



## Usability Testing Report

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## Introduction

The Huntsville-Madison County Public Library is the oldest public library branch in the state of Alabama, and it serves the residents of Madison County. The library offers online services, computer training, an extensive digital collection, public-use computers, free Wi-Fi service, meeting spaces, and much more. The primary purpose of the website is to provide information about the library's collections, services, and events.

The goal of this study is to collect data and evaluate issues associated with the usability and accessibility of the Huntsville-Madison County Public Library website. Usability is the assessment of how easy it is for a user to navigate and use a site, while accessibility is how easy users with disabilities can use the same site.

The researchers, a group of four students from The University of Alabama in Huntsville's Usability Studies course, used a heuristic analysis to assess accessibility concerns, with a particular focus on those that affect users who have visual impairments. Additionally, the researchers tested the site's usability with 11 (n=11) users in all.

The results of the accessibility heuristic included that:

- Alt text was missing across the entire site
- Numerous unordered lists across the site presented challenges to accessibility
- Numerous adjacent links go to the same URL

Results of the usability testing included:

- Participant demographics
- Pre and post-test results
- Challenges with the site's search bar
- User expectations for library website use
- User feelings towards the site's look and feel
- Digital download confusion
- Lack of content organization

Recommendations for improving accessibility include:

- Add alternative text to images conveying information
- Utilize numbered lists, rather than bulleted lists
- Reduce redundancy by consolidating links into a single link with descriptive text

Recommendations for improving usability include:

- Add additional drop-down menus for easy navigation
- Continue to utilize menu items on the homepage
- Add a clear explanation of what the Hoopla service is

- Set the search bar default to search the entire site
- Refresh old content and links to provide consistency across the site
- Add home button to the header

This report details these methods, findings, and recommendations.

## Methods

This usability study of the Huntsville-Madison Public Library website utilized two main methods: heuristic analysis and usability testing. The heuristic analysis was utilized to gain a better understanding of how well the library's website performed on accessibility standards, such as unordered lists, redundant links, and the presence of alternative text (alt text).

The following usability test provided insight into user pain points, user behaviors when completing common tasks, identifying user preferences when finding information about library events and general library information, understanding website accessibility, and gauging user enjoyment and satisfaction when tasked with finding library information.

## Heuristic Analysis

The heuristic analysis utilized standards from WebAIM and focused on five main pages within the website, including the Home, Events, Research, Books and Media, and About pages. These pages were selected for analysis as they are believed to be central to users' typical activities and goals on the library site.

To conduct the heuristic analysis, the WAVE accessibility checker tool was used to identify and explore each accessibility error and gain a better understanding of each one's severity. The WAVE tool was utilized to identify unordered lists, redundant links, and alt text errors, among others.

After data collection was complete, the researchers decided to focus on multiple error categories that were found to repeat across the site. Due to the time constraints of the semester-only project, the researchers strategically focused on the errors that presented the most barriers to the user. It is important to note that ARIA errors were excluded from this report as they were identified as being outside of the class scope. The goal of the researchers is to provide recommendations that could be easily replicated across the library site.

After exploring each error more thoroughly, the researchers provided recommendations to resolve accessibility issues.

## Usability Testing

The research team recruited individuals known to the researchers through personal text messages and phone calls. The research sample consisted of 11 users (n=11).

The usability test took users an average of 25 minutes to complete, through a combination of in-person and Zoom moderated interviews.

During the test, the users completed pre-test questions which provided the research team with demographic information and information regarding the user's library website familiarity.

The first look allowed the research team to gather information regarding user first impressions, aesthetics perception, library website expectations, and feelings towards navigational elements.

The usability portion of the study included a total of 9 tasks that focused on collecting data regarding user pain points regarding usability and accessibility.

When concluding the usability test, the participant completed a variety of exit questions to summarize the overall experience, understand positive and negative experiences while using the website, and gather information regarding user recommendations.

A full version of the script is located in Appendix A.

After the tests were completed, they were transcribed using Trint transcription software. The research team then used thematic analysis to interpret trends within the collected data.

## Accessibility Results

The heuristic analysis for accessibility revealed significant challenges to accessibility on the Huntsville-Madison County Library website. Specifically, the data revealed 3 main themes relating to accessibility:

1. **Alternative Text:** Alt text was missing across the entire site, with the biggest issue being missing alt text on informational graphics.
2. **Unordered Lists:** Numerous unordered lists across the site presented challenges to accessibility when presenting web content in a useful order.
3. **Redundant Links:** Numerous adjacent links went to the same URL resulting in additional navigation and repetition for users.

This section presents findings related to these themes.

## Alternative Text

Most photos and graphics providing critical visual information on the site lacked alt text, which posed serious problems for screen readers. The researchers discovered a total of 51 alt text mistakes on the website using WAVE. Table 1 lists the number of alt text mistakes on each page. Examples of missing alt text can be seen below in Figures 1 and 2.

Table 1: Number of alt text errors across the Huntsville-Madison Public Library

Alt Text Errors	Home Page	Events Page	Research Page	Books and Media Page	About Page
Total Errors	25	3	10	7	6

