screen that many older users may not know exists.

### Problem 2:

The user was also confused why they had to click on an additional hyperlink (the one embedded in the words 'Monona Lift') in order to get most of the information on bus services.

## Suggested Solution 2:

Once again, make the Monona Lift page (http://www.monona.wi.us/246/Monona-Lift) pop up right away when users click the 'Monona Lift Bus Service for Seniors' on the left side of the screen. Delete the middle page (http://www.monona.wi.us/292/Monona-Lift-Bus-Service-for-Seniors).

## User 4:

This user found no major problems with the site, but found several details that, if fixed, would provide a much more user-friendly experience.

## Problem 1:

User 4 found that there was a good deal of "clutter" on the page –in other words, there was too much content on the Senior Center homepage.

## Suggested Solution 1:

It is suggested, that more organization be put into place where broader categories might be needed so that much of the smaller categories could be combined into groups. By doing this, people may not be overwhelmed with the amount of clickable content on the homepage. It is suspected that a user base with less computer experience may simply just call into the Senior Center with their questions instead of trying to pick from numerous tabs on the homepage. This organization will hopefully make it easier for them to find what they are looking for.

## Problem 2:

The second problem that User 4 had with the site was that often times they found the text to be too small.

## Suggested Solution 2:

Although web users can use web tools to zoom in on a webpage, many older users may not know how to use these tools. Especially with this older user-base, a larger text for larger groups of texts may be appreciated. Additionally, the text size used for the category names would benefit from being enlarged as well.

# Accessibility Test Results

To analyze accessibility we ran the senior center homepage and the senior center programs and activities page through achecker.ca. Major findings are described below.

## Monona Senior Center Homepage
http://achecker.ca/checker/index.php : http://www.mymonona.com/251/Senior-Center

The picture icons on the left side, from "notify me" to "online forms" have no alt text, making it difficult for people who rely on spoken word devices to peruse through the Internet to understand where these links lead. Since this is a site for the senior center, the audience for this site is a demographic that may use web readers to surf the web. The h1 tags are also a problem because they are included incorrectly. This does not allow them to be read correctly by search engines.

### Recommendations
- Include alt-text for the entire site
- Reconfigure h1 tags so they are included simply as h1 tags

## Monona Senior Center Programs and Activities
http://achecker.ca/checker/index.php : http://www.mymonona.com/287/Programs-Activities

The same problems listed above were found for this page as well. The icons on the left don't have alt text, and the h1 tags type incorrectly. The SEO can't read the h1 tags and people using alternative means to browse the info on this webpage do not know what is the most important part/point of the page.

### Recommendations
- List events that are occurring, or link them to a PDF that lists them all
- Reduce the number of clicks it takes people to get the details for each event
  - This page is an example using text to summarize what the event is about, then use a downloadable PDF for more details and forms.
- If the PDF with information can fit on the actual page it is best to include it rather than link to the PDF form.
- Observation: the code **/DocumentCenter/view/850** on the movies page description seems to be out of place code.

# SEO Evaluation

To evaluate the SEO for the senior center and its related pages we used the website https://www.pagelocus.com to analyze the content.

**Monona Senior Center and its related pages**
https://www.pagelocus.com/review/http/monona.wi.us

**Main Issues**

1) There is no description of the page. When people search the web page, all it says is monona.wi.us. A better description should provide details about the webpage, which will increase the site's SEO. An example could be "City of Monona Senior Center."

2) There are 6 H3 tags and 11 H4 tags. Many of the H4 tags are simply dates, which do very little for SEO and do not call for a Header tag. If these dates correspond to events marked on the calendar they should be linked together using the event name. This makes searching for information about these events through a web browser easier because search engines will be able to map them easier.
So instead of **&lt;H4&gt; September 3rd&lt;/H4&gt; It should be &lt;H4&gt;Yoga Class&lt;/H4&gt;.**

3) The H1 tags I saw in the source code were unreadable to the SEO reviewer because they weren't actually tags. Line 129 began with:

```
<h1 id="versionHeadLine"
class="headline">
```

Programs &amp; Activities
&lt;/h1&gt;

It can't be read because the H1 tag is not its own. It should be coded as &lt;h1&gt;HEADER&lt;/h1&gt;.  The h1 tags are essentially useless in its current form because SEO cannot read them, which is hurting your SEO without you knowing.

.

4) Cleaning up and adding more H1 tags that include the title of their respective senior center page would increase this section of the site's SEO. An example for the senior center homepage could be, &lt;H1&gt;Monona Senior Center&lt;/H1&gt; or for an event page &lt;H1&gt;Monona Senior Center Events&lt;/H1&gt;. These headings would make navigation to these pages in a search engine easier, as it highlights the things that most people are going to be searching for when they are trying to get to your site.

# Conclusion

Overall the subsite has a solid foundation of Usability, SEO and accessibility. However this report highlights a lot of important factors that could be improved. Following these recommendations will increase the site in all three dimensions and make it easier for users who are trying to navigate the site.

# Appendix: Scenario Testing Transcripts

## Transcript 1

***Scenario: You are an active senior who has just moved to the city of Monona. Use the City of Monona webpage to find out how to take advantage of the town's opportunities.***

1.You are interested in attending some classes at the Senior Center, but have no way of getting there. Using the center's website, see if there is a bus service available, and if so what are the costs, times, and pick-up areas?

*Okay I'm reading at the bottom, there are lots of things but nothing that would say how to get there. I'm just not seeing it. Should there be another page? It has an address at least. At this point I would call the phone number that they give, that's how I would get in contact with them.*

2. You want to do Pilates at the senior center, but you're only free on Mondays. Find out if there is Pilates schedule on Mondays, and if so, when and what room it is held in.

*I suppose that would be under activities, Pilates is exercise, Pilates! Found it, It is available on Mondays. I can't tell if you need to go all 3 days, or just Monday. Cost is $3 per class, so maybe you can just go when you want ok? I would just go the first day and see. It says the time.*

3. You would like to get involved with a volunteer activity. Find out what is available and start to sign up for your favorite option.

*Maybe stay on activities here? Hm. Well. Now I don't see activities listed here. Only exercise classes. That's not what we want. Let's go to another page. I don't see anything here about helping or volunteer! Nothing at all, I feel stupid. You would think it would say volunteer. It wouldn't be a day trip would it? I don't know what connect with Monona means...I can't find it!*

## Wrap-Up Questions

What were your overall impressions of the site?

*I think it has a lot of choices, I like when they have the choices on the side with info. I just couldn't find the volunteer info. They have a lot of opportunities. But Your Services, I'm not sure what that means. Who's Services?*

Scale of 1 to 10 how do you rate this site? (10-Easiest, 1-Hardest)

*I would give it an 8.*

How likely would you be to use this site in real life if you were actually the person in the scenario?

*I suppose I would use it if I lived in Monona.*

*Scenario: You are an active senior who has just moved to the city of Monona. Use the City of Monona webpage to find out how to take advantage of the town's opportunities.*

1.You are interested in attending some classes at the Senior Center, but have no way of getting there. Using the center's website, see if there is a bus service available, and if so what are the costs, times, and pick-up areas?

*Okay. Hm. I clicked on Monona Lift, and I see the prices and service hours right here. Yes. There is one. Got it.*

2. You want to do Pilates at the senior center, but you're only free on Mondays. Find out if there is Pilates schedule on Mondays, and if so, when and what room it is held in.

*Oh boy, okay. I'll go back to the beginning and click on programs and activities. I see Pilates is $5 a class on 9:05 on M,W,F at the Community Center.*

3. You would like to get involved with a volunteer activity. Find out what is available and start to sign up for your favorite option.

*Hmph. Okay so i see Volunteer Opportunity. I'm going to click on job descriptions. Oops. Read only? What? okay , oh boy… Alright I see I could be a lot of things...okay how do I sign up for one? Hm. Okay. It was probably on a prior page but I'm afraid to x out. Okay so here's an application. I would fill this out. It took so long to pop up I felt like I was wrong I almost gave up.*

**Wrap-Up Questions**

What were your overall impressions of the site?

*Well, it was fairly easy to use but you had to know what you're looking for. I didn't really like the pictures of old people. It doesn't look fun!*

Scale of 1 to 10 how do you rate this site? (10-Easiest, 1-Hardest)

*I would give it an 8.*

How likely would you be to use this site again?

*I'd rather call. I'd feel more secure speaking to someone.*

> ***Scenario: You are an active senior who has just moved to the city of Monona. Use the City of Monona webpage to find out how to take advantage of the town's opportunities.***

1.You are interested in attending some classes at the Senior Center, but have no way of getting there. Using the center's website, see if there is a bus service available, and if so what are the costs, times, and pick-up areas?

> *Okay I'll look at Your Services. Wow that's a long list. Well okay now I see Monona Lift on the left, I'll click on that. Okay that's what I want. A big blank page but there's a hyperlink I'll try. Okay there is more info. I found service hours and fares. I don't know why I had to click on this link though.*

2. You want to do Pilates at the senior center, but you're only free on Mondays. Find out if there is Pilates schedule on Mondays, and if so, when and what room it is held in.

> *Alright. I don't know if this is a service, so I'll check that page again. I'm looking at the list on left hand side. I guess I'll click on programs and activities. Oh a long list, but I do see exercise classes. I see Pilates. I found the time, location, cost, mats available.*

3. You would like to get involved with a volunteer activity. Find out what is available and start to sign up for your favorite option.

> *Alright well I still don't know if that's an activity. My Services maybe? I don't think so. I'll guess Community. Ok Volunteer Opportunities. Is this a hyperlink? Ok there we go. Okay Volunteer job descriptions. Ooh. A page on the bottom? That's confusing. Ok I see lots of choices here. I guess I'll click on the application. Oh boy. Can I fill this out online? I guess I'll print it. Wow. 2 pages..I would hand it in in person.*

4. You are a Veteran looking to connect with some comrades, what services does Monona offer for you?

> *What did I click on? What did I do? Lots of pop ups..anyways. Oh I see Veterans Group. The text is so small. I see that they meet once a month, they give dates and times. Okay.*

**Wrap-Up Questions**

What were your overall impressions of the site?

> *There's a lot. It was a challenge to find what I wanted. There's so many different levels/layers in different places. If I really wanted to Volunteer it would be very confusing.*

Scale of 1 to 10 how do you rate this site? (10-Easiest, 1-Hardest)
> *I would give it a 5.*

How likely would you be to use this site again?
> *I think I'd just call.*

     *Scenario: You are an active senior who has just moved to the city of Monona. Use the City of Monona webpage to find out how to take advantage of the town's opportunities.*

1. You are interested in attending some classes at the Senior Center, but have no way of getting there. Using the center's website, see if there is a bus service available, and if so what are the costs, times, and pick-up areas?

     *Going to Monona Lift Bus Service for Seniors. Ok it's a bus service designed to help seniors… ok I'll click on that. The one thing that if you don't know about computers it is not clear where to click on from here. But I'm going to click on the gold text to find more information. So I'm on the Monona Lift Page and it shows service hours.. No service on holidays… none on weekends. I'm trying to find more information and I see a number. There's also the fares here. From there I would call the number.*

2. You want to do Pilates at the senior center, but you're only free on Mondays. Find out if there is pilates schedule on Mondays, and if so, when and what room it is held in.

     *In the left hand side in the gold box i'm going to programs and activities which opens a new screen… i'm going to exercise classes, then Pilates. I see here more information about it. Pilates is at 9:05 on Mondays. It says it's in the lounge of the community center.*

3. You would like to get involved with a volunteer activity. Find out what is available and start to sign up for your favorite option.

     *I would go again to the gold box and click on volunteer opportunities. Then underneath their applications I would click here under job descriptions…. It takes you to a new tab. Then it opens in Microsoft Word… I don't know why it has you do that it should just be online. It shows job titles and other things in this document. Ok so I'm going to try and sign up for something. I have to go back to the page I was on - the volunteer page… and then i'm clicking on the applications and it takes me to a pdf file to fill in information… so I guess I can't fill it out online I would have to print it out and then fill it out…. I don't know who I would send it to though, I guess I'd just have to mail it into the center.*

4. You are a Veteran looking to connect with some comrades, what activities are offered to you by joining this group? What number should you call to find out more information?

     *Gold box again, click on Veterans groups. Takes you to the page…. It has this paragraph that I'm reading, it's kind of small print should be a bit bigger. Group meets once a month, they offer camaraderie, I don't know what that means exactly. Doesn't really say what I can do they're not giving that much information, just when they meet. It does have a number here though so I would probably just call the number for more information then.*

**Wrap-Up Questions**

What were your overall impressions of the site?

*My first impression is that it was cluttered, there are too many things that don't need to be on there. There should be tabs that you can click on to get to these things but they shouldn't have their own tab. The print is also pretty small, especially for seniors. Doesn't make sense when the print is larger, what are their qualifications for larger print? Just too much stuff, needs to be organized better.*

Scale of 1 to 10 how do you rate this site? (10-Easiest, 1-Hardest)

*I would probably give it a 6. However, for those who are much older than me or don't know how to use computers it would be much more difficult.*

How likely would you be to use this site again?

*Very likely if I'm a senior in Monona I guess. If I had a question I would use the website first but after a bit of difficulty I would definitely just call.*

# UNIVERCITY MONONA REPORT:
## Accessibility, SEO, Usability, Analysis and Recommendations
**December 16th, 2016**

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**Test Facilitator and Analyzer**
*Deirdre O'Donoghue*

## Opening Explanation

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Hi and thank you so much in advance for your participation in this session today. I wanted to give you a little information about what you will be doing and hopefully address any questions you may have prior to starting.

Our goal today is to see how easy of difficult it is for you to use a Web site through completing a set of tasks. In doing so, we will be able to determine if the Web site works as intended. This session should take 20 minutes.

My role today is to observe your usage first hand, **not to test you**, but to test the Web site. I encourage you to think aloud as you are navigating through tasks. If you have any questions, please ask, although I may not be able to answer them right away due to the nature of this test. I may ask you questions about your expectations of what is happening or what you just saw.

Your role as a participant is to complete the tasks to the best of your ability. If you are confused or lost I may say we should move on from the task and I will ask what you would have done if time permitted. Use this Web site as you would at home or at work. Again, I am not testing you on how well you navigate a Web site, I am testing the Web site. So, don't worry about making mistakes.

**Before we begin the test please answer the questions below to the best of your ability:**

What's your occupation or what do you do throughout your day?

How many hours a week do you spend on the internet, whether at work of at home? An estimate is sufficient. This includes email and apps.

What websites do you use when browsing the internet?

Thank you so much for your participation. Please let me know if you have any more questions!

# Instructions

- Ask participants to perform 3 tasks and answer 1 question
- Should take maximum 15 minutes

# Tasks (3 Participants)

1. **Find the senior center page without using the search bar. That is, click through the links on the Monona home page to land on the home page without searching for it.**
   a. **Was this difficult to find?**
      **Summary:** Participants found it difficult to find and thought it was "Kind of confusing" and buried within too much text. One participant thought it was easy behind, but he is most familiar with website layouts.

   b. **How could this page be easier to find?**
      **Summary:** Participants suggested that we narrow the number of links on the navigation bar and narrow the amount of words used as well. One participant thought it was already simple and could not be easier.

2. **Create an account using the following information: (without using search bar)**
   Name: Mary Smith
   Username: MarySmith608
   Password: usabilitytest2016
   Once you get to email you have completed this task

   a. **How did you find the create an account on the home page?**
      **Summary:** Participants said that finding the page was difficult as first, and that the location of the link was not in a typical spot. Additionally, participants used many links to get them to the create an account page when he or she could not locate the link.

   **ii. What location of this link would make this easier for you to find, if it was difficult?**
   **Summary:** Participants suggested that changing the wording to be more clear would help everyone shorten the process of finding this link.

3. **Find the fares of the bus service.**
   **Summary:** Participants had most trouble locating the bus service page and then troubles finding the fares on the page. Most assumed that it would be located under the services tab instead of the government tab. Additionally, searching this in the search bar did not bring participants to the bus fare page.

# Final question

**Overall what score would you give this website? 1 being hardest to use and 5 being very easy to use.**

**Mean:** 2
**Median:** 2.25
**Mode:** 2

# WAVE Report

To test the site's accessibility, I conducted a WAVE test through a website program (http://wave.webaim.org/)

- The linked images on the side (envelope, credit card, mouse, social media and forms) are missing alternative texts
- An image without alternative text results is an empty link
- Under create an account, and login, broken same page link
- A link to another location within the page is present but does not have a corresponding target
- Underlined text is present at the email link on the right side
- Redundant text titles under the main image and the Facebook link
- Many under redundant titles on the page
- The senior newsletter link is an empty link

# Page Locus Notes (SEO Test)

- **High priority issues to fix:**
  - o The meta description is too short
  - o Poor header tags—they can be improved

- **Medium priority issues to fix:**
  - o The website IP does not redirect to mymonona.com
  - o STS is not present and HTTP and HTTPS is not present

- **Low priority issues to fix:**
  - o The conversion form is not present in the website
  - o The browser cache is disabled, and we should turn it on
  - o The server response time is too slow
  - o The server information is publicly available—we should make it private
  - o There are no social media pages linked to the website (Facebook, Twitter and Google+)
  - o The website is not listed in DMOZ

# Search Engine Terms & Results (SEO Test)

**Terms:**
1. Veterans
2. Seniors
3. BINGO
4. classes
5. Senior volunteer opportunities
6. Senior community
7. Special events
8. Dementia coalition
9. Senior breakfast
10. Assisted living

**Synonyms:**
1. Old veteran
2. Elder

3. Elderly
4. Games of chance
5. Senior activities
6. Senior exercise classes
7. early bird breakfast
8. Senior games
9. Senior association
10. Senior society
11. Senior assistance
12. Senior aid

## Results

- Almost all the direct search terms we came up with led directly to the Senior Center page on the Monona website.
- Synonyms created more difficulty and had to be further refined and directed towards the senior center before the web page popped up in the results. Often encountered websites that conflicted with the search intentions.
- Almost every word we came up with had to be bolstered by the word "senior" before it could work. Many other websites offer activities with these keywords without the senior specification so refinement was necessary.

## SEO Analysis

More content should be added to the metadata because of the gaps with words when searching for the Senior Page. Mostly results take user to the correct page he or she was searching for.

## Analysis of website based on criteria for good usability

**Ease of learning:** This website does not have good ease of learning, especially for the elderly group that mostly uses this page. Upon entering the website it took tech savvy individuals a long time to do the tasks assigned. What is especially concerning is how difficult it is to find basic things like bus fares. Overall, the ease of learning could be improved through following several of the suggestions listed below.

**Memorability**: Did not test this at this time. Personally, it took me 3-5 times on the site before I could use it effectively.

**Efficiency:** Users can get tasks done that are present on the homepage, but if a user has to find something not listed on the homepage he or she typically have to search around before finding a link and then download things as well to finish the task that he or she visited the website to complete.

**Error frequency or severity:** Users do not make many errors, as much as it is time consuming for he or she to complete a task on the website. The only time there was an error was when a participant assumed bus fares would be located under services instead of government.

Satisfaction: Refer to above-listed overall score on page two.

# Overall Suggestions

- Have the Senior Page on the navigation bar so that seniors, who may have more difficulty on computer can locate the page they are looking for much faster.
- Create an online form to submit directly on the Day Trip activity page instead of taking the seniors outside of the website.
- Make the navigation bar have a "sign-up" link because right now the "sign in" link takes them to sign-up, but that is misleading, especially for someone unfamiliar with signing up for accounts.
- Because bus service information is important, especially for seniors, a bus service link should be present directly on the home page with the fares and schedule portrayed clearly and prominently upon clicking on the bus service link.
- If this newsletter is something that Monona would like seniors to read then it needs to be a top link on the homepage which takes the senior directly to the newsletter instead of in downloaded form.
- Place the contact information at the bottom of the right-hand bar on the main page. Information like the calendar and quick links are more important to the user's experience.

# Monona Senior Page

Dana Scholl, Josh Mendelowitz, Ellie Heggerston, Alex Chartier, Emily Kwock
December 13, 2016

## Introduction:

For web users, it is imperative that the websites they navigate cater to their needs specifically. Senior citizens, who are not always the most proficient digital media users, need websites that are simplistic and easily accessible for those with disabilities. Our team compiled research and observations on the Senior Center portion of the Monona website through Accessibility tests, Usability tests and SEO tests in order to reveal potential flaws of the website. Specifically, each group member recorded individual reactions to website where the subjects were asked to navigate the site itself and rank it based on their overall experience. Ultimately, these tests and rankings provided helpful, constructive solutions to these problems.

## Accessibility
## Tests:

We ran two accessibility tests of the Monona Senior Citizen webpage, WAVE and Achecker. According to WAVE's website, "WAVE is tool to help web developers make their web content more accessible. WAVE cannot tell you if your web content is accessible. Only a human can determine true accessibility. But, WAVE can help you evaluate the accessibility of your web content". The WAVE test produced 9 errors. Achecker is an alternative accessibility testing site that produced similar results as the WAVE test. When we ran the webpage through the Achecker program, 10 errors were found. Although there are issues with accessibility for this web page, it should be quite easy to make changes to improve accessibility because the major errors found dealt with missing "alt" text and font-background contrast.

## Suggestions:

We propose, according to the problems found from these tests that the city of Monona:

1. Having proper "alt" texts for all images on the webpage. The left bar on the web page that consists of "Notify Me, Online Payments, Report a Concern, Connect with Monona, and Online Forms" does not have "alt" text. So, we suggest to add "alt" text to improve accessibility.

2. Utilize fonts and colors of text that will be easily read by any user with visual impairments. Make sure that the background of the webpage and the font color contrast well. For example, using a black font with a simple white background. The biggest problems that were found were text that was found on the left hand of the page. All of the text/links that are in dark yellow, such as, but not limited to, the top links, "Home, Your Government, and Departments" could be changed to a darker color that contrasts the background better.

3. We propose to increase font size for the users because many who will be utilizing this web page are senior citizens and may have visual impairments. This is especially important for the paragraph on the web page where information on services provided for seniors is presented.

## Usability

**Tests:**

To assess the usability of the senior page of the Monona City website, we created a usability test consisting of nine tasks. Then, we asked five test subjects to complete each task, explain how they completed each task and rank their overall experience. After a thorough analysis of each interview subject's responses and critique, we found a series of common critiques and compliments that the interview subjects had about the Monona Senior Page.

**Suggestions:**

We propose the City of Monona should look more into the following areas and consider the suggestions to improve the Senior Page:

1. Create a tab on the left for the calendar, or move it towards the top of the page. Most of the subjects were not able to find the events happening on a specific date. Subjects went to the "Special Events" tab, instead of accessing the calendar. They found the calendar to be not a main feature on the website, even though it contained a lot of information about events.

2. Make a clear distinction between the senior page with its orange quick links and the City of Monona drop-down tabs (i.e. Your Government, Your Services, etc.). Most of the test subjects thought those tabs were apart of the senior page quick links and ended up leaving the senior page and had trouble returning to the senior page.

3. When clicking a tab, the information should be directly on the page. For example, when clicking the "Monona Lift Bus Service for Seniors" tab, the link takes you to a page where another link must be clicked to reach information. This also is the case for the "Friends of the Monona Senior Center" page.

4. Downloading a flyer includes another step of technology, when the information should just be on the webpage. This occurs on the "Day Trips" page under the "programs and activities" tab. We recommend uploading the information straight to the site. At the very least, the flyer should be a PDF as opposed to a word document.

5. The some of the information about various programs, activities, and calendar events could be more up-to-date. For example, most of the interview subjects couldn't find current information about special events and the special event that was listed was almost a year or two old.

## SEO
**Tests:**

We ran the Monon Senior Citizen webpage through two SEO evaluation tools, Page Locus and Raven. SEO stands for **S**earch **E**ngine **O**ptimization. It is a set of practices to help websites rank highly on search engine results pages (like Google or Bing). So, in other words, the better your SEO score, the more likely users will be able to find your site using a simple Google search.

The Page Locus tool provides an SEO analysis by scanning your site for SEO issues, social influence, page download speed and more. Page Locus gave the Monona Senior Citizen webpage page an overall score of 70/100.

The Raven tool quickly analyzes your site to find all of the desktop and mobile SEO issues that may be keeping your sites from ranking on search engines like Google. Raven gave the Monona Senior Citizen Page an overall score of 85/100.

Overall, the Monona Senior Citizens webpage already has strong SEO scores. However, there are areas where the site could improve its SEO. If the recommendations below are adopted, we predict even higher SEO scores which will allow more users to find the site via search engines.

**Suggestions:**
We propose adopting the following recommendations based on the results from these tests:
1. The site is lacking any H1 or H2 headers tags in the HTML. We recommend adding H1 H2 header tags to all pages.
2. There are also 5 external links missing an anchor or ALT text with 5 images missing ALT text. We recommending adding anchor or ALT text with all external links or images.
3. One page is missing a meta description, which is very important for ranking highly for search engines. Because of this, we highly recommend adding a meta description.
4. There are 10 images that are missing title text and 1 page is missing Schema.org microdata. This is not as serious as other issues but should still be addressed. We recommend adding title text and schema.org microdata.
5. There is no conversion form present on the site. We recommend adding a conversion form.
6. The browser cache is disabled. An enabled cache allows the server to load quicker. We recommend enabling the browser cache.
7. The tool did not recognize any Facebook or Twitter pages linked to the site. We recommend linking the Facebook and Twitter accounts for the Monona Senior Citizen program to the site.
8. The site is not listed on dmoz, which is an online web directory. We recommend getting the site listed on dmoz.

**<u>Conclusion:</u>**

The Monona Senior Page is a vital resource and serves an important role in the Monona community. With Monona's large senior population, it is imperative that the Senior page be easy to access, use and find. Overall, these accessibility, usability and SEO suggestions will be able to greatly improve the site's effectiveness.

<u>Index</u>

**Test Script**

**Intro:** Thank you so much for coming in today. I wanted to give you a little information about what you will be looking at and give you time to ask any questions you might have before we get started. I'm in a Library & Information Studies class and today, we will be doing a usability test on the City of Monona's Senior Center website. I am going to ask you situations and you have to lead me through the website, using your best judgement to find the information we are asking you to find. Please verbalize your thought process and reasoning behind each step you make. Our goal is to see how easy or difficult you find the site to use.

1. Imagine you are a senior trying to find classes to improve your computer skills, walk me through how you might go about this.
2. You are a senior trying to find if there are any fun events happening on October 31st at the Monona Senior Center. How would you go about finding out?
3. You need to find the lift service fare rate for a senior/disabled rider. How would you find this information?
4. You know that there are occasionally day trips provided by the senior center. If you wanted to find out more about these field trips, what would you do?
5. You are a veteran and know there is a group that meets at the senior center. You want to find out more, what do you now?
6. You're the manager of a supermarket in Monona. You are planning on training your staff on how to deal with senior with Alzheimer's or other dementia related illnesses. To decide on how to get Dementia training for your employees you want to find out more and ask other companies that have gone through the training process. What are the steps you take to find this out?
7. Imagine you are a senior looking to check up on your current benefits for your insurance. How do you do that?
8. You want to find out relevant information on mesothelioma treatment and causes. Where can you find that from the web page?
9. You are a senior with poor vision and would like to speak with others who share this similar impairment. Tell me the name of the group and when they meet.

