Reviewing the Accessibility and Clarity

of the Tyler Public Library Website:

A Recommendation Report

Prepared for: Web Designer

Tyler Public Library

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Executive Summary

In order to ensure that the Tyler Public Library efficiently serves and engages with our community, I conducted a close study of the Tyler Public Library's website. The study was divided into five essential tasks. These tasks included examining the library website's use of important web design elements such as design principles, accessing aids, spatial balance, ease of navigation, and accessibility and accommodations for disabled, multicultural, and multilingual readers.

While the Tyler Public Library's website succeeds in many factors, it has room for improvement in terms of and some principles of basic design. Contrast could be used to better differentiate between sections of the website and help readers determine where they are located within the site. Additionally, contrasting colors could provide more usability for readers with colorblindness or other visual impairments. Secondly, the initial section of the homepage uses rotating images to express information. These images can sometimes create a crowded appearance near the menu bars and should be chosen more carefully to avoid visual overwhelm.

Introduction

The Tyler Public Library serves a broad community in East Texas. Beyond providing books and other texts to those who enjoy reading, the library in Tyler also serves a vitally important role as a publicly accessible information resource and collections archive. In order to best provide service to the whole of the community, an efficient, inclusive, and engaging website is crucial. As the use of internet technology has increased exponentially over the past few decades, access to online information resources have become increasingly necessary. The Tyler Public Library's website, in addition to providing information about the library itself, should serve as an excellent resource for accessing general information.

In examining the Tyler Public Library's website, I wanted to determine just how well this website meets the needs of the Tyler community and surrounding areas. This includes not only the information it provides, but the design elements of the website itself.

The first task I examined was the website's use of common design principles as discussed in *Practical Strategies for Technical Communication*. Summarized, these design principles include contrast/color, repetition, alignment, and proximity (CRAP).

The second task of this study was to examine the website's use of accessing aids. These include navigation aids such as a search option, clickable webpage title, menu bars, site map, iconography, a header and footer, and other interactive navigation tools.

The third element addressed in this study is the Tyler Public Library's use of spatial organization, including white/negative space, columns, rows, fonts and font sizes, headings, subheadings, and more.

The fourth task in this study was to determine relative ease of the library website's navigation. This includes an assessment of the general success of the site's menu bars, drop-down menus, search options, AI chat-bot, webpages, and more.

The fifth and final aspect examined in this study was the Tyler Public Library webpage's accessibility for viewers who may have disabilities, as well as those from multicultural and/or multilingual backgrounds. Qualities of accessibility for disabled viewers include webpage elements that can easily be read by a screen-reader, use of contrasting colors, clear spatial organization, and descript headings or buttons. For multicultural and multilingual readers, it is important that the website uses plain, simple wording and avoids potentially confusing language such as colloquialisms or metaphors.

Through the careful examination of these five elements, I have determined the overall functionality and success of the Tyler Public Library's website in providing service to a large and diverse community. As a result of this examination, I have formulated some recommendations for the improvement of the library's website design, including its accessibility and use of color and contrast.

Research Methods

The analysis of the overall design of the Tyler Public Library's website was performed by separating the study into five tasks. In each task, specific elements were examined for their relative ability to provide a user-friendly and engaging online experience. Each task is described as follows:

Task 1: Examine the website's use of design principles.

Task 2: Examine the website's use of accessing aids.

Task 3: Examine the website's use of space.

Task 4: Examine the website's navigation and search capabilities.

Task 5: Examine the website's accessibility and accommodations for

multicultural, multilingual, and disabled readers.

Task 1: Examine the website's use of design principles.

The first undertaking of this study is to examine the design principles as they are used throughout the Tyler Public Library webpage. Principles of design as they are described in *Practical Strategies for Technical Communication* include contrast, repetition, proximity, and alignment (CRAP). The Tyler Public Library website's use of these CRAP principles reflects on its user-friendliness and accessibility.

Contrast - The first principle, contrast, entails the use of color in the design elements of the website, including the background and any text. A well-contrasted webpage should make it easy to distinguish between certain elements without being overly bright or distracting. To examine the use of contrast in the Tyler Public Library webpage, I hovered the mouse over certain elements such as the menu bars and clickable icons. I also noted any color shift or other changes when certain elements were clicked.

