**DQ1: Group Sites**

Critically examine how you could improve the usability and accessibility of your own group Web site. Do the same for one other group’s Web site. Your Instructor will provide the URLs for all the group Web sites in an Announcement this week.

1. Introduction
   1. What is accessibility?
      1. (W3C 2010)
         1. Accessibility is about ensuring an equivalent user experience for people with disabilities, including people with age-related impairments. For the Web, accessibility means that people with disabilities can perceive, understand, navigate, and interact with websites and tools, and that they can contribute equally without barriers. Access to information and communications technologies is a basic human right as recognized in the UN Convention on the Rights of Persons with Disabilities (CRPD) (links off WAI website). See Accessibility - W3C (links off WAI website) for an introduction to web accessibility.
         2. Most accessibility guidelines also improve usability for everyone, and especially benefit older users, people using different devices, and others such as people with low literacy or not fluent in the language, and people with low bandwidth connections or using older technologies. Thus accessibility includes both:
            1. Requirements that are more specific to people with disabilities; for example, they ensure that websites work well with assistive technologies such as screen readers that read aloud web pages, screen magnifiers that enlarge web pages, and voice recognition software that is used to input text. Most of these requirements are technical and relate to the underlying code rather than to the visual appearance.
            2. Requirements that are also general usability principles, which are included in accessibility requirements because they can be significant barriers to people with disabilities. For example, a website that is developed so that it can be used without a mouse is good usability; and use without a mouse is an accessibility requirement because people with some physical and visual disabilities cannot use a mouse at all.
      2. Cherim, 2007
         1. Simply put, web accessibility is the ability to access web content. Whether this means accessible to the disabled, specifically, or if it means accessible to everyone, including the disabled, is another topic altogether. In either case the accessibility requirement remains the same: The content must be accessible in a number of testable conditions to verify adherence to the Web Content Accessibility Guidelines. This is for, and includes, disabled users.
      3. Webmasterworld
         1. Accessibility deals with ensuring that everyone can access your website, regardless of browser used or whether living with certain impairments or disabilities. To cite the W3C: "Web accessibility means that people with disabilities can perceive, understand, navigate, and interact with the Web, and that they can contribute to the Web, ... [whether suffering from] visual, auditory, physical, speech, cognitive, [or] neurological disabilities. ... Web accessibility also benefits people without disabilities. ... A key principle of Web accessibility is designing Web sites and software that are flexible to meet different user needs, preferences, and situations ... such as people using a slow Internet connection, people with 'temporary disabilities' such as a broken arm, and people with changing abilities due to aging."
         2. Needless to say, accessibility is much more than caring for people with disabilities. It is about lowering the barriers for everyone accessing the Internet, about caring for people's needs and preferences, along with writing the best possible content.
   2. What is usability?
      1. (W3C, 2010)
         1. Usability is about designing products to be effective, efficient, and satisfying. Usability is part of the human-computer interaction (HCI) research and design field (which is much broader than usability testing). For web developers, a key aspect of usability is following a user-centered design (UCD) process to create positive user experiences.
         2. User-centered design (UCD) focuses on usability goals, user characteristics, environment, tasks, and workflow in designing a user interface to meet user requirements. For example, UCD considers users' hardware, software, computer experience, task knowledge, and other characteristics in designing a website, web application, browser, and other web tool. UCD is an iterative process with well-defined methods and techniques for analysis, design, and evaluation from the first stage of projects through implementation.
         3. Usability efforts often focus on primary user groups and common user characteristics; in the past, many have not included people with disabilities. More and more usability specialists are recognizing the benefits of including people with disabilities in usability research and practice, including:
            1. Involving people with disabilities early in design processes broadens designers' perspectives and can lead to making products work better for more people in more situations.
            2. Involving participants with disabilities in evaluation can identify usability issues more easily because people with disabilities are often more sensitive to usability problems. For example, a large number of links poorly organized on a web page will be more of a problem for people with some types of cognitive, physical, or visual disabilities.
            3. Including accessibility guidelines throughout the design process helps improves usability for people with and without disabilities.
      2. Cherim, 2007
         1. Usability pertains to the layout, the location of elements, the functionality of the progressive enhancements, the design, the site’s inherit intuitiveness, and more. If someone can’t readily locate the navigation, for example, it would probably be classified as a usability issue, regardless of how technically accessible it may be. Many usability issues are less clear. Some teeter on the brink of accessibility. Some go further. And that brings us to a gray area.
      3. Webmasterworld
         1. As you can see, the step over to usability is quite natural. Usability takes over where accessibility ends. If accessibility is about enabling access to your site for everyone, usability is ensuring that everyone can navigate the site in an intuitive way. Usability is about making your quality content easy to find, about ease and flexibility of navigation, about simplicity and logic.
         2. Whether consciously or not, we have all learned valuable lessons from from years of study and research by usability guru Jakob Nielsen [useit.com]: 1) web users want to find what they're after quickly, and 2) if they don't know what they're after, they nevertheless want to browse quickly and access information they come across in a logical manner.
