

Creating Accessible Web Sites

Internet Web sites are a primary source of information for many people, including those with disabilities. Any Internet user will testify, however, that not all Web sites are created equal. It is thoughtful design that is the key to Web site accessibility for people with disabilities. People with vision disabilities, for example, may navigate the Internet with a screen reader and need text descriptions of graphics and tables. Some individuals with motor disabilities use a keyboard rather than a mouse. Accessible Web sites incorporate good design practices that make the Internet more usable by everyone.

The following introduces accessible Web design issues and provides resources for more in-depth information.

WHERE TO START

There are some initial steps for creating or renovating a Web site.

1. Evaluate the accessibility of the proposed or current site.

Use a program such as Bobby software, a tool that can test and evaluate the accessibility of a Web site and notify the designer of any trouble spots. Evaluation programs such as Bobby help identify many problems, but they cannot find all errors. It may also be necessary for someone who is knowledgeable about Web accessibility and individuals with various disabilities to review the Web site.

Evaluating Web Site Accessibility:

<http://www.webaim.org/techniques/evaluating/>

Web Site Accessibility Evaluation Tools:

<http://www.w3.org/WAI/ER/existingtools.html>

2. Become Familiar with Disability Law

When Congress amended Section 508 of the Rehabilitation Act in 1998, the new law required federal agencies to purchase

electronic and information technology that would be accessible to people with disabilities. The Architectural and Transportation Barriers Compliance Board (Access Board), the independent federal agency that develops and maintains accessibility requirements, then produced the Section 508 standards for Web accessibility based on the new law. The Web Accessibility Initiative (WIA) of the World Wide Web Consortium (W3C) has also produced Web Content Accessibility Guidelines (WCAG). The WCAG are categorized by priority level, with Level 1 items being roughly equivalent to Section 508 regulations. Web site designers may also want to check if their state has developed specific guidelines.

Section 508 Checklist:

<http://www.webaim.org/standards/508/checklist>

W3C Accessibility Guidelines:

<http://www.w3.org/TR/WCAG10/full-checklist.html>

ACCESSIBILITY FIXES

The following list does not include all items in the 508/W3C guidelines, but it is a good place to start when making a Web site more accessible.

1. Provide "alt text" for all images and graphics. Alt text is a brief, descriptive statement that serves as a substitute for images and graphics.
2. Many screen reader users skim through links to get an overview of a Web site. When links have vague labels such as "click here" or "more," the user is not able to determine the function of the link without reading surrounding text. Links should be clear and specific and contain enough meaning so people using screen readers immediately know the purpose of the link.
3. Make it possible to skip over repetitive links (such as navigation links).

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4. Use the simplest layout possible. Make the navigation scheme consistent and intuitive. Group information under headings to avoid long sections of text.
 5. Make sure the Web site has sufficient contrast (text against background color) and that the background is not distracting. Do not rely on color alone to convey meaning.
 6. Avoid using frames, if possible. People using screen readers can only look at one frame at a time, which can be confusing. It can also be difficult to navigate through frames without using the mouse. If the Web design must incorporate frames, be sure to add titles to explain their functions (navigational menu, main content, additional information, etc.).
 7. The entire Web site should be accessible through keyboard commands.
 8. Make sure data tables have a simple layout with appropriate column and row headers.
 9. Provide captioning/transcripts/audio description of any videos.
 10. Make PDF documents available in HTML format.
 11. Avoid using graphic text. Graphic text prevents users from modifying the text font and size to their individual needs.

HELPFUL LINKS

Considering the user perspective: a summary of design issues: <http://www.webaim.org/techniques/userperspective/?templatetype=3>

Fast Track to Web Accessibility in 5 Steps:
<http://www.webaim.org/techniques/articles/fasttrack?templatetype=3>

A Guide to Making Documents Accessible to People Who Are Blind or Visually Impaired:
<http://www.acb.org/accessible-formats.html#ag41>

World Wide Web Consortium Web Accessibility Initiative: <http://www.w3.org/WAI>

Access Board Guide to Web Accessibility Standards:
<http://www.access-board.gov/sec508/guide/1194.22.htm>

Section 508 info:
<http://www.webaim.org/coordination/law/us/508>

IBM's Web Accessibility Page:
<http://www-306.ibm.com/able/guidelines/web/accessweb.html>

Designing More Accessible Web Sites:
<http://trace.wisc.edu/world/web/>