**Conclusion**:
On a scale from 1 to 10 (1 being not easy at all and 10 being extremely easy), how simple was it for you to navigate through the web page?

On a scale from 1 to 10 (1 being not easy at all and 10 being extremely easy), how simple was it for you to find the information you were looking for?

On a scale from 1 to 10 (1 being horrible and 10 being amazing), how would you overall rank the web page?

Are there any additional comments you would like to make about the different situations or the web page in general?

**Subject A Interview**

1. Subject initially struggled to hover over the program and activities tab on the side of the webpage and resorted to clicking on the tab to find the information
2. Subject went to day trips to find calendar. Accidently clicked on the City Monona general tab bar and couldn't get back to the senior center page. Went to various other tabs on the senior center web page and used the search bar (only found out of date information) before giving up and not being able to find the calendar.
3. Initially got confused again with the general City of Monona tab bar on top but found prices in the appropriate spot once back at the senior center page
4. Subject was able to easily find day trips due to her calendar search from situation #2
5. Subject easily found the Veteran information due to the Veteran tab on the side of the page
6. Easily located the page but found no contact information about employee training with seniors with disabilities
7. Subject could not find the information about insurance. She looked all over and even typed the information in their search bar and couldn't find the appropriate page.
8. Looked around the various subpages of the senior center page and couldn't find anything relevant to the given situation
9. Subject found this one easily distinguishable on the side of the web page

**Conclusion:**
Simple to navigate: 9
Simple to find information: 6
**Overall rank: 7**
**Additional comments:** felt the calendar should be on the left side rather than the right. Needs to be more apparent on the senior center web page.

**Subject B Interview**

1. Went to click "Your Services" until I told her that was not for the subsite, but for the entire City of Monona site. Found the Program and Activities Tab easily after that, and then the computer classes without an issue
2. Went immediately to the "Special Events" tab and believed the site was not up to date, thinking there was only a St. Patrick's party going on, which she assumed was probably old. The search ended there and she did not think to go look at the calendar on the homepage
3. Found the lift fare easily and went immediately to the orange side tabs

4. Found the day trips easily- didn't like how the day trip flyer downloaded and there was minimal info on the actual page.
5. Subject found the veteran group easily since it was a title of an orange side tab
6. Had issues finding the info on dementia training since she just skimmed over the orange side tabs and didn't see the dementia coalition one. She ended up looking in at the "friends of monona" page and the "case management." Couldn't find it and was very stuck.
7. Didn't know where to find the insurance info.. First reaction was to search through all of the orange tabs. She then gave up saying it must not be on there.
8. Thought mesothelioma was an eye disease, so her first instinct was to check the "low vision support group tab." Couldn't find the information.
9. After that, knew were the low vision support group info was.

**Conclusion:**
Simple to navigate: 4
Simple to find information: 4
**Overall rank: 4**
**Additional Comments**: Generally is too hard to use for an elderly person. Was hard to use for a 21 year old even. The calendar is fine to have it there on the side, but it went unnoticed. It should also be in Special Events and Programs & Activities. A lot of them, like the bus service, it was weird to have separate links when you get to the page. The information should just be on the page. Downloading a flyer was weird. Shouldn't be separate flyers. Too much technology involved. The information should just be on the website. The top bar- it is unclear that the top bar is not specifically for the senior center website, like if you come to the site straight from google. It seems like it could be.


**Subject C Interview**

1. Went to "I want to" then Senior Services Center, couldn't find tab at first. Then eventually found 'programs and activities' tab.
2. Clicked on 'City of Monona' at the top of the site to go back to homepage. He then went to the calendar on the right side of the screen and clicked 'view all.' He then clicked October 31st on the calendar on left side of the screen.
3. Didn't know what lift service was at first. He then went back to the 'I want to' drop-down menu and clicked on 'Senior Services & Programs' and then once he was there it took him a few seconds to see the 'Monona Lift Bus Services for Seniors' tab.
4. Went back to senior services page and took him a minute to find day trip on orange side tabs.
5. He went to the 'our services' drop down menu and then looked under 'senior center' on the right side and found veterans group on the bottom right.
6. He went back to the senior center page and then back to it went back to the 'I want to' drop-down menu and back to the senior center page. He couldn't see the tab for dementia

training. He couldn't find it because it starts with 'Monona Area'. It took him two minutes even though in those drop-down menus there are two separate places for the dementia training program (which doesn't make any sense).

7. Goes to 'I want to' drop-down menu and can't find it anywhere. He kept looking under each drop-down menu and tab. He ended up on the exiting the site to the public health dane county. Gave up.
8. Didn't know what mesothelioma was. He went through drop-down menus and couldn't find it.
9. He went back to the Senior center services page and eventually found low vision on the left sidebar.

**Conclusion:**

Simple to navigate: 7

Simple to find information: 7

**Overall rank: 3.5**

**Additional Comments:**

He hated the left sidebar. He hated the color orange and just it's overall placement. He didn't like the titles that started with 'Monona' because he already knew he was on Monona site, and it made it harder for him to find a couple of the sub-sections. Somethings he found easy to find, it just took a couple steps. Like the calendar section was easy to use, it just took a few steps.


**Subject D Interview**

1. Immediately clicked on the programs and activities tab. She then proceeded to scroll down and clicked on the link "computer classes with Dan." Subject noted that it was very easy to locate.
2. Subject immediately found the calendar link on the right column of the senior page. This took her to a list of activities happening October 31st. She chose the Pilates class. Again, the subject had little difficulty finding what she was looking for.
3. The subject was asked to find the lift service rate for a senior/disabled rider. She first clicked on the Monona transit tab on the left side of the page and then Monona lift. She found the lift rate in seconds.
4. This search took a little longer only because she forgot how to get back to the senior center page. The subject then went on too click programs and activities and found the information on day trips easily.
5. In order to locate the veteran group meeting information, the test subject went directly to the veteran group tab on the left sidebar. This was almost immediate.
6. To find information on alzheimer's and other dementia related illnesses. The test subject immediately spotted the Monona Area and Dementia Friendly Community Coalition tab on the sidebar. Although the title has Dementia in it, the test subject hesitated because of the lengthy title.
7. Test subject took a really long pause because there wasn't a tab in the sidebar that directly stated "insurance benefits." In the end, the subject couldn't find the information.

She clicked on the case management tab and the general brochure. The Insurance Benefits needs to be easier to find!

8. There was no tab in the orange box on illnesses or mesothelioma so the test subject searched overhead in the Your Services drop down tab. She could not locate information on mesothelioma. This information also needs to be easier to find and explicitly stated in on the senior page.
9. Subject found this information quickly in the low vision support group tab because it was in the orange box.

**Conclusion:**

Simple to navigate: 8

Simple to find information: 7

**Overall rank: 8**

**Additional Comments**:

Are there any additional comments you would like to make about the different situations or the web page in general? I like the orange box tabs, they were super helpful. I found that the information that I was unsuccessful at locating was not in this box.

**Subject E Interview**
1. Did not have a problem with the first task
2. Saw the special events tab and went there, which was incorrect. Then went to the calendar which was correct
3. Found this task quickly with no problems
4. Went to programs and activities, which led him to the correct place.
5. Found the tab easily
6. At first was confused. Went to programs and activities, which was incorrect. Then found the correct place.
7. Could not initially find the Quick links tab. Spent about a minute looking through the tabs on the left (the quick links tab is on the right) and was frustrated because he could not find it. I had to let him know that he could look over to the right portion of the screen for more information. He had gotten into a "groove" of looking over on the left side of the screen to find the correct tab.
8. Because we had just used quick links he initially went there and found the tab.
9. Looked back on the left side of the screen and found it

**Conclusion:**

Simple to navigate: 7

Simple to find information: 6

**Overall rank: 8**

**Additional Suggestions:**

Test subject liked the orange box tabs, but not like the quick links. He thought that the quick links were almost hidden on the site and were too difficult to find. He said that having what seemed to be half of the information on the left side and then the rest on the quick links was very confusing, especially for a senior citizen.

Nicole Salzman, Kerry Justich, Emily Buda
UniverCity Monona: Senior Center

**Opening Explanation**

Hi, _____. My name is (Nicole) (Kerry) (Emily). Thank you so much for choosing to participate today. First, I want to walk you through what will occur throughout this session. Please feel free to interrupt at any point if you have any questions.

For our research, we will be asking people to use the City of Monona website, focusing primarily on the Senior Center subsite, in order to improve it. This session should not take more than 20 minutes. Your responses will be kept confidential within our research group.

It is important to note that we are testing the website, not testing you. There is no such thing as making a mistake. In fact, your "mistakes" will help us improve the site.

As you navigate through the site, it would be so helpful if you could think out loud: to say what you're looking at, what you're trying to do, what you're experiencing, and what you're thinking. This will let us know if anything about the site is confusing or beneficial.

If you say anything negative, do not feel as though you are offending us - it will only help us in the end! In order for this to work, we appreciate any and all honest opinions.

If you have any questions as you navigate the site, you can ask them. However, we just might not be able to answer them right away because we are trying to see how someone interacts with the site as if we were not here. If you feel like you need a break, please do not hesitate to ask for one.

With your permission, we will be recording for reference if needed. This footage will only be used within our research group and your identity will remain anonymous.

We may ask you other questions throughout the session and we may have questions for you once the session is completed.

Thank you again for participating. If you have any questions before we begin please feel free to ask them now.

**USABILITY TESTING**

Task Scenarios
1.I am a senior looking for activities to do during the month of october.  Where do I find the movie schedule and plans for transportation?

2. I'm the daughter of someone involved in the senior citizen program of Monona. Where do I find opportunities to volunteer and how do I get involved?

3. Find next month's newsletter and read about the most recent "Volunteer Spotlight!"

**Usability Test #1 - Dara:**

 *Task 1*:
·      Clicked on "Monona Lift Bus Service for Seniors" and found the bus schedule for means of transportation
·      Clicked on "Programs and Activities" and then clicked on "Movies" and then clicked on "October Movie Schedule"

*Task 2*:
·      Clicked on "Volunteer Opportunities"
·      Then clicked on "Click here for Volunteer Job Descriptions"
o  Was at first confused as to where the document went
o  Was able to find the document because she is computer savvy
·      Then clicked on "Monona Senior Center Volunteer Application"
o  The document popped up right away

*Task 3*:
·      Took a good amount of time for her to find the "newsletter" link
·      Had troubling the following page that popped up, took a good amount of time to locate the "November" newsletter
·      Used Command F to type in "volunteer" and was brought right to the Volunteer Spotlight page

**Usability Test #2 - Parris:**

*Task 1*:
·      Clicked on "Monona Lift Bus Service for Seniors" and found the bus schedule for means of transportation
·      Clicked on "Programs and Activities" and then clicked on "Movies" and then clicked on "October Movie Schedule"

*Task 2*:
· Clicked on "Volunteer Opportunities"
·      Clicked on the "Volunteer Job Descriptions"
o  Got confused when the file vanished but then knew to go to the downloads folder to find it

·   Clicked on Application and found it right away

***Task 3***:
·   Had trouble finding where it said "newsletter"
·   Didn't know to click on the link because it said "past and current issues here"
o   I had asked her to find next month's newsletter
·   Once she figured out to click on it, it took her a while to find November newsletter on the new webpage
·   Found November 1$^{st}$ newsletter
·   Read table of contents to look for Volunteer Spotlight
·   Scrolled throughout the pages to find it

## Usability Test #3 - Drew:

***Task 1***:
● Clicked on programs and activities window, scrolled down to movies
● Clicked on october movie schedule
● Confused how to get back to main senior center page
● Got back to main senior center page
● Clicked on monona lift bus service for seniors and found schedule

***Task 2***:
● Clicked on volunteer opportunities on left side
● Clicked on the job description link
● Went back and looked at the volunteer application

***Task 3***:
● Scrolled down and found the senior connection newsletter section on the homepage
● Clicked on current and past issues
● Scrolled down and found the november newsletter
● Used command F and searched spotlight
● Found it

**SEO TESTING:** (through Page Locus)

Synonyms
● Senior (main keyword – subsite is a direct result on Google) → retiree (brings to benefits, not to My Monona website), elderly (sends to old age homes)
● Support → advocate (monona website/subsite does not come up in any results)
● Programs → events (brings us to Monona website but not our subsite), classes (second site listed was our subsite, first site was the monona website but not our particular subsite)
● Volunteer→ participate (brings to Monona website but not our subsite)
● Assist → aid, help (both of these synonyms brings us to monona website but not our subsite)
● Community → **group** (main keyword - subsite is a direct result on Google)

**Only one of our synonyms work – many others bring us to the main website, not the subsite. This doesn't make it too accessible.

**ACCESSIBILITY TESTING:** (through WAVE)

Errors:
- 1 missing alternative text:
  - Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable
  - Fix this error by adding an alt attribute to the image
- 5 linked images are missing alternative text:
  - A screen reader has no content to present to the user regarding the function of the link
  - Fix this by adding an appropriate alternative text

Alerts:
- Justified text:
  - Large blocks of justified text can negatively impact readability due to varying word/letter spacing and 'rivers of white' that flow through the text
  - Fix this by removing the full justification from the text
- 2x Skipped heading level:
  - headings provide document structure and facilitate keyboard navigation by users of assistive technology. These users may be confused or experience difficulty navigating when heading levels are skipped.
  - Fix this by restructuring the document headings to ensure that heading levels are not skipped.
- 24x Broken same-page link:
  - A link to jump to another position within the the page assists users in navigating the web page, but only if the link target exists
  - Ensure that the target for the link exists or remove the the same-page link.
- 6x Redundant Link
  - Adjacent links go to the same URL.
  - results in additional navigation and repetition for keyboard and screen reader users.
  - Fix this by combining the redundant links into one link and remove any redundant text or alternative text
- 2x Noscript Element:
  - A <noscript> element is present.
  - JavaScript is disabled, <noscript> cannot be used to provide an accessible version of inaccessible scripted content
  - Fix this by ensuring that scripted content is accessible.

**FINAL ANALYSIS & SUGGESTIONS FOR IMPROVEMENT**

Throughout our experimentation with the City of Monona's Senior Center page, we found a few areas that could use improvement. First and foremost, an issue lies within the usability of the page, specifically with navigation. When asked to access different information throughout the site, both

ourselves and our users found it difficult to find their way back to the main page or to previous pages. For example, in task one, once Drew was able to access the movie schedule, he then found it rather difficult to go back to the main Senior Center page in order to find the bus lift schedule. This could be even more challenging for someone who is less tech-savvy or who has visual impairment. The only way to access previous pages is to click the "show the previous page" button on the browser. Through the page itself, this option is only available through a tiny navigation bar that is difficult for those even with strong eyesight to see. In order to improve this, the page's creators should provide an additional navigation bar similar to the one seen on the left-hand side of the page, with accessible links and larger font.

One of the most important parts of a page's accessibility is the search engine optimization results. A page is not accessible unless it uses SEO to its advantage, meaning that it uses a multitude of keywords that will put the web page at the top of search engine results. There are not enough keywords to be able to access the Senior Center page in any way other than knowing exactly what it is called or going to the site directly. Without knowing how to directly access the City of Monona's page, and more specifically the Senior Center page, it is difficult to come across it at all. Only one of our synonyms worked (group, instead of community), while many other synonyms bring us to the main website, not the subsite. This doesn't make it too accessible for people who are searching for options without knowing the specific programs that Monona offers.

When we conducted this analysis in October, one of our usability tests was for the user to find next month's (November's) newsletter. When asking our subjects to complete this task, they were able to find the next month's letter. However, in revisiting the website this month, it was brought to our attention that January's newsletter was not available. We are unsure if this change has to do with the fact that next month begins in the new year of 2017, or if the website has decided to no longer offer next month's calendar to those visiting the site.

Nicole Salzman,
UniverCity Monona: Senior Center
Capstone

## **Opening Explanation**

Hi, _____. My name is Nicole Salzman. Thank you so much for choosing to participate today. First, I want to walk you through what will occur throughout this session. Please feel free to interrupt at any point if you have any questions.

For our research, I will be asking people to use the City of Monona website, focusing primarily on the Senior Center subsite, in order to improve it. This session should not take more than 20 minutes. Your responses will be kept confidential within our research group.

It is important to note that I are testing the website, not testing you. There is no such thing as making a mistake. In fact, your "mistakes" will help us improve the site.

As you navigate through the site, it would be so helpful if you could think out loud: to say what you're looking at, what you're trying to do, what you're experiencing, and what you're thinking. This will let us know if anything about the site is confusing or beneficial.

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If you have any questions as you navigate the site, you can ask them. However, I just might not be able to answer them right away because I am trying to see how someone interacts with the site as if I am  not here. If you feel like you need a break, please do not hesitate to ask for one.

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I may ask you other questions throughout the session and I may have questions for you once the session is completed.

Thank you again for participating. If you have any questions before I begin please feel free to ask them now.

## **USABILITY TESTING**

**Task Scenarios**

1. I am a senior looking for activities to do during the month of october.  Where do I find the movie schedule and plans for transportation?

2. I'm the daughter of someone involved in the senior citizen program of Monona. Where do I find opportunities to volunteer and how do I get involved?

3. Find next month's newsletter and read about the most recent "Volunteer Spotlight!"

**Usability Test #1 - Matthew:**

*Task 1:*
- Clicked on the programs and activity tab, scrolled down to movies
- Clicked on october movies
- Brought him to a new window with the october movie schedule
- Returned to the previous window (movie window)
- Confused how to get back to original senior center home page to find transportation
- Clicked the "go back" icon on upper left corner of webpage
- Clicked on "Monona Lift Bus service for Seniors" tab on left side of webpage
- Clicked on small yellow underlined "monona lift" in the middle of webpage
- Found schedule

*Task 2:*
- Clicked "volunteer opportunities" on left side of webpage
- Scrolled down and clicked on job descriptions
- Brought him to a new window then asked him to save download
- Clicked "save" and brought him back to original "volunteer opportunities page"
- Opened up job descriptions document
- Clicked on volunteer application
- A new window opened with application

*Task 3:*
- Scrolled down on main web page saw "current and past issues" link under Senior Connection Newsletter
- Confused because task asked for future issue
- Clicked on "current and past issues"
- New window appeared
- Scrolled down and found the next month's issue
- Clicked on the next month's issue and downloaded it

**Usability Test #2 - Jessica:**

*Task 1*:
- Clicked on "Monona Lift Bus Service for Seniors" and found the bus schedule for means of transportation
- Clicked on "Programs and Activities"
- Clicked on "Movies"
- Clicked on "October Movie Schedule"

*Task 2*:
- Clicked on "Volunteer Opportunities"
- Clicked on the "Volunteer Job Descriptions"
- File went to her downloads folder
- Went to her downloads folder and found the document

*Task 3*:
- Had trouble finding where it said "newsletter"
- Didn't know to click on the link because it said "past and current issues here" (task asked for next month's issue)
- Clicked on the link that said "past and current issues here"
-
- Found November 1$^{st}$ newsletter
- Read table of contents to look for Volunteer Spotlight
- Scrolled throughout the pages to find it

**Usability Test #3 - Ilyssa:**

*Task 1*:
- Clicked on "Monona Lift Bus Service for Seniors" and found the bus schedule for means of transportation
- Clicked on "Programs and Activities"
- Clicked on "Movies"
- Clicked on "October Movie Schedule"

*Task 2*:
- Clicked on "Volunteer Opportunities"
- Then clicked on "Click here for Volunteer Job Descriptions"
- Was at first confused as to where the document went
- Clicked "command F" and searched "volunteer application" and was able to find it

- Then clicked on "Monona Senior Center Volunteer Application" and found the needed document

*Task 3*:
- Took a good amount of time for her to find the "newsletter" link
- It took her a good amount of time to navigate the next window and locate the "November" newsletter
- Used Command F to type in "volunteer" and was brought right to the Volunteer Spotlight page

## FINAL ANALYSIS & SUGGESTIONS FOR IMPROVEMENT

Throughout our experimentation with the City of Monona's Senior Center page, I found a few areas that could use improvement. First and foremost, an issue lies within the usability of the page, specifically with navigation. When asked to access different information throughout the site, both ourselves and our users found it difficult to find their way back to the main page or to previous pages. This could be even more challenging for someone who is less tech-savvy or who has visual impairment. The only way to access previous pages is to click the "show the previous page" button on the browser. Through the page itself, this option is only available through a tiny navigation bar that is difficult for those even with strong eyesight to see. In order to improve this, the page's creators should provide an additional navigation bar similar to the one seen on the left-hand side of the page, with accessible links and larger font.

One of the most important parts of a page's accessibility is the search engine optimization results. A page is not accessible unless it uses SEO to its advantage, meaning that it uses a multitude of keywords that will put the web page at the top of search engine results. There are not enough keywords to be able to access the Senior Center page in any way other than knowing exactly what it is called or going to the site directly. Without knowing how to directly access the City of Monona's page, and more specifically the Senior Center page, it is difficult to come across it at all. Only one of our synonyms worked (group, instead of community), while many other synonyms bring us to the main website, not the subsite. This doesn't make it too accessible for people who are searching for options without knowing the specific programs that Monona offers.

When I conducted this analysis in October, one of our usability tests was for the user to find next month's (November's) newsletter. When asking our subjects to complete this task, they were able to find the next month's letter. However, in revisiting the website this month, it was brought to our attention that January's newsletter was not available. I was unsure if this change has to do with the fact that next month begins in the new year of 2017, or if the website has decided to no longer offer next month's calendar to those visiting the site.

# UNIVERCITY MONONA REPORT:
## Accessibility, SEO, Usability
## Monona Senior Center Page
**December 16th, 2016**

**Test Facilitators and Analyzers**
*Danae Luetkehans*
*Deirdre O'Donoghue*
*Katherine Treankler*
*Sam Donsky*
*Cavan Faucett*

## Usability Test

### Field Test

1. **Find the senior center page without using the search bar. That is, click through the links on the Monona home page to land on the home page without searching for it.**
    a. **Was this difficult to find?**
        i. **Summary:**
            1. No/easy to find
            2. Yes, didn't understand which tab it would fit under, also too many words and links all over the website/kind of confusing at first /didn't understand which tab it would fit under, also too many words
            3. Found it, but it was hidden amongst too much text and links

    b. **How could this page be easier to find?**
        i. **Summary:**
            1. Already simple
            2. Limit how many tabs there are, consolidate the amount of words/Too many links to pages, narrow down the amount of things on the site/Make it a whole tab by itself/Put it under only community rather than both community and services
2. **Find Day Trip activities and download the flyer.**
    a. **Was downloading the flyer an unnecessary step?**
        i. **Summary:**
            1. Couldn't find "Day Trips" after 5 minutes, once I helped him to find it, and yes, said the flyer was unnecessary, too much text on the page, discouraged to read/Took too long and don't need it/downloading flyer was unnecessary

    b. **How could this function be improved?**
        i. **Summary:**

1. Didn't like downloading the flyer, wished it was on the website/Online form to submit/Put the information natively on the website, no need to have a downloadable flyer, too many words, if anything you could have the signable form downloadable/Maybe give a link to Google Forms
3. **Create an account using the following information: (without using search bar)**
   a. Name: Mary Smith
   b. Username: MarySmith608
   c. Password: usabilitytest2016
   d. Once you get to email you have completed this task

   e. **How did you find the create an account on the home page?**
      i. **Summary:**
         1. Wisconsin is cut off in the create account and it really bothers her visually/Found it pretty fast at the top of the page/Eventually found it, but it was hard to see at first.
      ii. **What location of this link would make this easier for you to find, if it was difficult?**
         1. **Summary:**
            a. It wasn't difficult, just should probably have a "sign up" link next to the sign in/Wasn't difficult, liked the location–felt that most sites already have that kind of setup, it felt familiar
4. **Find the fares of the bus service.**
   a. **Summary:**
      i. Couldn't find it, thought it would be under "Your Services" instead of "Your Government", search bar didn't help at all/ Finding the bus fares required to scroll down too/ Could not find, search bar wasn't very helpful, and the tabs didn't seemed organized well enough to guide to the bus fares/ Had a very hard time finding it… Never got there
5. **Find the latest Monona Senior Newsletter**
   a. **Summary:**
      i. Searching on the side. Feeling a little stumped. Took a couple different tries/Could not find the newsletter/Couldn't find it, after helping, said that there were too many links to go to before actually downloading the newsletter/Did not find the newsletter

**Overall what score would you give this website? 1 being hardest to use and 5 being very easy to use.**

- 2.5
- 3
- 4
- 3
- 1
- 2
- 2
- 4.5
- 4
- 2
- 3

**Mean:** 2.8
**Median:** 2.75

**Mode:** 2

# Usability Analysis

*Background and Methodology*

We are analyzing the website based on how effective the tools and information on the website are to help people accomplish tasks. This also includes the user experience design, which is everything the user is thinking or feeling when using the website. We analyzed the site for: Ease of learning or if new users understand how the site works, memorability or if returning users still know how to use the website, efficiency or how fast the explorer can get things done, error frequency and serenity or how often users make errors, and satisfaction or if users like the site.

*Results and Suggestions*

Overall, people felt like the website is not super difficult, but it is not super easy either. Therefore, there is room for improvement. For example, the tabs and links are hard to navigate, and should be consolidated and placed into more general, overarching categories. There is also too much text on pages, which makes it more difficult for people to find the specific information they are looking for. Certain things should be made more prominent and big, such as the sign-up link and the newsletter link. Additionally, the links should not lead you to download forms, but instead take people to Google Forms to access them to save time. However, people generally liked all the pictures on the pages, and thought it drew them into the website and what it is about.

Since the website is geared towards senior citizens who are probably not all tech savvy, it is important that the website becomes easier to use. The internet is an information source that many people use first when researching things, such as senior centers. Once the site becomes easier to use, more seniors will be able to learn about the Monona Senior Center to see if it is a right fit for them.

# Accessibility Test

## WAVE Report

- The linked images on the side (envelope, credit card, mouse, social media and forms) are missing alternative texts
    - An image without alternative text results is an empty link
- Under create an account, and login, broken same page link
    - A link to another location within the page is present but does not have a corresponding target.
- Underlined text is present at the email link on the right side
- Redundant text titles under the main image and the Facebook link
    - Many under redundant titles on the page
- The senior newsletter link is an empty link

## Accessibility Analysis

*Background and Methodology*

In this context, accessibility means accessibility for persons with disabilities. Hand in hand with usability, to have a good website it is crucial to have a website that allows for everyone, including those with disabilities, to access information on the web as comprehensively and easily as possible. To test the site's

accessibility, we conducted a WAVE test through a website program (http://wave.webaim.org/). WAVE's sole purpose is to evaluate the accessibility of web pages, through entering the web page address and providing feedback. This WAVE test highlighted missing alternative texts, empty links, underlined text, and redundant text titles. All of these are indicators of poor accessibility on the given web page. There is a general policy to utilize the Web Content Accessibility Guidelines (WCAG) to aid in measuring a website's accessibility. These guidelines say that web content should be perceivable, operable, understandable, and robust.

