Accessibility at the University of Michigan Library

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Case Study

The "accessibility problem" on the University of Michigan Library website is multifaceted, much as it is for many academic libraries. The library manages a range of web interfaces for our campus across with a variety of characteristics:

- Locally-hosted, locally-developed interfaces
- Locally-hosted, customized interfaces based on open-source software
- Locally-hosted interfaces based on closed and/or vendor-provided software
- Remotely-hosted interfaces over which we have no direct control (beyond contractual agreements)
- Remotely-hosted interfaces over which we have no control (freely available web resources)

What the library can effectively achieve in terms of improving the accessibility websites made available through this continuum decreases the farther down the list we go. Where the library has complete control over the software and the interface, we can do a great deal; where relationships are contractual or we are simply pointing at a free resource, we have very little control.

In 2013, the University Library recognized the need to quickly make improvements in accessibility to those locally-hosted sites that we manage. The University's Office of the Provost funded a two-year term front-end developer position to help us focus on this issue. Over the nine months since this position was filled, we have revised the presentation layer of our two most heavily used resources,¹ the library website (www.lib.umich.edu) and the library catalog (mirlyn.lib.umich.edu), to improve accessibility from their previous, significantly inaccessible, state.

The updated presentation layers for these resources are much closer to our desired goal of WCAG AA compliance. Although neither is fully compliant as of May 2014, these sites offer a much improved experience to site visitors who use assistive technology. The library website looks much the same as it did before the markup changes were implemented, with some subtle updates to color contrast and font sizes. Most of the changes were "under the hood," so that we could render the site in semantically valid HTML.

The catalog proved more challenging in many ways. The way the catalog website is generated from the underlying software means that content is delivered in two chunks. Static elements -- the page header and footer -- have been significantly rewritten. In this

¹ The HathiTrust website (<u>http://hathitrust.org/</u>), historically managed at the University of Michigan, underwent a significant accessibility review and revision prior to this effort.

case, we made some visible and functional changes to the user interface to improve usability for everyone, we did not undertake a full redesign of the site. Our work on this site was somewhat constrained because of the way the catalog website is generated by the underlying application. Our efforts concentrated on the site-wide navigation elements (at the top and bottom of all catalog pages) and the landing page (the starting point for catalog searches). We have not yet tackled in any significant way catalog search result listings and single item view pages. We are planning additional work to improve this portion of the catalog site, but it will be more challenging to implement because it involves work deeper into the application. We need to change not just how the information is presented, but how it is generated, by the catalog software.

The "easy" work—over the course of more than half a year—has been to change the presentation layer of our two most heavily-used sites. The harder work, redesigning the way the catalog software, for example, generates search results and catalog records, is still to come. This work will dovetail nicely with previously existing plans to redesign our site search from the ground up. As is often noted, creating an initial design with accessibility in mind is far easier than retrofitting accessibility to an existing site.

We are taking this approach, designing it right from the ground up, in several new tools currently under development: an update to our online exhibits subsite and a new blogging subsite that is launching in May 2014.

A significant area for improved accessibility is in licensed content. While we have no direct control over vendor interfaces, we do have the opportunity during contract negotiations to request that vendors pay attention to accessibility and add appropriate language to contracts. The following is a sample of such an included clause:

Licensor shall make efforts to comply with the Americans with Disabilities Act (ADA) by supporting assistive software or devices such as large print interfaces, voice-activated input, and alternate keyboard or pointer interfaces in a manner consistent with the Web Accessibility Initiative Web Content Accessibility Guidelines, which may be found at http://www.w3.org/WAI/GL/#Publications.

Status

So, how are we doing? The campus does not, yet, formally measure the accessibility of websites created by academic units, so we do not have precise goals and measures to which we compare ourselves at the campus level. We have consulted with the campus accessibility coordinator as we have worked on various initiatives to ensure we are following accepted practice. We are using the W3C's WCAG 2.0 standard in our internal reviews, with a goal of AA compliance or higher. Anecdotally, though, we believe we are in the vanguard of accessibility retrofitting and redesign on campus. We are leading by doing, and sharing what we know with others through the informal campus-wide Web Accessibility Working Group. Our library's User Experience Department has been active in setting the library-wide guidelines, and the developer doing much of the work on the library website is likewise active in this community.