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Little Elm Public Library

Website Accessibility Report

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Little Elm Public Library

Executive Summary

The Little Elm Public Library website – http://www.littleelmtx.us/index.aspx?nid=70 -- is a highly accessible site. It is obvious that both the library and the city have taken time to work through the implementation of accessibility for their community.

Most of the issues found during this consultation were minor, highly detailed and can easily be modified. Three larger issues were discussed at the on-site meeting:

- The current site does allow those using screen readers to skip navigation links and go directly to the main content on the page. However, it is done using empty anchor elements. Empty anchor elements can cause problems with screen readers. Although the goal is excellent, the method should be modified. (More information in the *Navigable* section.)
- The Calendar page has two major accessibility issues which should be relatively easy to change. Both deal with marking up text so that someone using a screen reader can understand which information belongs together and which information refers to a different event.
- A question was raised concerning accessibility issues dealing with podcasts. This is a service that the library is currently considering, so we discussed the need for a textual equivalent, possibly a transcript. Since the podcast would be a reading of the library's newsletter which is already on the website, as long as the link is prominently displayed on the page with the podcast, it meets Level A accessibility.

Library online catalogs were not checked for accessibility for any of the libraries in this project. In general, libraries have limited or no ability to modify the HTML for online catalogs, so they were not included.

Little Elm Public Library

Website Accessibility Report

In fiscal year 2010, the North Texas Regional Library System moved into the second year of their *Expanding Accessibility in Libraries* pilot program. In 2009, eight libraries voluntarily studied the accessibility needs of their communities and used funding available in the program to purchase items that would extend library services and programs to this population.

In 2010, each of the original eight libraries hosted an accessibility fair for their communities and eight libraries (two which were part of the original group) had their websites analyzed for accessibility issues. This report deals with this last project.

Between May 11th and May 20th, each library was visited to discuss the draft accessibility report for their website. After this discussion, each report was finalized and emailed both to the library contact and to the North Texas Regional Library System. Questions concerning the content of this report should be directed to:

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Christine Peterson is a Continuing Education Librarian for Amigos Library Services, a member-based non-profit organization that helps its members obtain affordable services and share library resources and knowledge. In her capacity as a Continuing Education Librarian, Peterson trains and consults in the area of library technology, which includes website accessibility, website authoring and design, technology planning, and web-based social software. She has trained and consulted in the area of library technology for eighteen years, working for both Amigos Library Services and the Texas State Library and Archives Commission. Before that, she was the system administrator for two academic libraries, e.g., San Antonio College of the Alamo Colleges, Florida Institute of Technology.

Accessibility Defined

An accessible website is one in which any person can perceive, understand, navigate and interact with that site. Disabilities are categorized in the following ways:

- Visual – those that are blind, partially blind, have low vision or color blindness.
- Hearing – those that are deaf or hard of hearing.
- Physical – those that have muscle weakness, missing limbs, joint problems, limitations of sensation, or cannot control muscles.
- Speech – those that have difficulty in producing speech that is recognizable.
- Cognitive/neurological – this can include learning disabilities such as dyslexia, attention deficit disorder, memory impairments, and seizures.

It is possible and, as we age, normal to have multiple disabilities. One of the largest generations is now starting to retire – the Baby Boomer generation. As the first generation to retire that has used the Internet both at work and at home, they can be expected to continue using the Internet through retirement.

Accessibility Guidelines

To help web authors create websites that are as accessible as possible, the World Wide Web Consortium (home of an international community that creates standards to ensure the long-term growth of the Web) created an effort called the Web Accessibility Initiative. Within this initiative, they have provided twelve guidelines, called the Web Accessibility Content Guidelines, which include conformance levels of website accessibility – A, AA, and AAA.

For example, one guideline deals with the ability for users to distinguish foreground and background elements, both visually and auditorially. There are three levels of compliance, starting from a basic level of accessibility at Level A to a higher level of accessibility at Level AAA. This report for the library's website is based on Level A.

In this report, each of the twelve guidelines is listed with a discussion of changes to be considered for the library's website to come into conformance at Level A. Requirements for Levels AA and AAA can be found at http://www.w3.org/WAI/WCAG20/quickref/ by submitting the form with the desired levels checked.

Text Alternatives

Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, Braille, speech, symbols or simpler language.
The purpose of this guideline is to ensure that all non-text content is also available in text.