Repetition - The second principle of design, repetition, refers to the repetition of elements and layouts in order to create an easily recognizable pattern for the reader. Elements that are often repeated in a webpage include icons, fonts, heading and subheading styles, bullet points, colors, and rulings. Repetition increases readability. In order to examine this design principle in the Tyler Public Library website, I looked for patterns in the layout and icons, as well as any repeated styles of headings and subheadings.

Alignment – The third principle of design, alignment refers to the ruling and alignment of text as well as other features. When alignment is used successfully, it helps the reader to make connections and understand the relationship between elements on a webpage. Differences in alignments can signify differences in the importance of information, such as a heading and sub-heading. In the Tyler Public Library website, I noted the alignment used for headings and subheadings.

Proximity – The fourth principle, proximity, works similarly to alignment in that it helps readers to establish connections between elements on the page. I examined the Tyler Public Library webpage's use of proximity in relation to text, icons, and other features.

Task 2: Examine the website's use of accessing aids.

Accessing aids include elements such as icons or color, which can be used to draw attention to certain features of a webpage. Icons can be used to symbolize actions or ideas while color is often used to highlight important information. In the Tyler Public Library's website, I assessed the use of accessing aids in the form of color, font, and iconography. In order to do this, I hovered the mouse of certain features and noted any stand-out items.

Task 3: Examine the website's use of space.

White space, or negative space as it is commonly called, refers to the areas of the page which are not filled with any image or text. In the same way that close proximity between items denotes their relationship, a significant amount of white space can indicate separation of ideas. In order to examine the use of white space in the Tyler Public Library's website, I scrolled down the page and noted where white space was used to indicate a separate topic or idea.

Task 4: Examine the website's navigation and search capabilities.

In any functional website, users need to be able to find the information they are looking for quickly and efficiently. Ease of navigation is crucial to a successful website. Features such as menu bars, quick links, and indexes are useful tools for increasing the navigability of a website. A search bar is also a very common and quick-to-use feature of many websites. In order to assess the navigation and search capabilities of the Tyler Public Library webpage, I noted the presence or absence of these elements.

Task 5: Examine the website's accessibility and accommodations for multicultural, multilingual, and disabled readers.

Accessibility for multicultural, multilingual, and disabled readers requires a broad understanding of the potential audience for a webpage. In order to be accessible, a webpage should offer accommodations such as providing textual labels in addition to visual labels, carefully considering graphics and colors, and providing alternatives to online forms. Accessible webpages should use simple, plain language and be aware of users who may have visual or hearing impairments. In order to assess the accessibility of the Tyler Public Library website, I examined the use, presence, or absence of contrasting colors, wording and language, captions, and text labels.

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Results

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Task 1: Examine the website's use of design principles.

Contrast – The blue menu bar at the top of the Tyler Public Library webpage does not change color when an option is clicked or hovered. The gray bar with links leading to the other City of Tyler webpages places an underline under words when the mouse is hovered over a link. Throughout the website, color is not used much to help readers establish where they are within the main site pages. An exception to this would be switching between the events/meetings tabs further down on the homepage. Some other features give a color shift and/or underline to indicate mouse selection, as in the "Library News" and "Videos" sections on the homepage.

Repetition – The font type is consistent throughout the webpage, although font size changes dramatically. The Library News and Videos sections of the homepage use a similar layout. Repetition can also be found in the circular icons and use of blue, white, and gray colors.

Alignment – When a topic on the blue main menu bar at the top of the page is hovered, a smaller sub-menu pops up below it. These submenus use alignment to indicate further headings and sub-headings related to the original selection. Alignment can also be observed on the Tyler Public Library homepage under the sections entitle "Library News" and "Videos," where descriptive sub-headings are centered directly below these titles.

Proximity – The circular blue graphic representations have titles underneath to clarify; the image of a library card is met with the title "library card," for example. The circles in proximity to each other also indicate their connection as quick and helpful links to other commonly-visited pages. On the rotating images at the top of the page, the "learn more" button's proximity implies that by clicking we can learn more about the specific information being shown at the moment. Boxes of items are grouped under "library news" and "videos." The "connect with us" title is shown at the bottom of the page next to graphics of popular media sites.

Task 2: Examine the website's use of accessing aids.

