Quick and Practical Web Accessibility Testing for First Impressions

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Assumptions

• Web accessibility for web pages and applications

• Usable, not just meeting the standard

• Some knowledge of HTML coding and accessibility

• Focus on the technique

• Won’t get into specifics of WCAG 2.0, policy, etc.

• Web Accessibility is more than screen readers
Quick, Quick, Quick

• Quick technique

• Quick presentation

• Quick (but limited) results
What it is not

• Not an answer to the question: “Is it accessible?”

• Not full accessibility test

• Not end user testing
What it is

• Helps answer the question: “Does the developer appear to be paying attention to accessibility?”

• First Impression of accessibility

• Blend of standards testing and practical testing

• Provides general sense of how usable/practical page is

• Stepping stone
Context

• This presentation is primarily from the perspective of testing websites and applications that already have been created.

• But, the techniques can also be used during the design process.

• Designing from the start with accessibility built in is best.
Flipping the Model

• Familiar tools

• Looking for what is there and what was done … rather than errors and what is not there
  • (what has the developer put in rather than what they have missed)
Technique Demo – UPS Hold Mail

USPS Hold Mail Service

United States Postal Service

Request Hold Mail Service

Heading out of town? We can hold your mail safely at your local Post Office until you return.

Sign up for USPS Hold Mail Service in two simple steps.

Schedule Hold Mail Service. You can notify us up to 30 days in advance or as early as the next scheduled delivery day. Request your start date by 3 AM ET (2 AM CT or 1 AM PT) on your requested day, Monday – Saturday. (NOTE: For hold times greater than 30 days, please sign up for a USPS Forward Mail Service.)

Step 1: Check if Hold Mail is available for your address.

Fill in your information and check availability to see if your ZIP Code is eligible for Hold Mail.

Note that we will hold all mail for this address, rather than an individual. An address can have only one Hold Mail Service scheduled at a time.

*Indicates a required field

This is a business address.

What is your address?

*First Name

*Last Name

Street Address

 Apt/Suite/Other

City

State

ZIP Code

Select


Step 1: Examine Document Structure

Question
• Were headings used properly?

Tools:
• WAVE Chrome plug-in
• Web Developer toolbar (Chrome and Firefox) or equivalent
  • “View Document Outline” (under Information)

Test:
• Display and examine the heading structure of the page
Step 2: Check the ALT text

Question
- Was ALT text used, and is it meaningful/functional? If the user can’t see the images or other objects, does the ALT text give them the essential info and make it possible to navigate?

Tools
- WAVE Chrome plug-in
- Web Developer toolbar or equivalent
  - “Display ALT Attributes” (under Images)

Test
- Display the ALT attributes and determine if they replicate the purpose of the images and other objects
- (Optional – Turn off images)
Step 3: Navigate with the keyboard only

Question
• If you are only using the keyboard, can you navigate, get to everything (without tricks or resorting to the mouse), and complete the intended tasks in the intended order?

Tools
• Tab Key & Shift + Tab
• Enter
• Spacebar
• Up or Down, Right or Left Arrows
• Alt + Down or Up Arrow

Test
• Navigate the site and complete the tasks with the keyboard only.
Step 4: Check form labels

Question
• Are form fields assigned functional labels?

Tools
• WAVE Chrome plug-in
• (Web Developer toolbar can outline missing labels)
  • “Outline Form Fields Without Labels” (under Forms)

Test
• Use WAVE to display the form labels
Other overarching checks

• Descriptive and unique link text

• Color contrast (visually and with mouse)

• Selecting blocks of text to check reading order and what is text vs. image

• Changing browser window and zoom sizes to see if site holds together

• Quality captions on videos (e.g. default YouTube auto-generated captions are not sufficient)
“USPS Hold Mail” demo summary

Accessibility has been considered, but there are some significant areas of concern

Good

• ALT text (but some issues)
• Form field order
• Focus on the error message after submitting the address modal
• Field specific notifications empty required fields (after submitting)

Concerning

• Heading structure and reuse of heading text
• Locating keyboard focus
• Keyboard navigation when address modal pops up
• Missing form field labels
NVDA Screen Reader Demo

NVDA is a free screen reader for Windows that works best with Firefox.

It is more literal in how it reads pages.

Change the synthesizer used with NVDA before getting started.
Kurzweil 3000 Read the Web Demo

Example of a Chrome extension that reads with highlighting for users with print-related disabilities with vision.
Web Developer Toolbar

• Be curious!

• The Web Developer Toolbar and other similar tools have a lot of other helpful features to explore web accessibility and structure.
  • E.g. Disable All Styles (CSS), Display Aria Roles (Information), Display Tab Index (Information), Linearize Page (Miscellaneous), Outline Frames (Outline)
  • Unfortunately the Web Developer Toolbar does not have a focus indicator enhancement feature, which is helpful for more quickly exploring keyboard accessibility.
Resources

- Web Developer Toolbar for Chrome and Firefox (https://chrispederick.com/work/web-developer/)
- WAVE (https://wave.webaim.org/)
- NVDA (https://www.nvaccess.org/download/)
- Using NVDA to Evaluate Web Accessibility (Windows) (https://webaim.org/articles/nvda/)
- Using Voiceover to Evaluate Web Accessibility (Mac) (https://webaim.org/articles/voiceover/)
Questions?

• What did you connect with?

• What didn’t make sense?

• What would you like to learn more about?

• What resources would you like from the presentation? In what form?

• Other?
Leave you with…

Each web page and application that we design is a new interface for a user to learn, even if based on a common template.

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Session Description

Web sites and applications need to be accessible and usable. Getting quick, practical feedback early and often in the development or acquisition cycle can make the end result much better, and the process much easier for all involved. This session will demonstrate a process of quick and practical testing using the keyboard, visualization tools, a bit of accessibility knowledge, and free screen readers to quickly, but generally, assess how well a site was designed and what might be the experience for users who have disabilities or use assistive technology. This process does not take the place of more thorough testing, end user testing, or compliance checking, yet can provide the IT professional and their team with valuable preliminary info.