- Overall, this site is very accessible. On each of the library pages, however, there are two linked images that have no alternative text:

  ```
  <img style="padding-top: 3px;"
  src="/images/layout/design21/facebook1.jpg" alt="Facebook"
  title="Follow us on Facebook" border=0>

  <img style="padding-top: 8px;"
  src="/images/layout/design21/twitter1.jpg" alt="Twitter" title="Follow
  us on Twitter" border=0>
  ```

Time-Based Media

Provide alternatives for time-based media.
The purpose of this guideline is to provide access to audio and video files.

- No issues were found pertaining to this guideline.

Adaptable

Create content that can be presented in different ways (for example simpler layout) without losing information or structure.
The purpose of this guideline is to ensure that all information is available in a form that can be perceived by all users, for example, spoken aloud, or presented in a simpler visual layout.

- Although this site includes both external and embedded style sheets, there is also a good deal of formatting within the HTML. Separating the formatting from the structure of a web page increases the ability of different types of clients to read and understand a site. From screen readers to cell phones, creating an HTML page without embedded formatting allows the best chance for accessibility across the board.
- In addition to HTML formatting, inline styles are also used in this site. Of the three types of Cascading Style Sheets – external, embedded, and inline – inline styles are moving out of favor as they bring the formatting inside the HTML. Selectors can be used in either external or embedded style sheets as a replacement.

- For forms such as those used for Frequently Asked Questions -- http://www.littleelmtx.us/FAQ.aspx -- should use the label element and id attribute so those with screen readers understand which phrase(s) describes which search box. For example:

```
<tr>
<td align="left" colspan="2">
<span style="float: left;">
<label for="faq_search">Search</label>
</span>
</td>
</tr>
<tr>
<td align="left">
<input type="text" size="30" maxSize="200" name="searchTerms" value=""
id="faq_search">
<input type="button" value="Go" onClick="verifyFAQSearchForm()">
</td>
```

Distinguishable

Make it easier for users to see and hear content including separating foreground from background.

The purpose of this guideline is to ensure that the default presentation is as easy to perceive as possible to people with disabilities.

- No issues were found pertaining to this guideline.

Keyboard Accessible

Make all functionality available from a keyboard.

The purpose of this guideline is to ensure that all functionality can be achieved using the keyboard.

- The links within this site include the hover effect. In order to be accessible from the keyboard, an additional effect should be added – focus. This is the keyboard equivalent of hover.

  For example, this code includes the hover for all links:
  ```
  a:hover {text-decoration: underline;}
  ```

  To make it accessible, another style should be added:
  ```
  a:hover, a:focus {text-decoration: underline;}
  ```

Other mouse-specific actions found on the site include onmouseover and onmouseout. These should be handled the same way as stated above, except use the keyboard-specific actions of onfocus for onmouseover and onblur for onmouseout.

Enough Time

Provide users enough time to read and use content.
This guideline focuses on ensuring that users are able to complete the tasks required by the content with their own individual response times.

- No issues were found pertaining to this guideline.

Seizures

Do not design content in a way that is known to cause seizures.
The objective of this guideline is to ensure that content that is marked as conforming to WCAG 2.0 avoids the types of flash that are most likely to cause seizure when viewed even for a second or two.

- No issues were found pertaining to this guideline.

Navigable

Provide ways to help users navigate, find content and determine where they are.
The intent of this guideline is to help users find the content they need and allow them to keep track of their location.

- Provide a way for non-sighted users to skip repetitive navigation links on each page. Users using screen readers must read the page as it looks in the HTML. By providing them a way to skip these links, they are able to more quickly move to the information they need.

  At the top of each page, there is a link to skip to the main navigation, which seems to be specific to each department. For the library, this allows a user to skip to the "Adult Programs" link in the left navigation. In addition to this link, there is also a link that skips directly to the main content of the page, which seems to be in the center column. Both of these are excellent and follow the accessibility standard. However, they are created as empty anchor elements, which can cause problems with screen readers.

```
<a style="display: inline;" href="#menuarea" title="Jump to the Menu
Area"> </a>
<a style="display: inline;" href="#contentarea" title="Jump to the
Content Area"> </a>
```

Instead of creating an empty anchor element, another idea would be to add text between the opening and closing anchor tags and then move the link off the page using styles, e.g.,