## *Results and Suggestions*

WAVE indicated that the linked images on the bottom left hand side of the page (envelope, credit card, mouse, Facebook/Twitter icons, form) are missing alternative text. Without alternative text, the image will result in an empty link. This is significant for accessibility because if an image is in a link that does not have text and the image does not have alternative text, a screen reader cannot give any content to its user about the link's function. To fix this issue, we suggest adding alternative text that describes the content of the image or the link's function.

Additionally, there is an empty link under the Senior Connection Newsletter section that reads as "current and past issues." This means that the link has no text. This lends to poor accessibility because if the link has no text, the function or purpose of the link cannot be shown to the user, and therefore can also cause confusion for users who utilize keyboard and screen readers. To fix this issue, the empty link should be removed, or text should be given within the link that describes the link's function and/or target.

WAVE also indicated broken-same page links: Create an Account (top left), Sign In (top right), and Search (top right). A broken-same page link is when a link to somewhere else on the page is there, but it does not have a corresponding target. If the link relocates the user to another spot on the page, this can aid in navigating the web page, but only if the link target is there. Our recommendation is either to make sure that the target for the link is there, or remove the same-page link altogether.

Another alert received from the evaluation was the presence of the following redundant links: current and past issues (under Senior Connection Newsletter), View All (next to Quick Links, Calendar), and Read On (under Calendar>Date>Event). Redundant links mean that adjacent links go to the same URL. When adjacent links go to the same place, this results in more navigation and repetition for those who use keyboard and screen readers. To improve accessibility, we suggest combining the redundant links into one link and taking out any redundant text or alternative text.

There were two instances of underlined text on the web page: current and past issues (under Senior Connection Newsletter) and Email (under Contact Us>Diane Mikelbank>Director). Usually, underlined text means that the text is linked. We suggest removing the underline from the text, as it is not linked. If you still would like to differentiate these texts, we suggest using other styling, such as bold or italics.

Finally, there is redundant title text at numerous places on the page, including current and past issues (under Senior Connection Newsletter), the image under Senior Center, the Friends Group logo (bottom of page), the Find Us on Facebook badge (middle left side of page), and the Monona image (bottom left of page). Redundant title text means that the title attribute text is the same as the text or alternative text. A title attribute value is used to give advisory data. This usually comes out when a user puts the mouse over an element. Advisory information given should not be the same as or very similar to the element text or alternative text. To fix this issue, we suggest removing the title attribute. If this cannot be done, the title text should be changed to give advisory information, instead of redundant information. Keep in mind that title text may or may not be able to be read by a screen reader, and it is usually inaccessible to those who use sighted keyboards.

# SEO Tests

## Test 1: Page Locus Report

- **High priority issues to fix:**
  - The meta description is too short
  - Poor header tags—they can be improved
- **Medium priority issues to fix:**
  - The website IP does not redirect to mymonona.com
  - STS is not present and HTTP and HTTPS is not present
- **Low priority issues to fix:**
  - The conversion form is not present in the website
  - The browser cache is disabled, and we should turn it on
  - The server response time is too slow
  - The server information is publicly available—we should make it private
  - There are no social media pages linked to the website (Facebook, Twitter and Google+)
  - The website is not listed in DMOZ

## Test 2: Search Engine Terms and Results

**Terms:**
1. Veterans
2. Seniors
3. BINGO
4. classes
5. Senior volunteer opportunities
6. Senior community
7. Special events
8. Dementia coalition
9. Senior breakfast
10. Assisted living

**Synonyms:**
1. Old veteran
2. Elder
3. Elderly
4. Games of chance
5. Senior activities
6. Senior exercise classes
7. early bird breakfast
8. Senior games
9. Senior association
10. Senior society
11. Senior assistance
12. Senior aid

**Results:**

- Almost all of the direct search terms we came up with led directly to the Senior Center page on the Monona website.
- Synonyms created more difficulty and had to be further refined and directed towards the senior center before the web page popped up in the results. Often encountered websites that conflicted with the search intentions.
- Almost every word we came up with had to be bolstered by the word "senior" before it could work. Many other websites offer activities with these keywords without the senior specification so refinement was necessary.

# SEO Analysis

## *Background and Methodology*
SEO, or otherwise referred to as "Search Engine Optimization" is an acronym used to describe how frequently and reliably a browser crawler can return a webpage related to the content initially searched for. Most readily, optimizing a webpage for browser searching begins with a site's metadata tags, that most often contain keywords that tie the subject to a broader vocabulary to make browser recall much more effective. To begin, we started by using a third party application known as Page Locus, a quick online webpage search engine optimization auditor that measures a website's ability on a scale of 1-100 based on 4 different facets of SEO: on site SEO, page speed, social, and authority scores.. Later, we took these measurements and thought critically about what tangible measures could reasonably be taken in order to help the site improve its status among a variety of search engines.

## *Results and Suggestions*
The mymonona.com website faces many easily addressable search optimization challenges that may help increase web traffic and reduce overall landing page bounce rate. Primary research suggests that the more common, recognizable keywords associated with the mymonona site  mostly generates results to the correct page. However, there is room for improvement. After much discussion and deliberation, our team was able to generate an abundance of synonyms for more direct metadata tags that may lead certain, otherwise ignored audiences to the correct page. The new mymonona development team should use these terms as a rough guide when making changes to the metadata, as these may directly translate to web traffic via browser indexing. Furthermore, we recommend that the mymonona developers consider adding hyperlinks or social icons at the top right hand corner of the landing page in order to increase social community engagement as supplemental source of information and interaction for mymonona's target audiences.

# Overall Suggestions

- The "Senior Center" title at the top of the page should be bigger so it looks like the title of the page.

- Have the Senior Page on the navigation bar so that seniors, who may have more difficulty on computer can locate the page they are looking for much faster.
- Create an online form to submit directly on the Day Trip activity page instead of taking the seniors outside of the website and also, where possible, work to eliminate any/all use of third party sites to house documents and forms. Municipal related forms and other documents should be reasonably expected to be self-contained and indexed within the site.
- Overall, the navigation bar should play an integral role in the user's experience, yet the current bar seems obsolete to many of our targeted users: e.g. eliminate overwhelming choices with insufficient labeling to address any unnecessarily confusing navigation. Also, for example, make the navigation bar have a "sign-up" link because right now the "sign in" link takes them to sign-up, but that is misleading, especially for someone unfamiliar with signing up for accounts.
- Make "sign-in" and "sign-up" buttons bigger, especially for senior citizens, to better indicate the possibility of creating a custom account on the site.
- Because bus service information is important, especially for seniors, a bus service link should be present directly on the home page with the fares and schedule portrayed clearly and prominently upon clicking on the bus service link.
- If this newsletter is something that Monona would like seniors to read then it needs to be a top link on the homepage which takes the senior directly to the newsletter instead of in downloaded form.
- Re-categorize the side menu so people can better find the links they are looking for.
    - Ex. "Adult Coloring" should fall under the "Programs and Activities" section
- Make slideshow on main page smaller, or place it at the bottom of the page. The content on the main page should be visible right when people access the site; they should not have to scroll down. This is an individual recommendation but also is in accordance with the other suggestions about the main page above (i.e. newsletter location).
- Place the contact information at the bottom of the right-hand bar on the main page. Information like the calendar and quick links are more important to the user's experience.

Final Report: UniverCity Monona
Margaret Abel, Lauren Richardson, Katie Morrison, Sofi LaLonde, Hakyung Hwang

We were assigned to test and analyze the Senior Center page of MyMonona.com. We designed several individual tasks as a part of our usability testing and also completed several WAVE reports for each task page and a site wide SEO report. Some of the issues that we found were missing contact information, hyperlink issues, and overall simplicity of the website. As a result, we found the following usability and accessibility issues within each task, and came up with suggestions for each problem.

**Analysis of SEO testing**

SEO testing of mymonona.com suggests a score of 72/100. Suggestions to improve this error including making the meta description of the website (currently is "Monona, WI-Official Website") longer and a more indepth description. Also, I suggest to improve header tags and W3C validity, as there were many errors for this. Also, to improve the SEO score, the website should have a conversion form and add STS to the HTTPS.

The speed score for the mymonona.com website was 77/100. Suggestions to improve this include enabling website cache to improve user experience and to lower the server load. Also, the server response time was slow, so any tools to improve the response time would also be useful to improve the speed score of mymonona.com.

The social score for mymonona.com was 0/100. The website does not have a Facebook or Twitter page which could benefit monona.com and improve the social score of the website. I'm assuming that a lot of older people use the specific section of "senior center" that we looked at as a group on mymonona.com. I also would think not as many older people use social media compared to people in younger generations. Thus, the fact that the website does not have Facebook and Twitter may not be as important to the specific "senior center" section.

The website also got a score of 38/100 for the authority score. To improve this score, mymonona.com should be listed on DMOZ, which would boost the search engine ranking of the website. As far as security, there were some security headers that were insecure on mymonona.com. Also, the server information is publicly available which is less secure. So, as far as suggestions for security improvement, I recommend that mymonona.com consider revising the security headers and consider a private server.

**Senior Breakfast**

In the senior breakfast task, participants were asked to find out when and where the senior breakfast was and how to sign up. Participants were also asked to figure out who to email to discuss alternative options for allergies.

From the accessibility testing with the wave checker, for the senior breakfast page, there were 8 errors involving missing alternative text, linked image missing alternative text and empty links. I suggest that these errors can be fixed by checking that all links and images are accurate and updated to the correct link. There were also 30 alerts, with the majority involving alerts for "broken same-page link." The other alerts included a nonscript element, skipped heading level and a redundant title text. These alerts can be fixed by checking the same page links to make

sure they are complete and accurate and by checking the heading levels, nonscript elements and by making sure that titles are not repetitive. There were also 10 errors for "very low contrast" which can be fixed by adding more contrasting colors to the web page.

For the senior breakfast task steps, many of my group members had trouble figuring out who to contact for the third task step to discuss alternative options for certain allergies (example dairy, lactose, egg, allergies). While people who followed the tasks eventually found an email to contact, they were unsure if it was the correct email to contact about food allergies. During the usability tests, people said that they could not find who to email and would instead call Cranberry Creek cafe because there was no adequate email provided. Other people considered emailing a senior service director but were still unsure of who the best contact was. To fix this problem, and as a reference for future questions that people may have about the senior breakfast, I recommend adding contact info on the "Senior Breakfast Program" page with a name, email, and phone number of the best person to contact in case someone has questions about the senior breakfast program.

Another issue occurred when one of my group members could not find out what time the senior breakfast was at. The web page says "every friday" but it does not list the time. Thus, the second task step "find out when and where the breakfast is and how to sign up" was hard to complete without knowing the time of the event. When one person searched for the time and place of the event she easily found the time on the senior breakfast program page but could not find the time of the event. She clicked on other web pages and still could not find the time and so she gave up looking for the time. I suggest that the time of the senior breakfast is included on the "senior breakfast program" page. The page lists the day as Friday, and since the event is a breakfast it is assumed that the event is in the morning. However, the time of breakfast can range anywhere from early, like 7AM, to a later breakfast like 11AM. Thus, the time is needed to ensure that people know when the breakfast takes place on Friday mornings.

**Newsletter**

One of our tasks was to test the usability of the Senior Center page. We had participants start at the mymonona.com home page and asked them to find the Senior Center page. From there, we asked them to find where they can access current and past issues of the newsletter. Finally, we asked them to find the Director's email address on the Senior Center page. Overall, when this task was administered, most people were able to complete it without much trouble. There were a couple common issues, though. First, a few of the participants had trouble finding the link to the Senior Center page. This seems to be because it is not placed in a convenient spot on the homepage. You can either access it under the main menu bar at the top of the page under "Our Community" or on the orange sidebar. Both of these places have a lot of links, which makes it hard to find the specific one you are looking for. A suggestion to fix this is to have all links under the main menu bar, but only include the top five or six links on the sidebar. That way, people do not miss their link when skimming the sidebar, but all of the links can still be found under the main menu bar. Another common issue was with finding the Director's email. The email is only listed on the main Senior Center page, so when the participants clicked on the Newsletter link they could not find the email on that page and did not know they needed to

navigate back to the Senior Center page to find it. This issue has a very simple solution which is to just add the Director's email on the contact section on the Newsletter page for easier access.

The accessibility test of the Senior Center page using WAVE came back with a few issues. First, each link of the tan left hand sidebar is missing alternative text. This means that there is no alternative text if the link doesn't work. To fix this, an alternative text describing the link needs to be added. Next, there are three empty links that contain no text. This can cause confusion to screen readers and the purpose will not be clear to the user. To fix this, text can be added by the link or the link can be deleted. Additionally, the orange links on the right and left hand sidebars have very low contrast. This can be visually challenging and can be fixed by changing the color or increasing the contrast. There are 24 same-page broken links and six redundant links, as well. Same-page broken links are links that are present but don't have a corresponding target. This can be fixed by removing the link or adding a target. The redundant links means that adjacent links go to the same URL. The best way to fix this is to combine the redundant links into just one link. Finally, there are nine redundant title texts, which means that the title attribute is the same as text or alternative text. Basically, when you hover on it, the information that comes up is too similar to the title. To fix this, the attribute can be removed or edited to provide information that is not too similar to the title.

**Computer Classes**

One of the assigned tasks was to sign up for a computer class with Dan. We had participants start at mymonona.com and find the senior center page, navigate the left menu bar, and find the computer classes page. This was done without issue. This page contained brief information about when and how often these classes are held, but we found that all of our participants struggled with figuring out how to reserve a seat in class. Participants looked around on various pages, such as the calendar, to see if they could find information on where to sign up. They found information on the calendar about the classes, but nothing that would help them to register for a class. We did not have a single participant that was able to find information on where to sign up for a class; they either said they would call, email, or ask for help, or they gave up entirely. We believe a solution to this problem would be best through two changes: reformat the computer class information page and create an online form on the computer page through which individuals can register for classes.

The main computer class page contained the adequate information about when and where the classes are held, but we suggest a different layout of information that would clearly differentiate important pieces of information, such as days/times, featured classes, and where to register. I believe online registration should be a priority on this page. There should be an embedded sign up feature that users can access directly on that page. This feature should show a calendar of all classes, seat availability for each, and the option to sign up for the class. The page should also display the contact information, such as email and phone number, if anybody prefers to sign up over the phone. This can be displayed in the content about computer class information. It is crucial that all these elements are on one page together, as it is difficult to manually search the site for multiple and separate pieces of registration information.

Another aspect of our report for this page is the WAVE results. We discovered that five images were missing alternative link text, two links were broken, and 24 broken page links.

Alternative text provides a way for differently-abled users to access the site, such as sight impaired users that need a screen reader to navigate the page. Without this text, they cannot navigate as easily. Adding alternative link text will fix this issue and restore usability. There are two broken links, meaning this link contains no text can therefore cannot be properly used. Adding texts to these links in the bottom left sidebar would increase accessibility for all users. Finally, the 24 broken same-page links means that there are 24 texts that link to another location in the page but do not have corresponding targets. These can be fixed by either removing the links or adding a target to the page. All of these measures will increase accessibility and create a better user experience for all. We also suggest increasing the contrast between text on the left menu bar to help differentiate all the page links from the background color. This would help highlight all the pages and services the senior center offers, and could would increase usability and accessibility for all users.

**Becoming a Member Task**

One of our tasks was to have users sign up to be a member of the Monona Senior Center. We wanted users to find the senior center page on the Monona site, find the "Friends of the Monona Center" link, find the "Becoming a Member" navigation bar, find the application form, and lastly print it out.

Looking at the results from our usability tests, we discovered most users had a difficult time figuring out how to print the sign up form as well as finding the "Becoming a Member" link. Users discovered there is no file for the membership form so that is why printing the form is a difficult task on this website. Additionally, the "Becoming a Member" link does not stand out enough and is hard for users to locate. We determined this by noticing our users hitting the back button to see if they missed the "Becoming a Member" link on a previous page during this task. To fix these problems, we recommend adding a specific link to the membership form and adding a print option to the page. This will cause less confusion and frustration from users. As for the "Becoming a Member" link, we recommend making the navigation bar links more concise so users are not overwhelmed when trying to figure out which one to select as well as making the font larger.

Furthermore, looking at the results from the WAVE testing, we noticed more errors. We noticed a missing alternative link which could be fixed by adding an attribute. We also noticed a linked image that was missing an alternative text, which could be fixed by adding text to represent the content of the image. Another large error we found was a skipped heading level. The skipped heading level could be fixed by simply adding a bold, noticeable heading and restructuring the web page layout to make it more noticeable. Overall, if the team from My Monona makes these changes, we are confident that the usability of their website will increase for users.

**Finding Exercise Classes Task**

One of our tasks was to have users find out exercise classes such as Pilates and Tai Chi. We had participants start at mymonona.com and find the exercise classes and find out the fee per class for Pilates, when the Tai Chi class is and phone number to register chair yoga class.

Looking at the results from our usability tests, we discovered most participants find this information without any issues. However, some participants have trouble to find exercise classes. They clicked "your government" and come back and forth. Even though it was not hard to find information, one of participants replies that style and size of font in exercise classes are different, so it was little bit difficult to find all information right away. To deal with this problem, I would suggest to decide one style and size of font. It will be easy for users to read.

Moreover, looking at the results from the WAVE testing, we noticed several errors. First of all, we noticed a missing alternative link that can be fixed by adding an attribute. Other is that missing alternative text in 5 linked images. It can be fixed by adding text to represent the content of the image. The other is that there are two empty link that contains no text. Also, we found that there are 24 broken same page links. It can be fixed by either removing the links or adding target to the page. If these errors are fixed, it will increase the usability for website users.

This report contains both the problems we discovered with the website and possible solutions to increase usability and accessibility. In general, the solutions include clarifying contact information on pages, creating a simple structure, and fixing broken links. These solutions are implement and we believe that if completed, the user experience of MyMonona.com would dramatically increase.

Cavan Faucett

LIS 351

Dorothea Salo

16 December 2016

## Univercity Monona Capstone – Final Report

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## Opening Statement

Over the past couple of months, I have had the unique opportunity to meet with a variety of different people in the greater Madison area and develop my knowledge on web usability. From college kids to senior citizens to real estate developers, each person I interviewed had a distinct perspective and their own recommendations for on their ideal mymonona.com website.

Specifically, though, I focused my usability testing time around a single real estate developer and a handful of senior citizens. The following is a detailed account of those interactions.

## Usability Tasks Recorded Responses

## Developer

**Find the Property Maintenance Enforcement Code page.**

> The developer spent that majority of his time trying to find something that hinted toward the keywords "Building permitting" or "building inspection." However, he noticed earlier from pre-navigating the site that "public permitting," "building inspection" and "code enforcement" are separated, and so he was initially skeptical of the sites layout. He also questioned whether those items should be separated at all, as they bare so much similarity in real estate development and construction, both in legal terms and in project management processes. However, he eventually managed to navigate to the form in under 1:30m.

> **a. Was this page easy to find?**

> Initially, he said no. He was confused which subcategory to go to, given that there are so many subcategories under the navigation bar.

**b. How do you think finding this page could be easier?**

Property maintenance and code enforcement could be either commercial or residential, he was searching for commercial and residential separated, saw the sidebar navigation as redundant, waste of space navigation.

2. **Locate information on the current economic development projects and plans happening in Monona.**

    He immediately thinks to look for planning commission, he thinks it would be under boards commissions and committees, clicked on plan commission, looking for economic community development, there isn't any words to que toward "economic", he wasn't sure if the recent development proposals were being publicly announced and the phases, if it's legal he would be interested in knowing updates on the stages of the building process

    **a. Was this difficult to find?**
    Yes, because it didn't say 'economic" is definitely a key word.

    **b. How do you think finding this information could be easier?**
    Could include the word economic, " economic development plan" seems like an important phrase to him

3. **Locate the contact information for the city property assessor.**

    Didn't know the assessor had his own department, he was initially thinking to go under boards commissions and committees, may have even went into administration

    **a. Was this information difficult to find?**
    Wasn't that difficult
    **b. How do you think finding this information could be easier?**
    Pretty simple already

4. **Locate the Building Permit Form.**

    Looking for government, you would have to understand each municipalities' website, everybody is trying to be unique, departments, he is clicking on building inspection (he thinks it should be here under building inspection) he found it using the side bar, normally only goes to the site for one piece of information, he would like to see something that says "contractor, resident, home-owner" as a contractor, he has limited time to fill the permit form, much faster process, he thought that the "right of way

permit application" isn't relevant to developers (didn't even know what it is) as a contractor, he is visiting the site for a very specific set of reasons. "prehistoric" the navigation bar was giving him a lot of problems, he liked the calendar a lot, where to find leaf pickup? (put a map up)

**a. Was it easy to find this form?**

N/A

**b. How do you think finding this page could be easier?**


## Senior

1.  **Find the Senior Center home page.**
    The seniors interviewed spent most their time just trying to find it within the navigation bar, seemed frustrated with not being able to read the small text and made note that there were too many words to look at.

    **a. How did you find this page?**
    Found it by looking thoroughly at the navigation.

    **b. Was this page easy to find?**
    No, it felt "foreign and unfamiliar" to someone who has never been to this website. She said she was not immediately sure where to look.

    **c. How do you think finding this page could be easier?**
    Doesn't know, joked that she thought that's what I was for


2.  **Locate information about day trip activities and download the flyer.**
    Found it after searching semi-randomly, going from page to page primarily using the navigation bar for 2:12m. Could download the flyer just fine.

    **a. Was this information easy to find?**
    Upon finding it, she realized it was easier than she expected but still appeared frustrated. Wished that she had found it sooner, she said she would have just rather have thought to dial the phone number at the bottom

    **b. Was downloading the flyer an unnecessary step?**
    She said she doesn't print things all that often anymore, so she said that she thought it might be a little unnecessary if nobody was actually using them to be printed

    **c. How do you think finding this information could be easier?**

N/A

**3. Find the latest Monona Senior newsletter.**

Found it quickly from the senior center landing page, within 30 seconds.

 **a. How did you find this information?**

 saw the "senior connections" hyperlink then immediately clicked.

 **b. Was this information easy to find?**

 Yes, she agreed

 **c. Was downloading the newsletter an unnecessary step?**

 Yes, again didn't like the download feature if it wasn't going to be printed, she said she didn't know how downloaded was different than clicking "File:print" straight from the webpage

 **d. How do you think finding this information could be easier?**

 N/A

**4. Locate the bus fares for the Monona Lift bus service for seniors. (OMMITTED, DID NOT HAVE TIME)**

 **a. How did you find this information?**

 **b. Was this information easy to find?**

 **c. How do you think finding this information could be easier?**

## Follow Up Questions (Developer Only)

**How often have you visited Mymonona.com in the past 6 months?**

 Only visited 2 times in the past 6 months.

**What did you come to the site for?**

 He couldn't remember very specifically, yet he does recall it being "code" related.

**Did you find what you were looking for?**

 He found it.

**What was most frustrating about using this website?**

 The notify me, online payments, report a concern, connect with Monona, online forms bar

**If you could make one significant change to this website, what would it be?**

 Clean up the navigation menus, he mentioned that he really dislikes the "notify me, online payments, report a concern" sidebar, thinks it's unnecessarily large and distracting to the webpage content and that it bears no relevance to him as a real estate developer.

**Is there anything you would want added to the site?**

Improved navigation

**Anything else you want to tell me about your experience while using the website?**

N/A

**Consider each of the following statements and select your agreement with each one.**
(Developer) (Senior) BOTH AGREED

**1. It is easy to navigate through this web site.**

- Strongly Agree
- Agree
- Neutral
- Disagree  X
- Strongly Disagree X

**2. It is easy to find what I want on this web site.**

- Strongly Agree
- Agree
- Neutral XX
- Disagree
- Strongly Disagree

**3. This web site loads too slowly.**

- Strongly Agree
- Agree
- Neutral
- Disagree XX
- Strongly Disagree

**4. The graphics on this web site are pleasing.**

- Strongly Agree
- Agree X

- Neutral X
- Disagree
- Strongly Disagree

**5. It is easy to use this site upon my first visit.**

- Strongly Agree
- Agree
- Neutral X
- Disagree X
- Strongly Disagree

**6. Clicking on links takes me to what I expect.**

- Strongly Agree  X
- Agree X
- Neutral
- Disagree
- Strongly Disagree

**7. The organization of information on the system screens is clear.**

- Strongly Agree
- Agree
- Neutral
- Disagree XX
- Strongly Disagree

## Usability Analysis

*Background and Methodology*

Overall, the goal of these usability tasks was to analyze and measure the website based on how effective the layout, tools and information on the website are ultimately in order to help people accomplish basic tasks. Included within this measurement was the user experience, otherwise known as UX, which is everything the user is thinking or feeling when using the website. I actively tested the site and formulated my questions and tasks based upon a few overarching metrics and/or themes: e.g. ease of learning/use or if new users understand how the site works,

memorability or if returning users still know how to use the website, efficiency or how fast the explorer can get things done, error frequency and serenity or how often users make errors, and satisfaction or if users like the site.

*Results and Suggestions*

My results have consistently shown that navigation is a primary concern for our target audiences. I'm immediately concerned with the overall sitemap and the layout of the information within. The development team should consider prioritizing the most frequently visited or the most popular information and finding a way to seamlessly integrate it into the site's overall purpose and brand message so that people can not only find the information they came to the site to find, but also learn something new about Monona as well.

# Accessibility Test

## WAVE Report

- The linked images on the side (envelope, credit card, mouse, social media and forms) are missing alternative texts
    - An image without alternative text results is an empty link
- Under create an account, and login, broken same page link
    - A link to another location within the page is present but does not have a corresponding target.
- Underlined text is present at the email link on the right side
- Redundant text titles under the main image and the Facebook link
    - Many under redundant titles on the page
- The senior newsletter link is an empty link

## Accessibility Analysis

*Background and Methodology*

Accessibility, in context of web design, means designing a website that accounts for, and is user-friendly for people with disabilities. Similar to usability, accessibility is a fundamental design consideration to have a good website it is crucial to have a website that allows for everyone, including those with disabilities, to access information on the web as comprehensively and easily as possible. To test the site's accessibility, we conducted a WAVE test through a website program. WAVE's sole purpose is to evaluate the accessibility of web pages, through entering the web page address and providing feedback. This WAVE test highlighted missing alternative texts, empty links, underlined text, and redundant text titles. These are indicators of poor accessibility on the given web page. There is a general policy to utilize the Web Content Accessibility Guidelines (WCAG) to aid in measuring a website's accessibility. These guidelines say that web content should be perceivable, operable, understandable, and robust.

*Results and Suggestions*

WAVE indicated that the linked images on the bottom left hand side of the page (envelope, credit card, mouse, Facebook/Twitter icons, form) are missing alternative text. Without alternative text, the image will result in an empty link. This is significant for accessibility because if an image is in a link that does not have text and the image does not have alternative text, a screen reader for the visually impaired cannot sufficiently give any context to its user about the image/link's function. To fix this issue, I'd suggest adding concise alternative text that can better describe the content of the image or the link's function.