Figure 1: Missing alt text on button grid

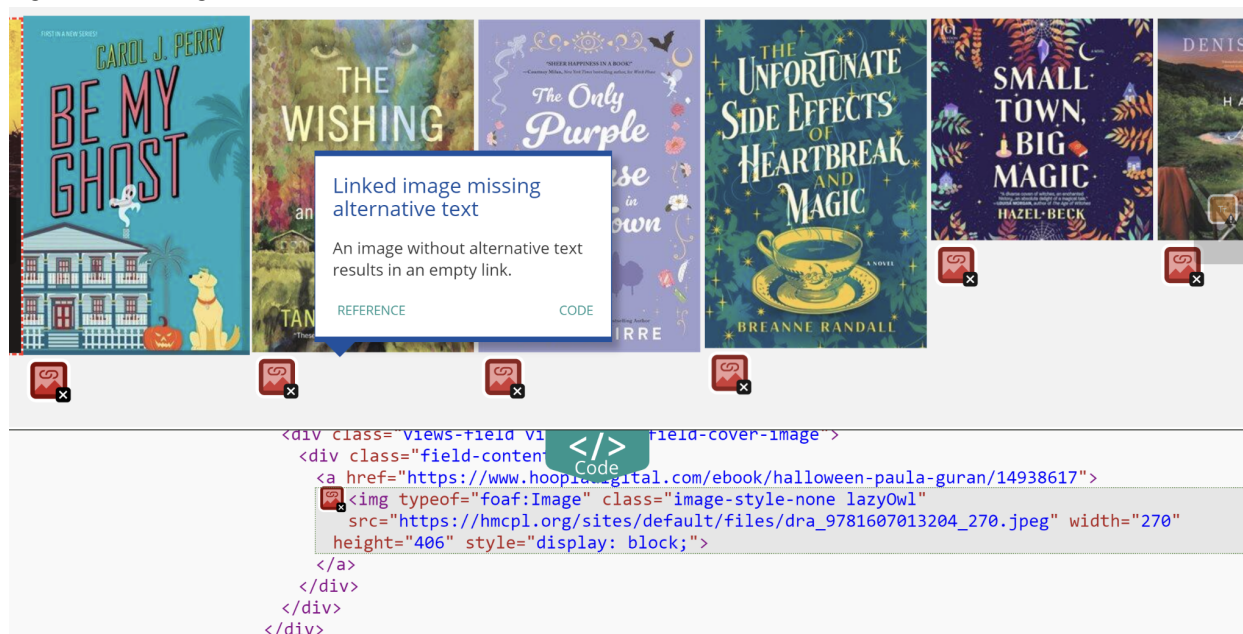
The image shows a grid of buttons on a website. The top row contains two buttons: 'YOUTH SERVICES' and 'BOOK CLUBS'. The 'BOOK CLUBS' button has a tooltip that reads: 'Linked image missing alternative text. An image without alternative text results in an empty link.' Below the buttons, the source code for the 'BOOK CLUBS' button is displayed, showing the following HTML:
 

```

<div class="views-field views-field-promo-image">
  <div class="field-content">
    <a href="http://blast.hmcpl.org">
      
    </a>
  </div>
</div>
<div class="views-field views-field-title">
  
```

 The code shows that the image tag is missing an alt attribute, which is the cause of the error.

Figure 2: Missing alt text on book carousel



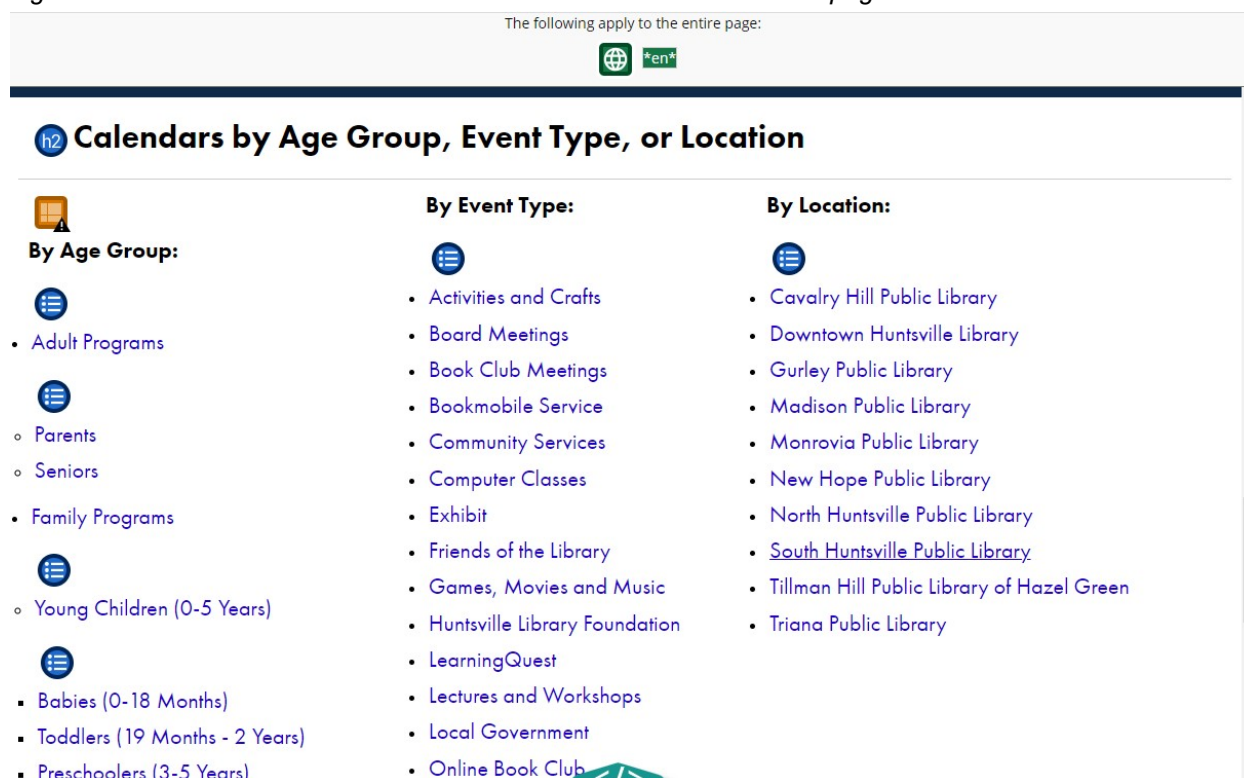
## Unordered Lists

WAVE accessibility errors were found across the 5 library pages that were evaluated by the research team. The number of errors was not extensive, however, they were significant enough to warrant further investigation. Of the 5 pages evaluated, the Events page contained the highest density of unordered list errors, with 17 total errors.

Unordered lists make it difficult for screen readers to properly order web content, so these errors must be addressed to make the library website more accessible. By ordering a list on a web page content will be shared with the user in its intended order.

As previously mentioned, the Events page contained numerous unordered lists. An example of this can be found below in Figure 3.

Figure 3: Numerous unordered list errors can be found on the Events page.



These errors were caused by the lack of order, specifically regarding the event category list. The categories in this section are unordered and by providing order to the list, screen readers will be able to deliver the content to the user in a more appropriate way.