         3. Usability is the answer to how you can please your users and live up to the demands of an everchanging web. Internet is no longer just about having the information people are looking for. It's about providing the easiest way of finding that information.
         4. The same methods used to making your website accessible can typically be directly employed in making your site usable. Try navigating your site using your off hand again. Navigate your website using nothing but a keyboard. Give someone (not tech savvy) who is unfamiliar with your website the task of finding something in particular. Watch their behavior. Listen to their feedback on what worked and what did not. Then do that a thousand times more! ...or, go read some of Jakob Nielsen's articles.
         5. If you have excellent content and quality products to sell, but not an easy way for your visitors to navigate your site or find what they are looking for, do not think they will go through the trouble of figuring out "how your site works".
         6. I have witnessed countless examples of companies losing significant numbers of sales due to lacking usability. Sometimes even the smallest changes have made a great impact.
         7. Simplify and enhance their experience!
         8. Summary
            1. While accessibility is typically directly associated with disabilities there is so much more to consider. Accessibility means not turning anyone away, regardless of browser, internet connection speed, education, disabilities, personal preferences. So what if your visitor prefers large text and you think it will look ugly. It is their choice! So what if your buyer is using a pointer wand to make a purchase? Are you going to turn them and their money down based on a disability?
            2. Accessibility is about empowering your visitors!
   3. What is the difference?
      1. Mifsud, 2011
         1. An accessible web site would benefit all users, not just those who are disabled [13]
         2. Accessibility is a subset of usability [9]
         3. A web site is not usable unless it is accessible [14]
         4. Whilst usability implies accessibility, the contrary is not necessarily true
2. Our group’s website
   1. Accessibility critique
      1. About Us page (Page that I was responsible for:
         1. Client-side validation for the form section worked in Firefox, but did not work with Safari. I checked and JavaScript was enabled, so I still do not know how to fix this problem. When working on this assignment, I only used Firefox, Internet Explorer, and Chrome.
         2. I see the following issues using iOS from my iPad and iPhone:
            1. Client-side validation for the form on the About Us section does not work. This was done with popup windows.
      2. Menu page:
         1. The descriptions of the menu items displayed inconsistently when viewed on different browsers and operating systems (Mac OSX and iOS).
   2. Usability critique
      1. All pages:
         1. The menu, location, about us, and register pages all have a form for the user to give their names, email addresses, and comment. Perhaps this could be simplified by providing a single contact us page where the user could do this. However, each of the team members was responsible for one of these pages, so in the interest of demonstrating the ability to create functional forms, this was done on each page.
         2. The Google site search was not functional.
      2. Menu page:
         1. The drawings of the sandwich obstructed the view of the menu items 2, 3, and 4.
         2. Has a button to display the current date and time. Again, this was probably done to demonstrate the student’s coding ability. However, if this were a real business, I would not have this feature.
      3. Register page:
         1. The button at the bottom of the page “What’s Your Favorite Mean?” was not functional. I would recommend removing it or perhaps having it lead to another webpage where the user could input more information.
3. Other group’s website (Group 3)
   1. Accessibility critique
      1. All pages had a similar experience when I attempted to access them using:
         1. MacOSX (Safari and Firefox)
         2. iOS (Safari).
   2. Usability critique
      1. Home page:
         1. The 5 descriptions “Lorem ipsum…” looked like they were all taken from a Microsoft template. I did not immediately know what Softdev does.
      2. The following links were not functional:
         1. Latest Projects
         2. Tutorials
         3. Partners
         4. Click here for more details (All 4 occurrences)
      3. The search function did not work.
      4. Profiles.html
         1. The Hire Now button did not seem to have an action associated with it.
         2. There were only 3 links on the left side, which was not consistent with the home page.
      5. Register page
         1. There was only one password field. I think it is a good idea to give the user 2 fields in to mitigate the risk that they are mistyping.
         2. The radio buttons for Account type were closer to the option not being selected. I would recommend that more space be placed between the radio button for developer and “Business”.
         3. When attempting to register, all fields cleared when my password did not fulfill the requirements. I recommend that the requirements be stated on the page, and that all fields do not clear if a requirement is not met.
         4. When finishing registration, I recommend that an email confirmation be sent to the user.
      6. CPostReq.html
         1. The field “Estimated budget per week” was unclear to me. I recommend specifying units (dollars, GBP, etc.)
         2. When submitting a project, I received the error message “Error: You have not provided the project length. Go back and try again.”. There was no such option on the web page.
      7. ContactUs.html
         1. There were a limited number of countries available for selection in the Country drop down menu. I recommend making all countries available.
         2. Clicking the submit button did not work.
      8. BrowseProjects.html
         1. None of the links on the left side were functional.
4. Conclusion

References:

References:

Cherim, M. (2007) *A Comparative: Accessibility and Usability* [Online]. Available from: <http://accessites.org/site/2007/09/a-comparative-accessibility-and-usability/> (Accessed: 4 July 2014)

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W3C (2010) Web Accessibility and Usability Working Together [Online]. Available from: <http://www.w3.org/WAI/intro/usable> (Accessed: 4 July 2014)