Additionally, there is an empty link under the Senior Connection Newsletter section that reads as "current and past issues." This lends to poor accessibility because if the link has no text, the function or purpose of the link cannot be shown to the user, and therefore can also cause confusion for users who utilize keyboard and screen readers. To fix this issue, the empty link should be removed, or text should be given within the link that describes the link's function and/or target.

WAVE also indicated broken-same page links: Create an Account (top left), Sign In (top right), and Search (top right). A broken-same page link is when a link to somewhere else on the page is there, but it does not have a corresponding target. If the link relocates the user to another spot on the page, this can aid in navigating the web page, but only if the link target is there. I recommend ensuring that the target for the link is there, or remove the same-page link altogether.

Another alert received from the evaluation was the presence of the following redundant links: current and past issues (under Senior Connection Newsletter), View All (next to Quick Links, Calendar), and Read On (under Calendar>Date>Event). Redundant links mean that adjacent links go to the same URL. When adjacent links go to the same place, this results in more navigation and repetition for those who use keyboard and screen readers. To improve accessibility, I'd suggest combining the redundant links into one link and taking out any redundant text or alternative text.

There were two instances of underlined text on the web page: current and past issues (under Senior Connection Newsletter) and Email (under Contact Us>Diane Mikelbank>Director). Usually, underlined text means that the text is linked. I'd suggest removing the underline from the text, as it is not linked. If you still would like to differentiate these texts, I'd suggest using other styling, such as bold or italics.

Finally, there is redundant title text at numerous places on the page, including current and past issues (under Senior Connection Newsletter), the image under Senior Center, the Friends Group logo (bottom of page), the Find Us on Facebook badge (middle left side of page), and the Monona image (bottom left of page). Redundant title text means that the title attribute text is the same as the text or alternative text. A title attribute value is used to give advisory data. This usually comes out when a user puts the mouse over an element. Advisory information given should not be the same as or very similar to the element text or alternative text. To fix this issue, we suggest removing the title attribute. If this cannot be done, the title text should be changed to give advisory information, instead of redundant information. Keep in mind that title text may or

may not be able to be read by a screen reader, and it is usually inaccessible to those who use sighted keyboards.

## SEO Tests

Test 1: Page Locus Report

- **High priority issues to fix:**
  - o The meta description is too short
  - o Poor header tags—they can be improved
- **Medium priority issues to fix:**
  - o The website IP does not redirect to mymonona.com
  - o STS is not present and HTTP and HTTPS is not present
- **Low priority issues to fix:**
  - o The conversion form is not present in the website
  - o The browser cache is disabled, and we should turn it on
  - o The server response time is too slow
  - o The server information is publicly available—we should make it private
  - o There are no social media pages linked to the website (Facebook, Twitter and Google+)
  - o The website is not listed in DMOZ

Test 2: Search Engine Terms and Results

**Known Terms:**
1. Veterans
2. Seniors
3. BINGO
4. classes
5. Senior volunteer opportunities
6. Senior community
7. Special events
8. Dementia coalition
9. Senior breakfast
10. Assisted living

**Suggested/Possible Synonyms:**
1. Old veteran
2. Elder
3. Elderly
4. Games of chance
5. Senior activities
6. Senior exercise classes
7. early bird breakfast
8. Senior games
9. Senior association

10. Senior society
11. Senior assistance
12. Senior aid

**Initial Findings:**

- Almost all the direct search terms we came up with led directly to the Senior Center page on the Monona website.
- Synonyms created more difficulty and had to be further refined and directed towards the senior center before the web page popped up in the results. Often encountered websites that conflicted with the search intentions.
- Almost every word we came up with had to be bolstered by the word "senior" before it could work. Many other websites offer activities with these keywords without the senior specification so refinement was necessary.

## SEO Analysis

*Background and Methodology*

SEO, or otherwise referred to as "Search Engine Optimization" is an acronym used to describe how frequently and reliably a browser crawler can return a webpage related to the content initially searched for. Most readily, optimizing a webpage for browser searching begins with a site's metadata tags, that most often contain keywords that tie the subject to a broader vocabulary to make browser recall much more effective. To begin, I started by using a third-party application known as Page Locus, a quick online webpage search engine optimization auditor that measures a website's ability on a scale of 1-100 based on 4 different facets of SEO: on site SEO, page speed, social, and authority scores. Later, I took these measurements and thought critically about what tangible measures could reasonably be taken in order to help the site improve its status among a variety of search engines.

*Results and Suggestions*

The mymonona.com website faces many easily addressable search optimization challenges that may help increase web traffic and reduce overall landing page bounce rate. Primary research suggests that the more common, recognizable keywords associated with the mymonona.com site mostly generates results to the correct page. However, there is room for improvement. I generated an abundance of synonyms for more direct metadata tags that may lead certain, otherwise ignored audiences to the correct page. The new mymonona.com development team should use these terms as a rough guide when making changes to the metadata, as these may directly translate to web traffic via browser indexing. Furthermore, I recommend that the mymonona.com developers consider adding hyperlinks or social icons at the top right hand corner of the landing page to increase social community engagement as supplemental source of information and interaction for mymonona's target audiences.

## Overall Suggestions

- Revise and resize the navigation bar, prioritizing the most important information and eliminating redundant/excess page links
- Consider revision to the overall sitemap, make it easier for audiences to understand the overall layout of the site.
- Incorporate and connect social media accounts directly to the website, making it easier for audiences to engage and interact with you and amongst themselves to better facilitate the community
- More accessible images and hyperlinks, using alt text and tags
- Revise "sign up" "sign in" feature of website to make it easier for users to create their own individual account on the site to allow the website to rank its own information per user preferences and frequency to better tailor and personalize the user experience

## Closing

In conclusion, I think that the Univercity Monona website project redesign is largely headed in the right direction. With the high potential as an invaluable resource to the community, mymonona.com needs to seriously reconsider some of the above design, usability, accessibility, and SEO flaws to be able to better provide a quality website experience for all users and audiences, while also simultaneously working to cater to the more specialized visitors, e.g. developers and seniors. I'm very excited to have had the opportunity to make a real impact on the mymonona.com website, and I look forward to seeing what changes are to come.

# SECTION SIX:

# OPEN FOR BUSINESS

UNIVERCITY
BETTER PLACES
TOGETHER

# Navigating 'Open for Business'

## CAPSTONE PROJECT

### BY:

### MICHAEL SZTANSKI

City of
MONONA
WISCONSIN

# Farmers Market Participant

I am a local farmer. I sell many fruits and vegetables. Where do I go to apply to be a vendor at the Monona Farmers Market?

**Tasks:**

- Navigate mymonona.com to find the Open For Business section of the website

- Successfully find the farmers market tab and fill out the Vendor Application

- Save, download and print the completed application document for submission to Stacy Iruk

# Farmers Market Recommendations

- It seems that our users had a fairly easy time navigating to the Farmers Market page and filling out the vendor application.

- One recommendation/suggestion that all users had was to allow users to submit the form online. They thought this would be more helpful and much easier.

- She suggested that it would be easier to find pages if there was less information on the drop down tabs and if there was an email address provided to send her application.

# Public Transportation Participant

I am a UW student looking to get to Madison West HS because I tutor there for their after school activities. How do I get there using public transportation?

**Tasks:**

- Navigate to the my monona website Open For Business tab or website page

- Press on the Monona Transit "More information…" link at the end of the "Metro Transit" subsection.

- Find on the city of Madison transportation page Bus 6. (from UW Campus to West HS)

# Public Transportation Recommendations

- All of our users had a very easy time with the public transportation task. They were able to find this website section and the bus they wanted to take very quickly.

- We recommend keeping this subsection the way it is as it seems to be easy and effective.

- She completed this task in all of 2 minutes and found it very simple and easy to navigate.

# Zoning Participant

I am a local builder looking to request an Area Variance to change some of the dimensions on the building I am currently working on. Where can I find the form to do this?

**Tasks:**

- Navigate mymonona.com to find the Zoning Variance section of the website.

- Successfully locate and fill out the Variance Application Form.

- Save, download, and print the completed document to submit to City of Monona Officials.

# Zoning Recommendations

- One of our users had a very difficult time with this task and ended up getting frustrated and giving up when trying to find and fill out the Variance application. Our other users eventually figured out how to find this application but it seemed to take them a while.

- We would recommend making the Zoning subsection easier to navigate and possibly having a designated section for where one could find all of the applications.

- Our users also recommended that you allow them to submit forms and applications online for their convenience.

# Planning & Community Development Participant

I am a community organizer. I came to Madison in hopes of embracing and educating residents about the racial divide within the community. Where do I go to submit a proposal for a recreational space for residents to join the movement and improve community relations?

**Tasks:**

- Navigate mymonona.com to find the Open For Business section of the website.
- Successfully find the planning & community development tab and read the Responsibilities & Services section to have all your questions answered
- If you need further guidance from a support staff member, find what commission caters to your needs and seek additional information.
- The Comprehensive Plan looks to be a good starting point to download and print the application document.

# Planning & Community Development Recommendations

- Our user was able to complete this task but it took longer than expected. Our user thought that the page was hard to read and it was difficult to distinguish where to find the necessary application.

- We recommend better organizing the layout and organization for this page so it is easier for users to read. We also suggest, like other sections, allowing users to submit these applications online for their convenience.

# Overall Analysis & Suggestions

## How to Fix:

- Add appropriate alternative text that presents the content of the image and/or the function of the link.
- Remove the empty link or provide text within the link that describes the functionality and/or target of that link.
- Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image.
- If a text label for a form control is visible, use the <label> element to associate it with its respective form control. If there is no visible label, either provide an associated label, add a descriptive title attribute to the form control, or reference the label(s).
- Ensure that all headings contain informative content.

# Welcome!

# UniverCity Monona: Accessibility, SEO, and Usability Test Results "Open For Business" Subsite

Talya Evans, Jennie Russnow, Natalie Zimmerman, Lauren Greenberg, Erica Schwartzberg

**The Process**

Ultimately, we used a variety of methods to understand how to make this webpage better and more user-friendly.

**1. Websites used to help check for issues:**

   **Accessibility:**
   - A Checker
   - Wave

   **Search Engine Optimization (SEO):**
   - Raven
   - Page Locus

**2. We conducted interviews to test for issues with <u>usability</u>.**

To test usability, we conducted 5 interviews. In each interview, we gave the respondents to take on a certain character while using the website. We observed their behaviors and asked them to talk out loud while trying to maneuver through the site.

*<u>Scenario:</u>* Pretend you are a woman around the age of 45 and have two children. You and your whole family live in the town of Monona. Summer is approaching and you want to plan some activities you and your family can do during the weekend. You need to look at transportation schedules because you are planning on going to the farmers market.

**3. Aside from these formal testing, we also used our own knowledge and opinions to recommend how to fix this website.**

# Part 1: Accessibility Conclusions

In terms of accessibility, the three biggest issues involve broken same-page links, low contrasts, and missing alt tags.

- ***Defining these issues:***
  - Broken same-page link: this means that the link that lets a user jump from one page to another is broken.
  - Very low contrast**:** this means that the website is hard to read because the background color and font color are not contrasted well enough.
  - Missing alt tags: this means that there is no alternative text included with the image. Therefore, if the image does not show up, the user will not know what is supposed to be there.
- ***How to fix these issues:***
  - Broken same-page links
    - Make sure you have entered the correct URL.
  - Low contrast
    - Consider a darker background with a much lighter font color OR consider a much lighter background with a much darker font.
  - Missing alt tags
    - Include a short description about what the image is showing.
- ***The following issues are specified below:***
  - Broken same-page links for:
    - The "sign in" button on the top right
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    - The "create an account" section
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    - "Link to page" link
    - The white words in the orange box on the left side of the page
  - Missing an alt tag for:
    - The symbols next to:
      - "Notify Me"
      - "Online Payments"
      - "Report a concern"
      - "Connect with Monona"
      - "Online Forms"

Aside from these three major issues, other issues include:

- The site's browser **cache** is disabled. By enabling website cache, you can improve user experience and even lower server load.
- The **server response** time is slow in responding to any request. Try to reduce your server response time under 200 ms.

Ultimately, the website is mobile friendly but loads pretty slow.

# Part 2: SEO Conclusions

**What is SEO?**
- **SEO (Search Engine Optimization):** maximizing the number of visitors to a website by ensuring that the site appears high on the list of results returned by a search engine.

We used Raven and Page Locus to check any issues regarding SEO. As a result, we came up with the following conclusions:
- Metadata description is too short
- There are too many H1 tags

We suggest that you consider adding **conversion forms** (forms that help websites convert visitors into subscribers, leads, or customers) on your web page to give the user an option to get in touch with you easily. Making most of the traffic coming to your website by adding a conversion form can really boost your conversion rate and get you more users to visit your website.

Additionally, we suggest that you consider listing the website to the **DMOZ website**, which is an open-content directory of the World Wide Web links. This can definitely boost your search engine ranking.

**What keywords will bring people to this site?**
_Keyword Suggestions:_
- Business
- Transportation
- Market
- Farmer's
- Local
- Routes
- Bus
- Monona
- Assessor
- Marketplace
- Directory
- Planning
- Development
- Community
- Public
- Zoning
- Permits
- Inspections

# Part 3: Usability Test Conclusions

To test usability, we conducted 5 interviews. In each interview, we gave the respondents to take on a certain character while using the website. We observed their behaviors and asked them to talk out loud while trying to maneuver through the site.

***Scenario:*** Pretend you are a woman around the age of 45 and have two children. You and your whole family live in the town of Monona. Summer is approaching and you want to plan some activities you and your family can do during the weekend. You need to look at transportation schedules because you are planning on going to the farmers market.

**Reoccurring themes found in our interviews:**

- **Ultimately, users found that there were too many steps to get from one place to the next. They also just don't know where to click.**
    - *"There are too many things to click"*
    - *"How come when I click on certain things, a million different tabs pop up on my computer?"*
    - *"Is there a place where all of the information is just on one concise page, I don't know where to start or what to click… I give up"*
    - *"Not useful to link to apps via a computer, gets messy."*
    - *"Too many links, would be more organized with less clicks."*
- **Additionally, users find it frustrating that there is no option to return back to the home page, especially when they click on a link that takes them to a totally new website.**
    - *"How do I get back to the home page?"*
    - *"I was confused when the original sidebar with links to pages completely disappeared when I clicked on one of the pages."*
    - *Why are there links to other pages in the middle of the page and on the side? Do they link to different pages, or the same?"*
- **Transportation section, a very important section, is confusing for a lot of users.**
    - *"I find it confusing that transportation is under the open for business"*
    - *"I can't figure out the different stops on the bus route link."*
    - *"What are each loop?"*
- **The users don't know that some of the links that are meant to be clicked on should be clicked on. Additionally, the low contrast on the website further contributes to this problem.**
    - *"I have trouble seeing the "Link to page" links below the headings because the bad contrast"*

- o "It's hard to notice that there's a link that goes to the Farmer's Market because it kind of blends into the page"
- **Users want more information on the Farmer's Market. There is too much information that is too spread out. Ultimately, users just want the information they came for.**
  - o *"I notice that there was a lot of useful information, almost too much – it makes the website overwhelming"*
  - o *"Would prefer to have the options and categories under new business ranked in terms of priority, not alphabetized."*

## Part 4: Conclusion & Suggestions

Based on our test results, we can conclude that the website needs a little more organization.

- We suggest:
    - Creating less of a confusing path to get from one page to the next
    - Creating a link to allow users to click back to the home button whenever they jump to a new page
    - Condensing information
    - Prioritizing in terms of important, rather than alphabetically, the "New Business" section category options

Additionally, the color of the fonts and background needs to be changed to fix the low contrast issue and make it more user-friendly.

- We suggest:
    - A clean, very light background
    - A dark font

Finally, we also suggest using different keywords (as suggested in the SEO section of the report) to create better Search Engine Optimization. This will allow users to find this subsite when they search questions related to it.

**UniverCity Monona: Accessibility, SEO, and Usability Test Results**
**"Open For Business" Subsite**

**LIS 351**
**Digital Studies Capstone Project**
**Talya Evans**

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**What is SEO?**
- **SEO (Search Engine Optimization):** maximizing the number of visitors to a website by ensuring that the site appears high on the list of results returned by a search engine.

We used *Raven* and *Page Locus* to check any issues regarding SEO. As a result, we came up with the following conclusions:
- Metadata description is too short
- There are too many H1 tags

We suggest that you consider adding **conversion forms** (forms that help websites convert visitors into subscribers, leads, or customers) on your web page to give the user an option to get in touch with you easily. Making most of the traffic coming to your website by adding a conversion form can really boost your conversion rate and get you more users to visit your website.

Additionally, we suggest that you consider listing the website to the **DMOZ website**, which is an open-content directory of the World Wide Web links. This can definitely boost your search engine ranking.

**What keywords will bring people to this site?**
*Keyword Suggestions:*
- Business
- Transportation
- Market
- Farmer's
- Local
- Routes
- Bus
- Monona
- Assessor
- Marketplace
- Directory
- Planning
- Development
- Community
- Public
- Zoning
- Permits
- Inspections

# Part 3: Usability Test Conclusions

To test usability, we conducted 5 interviews. In each interview, we gave the respondents to take on a certain character while using the website. We observed their behaviors and asked them to talk out loud while trying to maneuver through the site.

*__Scenario:__* Pretend you are a woman around the age of 45 and have two children. You and your whole family live in the town of Monona. Summer is approaching and you want to plan some activities you and your family can do during the weekend. You need to look at transportation schedules because you are planning on going to the farmers market.

**Reoccurring themes found in our interviews:**

- **Ultimately, users found that there were too many steps to get from one place to the next. They also just don't know where to click.**
    - *"There are too many things to click"*
    - *"How come when I click on certain things, a million different tabs pop up on my computer?"*
    - *"Is there a place where all of the information is just on one concise page, I don't know where to start or what to click… I give up"*
    - *"Not useful to link to apps via a computer, gets messy."*
    - *"Too many links, would be more organized with less clicks."*
- **Additionally, users find it frustrating that there is no option to return back to the home page, especially when they click on a link that takes them to a totally new website.**
    - *"How do I get back to the home page?"*
    - *"I was confused when the original sidebar with links to pages completely disappeared when I clicked on one of the pages."*
    - *Why are there links to other pages in the middle of the page and on the side? Do they link to different pages, or the same?"*
- **Transportation section, a very important section, is confusing for a lot of users.**
    - *"I find it confusing that transportation is under the open for business"*
    - *"I can't figure out the different stops on the bus route link."*
    - *"What are each loop?"*
- **The users don't know that some of the links that are meant to be clicked on should be clicked on. Additionally, the low contrast on the website further contributes to this problem.**
    - *"I have trouble seeing the "Link to page" links below the headings because the bad contrast"*

- o "It's hard to notice that there's a link that goes to the Farmer's Market because it kind of blends into the page"
- **Users want more information on the Farmer's Market. There is too much information that is too spread out. Ultimately, users just want the information they came for.**
  - o *"I notice that there was a lot of useful information, almost too much – it makes the website overwhelming"*
  - o *"Would prefer to have the options and categories under new business ranked in terms of priority, not alphabetized."*

# Part 4: Conclusion & Suggestions

Based on our test results, we can conclude that the website needs a little more organization.
- We suggest:
    - Creating less of a confusing path to get from one page to the next
    - Creating a link to allow users to click back to the home button whenever they jump to a new page
    - Condensing information
    - Prioritizing in terms of important, rather than alphabetically, the "New Business" section category options

Additionally, the color of the fonts and background needs to be changed to fix the low contrast issue and make it more user-friendly.
- We suggest:
    - A clean, very light background
    - A dark font

Finally, we also suggest using different keywords (as suggested in the SEO section of the report) to create better Search Engine Optimization. This will allow users to find this subsite when they search questions related to it.

**Limitations of this study:**
- We all interviewed college students and made them pretend that they were a part of the demographic that would probably use this website. If we were able to further test for this study, we would like to interview older people so we could get their real, actual thoughts. Also, I would like to interview more people in the future.

# Appendix: Interview notes from original project

- ***Talya's Interview:*** Interviewed Jordan Schepps
  - When looking for information on the Farmer's Market, tried clicking on the blue word "Farmers Market," not the little orange "link to page"
    - Said that it was hard to notice the link to the page because it blends in
  - When trying to go back, she was confused that she was no longer on the Monona website and didn't realize that she was directed to an entirely new page
  - To look for public transportation:
    - "There are too many things to click"
    - "How do I get back to the home page?"
    - "How come when I click on certain things, a million different tabs pop up on my computer?"
    - "Is there a place where all of the information is just on one concise page, I don't know where to start or what to click… I give up"
- ***Jennie's Interview:*** Interviewed Hayley Trichon
  - Had trouble seeing the "Link to page" links below headings because of the low contrast
  - Was confused when the original sidebar with links to pages completely disappeared when she clicked on one of the pages
  - Noticed that there was a lot of useful information, almost too much - made the website overwhelming
    - "Why are there links to other pages in the middle of the page and on the side? Do they link to different pages, or the same?"
- ***Natalie's Interview:*** Interviewed Kiki Lazic
  - Would prefer to have the options and categories under new business ranked in terms of priority, not alphabetized
  - Too many links, would be more organized with less clicks
    - Specifically would prefer public transport times, etc. to be not hyperlinked, but on the site itself
  - Found it unclear to decipher where the route begins
    - "What are each loop?"
  - Not useful to link to apps via a computer, gets messy
- ***Lauren's Interview:*** Interviewed Danielle Lindenbaum

- ○ Clicked on Farmers' market tab first then on the map to look to see where it is located
- ○ Used the street view and zoomed in and out
- ○ Went back to Farmers' market tab and clicked to learn more about the vendors and then clicked on the entertainment line up to see who was performing when
- ○ Then clicked on FAQ tab to do research on the farmers' market
- ○ She then went back to the "open for business" tab and clicked on the public transportation link to learn more about how to get to the Farmers' market
- ○ Clicked on the Monona Express tab and viewed the routes, fares and schedule
- ○ Then she looked into the PDF of the morning route of the express schedule and then did the same for the P.M. route and then looked at the fares at the bottom of the page
- ○ She then went back to the tab and clicked on the bus schedule and looked at the map of the bus schedule

- ● **Erica's Interview:** interviewed Alex Friedman
  - ○ She finds it confusing that transportation is under the open for business
  - ○ She could not figure out the different stop on the bus route link
  - ○ She also thought is was confusing to get back to the home page once she was on another side page
  - ○ She felt there was not enough information on the farmers market page
  - ○ "What was at the market exactly?"

**Open For Business**
URL: http://mymonona.com/35/Open-for-Business
Reported by: Danielle Medin, Alyssa Rothman, Jane Fleming, Michael Sztanski, Amanda Fogel

**Steps to Produce: Usability - Task Scenarios**
As a group, we asked our peers to participate in an experiment to test the Usability of the pages on the Open For Business tab. We explained to them the below tasks and told them to try to get to the necessary pages to complete the task. We asked them to say what they were doing and clicking on aloud so we could understand their thought process while trying to navigate through the site. Below you can find our notes on how they tried to find the pages, showing any difficulties they faced along the way. We have **bolded** the suggestions our participants made.

**1. Farmers Market:**
I am a local farmer. I sell many fruits and vegetables. Where do I go to apply to be a vendor at the Monona Farmers Market?
Tasks:
1.  Navigate mymonona.com to find the Open For Business section of the website
2.  Successfully find the farmers market tab and fill out the Vendor Application
3.  Save, download and print the completed application document for submission to Stacy Iruk

**2. Public Transportation:**
I am a UW student looking to get to Madison West HS because I tutor there for their after school activities.  How do I get there using public transportation?
Tasks:
1.  Navigate to the my monona website Open For Business tab or website page
2.  Press on the Monona Transit "More information…" link at the end of the "Metro Transit" subsection.
3.  Find on the city of Madison transportation page Bus 6. (frm UW Campus to West HS)

**3. Zoning Application**
I am a local builder looking to request an Area Variance to change some of the dimensions on the building I am currently working on. Where can I find the form to do this?
Tasks:
1.  Navigate mymonona.com to find the Zoning Variance section of the website.
2.  Successfully locate and fill out the Variance Application Form.
3.  Save, download, and print the completed document to submit to City of Monona Officials.

**4. Planning & Community Development:**

I am a community organizer. I came to Madison in hopes of embracing and educating residents about the racial divide within the community. Where do I go to submit a proposal for a recreational space for residents to join the movement and improve community relations?
Tasks:

1. Navigate mymonona.com to find the Open For Business section of the website.
2. Successfully find the planning & community development tab and read the Responsibilities & Services section to have all your questions answered
3. If you need further guidance from a support staff member, find what commission caters to your needs and seek additional information.
4. The Comprehensive Plan looks to be a good starting point to download and print the application document.

**5. Bid Postings:**
I am a contractor looking for property to build on property in the city of Monona. Where do I go to learn about current bid opportunities in the city?
Tasks:
1. Navigate to mymonona.com to the Open For Business sectoin of the website.
2. Successfully find the Bid postings tab and use the tabs provided to narrow your search.
3. If there are no bids available at the moment, click the sign up link to receive a text message or email when new bids are added.

**Results: How Participants Completed the Tasks**
**Farmers Market**
1.
- First my friend started by hovering her mouse over all of the drop downs looking for the farmers market tab.  Some drop downs she had to scroll down the page to see the end and got frustrated when the tab closed out.  Finally she reached the open for business tab and pressed on the "Farmers Market" link.
- This then brought her to the mononafarmersmarket.com website. She first pressed the "Vendor" link on the top of the webpage.   She then took some time to read the paragraphs and found three different vendor applications. She was not sure whether to press the normal vendor application, the non-profit vendor application, or the mobile food vendor application.  She just opened the regular application, as I instructed.
- I advised her not to fill out the application, but to proceed as if she did.  She then saved the file and returned to the previous page.  She then found the address to send the application to very easily.  **She expressed that it would be easier to just fax or email the application in rather than mail it to the PO box specified.**
- **She suggested that it would be easier to find pages if there was less information on the drop down tabs and if there was an email address provided to send her application.**


2.

- She hovered over the Open for Business tab and click on the farmers market link in the drop down menu.
- She seemed surprised when this link took her to a completely different website.
- She scrolled down the page to skim for the vendor application but couldn't seem to find it. she then scrolled back up and clicked on the vendors tab.
- She clicked on the Vendor Application link and filled it out pretending that she would sell baked goods at the market.
- She saved the PDF and said she would have printed it if this was a real scenario.
- **Again she wished that she could have submitted it online so she didn't have to walk to a library to print it.**

**Public Transportation**
1.
- First my friend scrolled down the mymonona web page. Upon reading the tabs on the left side of the page she pressed the "City Maps" button. She then went through two pages on the maps page to find this was not the correct location she should be in. She then pressed the back arrow to return to the main page, and did not notice the side bar still on that page.
- She continued to read the list and pressed Monona transit. This then brought her to the public transportation page. She then asked me if she should press the MTA link or one of the other forms of transit (ex: express or lift). I did not tell her which to pick so she picked the Mass Transit Authority link. This then brought her to the Mass Transit Commission page, which is not what she was expecting, since that was not what the link indicated. She scrolled down the page and pressed on the public transportation link which brought her back to the original page she was on.
- She then read through the page and realized the Metro Transit was the appropriate form of transportation for her so she pressed the "more info…" link. She then pressed "Routes and Schedules" link, bringing her to the City of Madison Metro Transit website.
- She then read through the choices of busses and saw that bus route 5 brings her to East HS but didn't stop at the campus. She continued to head and saw that bus 6 was the bus for her to take.