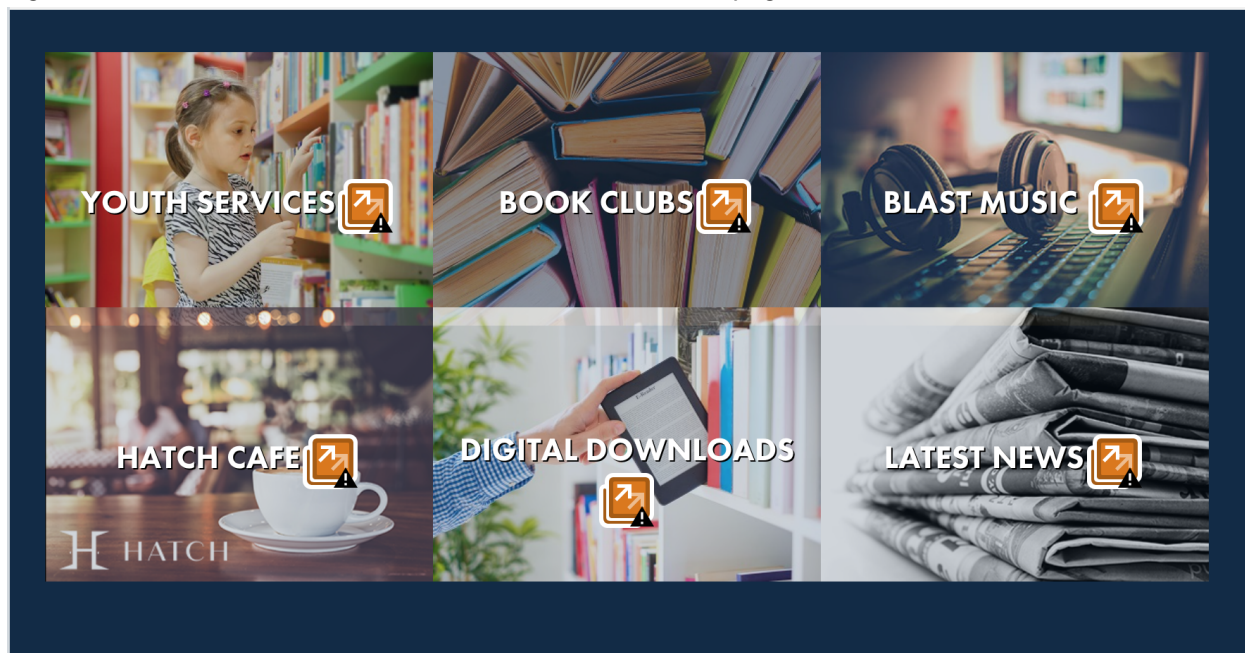
## Redundant Link

Redundant links have been identified across multiple pages of the website, with 11 such errors on the Home page, 6 on the Events page, and another 6 on the Research page. The issues involve instances when adjacent links direct users to the same URL, resulting in additional navigation and repetition for users, but especially for those who depend on assistive technologies, such as screen readers or keyboard navigation.

On the Home page, the redundant links issue occurs numerous times when multiple images are arranged in a three-by-two layout (Figure 4), designed for quick navigation to important sections or content of the website.



Figure 4: Numerous redundant link errors found on the Home page.



## Usability Results

### Demographics

Participants consisted of (n=11) participants with a mean age of 36.5 years. Of the (n=11) participants, (n=5) identified as male, (n=5) identified as female, and (n=1) identified as other.

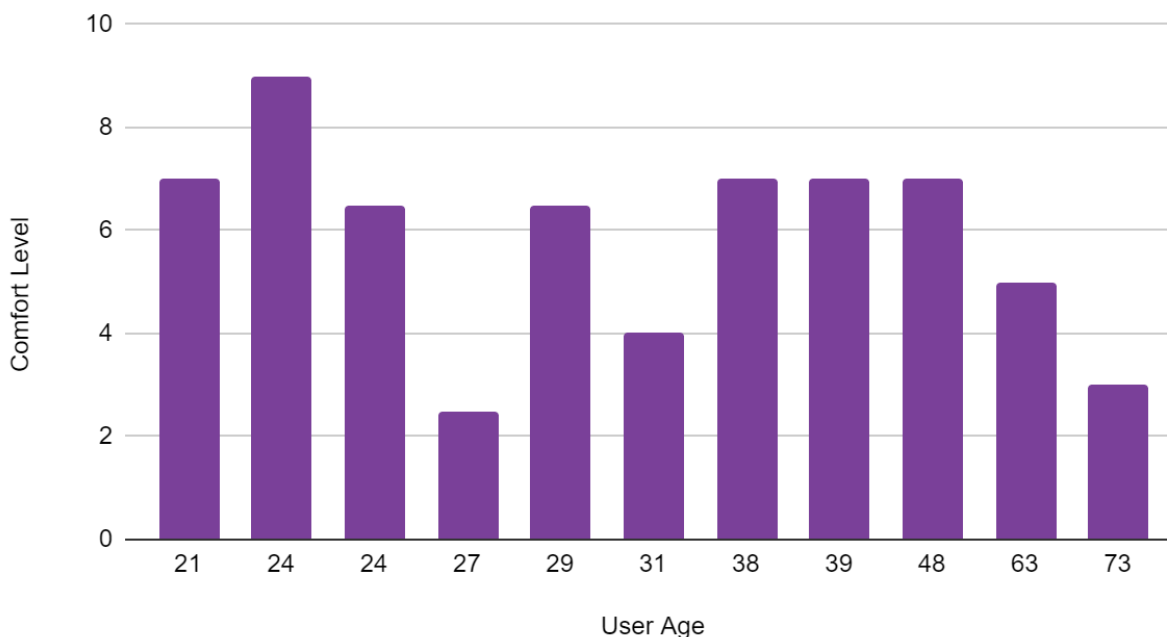
The participants rated their comfort level using websites in general on a scale from 1-10, 10 being very comfortable, resulting in an average comfort level of 8.75.

### Pre-Test

The research team conducted pretest questions to gather demographic information, understand the comfort level of navigating websites in general, and collect information regarding library familiarity.

Figure 5: Age & Comfort Level

### User Age and Comfort Level In Website Use



While most participants revealed that they don't frequently utilize library websites, a minority group of participants did identify as those who used library websites. One individual mentioned a bi-weekly use of the library website for accessing digital books. Another participant specifically relied on the Huntsville-Madison Library website, primarily for borrowing books. This specific participant also previously used the Birmingham Library website during their residence there. However, their current reliance on the school library has led to a decreased frequency of using the library website, turning instead to school resources for research needs.

