

## Lessons from an Accessible Website: www.Boston-IA.org

Presentation by P.J. Gardner



Bringing Information Architecture and Internet Accessibility Together

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"This is one of the better accessible sites I have seen.

"I am a webmaster for a Section 508 compliant government intranet and have reviewed over 700 sites linked to our intranet for 508 compliance since August 2001.

"You have avoided the common accessibility mistakes that appear even on other accessibility webs— Nice job!"

Faye N.
 Member, AccessAbility SIG
 Society for Technical Communication (STC)



#### Potential Accessibility Audiences

Some of the people for whom we can make the most difference:

- People who are blind (using screen readers).
- People with visual impairments.
- People who are colorblind.
- People with hearing impairments (if sound is used).
- People who have learning disabilities.
- Non-native speakers of English.
- People with older equipment or software.
- The growing population of senior citizens online.



#### Accessibility Features (1)

- 1. All images have text alternates, called "ALT text", except decorative images, where they are hidden.
- 2. The text of links is designed to be clear when read using auditory screen readers. Link titles have been added when necessary for extra clarity.
- 3. Pages are organized to make sense in text-only browsers, and with style sheets turned off in visual browsers.



- 4. All text uses relative font sizes so text can be enlarged or reduced using the text size options available in visual browsers.
- 5. All pages use flexible page formats so pages can be automatically resized for different window sizes and screen or print resolutions.
- 6. All data tables are structured with row and column headings that can be used in non-visual browsers.



- 7. All pages are designed with separate cascading style sheets, so they can be replaced by user-defined style sheets.
- 8. Colors on this site have been selected to provide sufficient contrast for people who are colorblind or have visual difficulties.
- 9. This site follows World Wide Web and Section 508 accessibility guidelines.



#### Accessibility Features (4)

10. We have tried to write clearly and succinctly.

11. We have assigned access keys to important locations:

- Access Key 1: Home Page
- Access Key 2: Skip to Main Content
- Access Key 3: Site Map
- Access Key 4: Main Menu
- Access Key 5: Topic Index
- Access Key 6: Page Announcement (some pages)
- Access Key 9: Contact Us
- Access Key 0: Accessibility Features Page



Technical communicators know these:

- Build text that can be re-flowed in different environments.
- Create clear divisions using heading styles.
- Chunk text using lists, tables, etc.
- Use style sheets and styles properly.
- Write very clear link text that can stand alone.
- Work for clarity for the widest possible audience (include foreign speakers and people with learning disabilities).



- Follow W3C or Section 508 coding standards strictly.
- Create flexible page layouts rather than fixed layouts whenever possible.
- Avoid using tables to lay out web pages.
- Test page layouts, applications, and web sites with people who have disabilities or other special needs as often as possible.
- Never, never jump to conclusions about who your audience is— you will always be surprised.



#### My Best Web Coding Hints

- At a minimum learn to read XHTML and CSS.
- Work in XHTML 1.0 transitional:
  - Include a DOCTYPE tag at the top of every page.
  - Use lowercase tags and attributes.
  - Enclose all tag attributes in quotation marks.
  - Close all tags with end tags.
- Use "semantic markup": use tags to identify what things are, rather than what they should look like.



#### My Best CSS Hints

- Separate presentation from markup using cascading style sheets.
- Create external style sheets rather than embedding styles.
- Use relative sizes (percentages and "ems") for fonts.
- Assign red, blue, purple, violet, and black as dark colors.
- Assign yellow, orange, green, blue-green, and white as light colors.



#### **Color Recommendations**

Source: Aries Arditi, PhD, "Effective Color Contrast: Designing for People with Partial Sight and Color Deficiencies", http://www.lighthouse.org/color\_contrast.htm



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"As a totally blind person who uses a screen reader (JAWS for Windows), I was particularly interested in the access keys on this site.

"I think you have done an excellent job of making your site accessible, and I hope other web designers will learn from your example."

— Steve Dresser Visually Impaired and Blind Users Group (VIBUG)

For more information about access keys, visit the Boston-IA Accessibility Features page!



#### **Favorite Web Coding Tools**

- Macromedia HomeSite (HTML editor) (http://www.macromedia.com/software/homesite/)
- Bradbury Software Top Style Pro (CSS editor) (http://www.bradsoft.com/topstyle/index.asp)
- Al Software CSE HTML Validator (syntax checker) (http://www.htmlvalidator.com/)
- Watchfire LinkBot (link evaluator) (no longer available, now WebQA and WebXM)
- Microsoft Windows Notepad (for text conversions!)



#### Favorite Accessibility Evaluation Tools

HiSoftware AccMonitor

(http://www.hisoftware.com/accmonitorsitetest/)

- Cynthia Says
  (http://www.cynthiasays.com/)
- WebAIM Wave

(http://www.wave.webaim.org/index.jsp)

- JAWS (http://www.freedomscientific.com/)
- Manual Evaluation (using W3C WAI guidelines) (http://www.w3.org/WAI/Resources/)



### **Browsers for Testing**

- Internet Explorer 6.0 (in standards mode)
- Internet Explorer 5.5
- **Firefox 1.0**, with Web Developer plug-in
- **Netscape Navigator 7.2** (similar results to Firefox)
- Netscape Navigator 4.08 (with CSS off)
- Opera 7.5
- Safari and Internet Explorer 5.2 (on Macintosh)



#### Great Color Selection Tools

- Lighthouse.org (article by Aries Arditi) (http://www.lighthouse.org/color\_contrast.htm)
- BTExact.com (color charts) (http://www.btplc.com/age\_disability/ClearerInformation/Colours/ colours2.htm)
- Vischeck.com (color evaluator) (http://vischeck.com/vischeck/)
- VisiBone.com (color contrast) (http://www.visibone.com/colorlab/)



#### Thank You

# Visit the Boston-IA Resources page for lots more accessibility hints!

– Boston-IA

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