2.
- Immediately after hearing the prompt my friend scrolled over the "I want to..." tab and clicked "Public Transportation" under the find tab.
- She then scrolled down and clicked "Metro Transit" within 2 seconds.
- From there immediately clicked "routes and schedules" bringing her to the service chart where she found the route to get to Madison West HS.
- She completed this task in all of 2 minutes and found it very simple and easy to navigate.

3.

- First, I introduced the website to my friend and had him naturally navigate the website to get a general feel for the layout. He selected the 'Open For Business' tab and had little to no difficulty finding it.
- He then effortlessly scrolled down to Public Transportation where he was redirected to another page.
- It took him a second to locate the boldface 'metro transit' section and even commented how the different colored fonts confused him. Although it took him longer than expected, he located the 'more information tab' and continued to follow the given instructions
- After clicking the recommended tab, it was pretty self explanatory from there.
- When he noticed that the 16 bus was the only result to appear, it was his natural intuition that lead him to selecting 'routes and schedules.'
- At this point he was able to easily scroll down to the suggested bus stop and number where he was given all of the necessary information to get to the desired location.

**Zoning**
1.
- First my friend pressed the "zoning board of appeals" link from the my government tab and realized she was not in the correct place.
- She then went to the Your services tab and pressed the Building Permit Application. I then told her that unfortunately, that was not the correct application to fill out and recommended she focus on variance. She then saw on the right side of the page under "Documents and Downloads" a "Variance Information and Application" link.
- There she found the correct application. **And again said it would be easier to just scan and email the form to the office it needed to be sent to**.
- While this is a different way to find the application than we suggested it be found, it did not take that long.

2.
- First after reading my friend the task and the my monona website homepage was open, she scrolled over the "Your Services" tab and looked at that one for a while. Then the same with the "Our Community" tab.
- It took her about 3 minutes to finally click on the "Open for Business" tab.
- Once on the "Open for Business" tab she scrolled around a lot. Scrolled up and down and kept hovering her mouse over the highlighted words to see if anything popped up.
- She then found the "Sign & Zoning Permits" link and clicked it.
- After that she immediately clicked "Zoning Variance".
- She stayed on this page for the remainder of the time until she gave up very frustrated.

3.
- She first scrolled over the Your Services tab to find the zoning permits section but when she didn't see anything useful in that drop down menu she moved over and looked at the Open for business tab.
- She clicked on sign & zoning permits in the Open for Business drop down menu.
- She then scrolled over to the orange menu on the left side of the page and hesitated before clicking, mentioning that she had to look back at the task to see if she needed to navigate to zoning variance or zoning permits.

- She clicked on zoning variance and scrolled down until she saw the link to fill out the Variance Application Form.
- She clicked on it and filled it out **but mentioned that it would be much easier if she could just email it to someone or submit the form online.**

4.
- My friend spent some time scrolling over the tabs on the homepage and reading their sub categories. She originally clicked on the "our community" tab but did realize soon after that she was wrong.
- She went back and next clicked the "open for business" tab and saw the zoning permits section.
- She then scrolled over to the orange menu on the left side of the page. I could tell she was unsure and she asked what the difference was between zoning variance and zoning permits.
- She clicked on zoning variance and scrolled down until she saw the link to fill out the Variance Application Form. She pressed this and filled out the form.
- **However, she said it would be easier if she could just directly submit it online.**

**Bid Postings**
1.
- My friend first logged onto the website and found the open for business tab right away. she wasn't sure if she should click on the section as a whole or move her mouse over to the specific link she needed to click on. she ended up clicking on Open for business.
- She moved her mouse over to the bid postings link on the left side of the page and clicked on it.
- There were no open bids at the time but she checked the "show closed/cancelled bids" box to see if anything popped up. When they did, she scrolled down to skim all of them.
- She then scrolled back up and clicked on the sign up link to receive alerts when new bids are posted. She entered her email address to subscribe and hit "sign in"
- Although she said she didn't really know what bid posting were, she though this task was pretty simple.

2.
- First, my friend logged onto the website and scrolled over the tabs at the top of the page and immediately found "open for business" and clicked on it.
- She then looked at the tabs on the side, taking a few seconds to read them, and then clicked on bid postings when she saw it.
- She saw that there were no open bids at the time and thought she had reached the end of her search. She did not bother to click on "show closed/cancelled bids" to check this section out. However, she did click on the sign up link to receive alerts for new bid postings. She didn't want to enter her email because she didn't want to disclose her email address.
- Although she did not find many helpful results from this search, she had a fairly easy time with the task.

**Planning & Community Development**

1.
- First, my mom was instantly intrigued by the website and had a rather difficult time navigating the website from the given directions. It seemed quite clear that she was unaware of what the 'Open For Business' tab was and needed some extra effort to realize that you hover over it to see further options.
- After locating the Planning & Community Development tab, she selected it where she was taken to another page.
- **This page was poorly created in her opinion because the font was all the same size and had no variation. The spacing was also of great concern since it all looked like one paragraph.**
- After some reassurance she was able to locate the 'plan commission' tab, which was luckily the first option.
- From here, she just had to read through all of the information to gain a greater understanding of how to go about her desired task.
- While it did take longer than expected, in the end she was able to successfully follow the directions and navigate the site to find the application document.

## Overall Analysis and Recommendations

Farmers Market task:
- It seems that our users had a fairly easy time navigating to the Farmers Market page and filling out the vendor application.
- One recommendation/suggestion that all users had was to allow users to submit the form online. They thought this would be more helpful and much easier.

Public Transportation task:
- All of our users had a very easy time with the public transportation task. They were able to find this website section and the bus they wanted to take very quickly.
- We recommend keeping this subsection the way it is as it seems to be easy and effective.

Zoning task:
- One of our users had a very difficult time with this task and ended up getting frustrated and giving up when trying to find and fill out the Variance application. Our other users eventually figured out how to find this application but it seemed to take them a while.
- We would recommend making the Zoning subsection easier to navigate and possibly having a designated section for where one could find all of the applications.
- Our users also recommended that you allow them to submit forms and applications online for their convenience.

Bid Postings task:
- Both users thought this task was very simple. They did not really understand what bid postings were, but said that this portion of the site was easy to understand and navigate.
- We suggest leaving this section of the site as is.

Planning & Community Development task:
- Our user was able to complete this task but it took longer than expected. Our user thought that the page was hard to read and it was difficult to distinguish where to find the necessary application.

- We recommend better organizing the layout and organization for this page so it is easier for users to read. We also suggest, like other sections, allowing users to submit these applications online for their convenience.

**<u>Accessibility</u>**
Used [www.wave.webaim.org](www.wave.webaim.org) to analyze the errors and alerts on the Open for Business subsites.

Open for Business Subsite
- 7 errors
  - 5 linked images missing alternative texts
    - **How to fix**: Add appropriate alternative text that presents the content of the image and/or the function of the link.
  - 2 empty links
    - **How to fix**: Remove the empty link or provide text within the link that describes the functionality and/or target of that link.
- 30 alerts
  - 1 justified text
  - 2 skipped heading levels
  - 24 broken same page links
  - 2 no script elements
  - 1 redundant title text

Farmers Market Tab
- 5 errors
  - 1 missing alternative text
    - Location: Madison's Magazine Best of Madison Image
    - **How to fix**: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image.
  - 1 linked image missing alternative text
    - Location: Finger next to "Friend us on Facebook"
    - **How to fix**: Add appropriate alternative text that presents the content of the image and/or the function of the link.
  - 2 missing from label
    - Location: Next to the blank's in Current Year and Leave this Field Empty
    - **How to fix:** If a text label for a form control is visible, use the <label> element to associate it with its respective form control. If there is no visible label, either provide an associated label, add a descriptive title attribute to the form control, or reference the label(s) using aria-labelledby.
  - 1 empty heading
    - Location: Above "Friend us on Facebook"
    - **How to fix**: Ensure that all headings contain informative content.

Public Transportation Tab
- 8 errors
  - 1 missing alternative text

- **How to fix**: Ensure that all headings contain informative content.
  - ○ 5 linked images missing alternative texts
    - ■ **How to fix**: Add appropriate alternative text that presents the content of the image and/or the function of the link.
  - ○ 2 empty links
    - ■ **How to fix**: Remove the empty link or provide text within the link that describes the functionality and/or target of that link.
- 35 alerts
  - ○ 24 borken same page links
  - ○ 2 suspicious link text
  - ○ 3 redundant title text
  - ○ 2 noscript elements
  - ○ 1 justified text
  - ○ 1 skipped heading level
  - ○ 2 underlined texts

## SEO
On-site SEO Score: 75/100
Page Speed Score: 77/100
Social Score: 0/100
Authority Score: 38/100

High Priority Errors
- Meta Description - no description, Description Length :  0 (Too Short)
- Poor header tags

Moderate Priority Errors
- IP Canonicalization - Oops!!! Your website IP - 208.90.191.65 doesn't redirect to - mymonona.com
- HTTPS - STS not present, HTTP to HTTPS redirection

Low Priority Errors
- W3C Validity - too many errors
- Conversion Form - Oops!!! Conversion Form is not present in your website.
- Number of requests - 60
- Browser Cache - Disabled - Enabling Website Cache can improve user experience and even lower server load
- Server Response Time - slow in responding to any request
- Mobile Friendly Overview
- Mobile Size Content Viewport - Content is greater than the device screen
- Mobile Tap Easy - links too small to click on
- No Facebook or Twitter Page
- Website not listed in DMOZ
- Server Signature - server info is publicly available

# University Monona Project Final Report

**Class:** LIS351 Sec 306
**Date:** Dec 12, 2016
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## Part 1. University Monona Project Accessibility Final Results

**Description:**
We used WAVE (http://wave.webaim.org/) to complete the Accessibility Test, and the results are below:

**Actual Results (Errors):**

1 X Missing alternative text
- Meaning: Image alternative text is not present.
- Why is it important:  Every image should have an alt attribute. If there is no alternative text, it will be unavailable for screen reader users and when the image cannot appear correctly.
- How to fix it: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="")

5 X Linked image missing alternative text
- Meaning: An image without alternative text results in an empty link.
- Why is it important: If only the image in a link and there is no alternative text to explain the image, it may make users confused about the function of the link.
- How to fix it: Add appropriate alternative text that presents the content of the image and/or the function of the link.

2 X Empty link
- Meaning: A link contains no text.
- Why is it important: If there is no text for a link, the keyboard and screen reader users may be confused about the purpose of the link.

- **How to fix it**: Remove the empty link or provide text within the link that describes the functionality and/or target of that link.

**Alerts:**

1 X Justified text
- Meaning: Fully justified text is present.
- How to fix it: Remove the full justification from the text.

2 X Skipped heading level
- Meaning: A heading level is skipped.
- How to fix it: Restructure the document headings to ensure that heading levels are not skipped.

24 X Broken same-page link
- Meaning: A link to another location within the page is present but does not have a corresponding target.
- Why is it important: Only when a link target exists, the link to go to another position within that page can help users in navigating the web page.
- How to fix it: Ensure that the target for the link exists or remove the the same-page link.

2 X Noscript element
- Meaning: A <noscript> element is present.
- How to fix it: Ensure that scripted content is accessible. The <noscript> content will be presented to very few users, but must be accessible if used.

1 X Redundant title text
- Meaning: Title attribute text is the same as text or alternative text.
- How to fix it: In most cases the title attribute can be removed, otherwise modify it to provide advisory, but not redundant information. Note that the title text may or may not be read by a screen reader and is typically inaccessible to sighted keyboard users.

### Part 2. University Monona Project SEO Reports Final Results

**Description:**
We used Page Locus (http://www.pagelocus.com/) to complete the SEO Reports Test, and the results are below:

**Actual Results:**

## 1) IP Canonicalization (moderate priority)

- Problem: Website IP - 208.90.191.65 does not redirect to - mymonona.com.
- How to Fix It:
  - Make sure your website IP redirects to - mymonona.com.
- Explanation: Canonicalization is said to be present when http://[website IP] redirects to http://[website url]. The canonicalization problem occurs, when a website's IP address and domain name redirects to the same webpage, but does not resolve to the same URL.
- Why It Is Important: If non-www version of your website does not redirect to www version of your website then search engines treat those versions as duplicate content.

## 2) Meta description (high priority)

- Problem: Description length is too short - 0.
- How to Fix It:
  - Do not make extensive use of keywords in your meta description, but try to give a short description of the web page that is helpful to the users.
- Explanation: Meta description is the small description or the snippet which is available in the search result along with the url and your web page title.
- Why It Is Important: Search engines uses meta description to get brief information about the website. If you can optimize your web page meta description in accordance with your web page content then you'll find more people clicking on your search result.

## 3) Header tags (high priority)

- Problem: Marked as poor.
- How to Fix It:
  - Make sure every web page has one H1 tag (not multiple).
- Explanation: Header Tags are of real and vital importance in SEO landscape. Eg of Header Tags H1, H2, H3, H4, H5 and H6. Make sure every web page has one and only one H1 tags and then you can have any number of other header tags (according to your need). In this case, the website has no H1 tags.
- Why It Is Important: Header tags are used by search engines to get extra information about the website to provide relevant search results to the users.

## 4) Conversion Form (low priority)

- Problem: No conversion form is present on the subsite.
- How to Fix It:
  - Add a conversion form above the fold (first half of your website) and don't ask for too much information.

- ○ Simply ask Email, Name and Message. Then the rate of conversion will increase.
- ● Explanation: Adding conversion forms on your web page give user an option to get in touch with you easily. That user can be your prospective customer.
- ● Why It Is Important: Making most of the traffic coming to your website by adding a conversion form can really boost your conversion rate and can get you more customers.

## 5) HTTPS (moderate priority)
- ● Problem: STS is not present (Strict-Transport-Security Header), HTTP to HTTPS redirection issue.
- ● How to Fix It:
    - ○ Make sure that your HTTP website redirects (301 Permanent) to HTTPS for all URLs.
    - ○ Include Strict-Transport-Security Header (STS Wikipedia).
    - ○ Buy SSL from a recognized Company (ex: Comodo, Godaddy).
- ● Explanation: Google has officially announced on their blog post that HTTPS will be a ranking signal.

## Part 3. University Monona Project Final Searching Terms Results

**-Description**
       **-Summary**
       We individually examined the **open for business** subpage
http://mymonona.com/35/Open-for-Business for 6 sorts of terms which we want them to rank highly on search engine results page.

**Terms 1:**
       **-What happened?**
       We searched tems **transportation, transit, public transportation** in Google search engine and analyzed the results.

       **-What's the results?**
       When searching these terms, the same subsite page for Public Transportation on the City of Monona website was the top 5th search result in Google.

       **-Supporting information**
       There is no need to improve it.

**Terms 2:**
       **-What happened?**

We searched terms **sign, sign application** in Google search engine and analyzed the results.

**-What's the results?**
Results bring up the sub-site directly related to Sign Permits.

**-Supporting information**
There is no need to improve it.

**Terms 3:**
**-What happened?**
We searched terms **business directory, business** in Google search engine and analyzed the results.

**-What's the results?**
Results for business directory directly bring up the Open for Business subsite but not the specific Business Directory page. When searching the term business, the Monona East Side Business Alliance page pops up before the business directory page

**-Supporting information**
It can be improved by adding "business directory" and "business" to the searching list for "Business Directory" page.

**Terms 4:**
**-What happened?**
We searched terms **flea market** in Google search engine and analyzed the results.

**-What are the results?**
Results show Monona Farmers' Market on the top of the list. It's on the 2nd top search result.

**-Supporting information**
There is no need to improve it.

**Terms 4:**
**-What happened?**
We searched terms **bid, bidding** in Google search engine and analyzed the results.

**-What are the results?**
Results show Bid Posting page on the very top of the search results Monona Farmers' Market on the top of the list. It's on the 2nd tops.

**-Supporting information**

There is no need to improve it.

**Terms 4:**

**-What happened?**

We searched terms **community activity** in Google search engine and analyzed the results.

**-What are the results?**

Results show the Classes/Activity subsite on the top of the list, and the Community Center subsite on the second of the list. But what I want to search for is the Planning & Community Development, and it is not on the first page of the search result.

**-Supporting information**

To improve it, add "community activity" to the searching terms list for Planning & Community Development.

**Steps to reproduce**

1.Identify a list of 5-7 terms from **open for business** subpage.

2. Brainstorm synonyms for the terms in your list.

4. Plug in these synonyms + Monona in search engines and analyze the results.

5. Is the language/terminology consistent? If not, begin thinking of suggestions for improvement.

**Work around (Suggestion):**

Test more often used terms on **open for business** subpage as well as other subpages. Add those possible synonyms to the searching terms list for corresponding content.

## Part 4: University Monona Project Final Usability Results

**Description**

**Summary:**

We looked through **http://mymonona.com/35/Open-for-Business**, in order to test if the website is user friendly and if any user will be able to find the part that they need on this website, we developed 4 tasks in which users have different goals in each scenario, and they need to find useful information on the website to solve their problems.

**Task 1:**

We developed this scenario for users to be the host of an event, and they want to use the Monona building as a hosting place, and we ask users to find the application to get the permit of using the building.

**The question we asked:**
I am a host of an event, and I'd like to use the Monona building as the place. Where do I find the application to have the permit?

**Correct procedure to finish this task:**
It should be in this link: http://mymonona.com/125/Building-Inspection)

    1)    Navigate http://mymonona.com/35/Open-for-Business to find Building Permit Application (under building inspection)

    2) Successfully fill out the building permit application

    3) Save, download and print the completed document for submission to City of Monona officials

**What happened (The steps each user went through to finish the task):**
*The struggles they went through are highlighted in yellow

**User 1:**
a.    Used the direct link to building inspection page.
b.    Found building permit application at the bottom of the page.
c.    Clicked the link and got directed to application, downloaded and filled out the form.

**User 2:**
a.    Clicked the direct link to go to the building inspection page
b.    Scrolled down and clicked the building permit application link. Download it and filled out the the application.

**User 3:**
a.    Clicked the direct link to go to the building inspection page
b.    Clicked the building permit application link and was directed to the application. Successfully downloaded and filled it.

**User 4:**
a.    Clicked "Business directory"
b.    Clicked "Building inspection", found building permit application, downloaded and filled it out, saved.

**Actual results:**
All 4 users successfully found the building permit application and were all able to download and fill that out.

**Work around:**

All users successfully finished the task. Nothing much to improve

**Task 2:**

We developed this scenario for users to be a musician who want to attend the entertainment event and needs to register.

**The question we asked:**
I am a musician. Where do I go to find 2016 musician registration form to take part in the entertainment event?

**Correct procedure to finish this task:**
 1) Navigate
http://mymonona.com/35/Open-for-Business to find 2016 Musician Registration Form

2) Successfully fill out the 2016 Musician Registration Form

3) Save, download and print the completed document for submission to City of Monona officials
**http://mononafarmersmarket.com/wp-content/uploads/2016/01/music2016.pdf**

**What happened (The steps each user went through to finish the task):**

**User 1:**
a.      Read the titles on the page one by one and noticed the description of "Farms Market" including "time and place"
b.      Used the direct link to farmers market page.
c.      Clicked the "check out" link under 2016 Entertainment Line-Up section.
d.      Found musician application after musician line-up schedule.
e.      Clicked the link and got directed to application. Downloaded the form and filled it out.

**User 2:**
a.      Searched "2016 Musician Registration Form, didn't find the result.
b.       Clicked "Your Services" , then went under the "Your Government", then went under "Our Community"
c.      Went to "I Want To…", then went back to "Open for business"
d.      Scrolled down, went through "Farmers Market", "Monona Market", and "Riverfront Development", but she didn't click or enter those links, didn't find anything she's looking for, said" there's no music or anything related to musician"
e.       Didn't found and gave up

**User 3:**

a.        Said "It must be something of 'Our Community", and clicked on "Our Community" side page which is parallel to "Open for Bussiness"

b.        Skimmed the column to the left side of the "Our Community" sidepage

c.        Paused on the "Community Media" title and clicked it

d.        Scanned the side titles inside the side page but couldn't find it and returned to "Open for Business" page

e.        Guessed " would it be activities in farmers market?"

f.        Clicked on the "Farmers Market" title but nothing came out

g.        Paused a second and clicked on "Link to page" yellow words below to get into the page and scrolled down.

h.         Almost ignored the bottom and tried to exit

F          Noticed the "entertainment" word on the bottom

i.        Clicked on the "2016 entertainment lineup"

j.        Clicked "view all events"

k.        Found the music application page and downloaded it and finished it.

**User 4:**

a.  Clicked "Planning and community development" but failed to open any page

b.  Went to "Link to page" below and didn't found any useful information then exited

c.  Paused on "Open for Business" title, and noticed "monona marketplace" and moved on to "Monona EastSide Business Alliance"

d.  Clicked "Monona EastSide Business Alliance", and went to "business resources", scrolled down, and clicked "promote your business"

e.  Back to "Business Directory" after pausing on "Open for Business" title , clicked "Arts, Culture & Entertainment"  and scrolled up and down but failed to find anything useful,

f.  Clicked "Farmers markets", scrolled down, clicked "2016 entertainment line-up", scrolled down, and clicked "musician application"

g.  Downloaded, filled out, and saved

**Actual results:**

Only 1 user didn't find the application form, and 3 users found the the musician application form and were able to complete that. However, 3 users struggled to find the page and went through unrelated pages. The common action among users was trying to open pages by clicking the titles on the side page instead of "Link to page" below.

**Work around (Advice)**:

a.  The musician application form is hard to be found inside "Farmers markets". Users do not think music is related to music. So it should be somewhere more related and obvious.

b.  Hyperlink the title instead of have "Link to page" below the description.

**Task 3:**

We developed this scenario for users who want to have his property assessed, and he need to make appointment with the assessor.

**The question we asked:**
I would like to find someone to help assess my property, how do I make appointment with the assessor?

**Correct procedure to finish this task:**
1) Navigate http://mymonona.com/35/Open-for-Business to find how to make appointment to meet assesor. Find the 2016 dates for Open Book Appointments and the phone number to make appointments.

**What happened (The steps each user went through to finish the task):**

**User1:**
a.      Used the direct link to property assessment page.
b.      Read description on how to make an appointment with an assessor.
c.      Clicked the open book appointments link towards the bottom of the page.
d.      Viewed the 2016 dates for open book appointments as well as the phone number to schedule appointments.

**User2:**
   a. Clicked on the "Assessor" page on the left side column on the page
   b. Clicked "Open Book Appointments" page
   c. Found the dates and phone number

**User3:**
   a. Clicked on the "Assessor" page
   b. Clicked "Open Book" appointments page
   c. Viewed the page to find dates and phone numbers

**User4:**
   a. Said "It's so easy"
   b. Clicked "Accessor" link, scrolled down, and clicked "open book appointment" & found the telephone number

**Actual results:**
All 4 users found the page and the way to make appointment (all found the phone number) very easily, didn't struggle in the process.

**Work around:**
The way to find how to make appointment with the assessor is very clear and easy, nothing much to improve.

## Task 4:

We developed this scenario for users to be someone want to make changes to the signs, and they need to get permission.

**The question we asked:**
If I want to install a new signs and re-facing existing signs, where should I find the the Sign Permit Application Form to get the approval?

**Correct procedure to finish this task:**

1) Navigate http://mymonona.com/35/Open-for-Business to find Sign & Zoning Permits.
2) Successfully fill out a Sign Permit Application Form.
3) Save, download, and complete form to the Zoning Administrator.
**http://mymonona.com/235/Sign-Code-Permits**


**What happened**
**(The steps each user went through to finish the task):**

**User 1:**
    a.  Clicked on the sign and zoning permits
    b.  Clicked "sign permit application form" and downloaded the form. Filled it out.

**User 2:**
    a. Used the direct link to sign code permits page.
    b. Clicked 'sign code' link, got directed to City of Monona Code of Ordinances document instead.
    c. Went back to sign code permits page.
    d. Clicked the sign permit application form' link and got directed to sign permit application form.

**User 3:**
    a.  Clicked sign and zoning permits page·
    b.  Clicked the 'sign permit application form' link and got directed to sign permit application form. Downloaded

**User 4:**
    a.  Clicked "Sign  & Zoning permits"·
    b.  Clicked "Signed permit application form"
    c.  Downloaded and filled it out

**Actual results:**

All 4 users successfully found the application form without any struggle.

**Work around:**
There is nothing much to improve because the path to find the Sign Permit Application Form is very clear for users.

# SECTION SEVEN:

# PARKS AND RECREATION

UNIVERCITY

BETTER W
PLACES
TOGETHER

**Final Capstone Assessment**

My assignment was to write up and perform a user test on different parts of the My Monona website ([www.mymonona.com](www.mymonona.com)) in order to identify potentially user-unfriendly aspects of the site and make suggestions on how to fix them. My entire user test plan, developed by me and including an opening statement, various tests, and debriefing questions, is available in another document. Each user test was based around a theme of site needs that the average person might have while using the site. In the instructions given beforehand, the test was described as a "think-aloud" test, which means that I requested the subject to explicitly state everything they were doing as they navigated the website, including their opinions on what they were doing. The tests contain 3-5 different scenarios that the person must attempt to complete without the help or guidance of the proctor administering the test. In the user test conducted by me on college-aged friends, I found that there were some minor problems encountered while following along with the scenarios, and that there was generally success in the navigation of the site, but there were several things that the participants felt could be changed to make the site more user-friendly. I will describe the two different user tests and how the participants performed below, as well as provide analysis and recommendations on how to improve MyMonona.com for the benefit of its daily userbase.

The first user test was based around the theme of a family who wanted to plan for fun activities to do around Monona with their children. It lasted about sixteen minutes. In the first scenario, the user had to find a bike path route from the Aldo Leopold Nature Center to the public library, whose location was indicated with a library logo. The user went to several places on the site before finding the correct location. They started by clicking on the Nature Center's page and then into its trail maps, and then tracing back to the Monona homepage. She then went

to the "Explore" tab under "I Want To…"    and went to the Interactive Maps page. Then, she

went to Parks and Recreation and found the bicycle maps PDF. After being confused about

where to find the public library on the map based on the legend symbol, she found a bike path

that worked for the route. She found it a bit hard to find the map, and wished that the PDF all fit

on one page and not a scrollable document so she could see everything as once.

In the second scenario, the subject was asked to find a summer camp for her 12-year-old

daughter to go to over the summer. She went back to Parks and Recreation, and then Summer

Recreation programs, and then Summer Recreation and Camps. She found the camps, though

was dissatisfied that when she rolled over the names on the sidebar, she wanted them to have

descriptions of what the camps were (ages, activities, etc). She was able to find a camp that she

was satisfied with based on the amount of descriptions that were available on each camp's site,

but did want more. She could not find an age range for the Dancing Camps and was dissatisfied

with that, and also did not think that the names of the camps were descriptive ("What is a

Scamper?").