Moreover, when asked about past event attendance at a library, one participant mentioned regularly attending storytime sessions with her son. Finding these events through the library's online calendar, she utilized the website beforehand to gather event details such as dates and locations, particularly to entertain her young child.

Additionally, the researchers asked participants about their background in graphic design experience. This helped the researchers to gauge the users' understanding of design aesthetics. Two participants indicated that they have graphic design experience. Their backgrounds in graphic design added a valuable dimension to their ability to contribute unique perspectives and insights addressing design-related aspects of the website.

During the usability test, participants expressed their expectations regarding what a library website should offer, like being able to access research journals and check out or pick up books online. Participants stressed the need for easy navigation to find and borrow books. Participants

also wanted options to quickly narrow down searches for magazines, teasers, or research materials for a faster and smoother experience.

None of the participants indicated that they use assistive technology.

## Post-Test

Post-test questions were asked of the participants to summarize their overall experience, understand positive and negative experiences while using the website, and gather information regarding user recommendations.

When asked about their overall experience using the website, participants stated that:

- “Locating books was straightforward, but finding materials on various or specific subjects proved a bit challenging. However, the overall experience is satisfactory.”
- “I found it quite good; I managed to locate everything I wanted.”
- “It was more challenging than I would have liked. If I couldn't find information about the makerspace here, I would resort to Google searches and navigate through the links. It seems unnecessarily difficult for certain things that should be straightforward.”
- “The little tabs at the top that made it easy to find information.”
- “I found that there were some challenging areas. So I think that this website could use some improvements.”

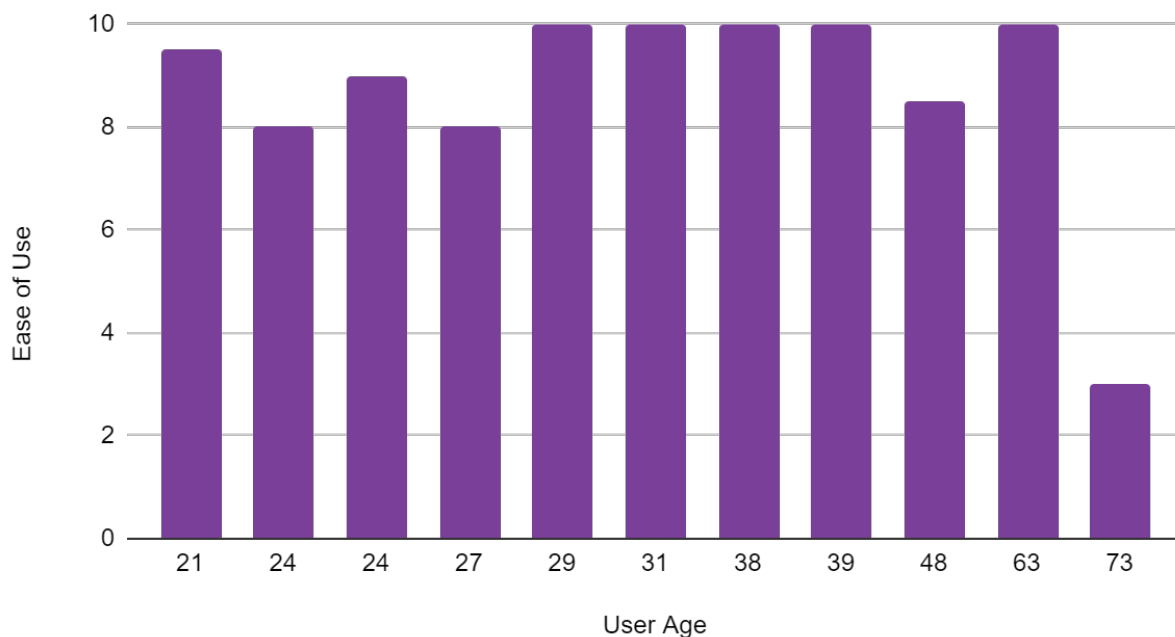
These quotes were further validated when users were asked about their positive and negative experiences.

- “Visually appealing, and easy to navigate. The best part was, a lot of basic stuff on the homepage to access.”
- “The worst part was the search bar leading to the catalog instead of the website itself.”
- “I'd say that the worst part about the experience was finding out that there was a Lego Club, but not being able to see them the next time they met up was.”
- “The best part of my experience was how easy it was to find a book.”
- “Um, I think learning about the special collections, I like that. I thought that was cool that they had those. I learned about different things that the library has that I might not have known before.”
- “The search tool for finding books was very intuitive. It was exactly what I expected.”
- “Critiquing the website was quite interesting, especially from a graphic design perspective.”
- “The best part of my experience, I think, was the buttons at the top that make it easy to navigate and find what you need.”

To summarize how easy or challenging the users found the website to navigate, they were asked to rank on a scale from 1-10, with 1 being very easy, and 10 being very difficult to use.

Figure 6: User age their ease of website navigation

### User Age and Ease of Use



Finally, users were asked what improvements or changes they would recommend to make the website better to navigate.

- “Search bar, not to go directly to the catalog but to the website itself.”
- “Under events, if they had a master calendar. That would be helpful.”
- “Larger print, maybe the headings would be larger to see. The heading size is the same as the font and it is hard to capture the differences.”
- “Perhaps they could consider adding highlights at the bottom of the page, just under the home page. This way, if you have the shortcut, it would be more convenient.”
- “Books and media I feel like could have a dropdown for digital downloads.”
- “I would suggest perhaps rearranging some of the buttons such as the locations button onto this tab, which is where I would expect it to be at the very top of the page is usually for personal information or contact information, things like that.”
- “For consistency, it would be beneficial if the search function allowed users to search everything on the website.”
- “That home page with those 6 panels, they were very clear and concise and also showed me some of the services that I didn't know existed. So I thought the six panels were great.”
- “There's a lot of visuals. It's hard for me to focus on one thing.”

## Familiarization and Tasks

### Familiarization

The search bar and the seasonal header graphic stood out.

When participants took their first look at the library's home page the majority of the users first noticed the search bar and the seasonal header graphic. Two of the participants who noticed the search bar commented on how they liked the option to search the site, however, the users did not notice that this search bar defaults to searching the library catalog.

