

Web Accommodation for the Vision-Impaired

Lory Hawkes

Accessibility for vision-impaired users of corporate websites is becoming a critical issue. The federal government requires its agencies to provide effective, equal access to electronically delivered information. The W3C launched its accessibility initiative in 1999 and continues to expand it. Court rulings are mixed, as the judicial system struggles to clarify accommodation in relation to the web environment.

Students in the Jack David Arnold Honor Society at DeVry University researched, collaborated, and developed a community service website to convince corporations that web accommodation for vision-impaired users made financial sense.

IT'S THE LAW.

Almost 15 years after the World Wide Web protocols were created, the Web has achieved a grand sophistication. Pages dance and text swirls through lush colored backgrounds to enhance the expressive appearance of the web interface. Mouse clicks reveal vast archives of information or these clicks effortlessly add goods and services to virtual shopping carts. However, in the last 6 years, web developers, university administrators, federal information vendors, and e-commerce entrepreneurs have learned that web accommodation is a federal mandate and may be a reason to hire a lawyer as well as an enlightened web designer.

Section 508

According to Section 508 of the *Rehabilitation Act* (1998), federal agencies must use information technology to promote an "equality" of accessibility for disabled and non-disabled users. For example, compliance with the federal mandate would mean that a government agency's information must be conveyed in an effective way to the public user. Although "effective" is an abstract term, the U.S. Department of Justice has tried to clarify the term. "Effective" means that information delivery is quickly accomplished, suited to the user's abilities, and accurately conveyed. In other words, federal web pages must be reworked to accommodate the disabled who may need special design elements in order to see or hear the content.

Federal Resources Online

In response to President George W. Bush's memorandum in late August of 2002, the Department of Labor has now established a unique web portal to government resources for the disabled called Disability.gov. A second source is the website of the federal agency created by the *Rehabilitation Act*, the Access Board. It is this agency's duty to work toward better access for the disabled. Publications, accessibility guidelines and standards, and various publications can be found at this site.

IT'S A W3C INITIATIVE.

Just as federal agencies have pursued rapid development of disabled-friendly websites, the standard-setting body of the net community, the W3C, has produced *Web Content Accessibility Guidelines* (version 1) in 1999, and the *User Agent Accessibility Guidelines* in 2002. While the content guidelines explain helpful approaches in navigation, scripting, and color selection, the user agent guidelines explain useful approaches with multimedia devices and assistive technology. These standards help developers understand principles that they should apply to a design.

IT'S A COURT BATTLE.

Activist groups for the visually-impaired are forcing the nation's courts to interpret the meaning and intent of web accommodation. One of the earliest legal tests of the law came in 1999 when the National Federation of the Blind asked Boston's U.S. District Court to decide if America Online offered adequate access to vision-impaired users. Although AOL settled the case with the promise to re-engineer its interface to be compliant with screen reader devices, other large online corporations like Barnes and Noble and Claire Stores have been challenged by Access Now (Haggman).

For the most recent cases, two giant airlines with well developed Internet reservation systems were taken to court in separate suits. Robert Gumsom asked a Miami U. S. District Court judge to rule in his favor and against Southwest Airlines. He said he could not receive a lower Internet fare from the Southwest Airlines website because it was not compatible with his assistive technology. The judge disagreed saying that

the website was not a physical entity and therefore not a place for public accommodation. While the Southwest Airlines case is somewhat settled, as of this writing the American Airlines case is not.

IT'S A CLASS PROJECT.

The nine honors students in the Jack David Arnold Honors Program, who were enrolled in the Professional Writing course, investigated the need for web accommodation and decided to explain web accommodation as a community service in a public web. However, as they got more involved in the project, they found that the objective nature of their site changed. They wanted to convince business owners that it was financially feasible to accommodate the disabled. Although focused on a common purpose, they debated the types of disabilities that they should deal with. In the end, they agreed that they should concentrate on visually-impaired users for two reasons. First, the visually-impaired seemed to be the largest group of disabled users (an estimated 1.5 million according to the *Chicago Daily Law Bulletin*). Second, because of activist groups like Access Now, the visually-impaired seemed to be the most vocal and intent on forcing change in website accommodation with litigation.

Tasks

The students faced the task of

- learning HTML
- applying design and usability theory
- finding and incorporating accommodation techniques
- working together as a design group, despite diverse backgrounds, majors, and schedules
- writing and researching individual proposals which explained their facet of the project.

The two working documents were Section 508 of the *Rehabilitation Act* (1998) and the *W3C Web Content Accessibility Guidelines*.

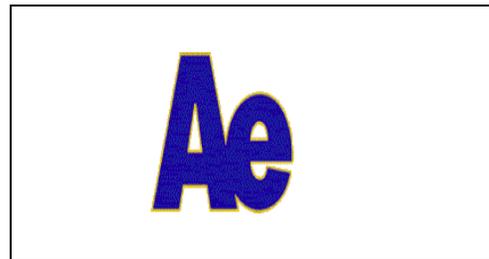
Accomplishment

What they created was a style sheet driven web site. The project webmaster, who was experienced in design and aural style sheets, created a template that used a blue background, white text, and gold accents. The students named their site "Access for everyone" and relied on Scott Dunham to devise a distinctive logo. In his words:

The logo letters are large and highly recognizable, supporting the readability style of the website.

The letters come together and merge, suggesting the humanitarian role of accessibility — to bring the disadvantaged into the circle of the World Wide Web. The gold coloring adds a degree of professionalism and good taste, the image that all businesses wish to portray.

The blue outline coordinates with the gold, signifying our commitment to a well-coordinated and well-organized website.



The students who participated in the project were: Sabas Gonzales (webmaster), Christi Burnam, John Cone, Benjamin Doke, Scott Dunham, Gale Flora, Tyson Moncrief, Ashia Saunders, Taylor Stockum. In a 15-week semester, they were able to research, collaborate, and develop a multi-page web to convince corporations and web administrators that accessibility for vision-impaired users was an enlightened business strategy.

REFERENCES

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