In the third, she had to find how to reserve a park shelter at one of the parks. She clicked

"Rentals and Events" within the Parks and Recreation page again and found the "Park Shelter

Rentals." She found it easy to find information about the rentals, and within an intuitive place on

the site.

Finally, for the last scenario, the participant was asked to look for lost and found

information on the community pool's website. She clicked "Parks and Recreation" from the

lefthand sidebar on the main Monona page and then "Community Pool" on the side to find the

page. She first decided that she would just contact them directly rather than look on the page, but

continued to look through the site for the sake of the scenario. She clicked through most of the

links until she found text that noted that the pool was not responsible for any lost goods, and therefore stopped looking on the site for a lost and found.

Overall, the subject had a fairly easy time finding information on the website. She had trouble finding some links, or thought that the links were not focused on clarity but rather conciseness or perhaps "prettiness." The task she found most difficult was finding the bicycle map because there were several links that had names that seemed related to the information she was looking for. She liked the sidebar always being in the same spot on the site so that she knew where to look, and was generally happy with the links on the side. She felt proficient in her navigation of the site, and that she could do so again if she was asked to.

The second user test's theme was a family who has just moved to the city of Monona and wants information about the city. It took about fifteen minutes to complete. In the first scenario, the subject was asked to find information about obtaining a voter ID for an election. She first went to Your Government and then Other Resources and then Elections on the sidebar. She clicked Register to Vote with trepidation, looked around some links and then decided that wasn't right. She finally saw that Voter ID was a sidebar link under Elections after not seeing it there for quite a while. She didn't know why she could not see the Voter ID link on the sidebar, and disliked that it was the last link on the bar since it seemed like an important link. She wanted them to be in some discernable order, such as importance.

The second scenario was finding where to obtain a bus pass with Monona Express and how much an annual pass is going to cost. She went to Services and then Public Transportation, and then clicked the Monona Express link. She looked at the Routes, Fares, and Schedules link and found the prices of the passes. When asked to find where to obtain the pass, she become dissatisfied with the way the information was presented. She found a button next to the table of

prices that said where to find an annual pass, and thought that the button was a bad color and hard to read, and thought that the importance of the information was not indicated by the general irritation and unobtrusiveness of the small button.

In the third scenario, the subject had to sign up for emergency alerts and urgent city information through email and/or text messages. She went to Our Community first and then Fire & EMS but reached a deadend. She then went to Services but also did not find anything there. She went to Other Resources under Government, where she had gone previously to find other information, but did not find anything of note there. After some looking around various places again, she became unsure if it was possible to find it. She noticed that Community Media was located both under Government and Community, which she found frustrating because she didn't like the idea of information being in multiple places, because she thought that meant the sublink had too much broad information within it. She clicked "I Want To" but then didn't find anything she thought she could click on there. I reminded her that she could use the search bar if she gets lost. She first typed in "alerts" in the search but was taken to Alerts on the Police page, and scoured that for a while. She then typed "emergency" into the search and was taken to a very obscure page which had the root link of Interactive Maps > Featured Links > Emergency Alerts. She was very frustrated by this.

Finally, she was asked to find the building permit application in order to install an air conditioner. First, she went to Commissions under Government but found that that was not correct. After a bit of looking, she then found Applications and Permits under Services and quickly saw the correct building permit application PDF. She commented that she had just looked all over the site during the last scenario involving the emergency alerts, and therefore was more comfortable finding things more quickly on the site.

Overall, this participant could find things on the website, but definitely was dissatisfied with the layout of some of the links within the subheadings on the top of the page. In the debriefing question regarding her overall impressions of the site, she thought it was fine, but made a point of mentioning the burst/button of information about where to obtain bus passes in the city (City Hall). She also said that finding "emergency alerts" was pretty much impossible for her. I then asked her specifically about the "I Want To…" tab because I noticed that she rarely ever looked at or hovered over this section. She said that the name of the tab and the trailing periods made her feel like she would not get much useful information out of it. Links were hard to find for her, though she did feel that she could accomplish most tasks with fair ease. She liked the top tabs (Government, Services etc) but she didn't like when the tabs such as Community Media repeated. She noted that the whole site was about Community and Government and so it was hard to figure out which subheading the information she wanted would be located under, because these were such broad categories. She said that it's possible that the subcategories under "I Want To…" (Explore, Find, etc) might actually be better top tabs instead of Services, Government, etc, because they addressed more specific concerns s about something someone might want to do. Finally, she noticed that the secondary sidebar below the main yellow sidebar on the websites, which has links such as Notify Me, Connect with Monona, Online Forms, was largely ignored by her while she used the site, even though there were several useful links in the bar. She said that her eyes went over it and she assumed that it wasn't important, even though it really was--it had a quick link to emergency alerts for instance. So, in conclusion, this user had some issues with the way links were dispersed as well as the headings and categories in which the site was divided, but in general was able to find things with ease.

Taking the cue from these two participants, there are a few things to analyze from the experiences of these user test plans. Unfortunately, or perhaps fortunately, the first test did not reveal much about the ways in which the My Monona website can be improved, as the subject found most of the necessary information with relative ease. The difficulties that both users did experience, however, mostly had to do with the organization of links on the site. The second user had a good deal to say about this, as noted in the previous paragraph. She noticed that the heading tabs (Your Government, Your Services, etc) were too broad to be especially useful to her, because one could understandably expect to find many of the links within these headings under different categories. This means, essentially, that these headings are not specific enough for the purpose that they mean to serve. The user recommended that the subheadings under "I Want To…" might prove to be a useful starting point for considering new headings, and I think that is a suggestion worthy of being explored. I don't think all of them are especially useful-- "Pay," for instance might not be a good option--but having headings with active verbs or phrases instead of noun phrases could potentially organize the links in a better way. Therefore, my main recommendation for the site going forward, based on an analysis of the user test, is that the headings that the user first see and chooses between as they use the website should be revamped to become more indicative of the information they hold.

A second, smaller recommendation came towards the end of the second user test, when the user finally saw the secondary heading which has useful quick links such as Notify Me and Connect with Monona. The user did not see this sidebar, even though it appears on most pages. I believe that this is due to the formatting of this sidebar, including the color/fonts of the table, the pictures and their quality, and the position on the page. If you had a "Common/Quick Links" section on the top of the page with several commonly visited links, that might be more useful

than this sidebar table. Otherwise, if you would like to keep the table, I would recommend changing its look and /or layout in order to make it look more primary and important on the page.

There were other minor complaints that were noted within the summary of the user test results, and you may read them at your will. Although the users was dissatisfied with some things on the site, I did receive comments that the site was nevertheless a good, useful, and generally intuitive website to use, especially in comparison to other city websites, as one of the users noted. I think that with some reworking of the link organization of the website, this will be a very user-friendly experience for anyone wishing to learn more about the many opportunities available to them in and around Monona. I hope that this report was helpful for you.

LIS 351
Final Report
Qingzi (Fiona) Guo, Kelly Stymiest, Maura Curtis, Sarah Krier

<center>UniverCity Monona Website
Parks and Recreation Subsite</center>

## Introduction

The Parks and Recreation page within the Community tab on the UniverCity Monona Website underwent search engine optimization (SEO) testing, bug testing, and usability analysis to help determine areas that required improvement. It is important to ensure that every page within a website meets proper accessibility and usability standards while being easily navigable and meeting the needs of all of its users. Our team's initial impression of the page raised concerns about the experience of the users trying to navigate the site.

## Method and Procedure

- We created four scenarios related to content that was specific to the Parks and Recreation page to test the website's usability. Usability is the effectiveness of the website's provided tools that help users perform their intended tasks on that website. We asked users participating in the test to perform these scenarios and monitored their successes and challenges to determine what errors they encountered, if any.
  - Scenario 1: Trying to find out what happens with a recreational summer camp when bad weather occurs.
    - For this usability test, the hardest part was finding the website in general on Google. Once the MyMonona website was found, it took a couple clicks to be able to find the summer recreational camps website. The user found it difficult to find the specific recreational camp website because there was a lot of text on the drop-downs on the top tabs. But once the summer recreational camp subsite was found, the user had no problem finding the weather cancellation policy.
  - Scenario 2: Searching for general concussion information and the concussion waiver that a child needs in order to participate in sports and activities at the Monona Recreation Department.
    - For this usability test, the user found the MyMonona website easily, but it took them about three minutes to find the Recreation Department page once on the MyMonona website. Once on this page, the user clicked on several tabs before clicking on the Youth Sports tab where the concussion information is located. The user easily found the concussion information tab on the left side of the page and once on this page, the user scrolled down to find the actual concussion waiver.
  - Scenario 3: Searching for the cost of the fall brewery tour.
    - For this usability test, the subject struggled to find the MyMonona website and the specific Recreation Department page due to the large number of headings and navigational tabs on the site. Once on the recreation page, the user took a few moments to find the "adult recreation program" tab

> under "recreational programs". Once on this page, the information was easily accessible.
> ○ Scenario 4: Searching for where to register for a Monona annual lake membership for a person who lives in Milwaukee.
>> ■ For this usability test, the subject took about three minutes to find the recreation program subsite. The subject spent two minutes to find the registration section. Once the user clicked on the registration section, the subject was able to find the permit pretty quickly.

## Results

- Accessibility Testing
  - ○ For this test, we used the WAVE website accessibility tool to help determine the accessibility, or the ability for all users to navigate the website successfully, of the MyMonona Recreational Program subsite
  - ○ The Monona Recreational Program subsite has poor accessibility for users. The major error is the lack of alternative test for screen readers to present to users. The website also has several problems in formatting and HTML. There are missing same-page links and form labels. In terms of HTML, some headers are not appropriately presented. Navigation, main content, footers, aside, and aria also have minor position problems. The variety of errors and formatting problems have shown that the subsite is not very accessible for users.
    - ■ 1 missing alternative text, 5 linked image missing alternative test (at link icon area for the images of email, credit card, report, social media icon and online forms), 2 empty links
- SEO Testing
  After conducting the accessibility testing through WAVE, we found a total of 8 Errors, 31 Alerts, 12 Features, 34 Structural Elements, 25 HTML5 and ARIA, 26 Contrast Error.
  - ○ Errors include 1 missing alternative test, 5 linked image missing alternative test at link icon area for the images of email, credit card, report, social media icon and online forms and 2 empty link.
  - ○ Features include 4 Alternative text, 1 Null or empty alternative text, 2 Null or empty alternative text on spacer, 1 Form label, 1 Skip link and 1 Skip link target.
  - ○ Alerts include 1 justified text, 2 skipped heading level, 24 broken same-page link, 2 noscript element and 2 redundant title text.
  - ○ Structural elements include 3 Heading level 1, 7 Heading level 3, 20 Ordered list, 3 Unordered list and 1 Inline Frame.
  - ○ HTML 5 and ARIA problems include 8 Header, 2 Navigation, 1 Main content, 1 Footer
- Usability Testing
  - ○ According to the method and procedures described above, we discovered a common problem for all test subjects when performing the scenarios is the difficulty in finding the website and the recreational department page. Once people enter the subsite page, most of them are able to locate the information

asked in a timely manner. This shows that information on individual pages is user-friendly, but it can be hard for users to locate the page for a specific subject.

## Recommendations

- Many of our users had trouble finding the subsites once on the MyMonona site because of the heavy amount of text and information under the "Your Government", "Your Services" and "Our Community" tabs. For this reason, we recommend condensing the information on the drop-down tabs. This will allow users to be less overwhelmed while looking for specific information on the site.
- Also, to improve SEO, it would be helpful to create a longer description of what the website is. This will increase the number of clicks on the website and the amount of traffic the website receives.
- We recommend adding a contact form on your website. This will allow for users to get in touch with you easily. If you simply ask for name, email, and message, the rate of communication will increase.
- Images must have a descriptive alternative text so that every user so that every user, regardless of ability, can understand the content of the image. We recommend adding appropriate alternative text that presents the content of the image or the function of the link. Without this, the screen reader has no content to present to the user regarding the function of the link.
- We recommend adding more text to a link. If a link does not have text, the function and purpose of the link will not be presented to the user. You can remove the empty link or provide text within the link that describes the function of the link.

## Conclusion

Overall, the results we gathered from our SEO, accessibility, and usability tests showed that the site presented some minor challenges. Reorganization of the navigation features, visibility of text related to links, and alternative texts catering to screen readers and other accessible devices will contribute to creating a more user and web friendly site.

LIS 351
Capstone Project
Qingzi (Fiona) Guo

<center>UniverCity Monona Website Evaluation Report
Parks and Recreation Subsite</center>

**Introduction**

The Parks and Recreation page within the Community tab on the UniverCity Monona Website underwent search engine optimization (SEO) testing, bug testing, and usability analysis to help determine areas that required improvement. It is important to ensure that every page within a website meets proper accessibility and usability standards while being easily navigable and meeting the needs of all of its users. Our team's initial impression of the page raised concerns about the experience of the users trying to navigate the site.

**Method and Procedure**

- My report group created four scenarios related to content that was specific to the Parks and Recreation page to test the website's usability. Usability is the effectiveness of the website's provided tools that help users perform their intended tasks on that website. The test subjects are all college students, which is not the most representative group of users. But I believe that their test result can also reflect important issues. I asked users participating in the test to perform these scenarios and monitored their successes and challenges to determine what errors they encountered, if any.
  - Scenario 1: Trying to find out what happens with a recreational summer camp when bad weather occurs.
    - For this usability test, the user found the MyMonona website easily, but it took them about three minutes to find the Recreation Department page once on the MyMonona website. The user found it difficult to find the specific recreational camp website because there was a lot of text on the drop-downs on the top tabs. But once the summer recreational camp subsite was found, the user was able to find the weather cancellation policy under one minute.
  - Scenario 2: Searching for general concussion information and the concussion waiver that a child needs in order to participate in sports and activities at the Monona Recreation Department.
    - For this usability test, the hardest part was finding the website in general on Google. Once the MyMonona website was found, it took a couple clicks to be able to find the summer recreational camps website. Once on this page, the user clicked on several tabs before clicking on the Youth Sports tab where the concussion information is located. The user easily found the concussion information tab on the left side of the page and once on this page, the user scrolled down to find the actual concussion waiver.

- ○ Scenario 3: Searching for the cost of the fall brewery tour.
    - ■ For this usability test, the subject also found it difficult to locate the MyMonona website and the specific Recreation Department page due to the large number of headings and navigational tabs on the site. Once on the recreation page, the user took a about one minute to find the "adult recreation program" tab under "recreational programs". Once on this page, the information was easily accessible.
- ○ Scenario 4: Searching for where to register for a Monona annual lake membership for a person who lives in Milwaukee.
    - ■ For this usability test, the subject took about three minutes to find the recreation program subsite. The subject spent two minutes to find the registration section. Once the user clicked on the registration section, the subject was able to find the permit pretty quickly. The subject confirmed that the biggest struggle during the process was to locate recreation program subsite.

**Results**
- ● Accessibility Testing
    - ○ For this test, we used the WAVE website accessibility tool to help determine the accessibility, or the ability for all users to navigate the website successfully, of the MyMonona Recreational Program subsite.
    - ○ The Monona Recreational Program subsite has poor accessibility for users. The major error is the lack of alternative test for screen readers to present to users. The website also has several problems in formatting and HTML. There are missing same-page links and form labels. In terms of HTML, some headers are not appropriately presented. Navigation, main content, footers, aside, and aria also have minor position problems. The variety of errors and formatting problems have shown that the subsite is not very accessible for users.
        - ■ 1 missing alternative text, 5 linked image missing alternative test (at link icon area for the images of email, credit card, report, social media icon and online forms), 2 empty links
- ● SEO Testing
    After conducting the accessibility testing through WAVE, we found a total of 8 Errors, 31 Alerts, 12 Features, 34 Structural Elements, 25 HTML5 and ARIA, 26 Contrast Error.
    - ○ Errors include 1 missing alternative test, 5 linked image missing alternative test at link icon area for the images of email, credit card, report, social media icon and online forms and 2 empty link.
    - ○ Features include 4 Alternative text, 1 Null or empty alternative text, 2 Null or empty alternative text on spacer, 1 Form label, 1 Skip link and 1 Skip link target.

- ○ Alerts include 1 justified text, 2 skipped heading level, 24 broken same-page link, 2 noscript element and 2 redundant title text.
  - ○ Structural elements include 3 Heading level 1, 7 Heading level 3, 20 Ordered list, 3 Unordered list and 1 Inline Frame.
  - ○ HTML 5 and ARIA problems include 8 Header, 2 Navigation, 1 Main content, 1 Footer
- Usability Testing
  - ○ According to the method and procedures described above, we discovered a common problem for all test subjects when performing the scenarios is the difficulty in finding the website and the recreational department page. Once people enter the subsite page, most of them are able to locate the information asked in a timely manner. This shows that information on individual pages is user-friendly, but it can be hard for users to locate the page for a specific subject.
  - ○ All test subjects agreed that the drop-downs from the top tabs are over-complicated and it was difficult to find information from there. However, they thought the subsite itself contained a sufficient amount of information. Once user entered the subsite, they could easily find the information they were looking for.

**Recommendations**
- Many of the tested users had trouble finding the subsites once on the MyMonona site because of the heavy amount of text and information under the "Your Government", "Your Services" and "Our Community" tabs. For this reason, we recommend condensing the information on the drop-down tabs. This will allow users to be less overwhelmed while looking for specific information on the site.
- Also, to improve SEO, it would be helpful to create a longer description of what the website is. This will increase the number of clicks on the website and the amount of traffic the website receives.
- I recommend adding a contact form on your website. This will allow for users to get in touch with you easily. If you simply ask for name, email, and message, the rate of communication will increase.
- Images must have a descriptive alternative text so that every user so that every user, regardless of ability, can understand the content of the image. We recommend adding appropriate alternative text that presents the content of the image or the function of the link. Without this, the screen reader has no content to present to the user regarding the function of the link.

- I recommend adding more text to a link. If a link does not have text, the function and purpose of the link will not be presented to the user. You can remove the empty link or provide text within the link that describes the function of the link.

**Conclusion**

Overall, the results we gathered from the SEO, accessibility, and usability tests showed that the site presented some minor challenges. Despite the fact that subsites are well-organized, the main pages can acquire some changes. Reorganization of the navigation features, visibility of text related to links, and alternative texts catering to screen readers and other accessible devices will contribute to creating a more user and web friendly site.

Will Decorah, Brandon Humboldt, Brett Robinson,
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**My Monona Website Evaluation**
**Recreational Programs**

The My Monona website is a comprehensive website that tries to fit an entire city in one spot.  This is a massive undertaking that makes for careful planning and in depth analysis.  In our non biased study of the My Monona website, primarily the Recreations Programs subpage, we found many good things and many red flags that need to be addressed. The following report summarizes our findings on My Monona's Recreational Programs website based on usability, accessibility, and search engine optimization.

**Initial Tests and Errors**

While running the PageLocus tests, it came to our attention that the website had several errors, some serious and some that can be considered a low priority. Alternatively, the My Monona Recreation Programs page did have close to 20 good results. Below is a summary of some of the errors that the PageLocus report identified.

- One of the main issues of the website is that the page had a low use of header tags. The webpage had plenty of h3 and h4 headers but no h1,h2 or h5 headers. This may confuse users or cause difficulties.

- Two of the low priority errors on the website are technical aspects, the meta description and the conversion form.  The meta description was too short while the conversion form was not even present in the website.

- Two critical issues that came up were the website's server response times and the browser cache.  For the server response times, the website was noticeably slow when responding to tasks. What may be causing these slow server response times is that the website cache is currently disabled. A website cache is where a website holds temporary

files such as documents, pictures and many more. Enabling the website cache will lower

the server load which should make the website run faster as well as making the user's

experience on the website much more enjoyable.

- Another important issue that came up is that there were no social media links anywhere
  on the website. Social media is changing the way we view the digital world which makes
  it vital that the website has links to social media accounts. If this is done it would surely
  bring more viewers to the webpage.

- Lastly, the website was not in the DMOZ directory. The DMOZ directory is a website
  that helps boost your search engine ranking on the web. If you decide to enter the
  Monona web page into the DMOZ directory it will get the website name out there and
  viewers will start flowing in.

If the bugs listed above are fixed, the website will improve tremendously.

**Usability Tests**

Usability describes how effective tools and information sources are in helping people

accomplish tasks. For the My Monona Recreational Programs website, usability would refer to

the ability of residents of the city of Monona to get involved with recreation programs and

activities. When planning a website's usability, the user experience encompasses everything that

a user thinks and feels while using a website. In order for the My Monona webpage to have good

usability and a positive user experience, the My Monona web developers need to look at the

website from the user's perspective.

For the usability portion of this particular study, we found it most appropriate to create

five different tests. These five tests explored five aspects of the website that a user could

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navigate through in order to find what they are looking for. The five tests were: sign your fifth

grade boy up for a basketball league, sign up to receive the parks and recreation newsletter,

reserve a park shelter for an event, fill out a volunteer application, and register for an adult

Zumba class. These tests were performed using the "think aloud procedure". This procedure

included a group member observing another student who was not in the class perform the tests.

We asked each subject to talk us through what they were thinking, problems they ran into, things

they found easy, and general comments about the site. Each of these five tests were performed by

five different people each under the observation of one group member.

The first test directed the subject to sign their fifth grade boy up for a basketball league.

They were told they needed to find out how much it cost, what days practice and games are on, a

list of coaches and their contact info, gym locations, and how long the halves were. The biggest

issue that each subject noticed was not knowing what R and NR meant on the registration page.

Another issue that came up was the availability of the coach's information. It is understood that

this may be because a coach is usually a parent volunteer and had not been selected yet. There

was some trouble finding the practice schedule but all other questions were able to be answered.

The second test asked the subjects to sign up for the parks and recreation newsletter. In

addition to this, they needed to find out what was included in the newsletter, the various ways to

view the newsletter, and to sign up for the enewsletter choosing to have it emailed to them. Most

of the subjects were able to find the newsletter easily, but they all were unsure how to sign up for

it. One subject even gave up after looking for about five minutes. After doing some digging, they

were able to find it after accessing the "notify me" page. The biggest issue of this test was the

difficulty being able to have the newsletter emailed to you. When the email button was clicked, it

should have redirected them to a page where they could just put their email in but instead it

brought them to an error page. It was easy to access the newsletter and read what was inside, but

it was difficult to sign-up for it.

The next test told the subjects to reserve a park shelter for an event. The subjects were

also asked to find the available dates, create an account through the online booking system, and

ultimately book the shelter. Two of the subjects initially went to the "I want to…" page and

eventually had to use the search bar to find the desired page. A small issue that was found was

the requirement to make an account rather than just typing in their information. All in all, this

was the easiest test and a majority of the subjects found this task to be quite user friendly.

Following that, the next test aimed the subjects toward filling out a volunteer application.

They needed to fill it out, find the number for the parks and recreation office for available

positions, donate to the Friends of Monona volunteer group, and find the 2016 Sponsor

Registration and Advertising form. A suggestion regarding this test would be to change the color

"donate" off the get involved page as our subjects described it as difficult to see. Also, a subject

expressed that they did not know if they should call the whole department in order to find the

openings, they figured it may be better to include a number for specific volunteer questions.

Overall, our subjects found this test to be relatively easy as well.

Finally, the subjects were requested to register for an adult Zumba class. Included in this

test, the subjects had to find the dates the classes run, the cost of a class, where the classes are

held, who teaches the classes, and create an account through the booking system to register. One

subject was confused as to where to go off the homepage but after looking around they found the

adult programs tab. Another expression of concern was that the contact information for the

teacher was not readily available. This may be to protect the privacy of the instructor as well.

The rest of the test ran smoothly with all of the subjects and they were all able to complete it.

**Accessibility Tests**

Accessibility ensures that everyone in society can have active participation. Accessibility is imperative for a website and in this case, a city, to maintain inclusiveness. The My Monona website had some glaring issues that must be addressed to allow for better ease of access for disabled users. Since this is a public website for citizen's use its information must be available with ease for its users. By addressing some of the accessibility issues previously mentioned, we believe the My Monona website will not only function better for disabled users but appear more streamlined and functionable for non-disabled users as well.

When studying the website's accessibility, we ran the Recreation Programs subsite through an online accessibility tool: the WAVE Web Accessibility tool. It's important to note, since the WAVE Accessibility tool is a computer application, it doesn't contain the definitive tests for determining site accessibility but it is helpful in finding errors including broken links and self referential links.

The WAVE tool picked up that for the five picture links on the bottom left of the subsite (notify me, online payments, report a concern, connect with Monona, online forms), there are no alternative text. This is not good in terms of accessibility, because users that browse the web through screen reading programs have no way of easily identifying the link to follow for making online payments, reporting concerns, etc. The alternative text should allow someone to know what the picture represents without actually seeing the picture.

Another thing that the tool picked up on is self referential links that don't actually go anywhere within the page. For instance, the "Create an Account" link in the top left of the page says that its target is mymonona.com/326/Recreation-Programs#moreinfo but no other element exists with an ID of moreInfo. These links are great in helping users navigate the page, but does not help if the target ID does not exist. This can be fixed by setting the HREF attribute to the actual link that it is going to, removing the reference to #moreInfo. Another link with which this exists is the "Sign In" link with the ID signIn.

A third thing to note is the <noscript> element. We are unsure as to what is contained within the noscript elements, but know that these are only shown if JavaScript is disabled. Most users have JS enabled. However, if a user happens to have JS disabled and navigates to the subsite, there is no guarantee that the content behind these tags will be accessible.

One last thing that the tool found was that the search bar has no text associated with it. This may be confusing to users who use screen readers as they will not know where the link takes them (or that it's a search bar). Adding some text that says this element is a search bar is one potential fix.

**Search Engine Optimization Suggestions**

Search engine optimization is a set of practices to help website rank higher in search-engine results pages, like Google. Having good search engine optimization techniques is important for the My Monona webpage because it will ensure that when residents and visitors search for the city of Monona online, the My Monona website can be one of the first results. Below are a list of potential SEO terms and synonyms that the My Monona Recreational Programs page can use to improve their search engine optimization. Note, the first key word

listed are current words on the recreational programs website; the words following the dash are

potential keywords that My Monona can utilize.

- Programs -- classes, (+)

- Community -- group(-), area(-), neighborhood (+)

- Recreation -- entertainment(+), fun (+)

- Parks -- play area (+)

- Register -- sign-up (+)

- Rentals -- reservation (+)

- Events -- function, outing (+)

**Conclusion**

Overall, we believe that the My Monona Recreational Programs website is currently

effective at keeping Monona residents involved in the recreational programs and activities that

the city of Monona offers. While there are currently some errors to the site, we believe that our

recommendations above will fix these errors and improve the overall usability, accessibility and

search engine optimization for the My Monona Recreational Programs website.