- "I first noticed the banner ad right here."
- "Right away I see the Library and October's National Book Month and I see a very large box search."
- "So, the first thing I noticed was the banner at the top of the stack of books."

Users want to use the library site to explore books and find events.

Participants were asked what they believed a library website should be used for, and almost every participant said the site should be used to find library books. A handful of users also said they would use the library website to explore upcoming library events that they would be interested in attending.

- "What books they have."
- "Information on all of their physical titles and media, as well as their digital titles and media, and then any like, services or events that they have or are hosting."
- "the ability to schedule rooms or meeting areas and then upcoming events."
- "Well, on the website it tells me all about the books in the media, the services and events and about and and the catalog."
- "I can sign up for a club if there's a club that I'm interested in. It looks like there's more than what's right here."

The buttons on the seasonal header image get lost.

Three buttons lay on top of the seasonal header image on the homepage. The majority of the study participants did not notice the buttons as they blended in with the design of the image. One participant did notice the three buttons but commented that the design of the background graphic stood out more than the buttons themselves.

- "I didn't even notice them. And they just kind of blended into the background."
- "Oh right there. I would not have known that those were anything to click on."

Overall, the homepage is fine.

The study participants mentioned a few pain points overall, but as far as the overall look and feel of the homepage, users said it was just fine. Users mentioned that they liked the use of color and simplistic layout. Users also mentioned that some buttons were challenging to see due to contrast issues.

- “Um, it’s fine. Um, it doesn't look like it's the cutting edge or the most optimized, but it is fairly easy to figure out.”
- “I think the homepage looks nicer than that page that I was just on.”
- “It’s laid out well. It seems like it flows pretty well. It seems welcoming.”
- “And I like that their most popular things are like on their main screen, so you don't have to go looking for them.”

## Tasks

Adding a book to digital downloads caused confusion.

When users were asked to add their favorite book as a digital download, they were often met with confusion. The site does little to explain that you will be exiting the library site to access digital downloads. For some books, there are multiple third-party sites available to rent the digital book, but there is a lack of information about each of these options.

- “I don't know what that is.”
- “I find it's very difficult. I'm not sure exactly where I have to click.”
- “I navigated to books and media and I'm going to, as I'm scrolling down, I see a section that says digital download. So I've got some sites that I can search for, like Valley Digital Library, Hoopla. Kanopy. So it looks like Valley Digital Library offers thousands of ebooks and audiobooks that are available for check out on the Valley Digital Library. So I'm going to click this. So what happens? So there's a search bar at the Top and Valley Digital Library website along the top tabs.”

The search bar was consistently a pain point.

Throughout the usability test, many participants tried using the search bar to find what they were looking for on the website. The search bar is defaulted to search the book catalog, instead of the website. No users realized that there was an additional drop-down menu indicating the search criteria could be changed.

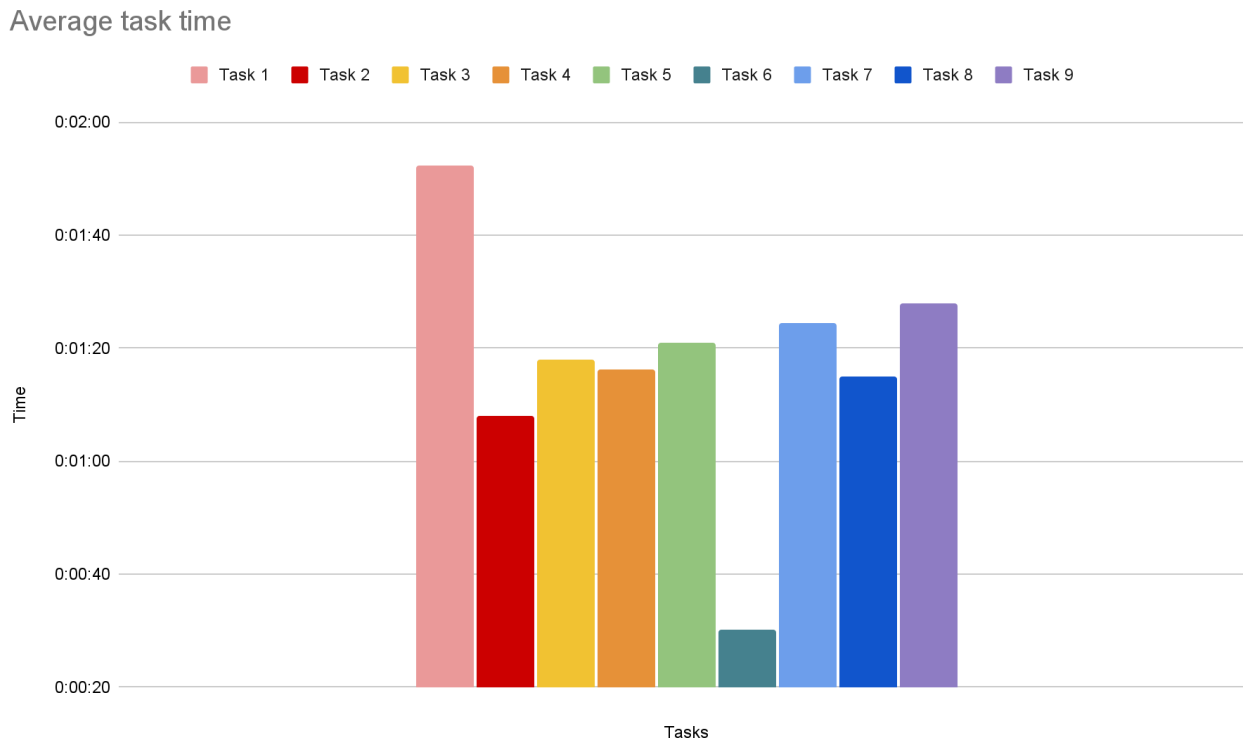
- “The unsuccessful searches were the most challenging part of the site.”
- “I find it confusing for me, it's confusing. Maybe in search. Now we're going back to the books. I'm confused.”
- “To keep things consistent, it'd be great if the search on the website could find everything in one go.”

## The site lacked intuitive content organization.

Overall, study participants experienced moderate challenges when trying to navigate the library site to find information. Most of the participants clicked on multiple buttons and pages before finding the information they were looking for.

