Redesigning the AccessAbility SIG Web Site for Accessibility

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Assuring the accessibility of a Web site is an ongoing process. Hear how the Web team for the AccessAbility SIG redesigned the SIG's Web site to incorporate more accessible features and how they stay on the accessibility road.

WHAT THE WEB SITE OFFERS

The AccessAbility SIG's Web site contains a rich source of disability-related information and resources. In addition to the latest articles, events, and news, the site includes a glossary and sections devoted to the following accessibility focus areas:

- Cognitive
- Hearing
- Internet Accessibility
- Mobility
- Speech
- Traumatic Brain Injury
- Visual

The Resources section provides valuable Web links for a variety of disability types. Each group contains multiple links to sites that are hand picked by SIG members. Some of the current 54 different groups include:

- Accessible Travel
- Cerebral Palsy
- Employment
- Fibromyalgia
- Hearing Loss
- Language
- Mental Health
- Pain Management
- Rehabilitation and Physical Therapy
- Traumatic Brain Injury

The Challenges

With the wealth of information that the site provides and the primary focus of accessibility, the site needs to be as accessible as possible. The SIG's name changed from the Special Needs SIG to the AccessAbility SIG in 2003, which required modification of all the pages and graphics in the Web site. The original site design was graphics intensive and built with tables to format the pages. While it had excellent navigation qualities, there were still some improvements needed for accessibility. The following is an illustration of the original design.
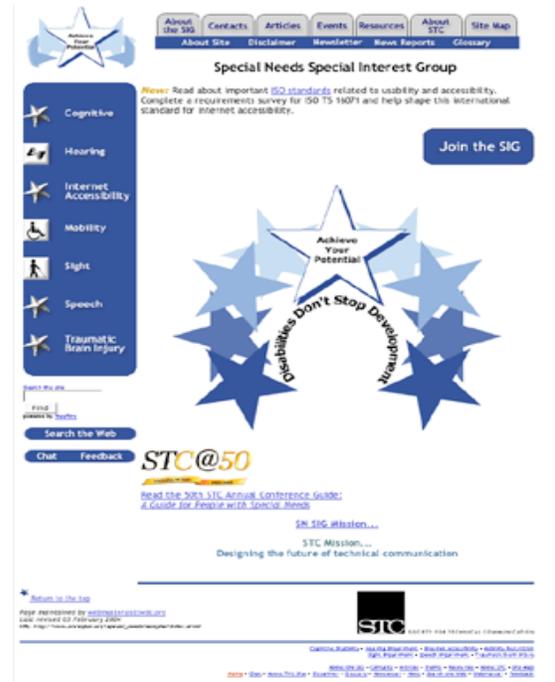
The Design Goals

Besides changing the name of the SIG on the site, our goal is to have a design that works in any size browser window and works just as well if the user changes the font size. The new design should not rely on tables for the page format. Data tables, if used, should be fluid so they can expand and collapse as needed to fit the browser window according to the user's preference. All the information in the site needs to be accessible by all users. For example, users who are deaf, have blindness or low vision, or have motor skill impairments. The ultimate goal is to create a CSS layout made without tables that behaves well with small window sizes and large fonts.

The Solution

Cascading Style Sheets (CSS) and many iterations. The final design successfully creates a layout that works with minor differences in most popular modern browsers that support the World Wide Web Consortium (W3C) standards for CSS, level 2. See the specifications at http://www.w3.org/TR/REC-CSS2/ These browsers include Internet Explorer 5 and 6, Opera 6 and 7, Safari 1.1, Mozilla Firebird 0.7, Mozilla 5b, and Netscape 7.2

on Macintosh and Windows platforms. In addition, the design degrades gracefully if the user is using a text-based browser such as Lynx or a browser that doesn't support the W3C guidelines. This achievement took months to accomplish because of the inconsistencies between all the browsers in the level of support for the CSS standards as defined at http://www.w3.org/Style/ and the Web Accessibility Initiative (WAI) at http://www.w3.org/WAI/

We wanted to use the same style rules for all the browsers. This constraint made the task more difficult and the final code larger and more complex than it would be for a browser with good compliance to CSS level 2, such as Netscape 7 and Mozilla Firebird. Because not all browsers support the same CSS features in the same way, it was necessary to use workarounds to solve browser deficiencies or other problems.

THE RESULT

The following illustration shows the final tableless design. The rollovers and buttons are CSS and not graphics. We use one style sheet for screen viewing for all the browsers on both Macintosh and Windows platforms. We also have style sheets for print layout, large font text, and audio. The design also passes all priority levels for Web accessibility and for Section 508 as tested using the CynthiaSays tool for content validation at http://www.cynthiasays.com/. Our progression will discuss the problems encountered during the redesign and the solutions found to achieve an accessible Web site.

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