## Accessibility:
### -Wave
The subsite ([Recreation Page](#)) was inserted into Wave.

Known Errors (summary)
- Image links do not lead to more text
- Missing/Empty links at beginning of webpage
- Same page links not working causing little accessibility to other areas of the same webpage.
- Alt text is not empty and image may be decorative
- Alt text does not convey the same information as the image
- H1 and h3 issues present
- Unordered lists

Wave highlighted key points about the image text on the page, and lack of. There were a lot of missing alt tags which surmised most of the navigation errors on the page. It also found changing contrasting colors due to image issues on the page. There were many missing links, or errors pertaining to the images, so that would be the place to start. I feel as though the pictures are mostly likely to be a great way to draw people into the rec activities, and by fixing the links to get to other areas of the website, the overall impact will be more accessible.

### -A-Checker
The subsite ([Recreation Page](#)) was inputted into A-Checker for a diagnosis and found the following problems:

15 known problems:
Image used as anchor is missing valid Alt text
Need to repair font element from the document
Need to modify the header levels so only an h1 or h2 hollows h1.

14 likely problems:
List item used to format text

368 potential problems:
Img element may require a long description
Alt text is not empty and image may be decorative
Alt text does not convey the same information as the image
Img has title attributes and image may be decorative
Tabular information may be missing table markup
Visual lists may not be properly marked
Unicode right-to-left marks or left-to-right marks may be required
Dir attribute may be required to identify changes in text direction
Input element label, type of "text", is not positioned close to control

Text may refer to items by shape, size or relative position aline
Image may be using color alone
Image may contain text with poor contrast
Input possibly using color alone
Script may use color alone
Etc.

Most of the errors were found on the image texts presented on the website. A-checker particularly highlighted images that are used as anchors that were missing valid Alt texts, images that had alt texts that were not conveying the same information as the image itself, as well as image elements that may require a longer description. A-checker also noted a couple potential errors on images in terms of color choices, recommending changes in color because of poor contrast.

## Usability:

Usability Test Script:
Thank you for taking the time to participate in this usability test of the website for City of Monona. The purpose of this test is to examine the ease of use of the website, and determine where improvements can be made. Your time and opinions today will go towards assisting the improvement of a widely used website.

For this test you will be assuming the role of a... As you navigate the site to accomplish this task, please extensively narrate your decisions and thought process. No detail is insignificant in this test, so please voice all thoughts, opinions and questions as they cross your mind.

Scenario 1:
● Grandparent looking to provide a fun weekend for their 2 elementary school level grandchildren. Using this [Recreation page](), the recreation programs portion of MyMonona.com, find an acceptable activity

Scenario 2:
● 40 year old person looking to join a sports league. Utilizing the [Recreation page]() find a league to join.

I now have a few questions which ask you to expand upon your experience with this task.

1) What was your first impression of the page when you enter?
2) Did you have any difficulties completing this task? If so, which one?

3) What's the primary issue you faced in this task?
4) How comfortable do you feel with computers/computer navigation?
5) Do you think a technologically illiterate individual could complete this task?
6) Overall, how do you feel about this site?

That concludes the test, thank you again for your time and opinions. Did you have any questions for me before we conclude this usability test?

## Summary of Usability:

Our test subjects ranged from computer literate college students to a technologically competent father. The general consensus on the first impression of the webpage was that it was attractively designed and bright coloration caused the user's eye to be drawn to certain points of interest. A common problem was site navigation. Users faced difficulties in both choosing the correct links to find what they were looking for, as well as finding their way back to the initial page without relying on the 'back' button. Finding age appropriate activities was also a minor challenge, as some users wound up in sections of the website that was not for the age group they initially thought, or were hoping to find.

Issues with technological literacy were not tested in great detail, as most test subjects had at the very least a passing familiarity with computers and website navigation. However, many subjects believed that the website was designed in a way that would not pose a challenge to individuals who would describe themselves as 'technologically illiterate'.

Overall, the website was viewed as an easily understood page with a few minor navigation issues. These issues were primarily caused by wording that did not meet the specificity expected by the test subject. Additionally, certain links acted as too broad a keyword, and caused users to become 'lost' in unwanted sections of the page.

## Usability Transcript:

Test Subject 1:
Age: 20
Gender: Male
Lead Facilitator: Gunnar Dunbar

Scenario 1 Results:
1) The website is very clean and put together. The layout seems concise but somehow there is a lot of information on it. It also mentions discounts towards the bottom of the page which really caught my eye.
2) I had a little bit of difficulty finding the desired outcome but eventually found a Parent-Tot All-Star Camp that looks like it could be a lot of fun for a grandparent and their grandchildren.
3) It was difficult finding something that was both adult and child friendly simultaneously.
4) I feel very comfortable with computers, I am a computer science major and am very familiar with web pages and technolog.
5) I think that someone who is technologically illiterate could still complete this task, the website is laid out easy enough for just about anyone to accomplish this task.
6) Overall, I think the site is put together well, and it shows that many people have put this together over time.

Scenario 2 Results:
1) Same as above
2) This was very easy to find, it was only 2 clicks from reaching a desired result. I found a page for recreational Softball for adults.
3) There were very few difficulties in this task.
4) Same as above
5) Same as above

Test Subject 2:
Age: 34
Gender: Male
Lead Facilitator: Dan Kondzela
Scenario 1 Results:
1) The site seems color coded, I was drawn pretty quickly to the bright yellow box on the left side where I did most of my navigating from. The contact list is very noticeable which I think is really important. I prefer to just call and talk to someone so that's good for me.
2) Once I got further into some links, such as through dance classes and stuff from that yellow box, I had a hard time finding a quick way navigating back to the rec home page. My first instinct was to click on the main button but that took me too far back.
3) I ended up on the current newsletter and navigating that PDF was tricky for me.

4) I work with the more office oriented computer programs, or my phone. I don't typically use a desktop to navigate the internet, but I know the general gist of it.
5) I think so. I mean, the boxes are bright. It's all worded pretty plainly so if a person could read and click they could probably figure out the task.
6) The site is okay. It's not the prettiest thing I've ever seen but it's easy to get a bearing on what is going on. I guess I didn't really like the 'trying to go back' thing, but I can't tell if that's caused just by this scenario or if it's a site issue.

Scenario 2 Results:
1) Same as above.
2) The yellow box had a drop down menu. I wasn't expecting the drop down menu though, I only noticed after I clicked it. Maybe an arrow indicating there are more options available would be good.
3) Just the drop down thing but I could be nitpicking there.
4) Same as above.
5) Same as above.

Test Subject 3:
Age: 22
Gender: Male
Lead Facilitator: Mitch Corcoran
Scenario 1 Results:
1) The website has a very wide diversity of colors that helps draw your eyes to different parts of the screen, but there is an information overload on the page.
2) I had a little trouble finding a place that listed upcoming events, but I found some classes off of the Youth Classes and Programs Page.
3) Navigation was definitely the hardest part of the task. As one who had never come to this page before (and most elderly people aren't as savvy with new pages) it was not very easy to figure out which links to follow.
4) I am very comfortable with computers. I am an engineer and do much of my work on computers.
5) I do not think a technologically illiterate person could complete this task without much frustration nor additional help.
6) Overall I think this works for the average user, but it lacks the ability for users of all experiences to use it.

Scenario 2 Results:
1) Same as above

2) This was really easy to navigate to. From the Rec Programs webpage, there is a link right to the Adult Recreation Programs.

3) The most difficult part was at first looking to see where to navigate to from this page. I assumed there would be a link similar to the one I had found, but there was so much going on the page I wasn't exactly sure where it would be.

4) Same as above

5) Same as above

6) Same as above

Test Subject 4:

Age: 21

Gender: Female

Lead Facilitator: Tammy Park

Scenario 1 Results:

1. The website looks fun because of the image of kids running around as soon as I enter it. The site looks pretty acceptable.

2. I had trouble finding out what specific age group "youth" entailed. I wanted to look for elementary school friendly activities, and I wasn't quite sure if the "youth" classes would be too competitive or demanding for much younger kids.

3. I wasn't quite sure what kind of activity I wanted to look into so it took some time for me to browse about. There seemed to be a lot of sports activities but I wish they had categories that are labeled by the type of activity, for example: "art," "sports," etc. instead of the way they had it laid out on the website.

4. 4 out of 5. Pretty comfortable.

5. I think it would be OK for older generations/technologically illiterate individuals. Despite all, the site was well organized in my opinion and pretty simple. I think the fact that the contact information stayed put on the side of the page made it more useable for older people, because if they don't know what to do on the website they can just call in.

6. I liked how they are simple and have all the information in the middle of the page. It was eye catching.

Scenario 2 Results:

1. Same as the other website; it is acceptable, but this site feels more information heavy. I didn't really like that the categories on the side changed dramatically from the youth recreation page.

2. I had a difficult time finding a sports league. The website used different wording that "league" so I wasn't sure if what the website was offering (lessons) was exactly what I was looking for.

3. It just felt a little bit more distracting and unclear than the kid's recreation page. I had a difficult time focusing and wasn't quite sure where to look at and what I was supposed to find. I think the wording confusion between "league" and "classes" was also a big issue. At the end of it, I wasn't really able to find what I was looking for.
4. (Same as above) Comfortable!
5. Maybe it will be a little bit difficult.
6. Worse than scenario 1.

Test Subject 5:
Age: 21
Gender: Female
Lead Facilitator: Marina Jacobs
Scenario 1 Results:
1. The website was interesting to look at, but was also extremely overwhelming with content.
2. I had a hard time figuring out which "youth" oriented classes would be good for the desired age group. It was also just more difficult to navigate through.
3. I did not know what sort of recreation I wanted to look more into, so the process of figuring out where to go from there took a bit longer.
4. Extremely comfortable
5. I think that this might not be entirely difficult for anyone to browse through, but that the site overall was a bit overstimulating and needed more simplification.
6. Pretty fine with the site, nothing was too confusing to the level where I couldn't accomplish what was being asked, but it could be improved.

Scenario 2 Results:
1. Same as above.
2. This one was very easy for me to find. Much simpler than the first scenario.
3. After taking the first scenario, this was entirely easy to find and navigate. I barely had any complications.
4. Same as above.
5. Maybe it will be easier
6. Not anything too special, but not that hard to navigate and use.

**SEO:**

Keywords:
- Upon review of the source code for the Recreational Programs site of mymonona.com I initially found there there are no keywords in place.
  - This is okay, however, because of most search engines making keywords meta obsolete.
- A list of keywords(following the phrase "my monona") that we came up with include:
  - Recreation
  - Programs
  - Activities
  - Events
- This represents what the average user will input into the search bar when looking for recreational programs associated with Monona.

Results and Suggestions:
- We have inputted "Monona" followed by the keywords mentioned above into the Google and Bing search engines and this is what we found.
  - "Monona Recreation" and "Monona Programs"
    - Google: the Recreational Programs page is the first search result which can be attributed to the various mentions of these keywords throughout the content
    - Bing: Recreation Programs is the first search result listed when inputting "Monona programs" but not when inputting "Monona Recreation" luckily the first result is still within the MyMonona website so this still eludes any problems with SEO.
  - "Monona Activities" and "Monona Events"
    - Google: There are various MyMonona results but they are not specific to the "Recreation Programs" page and there are many other websites within the first page of results.
      - Recommendations:
        - Use the other pages of the site to input links where appropriate, this will result in more MyMonona links being higher in the search results.
        - Increase the amount of reference to "events" and "activities" in the content of the "Recreation Programs" subsite to allow for a more directed search

result towards "Recreational Programs" and away from undesired subsites.

- Bing: There are very limited MyMonona results in the first page of the search results, let alone results regarding "Recreation Programs.
  - Recommendations:
    - Same as for Google Search, however, may need to increase more in the terms of content to affect Bing's search results.

Miscellaneous SEO:
- Google Analytics: Free service which notifies site admin of page traffic. Rec Page lacks a GA tracking code.
- Missing Image Title Text: Mostly insignificant for SEO, however one image is relevant as it is an appropriate way to increase keyword usage on the page.
  - http://mymonona.com/ImageRepository/Document?documentID=608

**UniverCity Monona: Accessibility, SEO, and usability test results:**
Recreation Programs Group: Ilyssa Frank, Amanda Rovitz, Sydney Chason, Hannah Felsenthal and Jordyn Berlent

## Usability:

Our group conducted 15 minute interviews with users and recorded what they thought of the site, which can be found below our accessibility and SEO evaluations.

Overall, usability seemed to be relatively simple for each of our participants.  We interviewed participants ages 15, 19, and 21 years old and each participant was able to complete all of our tasks within a small amount of time.  Perhaps with a broader age range, we would be able to get a more well-rounded view of how easy or hard the website was to use, but from this data, we believe that the website is already pretty simple for first time users.  Some recommendations that our participants made were that there was a lot of text to absorb and that more pictures would be beneficial to the overall look of the website and aid in finding certain desirable pages.  Another suggestion was that there be a better organization of categories to navigate the page, since the page is very overwhelming to look at at first glance.

## Accessibility:

After conducting these interviews, we ran multiple tests on accessibility and whether the website was able to be accessed by all different kinds of users (including those with disabilities).

### Wave:

The errors in Wave generally showed up as link issues for example in the navigation links and in regular links to get to other pages on the website. Also, links were broken overall which means that there is something written wrong or a misplaced tag in the HTML sheet.  To fix this, the

representatives in charge of maintaining the website need to double check on the ordered list part of the HTML page and make sure all of the coding is in place so that these errors don't show up. Additionally, errors appeared with the headers, which can be changed in the same manner as the links and lists.

Peek:
Some of the errors that showed up were content structure. For example, the contrast between pages in order to distinguish a clear difference between the two. Perhaps representatives could use a color contrast evaluator in order to measure a contrast ratio between text and background. Another problem for structure is the way it's presented, as it seems to be a bit confusing. There are several forms missing within each page. Another problem was that users may have a problem with the navigation throughout each page. Representatives can create clear titles for each page, so there is no confusion.

**SEO:**
Additionally, within the interviews, we made sure that our interviewees were able to find the specific website as a top hit on search engines (the most common used one was Google). Since all of our interviewees are young and have grown up using the Internet, they were easily able to navigate search engines in order to find this specific URL. However, we feel that if we had interviewed people that were much older or even younger, results would be more varied.

**Interview Notes:**

15 year old user
Tasks:
- Find the recreation programs page for the City of Monona from Google (took 1 minute)
    - Now try from the City of Monona home page (took 10 seconds)
- Find more information about 'Adult Women's Softball' programs (took 30 seconds)
- If you wanted to sign up your child for Volleyball, how would you get there? (took 10 seconds)
- *Hard* Tell me how much it is to attend Art in the Park. (took 30 seconds)
Questions:
- Was it difficult getting from page to page?
    - No
    - More specifically, was it hard to get to the home page?
        - No.
        - Also did not use the back button to go to the home page, he clicked on the 'City Of Monona' banner on the top
- Is the website visually appealing?
    - It is visually appealing. I especially like the pictures on the page and the background color.
- Did you expect your navigation throughout this website to be easy? Explain why.
    - Yes, because it seems to be easy for adults to navigate.

- Did you find the organization of the navigation bar difficult to maneuver?
    - No.
- Do you have any suggestions that may make navigation easier or the website more pleasing to look at?
    - No.

21 year old student:
Tasks:
- Find the recreation programs page for the City of Monona from Google (took 40 sec)
    - Now try from the City of Monona home page (took a min)
- Find more information about 'Adult Women's Softball' programs (took 1 min)
- If you wanted to sign up your child for Volleyball, how would you get there? (1 min 15 seconds)
- *Hard* Tell me how much it is to attend Art in the Park. (2 mins)
Questions:
- Was it difficult getting from page to page?
    - Confusing yes
    - More specifically, was it hard to get to the home page?
        - No, hit city of Monona, but difficult to get to recreations page
- Is the website visually appealing?
    - Color scheme wise yes but too much text
- Did you expect your navigation throughout this website to be easier? Explain why.
    - Yes, because it is a city page and people not so familiar with technology need to use it as well.
- Did you find the organization of the navigation bar difficult to maneuver?
    - Yes because they don't categorize things well
- Do you have any suggestions that may make navigation easier or the website more pleasing to look at?
    - More pictures, less text, better organization of information and categories. Went to search volleyball in search bar to see if it would even show up and never loaded.

21 year old student:
Tasks:
- Find the recreation programs page for the City of Monona from Google (took 10 seconds)
    - Now try from the City of Monona home page (took about a minute)
- Find more information about 'Adult Women's Softball' programs (took a little less than a minute)
- If you wanted to sign up your child for Volleyball, how would you get there? Took about a minute
- *Hard* Tell me how much it is to attend Art in the Park. (took 2 minutes)
Questions:

- Was it difficult getting from page to page?
    - No
    - More specifically, was it hard to get to the home page?
        - Yes, not difficult but not organized how you think it would be. It is under the departments, but you think it might be under services. No drop down for programs
- Is the website visually appealing?
    - Yes, pretty nice city website. Colors are appealing
- Did you expect your navigation throughout this website to be easier? Explain why.
    - Too many tabs in tabs, but overall organized fine
- Did you find the organization of the navigation bar difficult to maneuver?
    - No
- Do you have any suggestions that may make navigation easier or the website more pleasing to look at?
    - Need better organization of categories and information

19 year old student:
Tasks:
- Find the recreation programs page for the City of Monona from Google (took 10 seconds)
    - Now try from the City of Monona home page
- Find more information about 'Adult Women's Softball' programs (took 1 minute)
- If you wanted to sign up your child for Volleyball, how would you get there? (took 45 seconds)
- *Hard* Tell me how much it is to attend Art in the Park. (took 5+ minutes)
Questions:
- Was it difficult getting from page to page?
    - No
- More specifically, was it hard to get to the home page?
    - No
- Is the website visually appealing?
    - No, the colors aren't bright, it is dull
- Did you expect your navigation throughout this website to be easier? Explain why.
    - Yes because it is hard to find things and there are too many tabs in tabs
- Did you find the organization of the navigation bar difficult to maneuver?
    - No
- Do you have any suggestions that may make navigation easier or the website more pleasing to look at?
    - Put the contact information on the bottom and more information on the side

19 year old student:
Tasks:

- Find the recreation programs page for the City of Monona from Google (took 12 seconds)
    - Now try from the City of Monona home page
- Find more information about 'Adult Women's Softball' programs (took about 55 seconds)
- If you wanted to sign up your child for Volleyball, how would you get there? (took a little over a minute)
- *Hard* Tell me how much it is to attend Art in the Park. (took about 3 minutes)

Questions:
- Was it difficult getting from page to page?
    - Not generally, no.
- More specifically, was it hard to get to the home page?
    - No.
- Is the website visually appealing?
    - I think the colors are fine, but there is too much text on the page, which might scare people a little upon entering the site.
- Did you expect your navigation throughout this website to be easier? Explain why.
    - It's hard to find certain things because the overflow of text and tabs, maybe condensing the website it would have been a little easier.
- Did you find the organization of the navigation bar difficult to maneuver?
    - So/so. The categories are all over the place.
- Do you have any suggestions that may make navigation easier or the website more pleasing to look at?
    - I think condensing information would help a lot.

**GROUP MEMBERS: Jacob LaBine, Elana Roth, Morgan Wileman, Ann Ziegler, Meredith Johnson**

# Tasks:

**Scenario 1:**
- **You're a parent looking to get involved in the City of Monona's recreational programs. How would you "get involved" through their website?**
- **Once you have found the "get involved" button, how would you find out more about "volunteer opportunities"?**
- **You have decided that you are definitely interested in volunteering, print out the "volunteer application".**

**Scenario 2:**
- **You are interested in throwing a retirement party for your boss. How would you inquire about doing so?**
- **Once you have found out more about "party and event rentals," pick a location for your event to take place at.**
- **Reserve your desired space.**

**Scenario 3:**
- **You are interested in reading the Recreation Programs newsletter. How do you do so?**
- **You want to read the 2016 Summer/Fall Guide, where would you find this?**
- **You have found the 2016 Summer/Fall Guide but find the text is too small to read. How do you make it bigger?**

**Scenario 4:**
- **You have already booked an event with the Recreation Program, but you're scared it may rain on the day of your event and it's supposed to be outside. Where would you find out more about this?**
- **Once you find the weather cancellation policy, you realize that you need to find out if you're allowed to have alcohol on the premises. Where would you do this?**
- **After looking at the alcohol/tobacco use policy, you need to find out if you can pay for the event using a credit card. Where would you find this?**

**Scenario 5:**
- **You are interested in a fall Zumba class. Inquire more about when the classes are.**
- **You find that a session works well with your schedule and is still open to register. Register yourself for a session of the fall Zumba classes.**
- **You aren't sure what you should bring to class, contact the instructor of the class to ask more personalized questions.**

# SEO TEST NOTES:
# (page locust)

- ** note: this is for the mymononawebsite, not the recreation programs subsite
- **IP Canonicalization**: moderate priority- Website's IP address and domain name redirects to the same webpage, but does not resolve to the same URL
- **Meta description:** high priority- the description length is too short (0 words)
- **Header tags**: high priority- there are no H1 or H2 tags, however, there are H3 and H4 tags
- **Keyword consistency:**
  - Read
  - Monona
  - Official
  - Website
  - Sitemap
  - Free drug
  - Halloween spooktacular
- **Conversion form:** low priority- a conversion form does not exist
- **HTTPS:** moderate priority- STS is not present and issues with HTTP to HTTPS redirection
- **No. of Request(s)**: low priority- page speed is slowing down due to high volume of traffic
- **Browser cache:** low priority- cache is disabled, people's data is not saving
- **Server response time**: low priority- loads necessary HTML slowly
- **FACEBOOK AND TWITTER**- not linked to website
- **Google Plus**- not linked to website,
- **Dmoz**: low priority- since website it not listed in Dmoz directory, reducing search engine ranking
- **Server signature**: low priority- public available, not secure

# ACCESSIBILITY NOTES:
# (wave)

- ERRORS (8):
  - 1 X Missing alternative text
  - 5 X Linked image missing alternative text
  - 2 X Empty link
- ALERTS (31):
  - 1 X Justified text
  - 2 X Skipped heading level
  - 24 X Broken same page link
  - 2 X Non-script element

- - 2 X Redundant title text
- FEATURES (12):
  - 4 X Alternative text
  - 1 X Null or empty alternative text
  - 2 X Null or empty alternative text on spacer
  - 2 X Linked image with alternative text
  - 1 X Form label
  - 1 X Skip link
  - 1 X Skip link target
- STRUCTURAL ELEMENTS (34):
  - 3 X Heading level 1
  - 7 X Heading level 3
  - 20 X Ordered list
  - 3 X Unordered list
  - 1 X In-line frame
- HTML5 ARIA (25)
  - 8 X Header
  - 2 X Navigation
  - 1 X Main content
  - 1 X Footer
  - 10 X Aside
  - 3 X ARIA

# Opening Explanation

## Welcome and Purpose

**Thank you very much for taking time to come in today.  I wanted to give you some background information about what you will be looking at today and give you time to ask any questions you might have before we get started.**

**Today, we will provide you with some tasks to complete on a web site in order to evaluate and better the web site. Our goal is to find aspects of the site that can be improved as well as parts that work well.**

## Test Facilitator's Role

**We are here with you to observe how you interact with the web site. We will be taking notes as you complete each task.**

As you work through the tasks, I encourage you to think aloud. In order to avoid influencing or biasing the results, I will not be able to offer any suggestions or hints on the tasks. From time to time, I may ask you to clarify what you have said or ask you for information on what you were looking for or what you expect to have happen.

## Test Participant's Role

· Today I am going to be asking you to look for certain information and to complete certain scenarios on the site. We want to know how easy or difficult it was to find the information. These scenarios will help us to improve our web site and make it easier for future users to navigate and complete similar tasks.

· There is no right or wrong answer. If you have any questions, comments or areas of confusion while you are working, do not hesitate to ask me or _____.
· It is ok if you feel lost or that you cannot complete a task with the information that you have been given. I will ask you what you might do in a real-world setting to solve the problem and then either guide you on the right track or move you on to the next scenario.
· As you use the site, please do so as you would at home or your office. The "Search" bar should be used as a last resort. Please try to navigate the tasks at hand based on what you see in front of you. If this is unmanageable, you may use the "Search" bar.

· As you navigate, we may ask questions. At the end of the tasks, we will wrap up with concluding thoughts and questions. Thank you.

Do you have any questions before we begin?

# DATA (usability) NOTES:

<u>(Ann)</u>
**Scenario 1:**
- **You're a parent looking to get involved in the City of Monona's recreational programs. How would you "get involved" through their website?**
  a. Click "adult recreational programs".
  b. Had to scroll around for a bit
  c. Clicked "Get Involved" on bottom of page on right side

**Suggestion:** I would move the "Get Involved" button to a clearer location. You could maybe change "adult recreational programs" to have a drop down menu where "Get Involved" could be located.

- **Once you have found the "get involved" button, how would you find out more about "volunteer opportunities"?**

a. Looked around for a bit
b. Pressed "volunteer" on left side of page in orange box
c. Was unsure of what to do at this point
d. Found "volunteer application"
   i. PDF format was difficult to navigate

**Suggestion:** I would include step-by-step directions of what users should do next. As I observed my tester she was scrolling up and down on the screen and asking me where she would find instructions of what to do next.

- **You have decided that you are definitely interested in volunteering, print out the "volunteer application".**
  a. PDF format difficult to navigate
  b. Printer button did not work with user's computer

**Suggestion:** I would make sure that your PDF format is compatible with any type of computer; Windows, Microsoft or Mac.

**Scenario 2:**
- **You are interested in throwing a retirement party for your boss. How would you inquire about doing so?**
  ○ Party and event rentals
    i. Took a bit of time to look around and find this tab
    ii. Reservations
       1. Inconvenient to have to call
       2. Much easier and better to offer a place online to make rentals

**Suggestion:** Add in an online location to make rentals

- **Once you have found out more about "party and event rentals," pick a location for your event to take place at.**
  ○ Was hesitant for a bit
  ○ Clicked on "community center"

**Suggestion:** Add in more detail about each of the sites, include more images so potential renters can get a sense of what the space is like before they book.

- **Reserve your desired space.**
  ○ Couldn't figure out how to reserve space

**Scenario 3:**
- **You are interested in reading the Recreation Programs newsletter. How do you do so?**
  a. Inconveniently placed on the screen
  b. Eventually found it

**Suggestion:** If you want people to engage with your content, you must place it boldly on your site or include it in your email for easier access.