- “So I feel very comfortable with that request because when I go down here again, the graphics that I like it says “Book Clubs”. So click on the book clubs. And the branch I selected was Downtown, sorted by theme. This is really nice. I will pick classic book clubs. Okay. And that appears to be the end, and I'm not getting any information about that book club. That's very interesting. I'm confused at this point.”
- “I'm taking my time to read everything. Browse Advanced Search. I find it confusing. For me, it's confusing. Maybe in search. Now we're going back to the book. I'm confused. Search results now.”
- “I want to go back to the homepage, which is something that changes.”
- “Larger print. Maybe the headings would be a little bit larger to see. It's the same size as the information underneath it.”

Figure 7: Average time per test task



## Recommendations

### Accessibility Recommendations

Based on trends in findings from the heuristic analysis, this report recommends the following changes be made to the Huntsville-Madison Public Library website to improve accessibility:

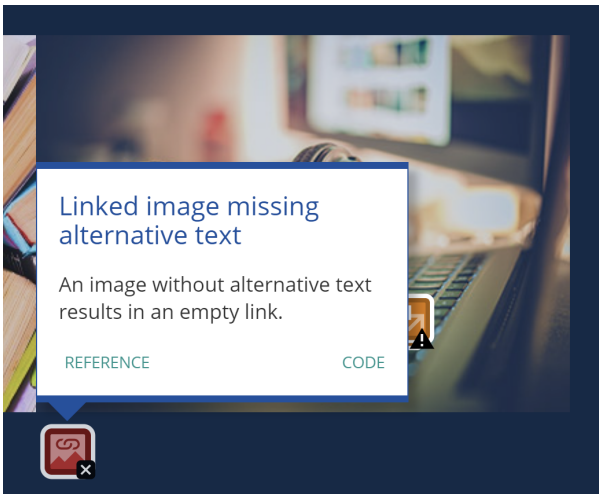
1. **Alternative Text:** Invest time in adding alternative text to images conveying critical information across the entire site.
2. **Unordered Lists:** Utilize numbered lists, rather than bulleted lists, to ensure that content is presented in an ordered manner.
3. **Redundant Links:** Consolidate the redundant links into a single link across the site.

### Alternative Text

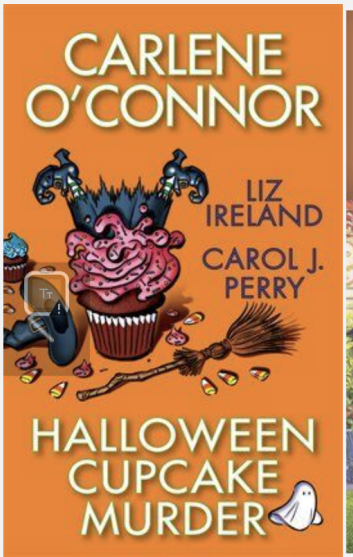

Alternative text was largely missing across the site. Significant resources should be devoted to distinguishing between informative and decorative images across the site and then developing alternative text for the images and graphics that convey critical information.

Table 2 below provides recommendations for alternative text for images across the site.

Table 2: Alt text recommendations

Image	Alt Text Recommendation
	<p>Blast Music Button</p>



 <p data-bbox="240 254 545 352">CARLENE O'CONNOR</p> <p data-bbox="423 401 545 527">LIZ IRELAND CAROL J. PERRY</p> <p data-bbox="250 638 537 764">HALLOWEEN CUPCAKE MURDER</p> 	<p data-bbox="824 212 1406 342">Book cover with an orange background with an image of a cartoon cupcake and a witch's legs sticking out of the top. In front of the cupcake lies her broom.</p> <p data-bbox="824 380 1360 443">----- All books located on the rotating carousel need alt text for accessibility.</p>
---	---

## Unordered Lists

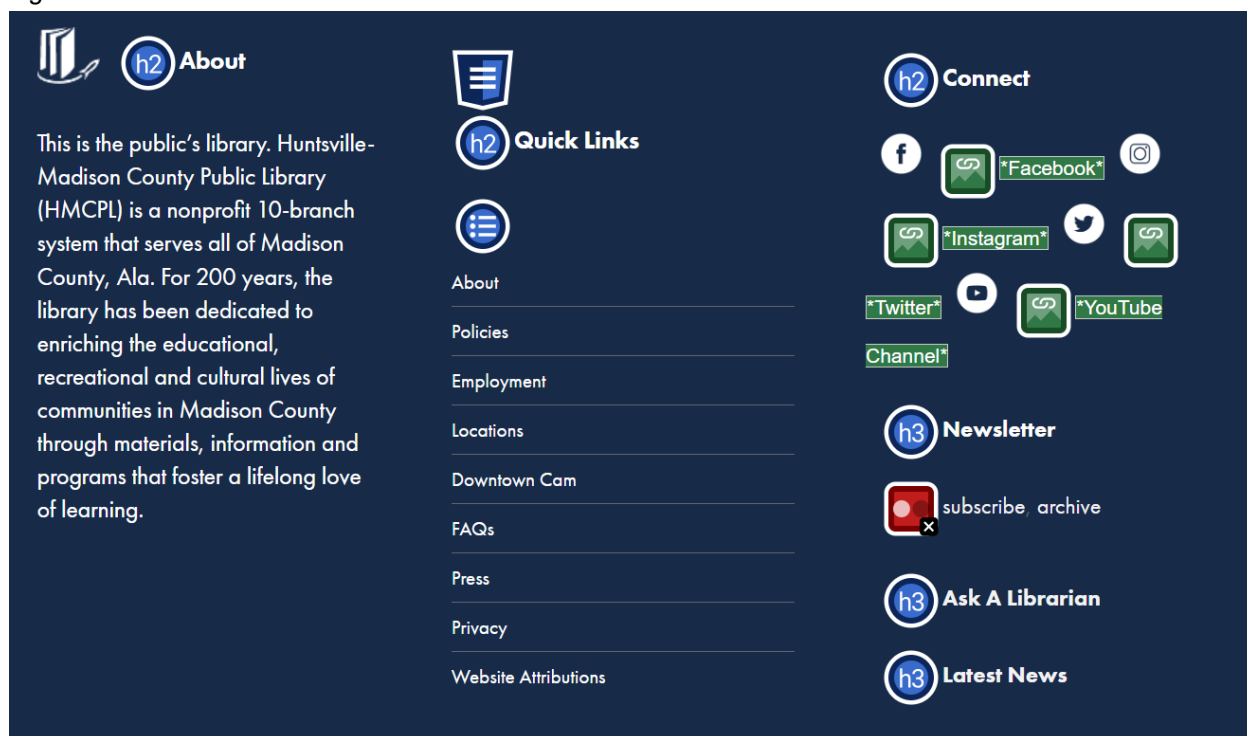
Of the 5 pages evaluated, the Events page contained the highest density of unordered list errors, with 17 total errors, shown in Figure 8 below. Rather than utilizing bullets to organize the list, numbers should be used to allow for better list organization when a screen reader is used.