Jump to Menu

- The Calendar page includes a table which is used for tabular data and not layout purposes. When used in this way, table headers <th> are required so that those using screen readers can understand the structure of the table. This table uses only table data <td> cells. Instead of this:

```
<td class="CalendarActiveItemFont"><abbr title="Sunday">S</abbr></td>
```

Use this for the first row, which are the column headings:

```
<th class="CalendarActiveItemFont"><abbr title="Sunday">S</abbr></td>
```

- In the listing of calendar events (below the monthly view), each event begins with a paragraph and then lists the additional information in a table. For someone using a screen reader, it is difficult to understand the relationship of the paragraph to the table. Other options might be to make the paragraph a heading, e.g., h2 or h3, or include it in the table as a table header <th>. For example, instead of this (includes just primary elements):

```
<!-- BEGIN Event Info -->
<p>
<a href="/CurrentEvents.aspx?EID=5520">Scrambled States of America US
Trivia – June 29</a>
</p>
<table>
<tr>
<td>When:</td>
<td>5:00 p.m.</td>
</tr>
<tr>
<td>Cost:</td>
<td>Free</td>
</tr>
<tr>
<td>[ <a href="/CurrentEvents.aspx?EID=5520 ">More Information</a> ]
</td>
</tr>
</table>
<!-- END Event Info -->
```

Possibly this:

```
<!-- BEGIN Event Info -->
<table>
<tr>
<th colspan="2"><a href="/CurrentEvents.aspx?EID=5520">Scrambled States
of America US Trivia – June 29</a></th>
</tr>
<tr>
<td>When:</td>
<td>5:00 p.m.</td>
</tr>
<tr>
<td>Cost:</td>
<td>Free</td>
</tr>
<tr>
<td>[ <a href="/CurrentEvents.aspx?EID=5520 ">More Information</a> ]
</td>
</tr>
</table>
<!-- END Event Info -->
```

Or this:

```
<!-- BEGIN Event Info -->
<h3><a href="/CurrentEvents.aspx?EID=5520">Scrambled States of America
US Trivia – June 29</a></h3>
<p>When: 5:00 p.m.</p>
<p>Cost: Free</p>
<p>[ <a href="/CurrentEvents.aspx?EID=5520 ">More Information</a> ]</p>
<!-- END Event Info -->
```

Readable

Make text content readable and understandable.

The intent of this guideline is to allow text content to be read by users and by assistive technology, and to ensure that information necessary for understanding it is available.

- The language used on a website should be identified either at the site level, the page level, or the element level so that screen readers can pronounce words correctly. For example, if the entire page is in English, then it should state so at the top of the page. This web page does not have a language encoded.

  On the circulation page:
  http://www.littleelmtx.us/index.aspx?NID=73
  there is a statement in Spanish that should have the language encoded so it can be read correctly:

  ```
  <p lang="es">Procedimientos para la Aplicación en <A class=Hyperlink
  title="Procedimientos para la Aplicación" href="/index.asp?nid=224"
  target=_self>Español</A>
  ```

- Using the home page as an example, the web page has a 7th grade reading level.

Predictable

Make Web pages appear and operate in predictable ways.

The intent of this Success Criterion is to help users with disabilities by presenting content in a predictable order from Web page to Web page and by making the behavior of functional and interactive components predictable.

- No issues were found pertaining to this guideline.

Input Assistance

Help users avoid and correct mistakes.

This guideline seeks to reduce the number of serious or irreversible errors that are made, increase the likelihood that all errors will be noticed by the user, and help users understand what they should do to correct an error.

- No issues were found pertaining to this guideline.

Compatible

Maximize compatibility with current and future user agents, including assistive technologies.

The purpose of this guideline is to support compatibility with current and future user agents, especially assistive technologies (AT).

- This page does not validate to HTML 4.01 Transitional, which is stated at the top of the document. There are attributes and elements that are used incorrectly. Incorrect or unmatched tags can cause problems with screen readers understanding the structure of the web page. Validation can be done at http://validator.w3.org/.
- Use of both HTML and Cascading Style Sheets is considered the best way to future-proof your website. When created to these standards, changes to come into compliance with future standards should be less demanding. This site seems to have base CSS files, but modifications were done within the HTML instead of within the CSS. This will cause problems in the future when updating or revising this site.