- **You want to read the 2016 Summer/Fall Guide, where would you find this?**
  - 2016 summer/fall extremely easy to find, immediately clicked on it

- **You have found the 2016 Summer/Fall Guide but find the text is too small to read. How do you make it bigger?**
  a. Zoom in feature offered conveniently
     i. Easy to find
     ii. Easier to read

**Scenario 4:**
- **You have already booked an event with the Recreation Program, but you're scared it may rain on the day of your event and it's supposed to be outside. Where would you find out more about this?**
  - Alert center
    i. Offers up to date information on what the forecast will be for outdoor events and any future alerts

- **Once you find the weather cancellation policy, you realize that you need to find out if you're allowed to have alcohol on the premises. Where would you do this?**
  - Unable to find information on bringing alcohol to rental

**Suggestion:** Have a tab for FAQ because I'm sure this is one of them.

- **After looking at the alcohol/tobacco use policy, you need to find out if you can pay for the event using a credit card. Where would you find this?**
  - Able to pay using a credit card
  - Navigated around a little bit but was able to find it eventually

**Scenario 5:**
- **You are interested in a fall Zumba class. Inquire more about when the classes are.**
  - Found zumba class in right hand sidebar
- **You find that a session works well with your schedule and is still open to register. Register yourself for a session of the fall Zumba classes.**
  - Easily registered for class
- **You aren't sure what you should bring to class, contact the instructor of the class to ask more personalized questions.**
  - Drop down bar led to "contact staff"

**(Elana)**
**Scenario 1:**
- **You're a parent looking to get involved in the City of Monona's recreational programs. How would you "get involved" through their website?**
  - Went to the recreational programs page

- ○ Scrolled over the page for seven seconds before clicking "get involved"
- **Once you have found the "get involved" button, how would you find out more about "volunteer opportunities"?**
  - ○ Immediately clicked on "volunteer opportunities"
  - ○ Lead to a new tab
- **You have decided that you are definitely interested in volunteering, print out the "volunteer application".**
  - ○ Took a while to find the "volunteer application"
  - ○ "Print" object appeared in the right hand corner after shaking the mouse and clicked it

**Suggestion:** Make it easier to print forms.

**Scenario 2:**
- **You are interested in throwing a retirement party for your boss. How would you inquire about doing so?**
  - ○ Struggled for 20 seconds with this
  - ○ Finally clicked on "party and event rentals"
- **Once you have found out more about "party and event rentals," pick a location for your event to take place at.**
  - ○ Immediately clicked on "community center"
- **Reserve your desired space.**
  - ○ Clicked on "main hall"
  - ○ Scrolled up and down and could not figure out how to reserve the space on the site other than to call using the phone number provided or using the "contact us" button on the upper right hand side

**Suggestion:** Make it easier to reserve a "party and rental" spot.

**Scenario 3:**
- **You are interested in reading the Recreation Programs newsletter. How do you do so?**
  - ○ Scrolled down and clicked on "newsletter"
- **You want to read the 2016 Summer/Fall Guide, where would you find this?**
  - ○ New tab opened up
  - ○ Clicked on "2016 Summer/ Fall Guide"
- **You have found the 2016 Summer/Fall Guide but find the text is too small to read. How do you make it bigger?**
  - ○ Pressed the "+" sign at the bottom right corner

**Scenario 4:**
- **You have already booked an event with the Recreation Program, but you're scared it may rain on the day of your event and it's supposed to be outside. Where would you find out more about this?**
  - ○ Scrolled around page for a bit until found "weather cancellation policy"
- **Once you find the weather cancellation policy, you realize that you need to find out if you're allowed to have alcohol on the premises. Where would you do this?**

- ○ Found "alcohol/tobacco use policy" a few below "weather cancellation policy"
- **After looking at the alcohol/tobacco use policy, you need to find out if you can pay for the event using a credit card. Where would you find this?**
  - ○ Looked at bottom of page and found "payment options"

**Suggestion:** N/A

**Scenario 5:**
- **You are interested in a fall Zumba class. Inquire more about when the classes are.**
  - ○ Clicked on adult recreation programs
  - ○ Led to new page and scrolled around for 10 seconds
  - ○ Finally saw "Zumba" on left side of page
- **You find that a session works well with your schedule and is still open to register. Register yourself for a session of the fall Zumba classes.**
  - ○ Clicked on "zumba"
  - ○ Pressed "register now"
  - ○ Pressed "add to cart"
  - ○ Had to create a login so stopped here
- **You aren't sure what you should bring to class, contact the instructor of the class to ask more personalized questions.**
  - ○ Went back to the zumba class page
  - ○ Clicked on "contact us" at the top right corner
  - ○ Pressed "back"
  - ○ Next to instructor bio saw "what to bring" and clicked on it
  - ○ Cannot find the contact information for the instructor but saw a list of what should be brought to class

**Suggestion:** Make information regarding zumba classes available to people even if they do not have a login.

**(Morgan)**

**Scenario 1**
- **You're a parent looking to get involved in the City of Monona's recreational programs. How would you "get involved" through their website?**
  - ○ Took about 30 seconds to find "get involved button"
- **Once you have found the "get involved" button, how would you find out more about "volunteer opportunities"**
  - ○ Again found volunteer opportunities link in about 30 seconds
- **You have decided that you are definitely interested in volunteering, print out the "volunteer application".**
  - ○ Found volunteer application quickly, skimmed over, printed and signed within 5 minutes

**Suggestions:** Printing took a little too long to find to do/complete so make that more accessible and quicker to do.

**Scenario 2**

- **You are interested in throwing a retirement party for your boss. How would you inquire about doing so?**
  - Clicked on party and event rentals within 20 seconds
- **Once you have found out more about "party and event rentals," pick a location for your event to take place at.**
  - Chose community center for location
- **Reserve your desired space.**
  - Chose senior center for space
  - Couldn't find where to reserve
    - Went back
    - Found room rental request under additional information
    - Selected that

**Suggestions:** Make "reserve a space" more visible and accessible.

**Scenario 3**

- **You are interested in reading the Recreation Programs newsletter. How do you do so?**
  - Selected "newsletter" button
- **You want to read the 2016 Summer/Fall Guide, where would you find this?**
  - Found immediately under "current newsletter"
- **You have found the 2016 Summer/Fall Guide but find the text is too small to read. How do you make it bigger?**
  - Chose the + button on right side of PDF format page

**Suggestions:** All was fairly easy to navigate but if text is too small make bigger to start with so viewers do not have a problem reading text.

**Scenario 4**

- **You have already booked an event with the Recreation Program, but you're scared it may rain on the day of your event and it's supposed to be outside. Where would you find out more about this?**
  - Found "weather cancellation policy"
    - Read paragraph about refunds and weather policy
- **Once you find the weather cancellation policy, you realize that you need to find out if you're allowed to have alcohol on the premises. Where would you do this?**
  - Selected "alcohol/tobacco use policy" link
    - Found it is prohibited almost immediately
- **After looking at the alcohol/tobacco use policy, you need to find out if you can pay for the event using a credit card. Where would you find this?**
  - Immediately found "payment options"
    - Found you can use credit card

**Suggestions:** No problems navigating, finding information.

**Scenario 5**
- **You are interested in a fall Zumba class. Inquire more about when the classes are.**
  - Scanned through left, yellow menu
    - Found zumba under adult recreation programs in about a minute
- **You find that a session works well with your schedule and is still open to register. Register yourself for a session of the fall Zumba classes.**
  - Clicked zumba
    - Found program dates but questioned which was the second session because it did not specify
      - Assumed it was the second one listed and selected "register now"
- **You aren't sure what you should bring to class, contact the instructor of the class to ask more personalized questions.**
  - Clicked back arrow
  - Clicked on "what to bring" under program dates information
  - When looking at instructor information it only provided her name and information about her but not her contact info
    - Did find recreation staff contact information under "register now" link

**Suggestions:** Make program dates and information about class and contact information more obvious and easy to find.

**MEREDITH**
**Scenario 1:**
1. **You're a parent looking to get involved in the City of Monona's recreational programs. How would you "get involved" through their website?**
   a. Looked around for a button that said "get involved" for a while, finally chose Parks & Recreation page instead. Frustrated by the drop-down menu that appears when you hover over page titles at top of screen
2. **Once you have found the "get involved" button, how would you find out more about "volunteer opportunities"?**
   a. Chooses "get involved" button on bottom right
   b. Chooses Volunteer from left side column
3. **You have decided that you are definitely interested in volunteering, print out the "volunteer application".**
   a. Easily finds "volunteer application" - it was in all caps

**Suggestion:** Streamline the appearance and include much less color, pop-ups. Minimalism is best for navigation, otherwise users may get overwhelmed with appearance of website. Too many words (links) to choose from. I would suggest having *more* headers, maybe 2 or three more, and less subheaders that appear when you hover on the current 5 main headers. These

hovering subheaders are very overwhelming and difficult to find what you're looking for. Or at least alphabetize.

**Scenario 2:**
- **You are interested in throwing a retirement party for your boss. How would you inquire about doing so?**
  - Chooses "Party & Event Rentals" - no trouble finding it
- **Once you have found out more about "party and event rentals," pick a location for your event to take place at.**
  - Chooses community center
- **Reserve your desired space.**
  - Chooses senior center based on description
  - Doesn't find a "reserve" area
    - i.    Chooses "Contact Us" from information bar on right
    - ii.   Searches "rental" in search bar
    - iii.  Chooses "Rental Questions & Inquires" sheet
    - iv.   (Fills it out)

**Suggestion:** Rather than a small "Room Rental Request" link among the Additional Information at the bottom of info pages about each space, make a big, obvious link at the bottom of such pages that say "RENT THIS SPACE." This will make it easier for people to find the option, and might also increase amount of people that rent it if it is easier to find.

**Scenario 3:**
1. **You are interested in reading the Recreation Programs newsletter. How do you do so?**
   a. Chooses Parks & Recreation from left sidebar
   b. Hovers on "Parks & Recreation" & chooses "Current Newsletter"
   c. Chooses 2016 Summer/Fall Guide
2. **You want to read the 2016 Summer/Fall Guide, where would you find this?**
   a. Already found
3. **You have found the 2016 Summer/Fall Guide but find the text is too small to read. How do you make it bigger?**
   a. Uses mouse pad to zoom

**Suggestion:** Rename "Newsletter" button "Parks & Recreation Newsletter" - easier to find

**Scenario 4:**
1. **You have already booked an event with the Recreation Program, but you're scared it may rain on the day of your event and it's supposed to be outside. Where would you find out more about this?**
   - Searches "Rental" in top right search bar
   - Clicks "Parks & Recreation" (first search result, after peering at other search results)
   - Clicks "Party & Event Rentals" button at bottom
   - Clicks Park Shelters

- ○ Can't find it
  - i. Searches "rain"
  - ii. <u>Gives up!!!</u>
2. **Once you find the weather cancellation policy, you realize that you need to find out if you're allowed to have alcohol on the premises. Where would you do this?**
   - ○ Searches "alcohol parks" in top left sidebar
   - ○ Clicks on "2016 Shelter Reservation Policies"
     - i. Finds info here
3. **After looking at the alcohol/tobacco use policy, you need to find out if you can pay for the event using a credit card. Where would you find this?**
   - ○ Searches the "2016 Shelter Reservation Policies" for "credit card" and "payment" but nothing comes up
   - ○ Goes back to past search results for "alcohol parks" and sees "Frequently Asked Questions," chooses that from search results
   - ○ Doesn't find any credit card info here
   - ○ Searches "reservations credit card" and a 2014 search result comes up, so she assumes she can pay for it w/ credit card based on this, but is not positive
     - i. <u>Gives up</u>

**Suggestion:** On the "Rental and Events" page, add a section below the description of each event location that says, "Shelter Reservation Policies." This should be easy to find and read for anyone who is going to make, or has already made, a reservation. Streamline *all* reservation policies, including payment information, on these reservation policies and include a pretty obvious link to an email address and phone number of the appropriate department, which people can contact in case they cannot find the information they are looking for.

**Scenario 5:**
1. **You are interested in a fall Zumba class. Inquire more about when the classes are.**
   - a. Searches "Zumba"
   - b. Clicks first result (May Zumba classes)
     - i. Puts in next week's dates on the Zumba calendar search page
     - ii. A bunch of random stuff comes up
     - iii. She goes back a page
   - c. Clicks a link on the last page to the official Zumba page
     - i. Finds dates for Sept-Nov
2. **You find that a session works well with your schedule and is still open to register. Register yourself for a session of the fall Zumba classes.**
   - a. Clicks green Register Now button
3. **You aren't sure what you should bring to class, contact the instructor of the class to ask more personalized questions.**
   - a. Clicks on "Instructor: Recreation Class" at bottom of page
   - b. Finds phone number

**Suggestion:** On the "Classes/Activities" page, right now it gives little clarified information about the classes offered. It only says it holds "many classes," and gives vague program names. On

this page, provide a list of each activity offered and links to "Register" for those classes. This might eliminate the need for other links on the website.

**(Jake)**

**Scenario 1**
- **You're a parent looking to get involved in the City of Monona's recreational programs. How would you "get involved" through their website?**
    - Looked around at the top bar and left sidebar
    - Searched "I want to" to get involved
    - Found get involved button at bottom
- **Once you have found the "get involved" button, how would you find out more about "volunteer opportunities"?**
    - Started by looking at bottom of the page
    - Found volunteer bar on side
    - Clicked volunteer
- **You have decided that you are definitely interested in volunteering, print out the "volunteer application".**
    - Looked into online forms
    - Wasn't able to find volunteer application link

**Suggestion:** Participant was stuck on using "I want to" tab. Consider making this less ambiguous. The application link for volunteering could also be made more apparent.

**Scenario 2**
- **You are interested in throwing a retirement party for your boss. How would you inquire about doing so?**
    - Looked in the "I want to" section first
    - Party and event rental button found at bottom
- **Once you have found out more about "party and event rentals," pick a location for your event to take place at.**
    - Decided on community pool option found it right away
- **Reserve your desired space.**
    - Found phone number to call to reserve quickly

**Suggestion:** Everything worked well here aside from the "I want to" tab which, in his mind, was used as a search bar to try and find everything. Again, consider making amends to this tab's title.

**Scenario 3**
- **You are interested in reading the Recreation Programs newsletter. How do you do so?**
    - Scrolled to the bottom right away
    - "Don't know why these are all at the bottom…"
- **You are interested in reading the Recreation Programs newsletter. How do you do so?**

- ○ Easily found summer/fall guide link
- **You are interested in reading the Recreation Programs newsletter. How do you do so?**
  - ○ Used PDF zoom button
  - ○ Found pretty easily

**Suggestion:** A notable comment was, "Don't know why these are all at the bottom…" Considering this, it would be beneficial to try and place these important links and forms higher up the page, making it more accessible to many people. Aside from location of important items, the PDF's seemed to be easy to navigate.

**Scenario 4**
- **You have already booked an event with the Recreation Program, but you're scared it may rain on the day of your event and it's supposed to be outside. Where would you find out more about this?**
  - ○ Clicked on party and event rentals
  - ○ Looked in "I want to" section again
  - ○ Clicked on pool rental to try and find rain policy
  - ○ Decided to contact Missy Kedzorski about rain
  - ○ Hard to find rain policy
- **Once you find the weather cancellation policy, you realize that you need to find out if you're allowed to have alcohol on the premises. Where would you do this?**
  - ○ Decided to check frequently asked questions
  - ○ Contacted the Parks and Recreation department about alcohol policy
- **After looking at the alcohol/tobacco use policy, you need to find out if you can pay for the event using a credit card. Where would you find this?**
  - ○ Would most likely ask all questions with the Parks and Rec department, including payment
  - ○ Found alcohol policy in frequently asked questions while looking for payment options

**Suggestion:** The participant actively used contact numbers to ask questions about the website. The contact tab on the side is a good addition to the website.

**Scenario 5**
- **You are interested in a fall Zumba class. Inquire more about when the classes are.**
  - ○ Checked our community and "I want to" tabs first
  - ○ Checked "I want to sign up for" recreational program under "I want to" tab
  - ○ Clicked "Get Involved"
  - ○ Was difficult to find Zumba classes
- **You find that a session works well with your schedule and is still open to register. Register yourself for a session of the fall Zumba classes.**
  - ○ Had to guide to adult recreational page
  - ○ Found Zumba with guidance (Telling him to check adult recreation program)
  - ○ Found how to register by clicking "Register Now" tab

- **You aren't sure what you should bring to class, contact the instructor of the class to ask more personalized questions.**
  - Tried to click on instructor bio and instructor's name
  - Clicked on "What to Bring" tab
  - Found "Instructor" tab on register now page to contact instructor

**Suggestion:** Consider making the instructor's name (or any name on the website) into a hyperlink. This could send people to contact info for that specified person, making navigation easier.

_____

**Overall Suggestion:** There is a lot of information on this website, but it is very disorganized because of the information overload. There is necessary streamlining to be done in order to minimize information and make it easier to find what citizens are looking for. Considering moving some links around to more accessible areas. Also consider adding some more hyperlinks to names.

# MyMonona Recreation Programs Website

# Accessibility, Usability, and SEO Report

Report by: Jordan Bain, Alex Diebold,
Megan Scott, Zack Wermeling

# Accessibility

We used the accessibility tests WAVE (http://wave.webaim.org/) and Achecker (http://achecker.ca/checker/) to find problems with web accessibility in MyMonona's Recration Programs website. Outlined below are several of the issues we came across.

**Alt Text Errors:**

Alt text allows screen readers to read information about web elements to a user. They also have the additional benefit of helping search engines index web content. These are the alt text errors we came across:

- The five images that serve as navigation on the lower left of each page have no alt text (Notify Me, Online Payments, Report a Concern, Connect with Monona, and Online Forms). These images should be given alt text, and these images should also be converted into text if possible.
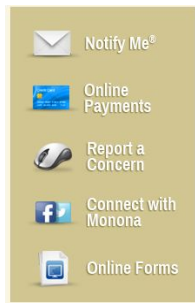


- Some images had irrelevant alt text that only had the image name (e.g. IMG1834 on the Recreation Programs main page). The alt text on these images should be changed to a short description of the image.

**Contrast Issues:**

High contrast on a website minimizes difficulty interpreting different elements on a page. To fix any contrast errors, the color of foreground elements can usually be changed to be more distinct from the background. These are the contrast errors we came across:

- The navigation links at the top of each page (e.g. Home > Your Government > Departments > Parks and Recreation) do not contrast well with the background.
- The navigation links on the upper left of each page (e.g. Adult Recreation Programs, Current Newsletter, etc) also have the same color scheme as the navigation links on the top.

- The contact and staff links on the right hand side of each webpage do not contrast well with the background.
- The "Newsletter" and "Get Involved" buttons on the lower right of each page could be difficult to read for some users.
- Overall, the light cream color used in the background and the orange color used for links do not contrast well, and any instances of these two colors together should be changed to give more contrast.

**Other Issues:**
- There is an improper use of heading tags where h1 and h2 were skipped to create smaller text. This can change how screen readers interpret web pages. Heading tags should only be used to signify importance, and the actual size of the text can be modified with CSS.
- The website becomes disorganized when the CSS is disabled, which poses a problem for screen readers as they read the site from top to bottom. The website should be restructured in a more orderly manner that still makes sense with CSS disabled.
- One of our tests reported that coding errors in the website design may be known to cause flashing, and therefore seizures. These errors should be fixed to minimize the risk.
- Several images on the website have text in image form with no/improper alt text, or are images that the screen reader cannot pick up with no alt text. Buttons should not be using images of a word as the link, instead use actual text, and should provide adequate alt text if an image is used so screen readers can know where the link is going to.
- There's is sometimes no easy way to move backwards from a subsite without using the browser's built-in "back" function. A quality site map should be provided to allow easier backwards navigation. The current site map does not always backtrack to where the user came from, thus forcing the user to use the "back" function.
- Some text is smaller than necessary. The CSS text size values should be changed so text is a size that makes full use of the space allocated to it.

# Usability

We performed usability tests (tests that critique the usability of a website) on multiple people, including a girl in her early teens, a undergraduate young adult, a graduate student in his twenties, and a middle aged woman. We presented them with a scenario and asked them to navigate the recreation page in order to answer some questions. The results of the tests critique the ease with which the subjects navigated to the site as well as their ability to complete the tasks requested of them. The script for this test can be found at the end of the report in the Appendix.

**Usability Summarized Test Results:**

Youth Scholarships
- It was easy to find the correct page for all of our subjects
- The page itself is wordy and it was somewhat difficult to find the answers to our particular questions

Little Picasso
- Was accessible as long as people originally knew the name of the program
- If we had not given context and we only said to find a Pre-K art class, this would have been more difficult
- Some of our subjects had difficulty differentiating the Pre-K and Youth age groups - some first looked for Little Picassos in the Youth section

Archery (Monona Extreme Club)
- Most of our subjects were unable to find archery without using a search
- The page titled "Monona Extreme Club" does not give much information about the programs and therefore it may be difficult for users to figure out this is where certain programs are located. Users must be willing to hypothesize that the information they want may be under that page

Computer Classes with Dan
- People were easily able to find the main page, however this page did not give any information about the classes for this month. The page tells you to look in the newsletter, which is very difficult to find
- There was a link called "Newsletter" on the lower right hand side of the page, however this doesn't direct to the Senior Newsletter and it can be confusing for users
- The Senior Recreation Page does not directly and obviously link back to the Senior Center page where the Senior Newsletter is housed. This could be remedied by including the Senior Newsletter on the Senior Recreation Page or alternatively providing clear navigation between the Senior Recreation Page and the Senior Center page.

- The section in the newsletter about Computer Classes with Dan was called "Holiday Letters and Mailing Labels with Dan" which gives no implication that it is a computer class.

**Usability Suggestions:**
- In pages with FAQs, such as the Youth Scholarship Program page, have all the questions outlined at the top of the page, linked to the answers which are lower on the page. This could make it easier for users to find the answer to a particular question they are looking for.
- Give headers a more detailed description. This would make each header more easily recognizable for the content contained in them, and as a result it would make the information easier to locate.
    - "Pee Wee" should instead be something like "Pre-K" so that users know exactly what the page is referring to
    - "Monona Extreme Club" could perhaps be a page titled "Archery, Frisbee, and Kickball"
    - "Little Picassos" could be changed to a more informative header, such as "Pre-K Art"
- Put all the information, schedule, and upcoming events for Dan's Computer Classes in one centralized page. Currently the pertinent information is accessible through downloading The Senior Newsletter on a separate page. By listing all the information on one page it makes the information easier to locate.
- Fix the typo on the Monona Extreme Club page (http://www.mymonona.com/667/Monona-Extreme-Club) at the bottom where it asks, "Want to try a day out **fro** free?".

# Search Engine Optimization (SEO)

PageLocus is an online site auditing tool that categorizes its analyses into four scores including social report, on site SEO, page speed, and authority. For the purposes of this project, we isolated the audit from the on site SEO score. Unfortunately, PageLocus only evaluates the entire domain as a whole (mymonona.com), but we found its insights useful to search engine optimization for the recreation programs subsite as a result of a cascading effect.

**PageLocus SEO Test Results:**
- Header tags were misused on mymonona.com. There are no h1 tags on that page.
    - 0 h1 tags, 0 h2 tags, 6 h3 tags, 13 h4 tags, 0 h5 tags
- Recommends adding a Conversion Form to reach customers/community members better
- There is no functioning meta description for mymonona.com.
    - This snippet of text given context in search results that when optimized to the content of the page, encourages more people to click on the mymonona.com search result
    - This could be due to several different phenomena. It could be that Google's crawlers have not crawled the site for some time. It could be that the meta description is improperly formatted or other HTML impaired the displaying of this description.
- To increase ranking in search results, add HTTPS support and make sure HTTP links redirect to HTTPS for all URLs associated with mymonona.com

Raven (https://raventools.com/) is a search engine optimization tool that analyzes specific subsites. It is a site auditor that suggests search engine optimization changes to draw more traffic to a webpage.

**Raven SEO Test Results:**
- Google Analytics is missing from the Recreation Programs page (http://www.mymonona.com/326/Recreation-Programs). No traffic to the page can be logged as a result. Using Google Analytics allows webmasters to view traffic differentials per page of their website.
- The navigation links at the bottom left of each page under the subsite (http://www.mymonona.com/326/Recreation-Programs) lack alt tags. Search engines cannot associate these links with the Recreation Programs page since their icons are image files without any alt text for the engine to read:
    - http://www.mymonona.com/264/Applications-Permits
    - http://www.mymonona.com/423/Online-Payments
    - http://www.mymonona.com/428/Connect-With-Monona

- http://www.mymonona.com/list.aspx
- http://www.mymonona.com/requesttracker.aspx
- These images lack alt text that could otherwise be read by search engines to enhance retrieval of the Recreation Programs page in search results:
  - http://www.mymonona.com/ImageRepository/Document?documentID=98
  - http://www.mymonona.com/ImageRepository/Document?documentID=608
  - http://www.mymonona.com/ImageRepository/Document?documentID=102
  - http://www.mymonona.com/ImageRepository/Document?documentID=100

**Search Engine Optimization Takeaways:**
- We noticed the Parks and Recreation subsite has its own Facebook Page (https://www.facebook.com/mononaparksandrec/?fref=ts) and that it has been added to the Parks and Recreation subsite (http://www.mymonona.com/250/Parks-Recreation). We suggest linking this Facebook Page on http://www.mymonona.com/326/Recreation-Programs as well in the same location on the page as the icon is on that Parks and Recreation page. This applies to the Twitter Page as well (https://twitter.com/mononaparksrec).
- Add https encryption to make the site more secure and rank higher in search engines.
- Add alt tags to the navigation links at the bottom left of each page in the Recreation Programs subsite (http://www.mymonona.com/326/Recreation-Programs ) for accessibility and for crawlers (http://www.mymonona.com/326/Recreation-Programs and all subsite links) (Notify Me, Online Payments, Report a Concern, etc).



- Encode descriptions for colloquial terms in upper left navigation bar on the Recreation Programs page( http://www.mymonona.com/326/Recreation-Programs) that users are more likely to run a search for. Terms like 'Little Scampers' and 'Pee Wee' may not be searched as frequently as 'toddler' or 'preschooler'.

# Appendix

**Usability Test Scenarios:**

You are a middle-aged mother who recently relocated to Monona, WI to have a closer commute to work in the city. You navigate to the City of Monona website to engage your family in programs that fit their particular interests. Please express all of your thoughts out loud and clearly. Do not rush, this test is designed to take 15-20 minutes.

You hear that the City of Monona offers Youth Scholarships, so you first check those out to see if the city will assist you in paying for your childrens' programs. Please locate which programs are eligible for scholarship and how much assistance you may receive.

*Solution: Home > Youth Scholarship Programs

Your youngest child, Jimmy (age 4), loves art. You would like to sign him up for an art program, and you hear Little Picassos is a local program available. What times are these programs held, and what are the costs?

*Solution: Home > Pre-K Programs > Little Picassos

Your oldest child, Sally, loves her new bow and arrow that Santa gave her for Christmas. She just turned 12. Can she join the archery camp? How long is the archery camp and what does it cost?

*Solution: Home > Summer Recreation and Camps > Monona Extreme Club > Archery (Link)

Your mother says she will frequently be in town to visit your household, but the kids always want to play on the computer with her. What programs are available for seniors to learn about computers and what topic will the teacher be discussing this month?

*Solution: Home > Senior Recreation Programs > Computer Classes with Dan > Back to Senior Center > Senior Connection Newsletter (Link) > Most Recent Publication (Download) > Scroll to bottom of Newsletter

## ABOUT THE UNIVERCITY YEAR

UniverCity Year is a year-long partnership between UW-Madison and one community in Wisconsin. The community partner identifies sustainability and livability projects that would benefit from UW-Madison expertise. Faculty from across the university incorporate these projects into their courses with graduate students and upper-level undergraduate students. UniverCity Year staff provide administrative support to faculty, students and the partner community to ensure the collaboration's success. The result is on-the-ground impact and momentum for a community working toward a more sustainable and livable future.

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