Figure 8: Unordered list on the Events page

 <b>By Age Group:</b>	<b>By Event Type:</b>	<b>By Location:</b>
 Adult Programs	 • Activities and Crafts	 • Cavalry Hill Public Library
 Parents	• Board Meetings	• Downtown Huntsville Library
 Seniors	• Book Club Meetings	• Gurley Public Library
 Family Programs	• Bookmobile Service	• Madison Public Library
 Young Children (0-5 Years)	• Community Services	• Monrovia Public Library
 Babies (0-18 Months)	• Computer Classes	• New Hope Public Library
	• Exhibit	• North Huntsville Public Library
	• Friends of the Library	• South Huntsville Public Library
	• Games, Movies and Music	• Tillman Hill Public Library of Hazel Green
	• Huntsville Library Foundation	• Triana Public Library

Similarly, the footer of each page (Figure 9) also contains an unordered list. By providing numbered orders to this list, assistive technologies will provide the content to the user in an ordered manner.

Figure 9: Unordered list in the website footer



## Redundant Link

To enhance the accessibility of our website, the issue of redundant links that exist across multiple pages were identified. Redundant links can create confusion and hinder the user experience, particularly for those who rely on assistive technologies. To resolve the issue, the researchers recommend consolidating the redundant links into a single link and eliminating any duplicate text or alternative text. By implementing these changes, the researchers aim to provide a more accessible and streamlined browsing experience for all our users.

Table 3 below provides examples of redundant links where the recommendation would be applied.

Table 3: Redundant links to apply recommendations

Image	Redundant Link
<p>The image shows the top navigation area of the library website. A search bar is visible with a 'Search Toggle Icon'. Below it, a navigation menu lists 'Huntsville', 'Madison', 'County', and 'Library'. A tooltip is overlaid on the 'Library' link, stating 'Redundant link' and 'Adjacent links go to the same URL.' Below this, there are sub-links for 'REFERENCE' and 'CODE'.</p>	<p>A redundant link error was found on the header.</p>
<p>The image shows a grid of service tiles on the library's home page. Each tile includes an image and a text label: 'YOUTH SERVICES', 'BOOK CLUBS', 'BLAST MUSIC', 'HATCH CAFE', 'DIGITAL DOWNLOADS', and 'LATEST NEWS'. Each tile also features a small icon of a document with a red arrow pointing to the right, indicating a redundant link.</p>	<p>Numerous redundant links errors were found on the Home page.</p>
<p>The image shows the 'Room Reservations' page. The main heading is 'Room Reservations'. Below it, there is a sub-heading 'Meeting, Conference and Study rooms are now open for reservation requests by Library cardholders.' The main text describes reservation options for different locations and includes a link for 'optional charges' with a red arrow icon. A sidebar on the right contains a 'Room Reservations Home' button and a list of links: 'Frequently Asked Questions', 'Meeting Room Images, Setup Options, &amp; Capacities', 'Meeting Room Request Details Form', 'Optional Charges', and 'Policies'.</p>	<p>A redundant link error was found on the Research page.</p>

## Recommendations - Usability

### Positives

Users thought the homepage was visually appealing and easy to navigate.

Users emphasized the significance of a clear and intuitive menu structure to facilitate easy navigation and prevent disorientation while browsing. Additionally, they highlighted the importance of employing visual cues such as contrasting colors, larger fonts, and strategic placement to draw attention to critical information and calls to action. Users also stressed the implementation of an efficient search function featuring autocomplete suggestions, noting its ability to expedite the process of finding specific content. Furthermore, they underscored the impact of incorporating high-quality, relevant imagery to capture attention and effectively communicate the website's narrative or purpose. Our recommendation is to continue with the current approach; users appreciate the clear navigation, highlighted important information, quick search, and quality images.

- “I really like the graphics they have on this. I like how they have a menu. They have a search bar, easily to use if I'm searching for a book. I like how they have all these.”
- “I think the homepage looks nicer than that page that I was just on.”
- “It's laid out well. It seems like it flows pretty well. It seems welcoming.”
- “I mean, somebody somebody obviously spent some time trying to make sure that this was a welcoming experience”
- “I think it is very well designed.”

The navigation buttons at the top of the page were well-liked.

The navigation buttons allowed users to quickly navigate to what they were looking for. A limitation of this however was that while the buttons at the top page were useful the search bar and the lack of drop-down menus made these buttons less appealing as an option compared to the search bar. Our recommendation is to simply add dropdown menus that could lead to other pages on the website in corresponding areas.

- “I like how they have a menu.”
- “I think. I think they're really good. I do like how they have books and media separated from research. So you have your books in the media section where it's probably reading for pleasure, you know, whether it be fiction or nonfiction. And then a research section where if you're looking for academic journals, peer reviews of peer reviewed journals, you can maybe find it there.”
- “Okay. Um, I think they're pretty self explanatory. They're for the most part, like books and media services that they offer, events that they have.”

The home screen made it easy to access information.

The home screen was very easy to navigate for our participants giving them the tools to look for everything they needed. A limitation of this was that the home screen being so accessible and good at it's job made participants avoid other parts of the website that could've used some testing. We would recommend continuing the use of menus on the home page.

- “Looks like there's their major services that they offer, which is very interesting, and Blast music that caught my attention, is something I'm not aware of. So it looks like you can get music, which is not something I usually expect from a library. Looks like some current books that are available for Halloween with the holiday coming up. And it also looks like there are just other support services that they provide. So looks, looks exciting.”
- “A lot of this basic stuff that you would be looking for right there on the homepage for you to access. That was something very similar. “

## Limitations and Pain Points

“Hoopla” does not translate to digital download.