The Tyler Public Library makes use of accessing aids in the form of icons for quick links. The homepage does not have much variety in its use of color; most areas are blue or gray. The yellow covid-19 information bar at the top of the page stands out, as do the yellow "more news" and "more videos" buttons.

Task 3: Examine the website's use of space.

The top portion of the page is somewhat crowded due to the two menu bars and rotating information which can feature busy images. Scrolling further down, the rest of the page makes good use of negative space to distinguish between topics.

Task 4: Examine the website's navigation and search capabilities.

      The Tyler Public Library website makes use of menu bars, search tools, home page links, and even an "ask a librarian" feature. The site also has an AI chat-bot at the bottom left corner for helping to answer questions and find specific information.

Task 5: Examine the website's accessibility and accommodations for

multicultural, multilingual, and disabled readers.

      The Tyler Public Library website does not use contrasting colors to indicate users current location within the site. Color also does not vary much throughout the site. The website does use common and simple language, without using of metaphors or clichés. The site seems as if it would be easily compatible with a screen reader due to large, clearly labeled sections. The videos at the bottom of the page have an option to turn on closed captions. There are links at the top of the page for ADA assistance and language translation.

Conclusions

The Tyler Public Library website makes good use of basic website design principles (CRAP). When it comes to color and contrast, the webpage could make more use of color variation in order to separate sections and indicate the current page at which the user is located. When links are hovered over or clicked, they do not behave consistently. Some features will change color/shade, as in the events/meetings section, while others will present with an underline. Otherwise, contrast is used effectively in the form of white lettering over blue or gray background or gray/black lettering over light backgrounds. Repetition is seen in the consistent font style throughout the page, although font size changes drastically to indicate headings and subheadings. The website also uses repetition in the layout of some elements, including the circular graphic links and "library news" and "videos" sections. The website makes good use of the design principle of proximity. Proximity of titles to graphic representations allows for quick interpretation of the meaning of a link. "Learn more," "more news," and "more videos" buttons are also appropriately close in proximity to the information to which they relate. Text titles and info are close to the images and graphics they represent.

The Tyler Public Library webpage does not make very extended use of accessing aids. While there are some icons and color contrasts, most of the website is of a consistent style and color – i.e. gray, white, and blue. The yellow covid-19 information bar draws attention amid the blue and gray, indicating it provides important information. The same effect is true for the yellow "more news" and "more videos" buttons, although this information is not particularly important.

The website generally makes good use of negative space, however, the top of the page can have a crowded and confusing appearance at first. The two menu bars, one for the library and one whose links lead to a separate site, are not clearly labeled as such. The rotating informational images at the top of the page are often busy in nature, lending to a crowded appearance. Icons, text, and links are large, but there is enough space between them further down on the page to provide clarity between topics.

In terms of navigation and searchability, the Tyler Public Library website excels. There are plenty of easily navigable menus, a search bar, quick-links, and an "ask a librarian" feature. The main menu bar slides down the screen as the reader scrolls, providing quick access to main pages at any time. There is even an AI chat-bot available in the bottom right corner to answer questions and locate specific pages.

Accessibility for the Tyler Public Library is good overall. The website uses large simple, common language making it more accessible to multicultural and multilingual users. There are links at the top of the page for ADA assistance and page translation, making it very accessible to these users. It also uses large icons are clearly labeled sections, making it more accessible to those with visual impairments, however the lack of contrasting colors may make it difficult for people with color blindness to distinguish between certain features. The videos at the bottoms of the page provide closed captions, which is helpful for those with hearing impairments.

Recommendations

While the overall quality of the Tyler Public Library website is adequate, there are some changes which could further improve its usability.

Firstly, I would recommend that the website make more use of contrasting color and/or varying shades of a color to improve navigability for the user. When the mouse is hovered over a link, a color change or shift would help the reader to understand which link they are selecting. When the user navigates to a different page on the site, the page link on the main menu bar should change color or shade in order to indicate that the user is currently on that page. Higher contrast colors could also improve usability for readers with colorblindness or other vision impairments.

Secondly, I would recommend that the rotating informational images at the top of the page be more carefully considered. A busy image has the tendency to clutter up the general view of the homepage, making it more confusing for the reader to quickly assess menu bar options.

It is my hope that the reviewers of this recommendation report will find its investigation to be thorough, and that the recommendations provided here will be taken into consideration in order to provide better service to the community of Tyler.