

Web Accessibility

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What is “Web Accessibility”?

- Can all users who visit your website access all of the information that’s there?
- Does the design, layout, and functionality of the site allow easy access for disabled users?
- Does your site allow for a wide variety of user agents to access the information?

WAI/WCAG

- Web Accessibility Initiative
 - Branch of the World Wide Web Consortium, <http://www.w3c.org/WAI>
- Web Content Accessibility Guidelines
 - 14 guidelines
 - Each guideline has at least one checkpoint
 - Techniques are listed to address each checkpoint

Section 508

- An amendment to the Rehabilitation Act of 1973
 - Enacted in 1998 and became law in 2001
 - <http://www.section508.gov>
- Whom does it apply to?
 - Federal departments and agencies
 - Government funded projects
 - States that choose to adopt it
- Requirements
 - “Equal or equivalent access to everyone”
 - Visually impaired, hearing impaired, physically disabled, and photosensitive epilepsy

Some typical issues

- No text equivalents for visual elements
- Non-resizable text sizes
- Non-accessible multimedia files
- Difficult to use navigation elements
- Low contrast or problematic color scheme
- No text labels for form elements
- Blinking visuals

What are the ramifications?

- The less accessible your website is, the smaller the number of users benefit from the information provided
- Broken functionality with some user agents or platforms
- Negative perception from users
- Civil Rights complaints
 - Target.com, <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2006/02/09/BAGQHH5H7D1.DTL&type=tech>
 - North Kingstown School District

Benefits of Accessibility & Standards

- Improve access for all users and user agents
 - Phones, handhelds, wide variety of browsers and platforms
 - Search engines and crawlers
- Simplified site design and management
 - Separate content from presentation
- Reduced bandwidth and overhead

Improving Accessibility

- Figuring out where you stand
 - Validation
 - <http://webxact.watchfire.com>
 - <http://www.contentquality.com>
 - <http://www.wave.webaim.org/wave/index.jsp>
 - Online services and tools
 - <http://www.vischeck.com>, simulates color blindness
 - Browser toolbars
 - Web Developer Extension for Firefox,
<https://addons.mozilla.org/extensions/?application=firefox>
 - Web Accessibility Toolbar for Internet Explorer,
<http://www.visionaustralia.org.au/ais/toolbar/>

Short-term Strategies

- 10 tips from Web Accessibility Initiative
 - <http://www.w3.org/WAI/References/QuickTips/>
- Investigate capabilities of current software tools
 - FrontPage 2003,
<http://www.microsoft.com/office/frontpage/prodinfo/accessibility/default.mspx>
 - Dreamweaver and Flash,
<http://www.macromedia.com/resources/accessibility/>
 - Acrobat,
<http://www.adobe.com/enterprise/accessibility/main.html>

Short-term Strategies

- Look at Content Management Systems
 - Microsoft Sharepoint
 - Macromedia Contribute
 - Many Open Source options
 - Test drive, <http://www.opensourcecms.com/>
 - Compare, <http://www.cmsmatrix.org/matrix/cms-matrix>
 - Easy to install Apache, MySQL, PHP, Perl environment to try out open source options, <http://www.apachefriends.org/en/xampp.html>

Designing for Accessibility

- Design from scratch to comply with Web Standards
 - <http://www.w3c.org>
 - <http://alistapart.com>
- Use (X)HTML for content and CSS for visuals
- Avoid the use of frames, tables for layout, and animated graphics
- Use (X)HTML for content whenever possible
- Test your site in a wide variety of user agents
 - <http://www.browsercam.com/>
- View your site with images, CSS, and JavaScript turned off to see if it still makes sense

References & Resources

- Books

- Designing with Web Standards, Jeffrey Zeldman
- Building Accessible Websites, Joe Clark

- Websites

- <http://www.section508.gov>
- <http://www.w3c.org/WAI>
- <http://www.ri.gov/policies/access.php>
- <http://alistapart.com>
- <http://joeclark.org/access>
- <http://www.jimthatcher.com>
- <http://www.microsoft.com/office/frontpage/prodinfo/accessibility/default.msp>
- <http://www.macromedia.com/resources/accessibility/>