In order to rent a book through digital download, users should select “Hoopla” as a checkout option. Unless the user is already familiar with Hoopla and its services, the name does not describe what it is. The study participants were often left confused about how to proceed with the digital download process and were hesitant to select Hoopla as an option as they did not know what it meant. We recommend that there be a clear explanation of what Hoopla is and how a user would use it to perform the task successfully.

- “I don't know what that is. Guess I'll click this just to see.”
- “So I don't see anywhere that tells me that this would be a download. So I'm confused and can't proceed.”
- “I'm at a loss here—I don't see any indication that this is a downloadable file.”

The search bar default should be set to search the website, not just the book catalog.

The search default led to many unsuccessful search attempts. Participants never noticed the additional drop-down menu to change the search setting. We recommend setting the search bar default to search for content on the entire site, rather than limiting the search to only the book catalog.

- “The unsuccessful searches were the most challenging part of the site.”
- “Since that's such a specific request, I thought I would just do a search. And I've come up with a book which is confusing since you're asking for information on the Makerspace.”

Each page of the website should be consistent.

Links lead to older versions of sites which then offer alternative routes to information. Our recommendation is to have a reorganization of the site to ensure the information architecture is updated and inline with the intent of the website.

- “I want to go back to the homepage, which is something that changes. “
- “... don't have a library card option and then register for a new library card. They have it in another spot, but this was a little harder to get to.”
- “It's not like it's a broken website, but there's just a lot of inconsistency.”

A return to home button should be made apparent.

Users didn't know that the Huntsville-Madison library logo would lead them back to the home screen, which created confusion about how to return to the home screen. Our recommendation would be to add a home button at the top of the page so that users can easily go back to the home screen.

- “So, I'm going to hit the back button and go back to the main page, the back button again. You know what? I'm going to quit hitting the back. I'm just going to clear the tab here. There we go. Now we're on the main page.”
- “There were a couple of times that I kind of had to backtrack to find what I needed.”
- “Let's see, I'm trying to figure out how to navigate back to the home page. Let's see, okay...”

## Appendix A: Usability Test Script

### Study Goals:

- Identify user pain points
- Better understand user behavior when completing common tasks
- Identify user preferences when finding information about library events and general library information
- Gain a better understanding of website accessibility
- Gauge user's enjoyment and satisfaction when tasked with finding library information

### Introduction/Greeting:

Hi \_\_\_\_\_. My name is \_\_\_\_\_. Thanks for volunteering your time today to help us conduct some research with you!

I am audio and screen recording our session today. As a reminder, you don't have to answer any questions that you don't want to, and you can stop participating in the research at any time, for any reason. Is that alright?

Also, please remember we are testing the website and not you. Now we are going to start with some questions about your experiences.

### Pre Questions:

- Can you tell us a little about yourself?
  - How old are you?
  - What is your occupation?
- On a scale of 1 (not comfortable at all) to 10 (very comfortable), how comfortable are you in navigating websites?
- Do you use library websites?
  - If Yes Ask:
    - When was the last time you used a library website?
    - What would you use a library website for?
    - What library sites have you used?
    - How often do you use library websites for research?
    - How often do you use library websites to borrow books?
    - Have you ever rented an online book from a library? Tell me about your experience.
  - If No Ask:
    - If you haven't used a library website before, why haven't you used it?
- Have you had any graphic design experience?
- What information would you expect a modern library website to provide?
- Have you ever attended an organized event at the library?
  - If Yes Ask:
    - How did you find out about the event?
    - Why were you interested in the event?



- Did you utilize the website beforehand to plan your visit?
- Do you typically use any assistive technologies on websites?
  - If Yes Ask:
    - What assistive technologies do you use?
    - What do you use them for?

### **Think-aloud Protocol Demo:**

For this test, I'm going to ask you to utilize what we call a "think-aloud" protocol. Have you done this before? Essentially, it's where you talk out loud about what you're thinking and feeling as you navigate the website. We will use the think-aloud protocol during this test so we can better understand what you're thinking and feeling as you're using the website and making decisions about how to use it. It might feel weird at first, but take as much time as you need! I'll go first to show you an example of what I am looking for. I'll demonstrate this protocol by going to the CAVA website and ordering a balsamic chicken bowl.

*\*Demonstration of think-aloud protocol\**

Alright, now it's your turn to try!

Great! Now, using the think-aloud protocol we just discussed, go to Wayfair.com and find a purple couch.

*\*User practices think-aloud protocol\**

### **First Look and Familiarization:**

Ok, let's go ahead and move to the next section. Imagine you've just heard about the Huntsville-Madison County Public Library and decide to visit the website. Please spend a few minutes exploring the homepage without clicking on anything. As you do explore, please remember to use the think-aloud protocol.

- What do you notice first on this page?
- What do you think you should be able to do on a library website?
- Tell me what you think about buttons on top of the "October is National Book Month" banner.
- Tell me what you think about the overall look and feel of the design elements, such as color choices, overall design, etc., of the page.

### **Tasks:**

Next, I will be giving you a task to complete. Please think aloud as you work through these tasks. You can ask me to repeat the question or information if needed. If you can't find the information you are looking for that is ok, let me know and we will move on to the next task.

- Now, think of your favorite book and add it to your cart as a digital download.

- Pretend you are planning a visit to your local library branch. Find which library branch is closest to you.
- Next, find the application for the library card.
- Now, find a book club you would like to join.
- Next, find an event you would like to attend.
- Pretend you have a library account, please find the account log in page.
- Pretend you need to collect research articles for a school history project about Huntsville. Find a good database source for Huntsville's history.
- Now, research what special collections are available, such as the Heritage and Rare Books collection.
- Lastly, find information on the library Makerspace studio.

**Post-Test Questions:**

- Overall, how was your experience using the website?
- What was the best part about your experience?
- What was the worst part of your experience?
- On a scale from 1-10, 1 being very difficult to use and 10 being very easy to use the website, how easy was it for you to use the website?
- What improvements or changes, if any, would you suggest to make the website easier to navigate?
- Do you have any other input that we haven't previously covered that you think would be helpful?

**Outro:**

Those are all the questions I had for you today. Was there anything else that you wanted to add that we didn't get to talk about?

Okay, I am stopping the recording. Please feel free to reach out to me via email with any questions or additional comments you may have.

Thank you for your time!