Lab #1: Web Accessibility

Objectives

- Describe some of the accessibility issues faced by users who have visual impairements
- Describe the advantages of making your website more accessible
- Explain how ChromeVox can be used to “read” a webpage
- Evaluate the accessibility of a page using ChromeVox

Time to complete: 60 min

Introduction

As you read in Chapter 3, you as the web developer must consider the entire audience of your website and realize that some site visitors arrive with disabilities that affect how they interact with their computer and how they will “view” your site. The W3C started the Web Accessibility Initiative (WAI) to insure that the Web is usable by everyone.

We have enormous potential to reach a large audience through the web. By better understanding how the content of a website is interpreted by site visitors, we can improve the way we design that content to be presented in the browser.

In this lab, you will have the opportunity to use a screen reader in viewing the Web and to see for yourself how site design affects the screen reader experience. Once you have visited several sites using the screen reader, you will write a short essay describing your observations.

If you don’t already have screen reading software installed on your computer (most do not), you can use the “light weight” Chrome-specific extension, ChromeVox, to see how a screen reader is used to interact with a website.

Lab Activity

If you don’t already have the Chrome browser installed on your computer, please go ahead and install this now. We will be using Chrome extensively throughout this class.

1. With Chrome installed and (assuming that you don’t already have any screen reader software installed), install the Google Chrome extension Chromevox.
2. Watch the short ChromeVox demo and go through the short ChromeVox Interactive Tutorial to learn how to navigate a webpage with ChromeVox. The ChromeVox Keyboard Shortcuts Reference includes some additional info specific to the different key combinations that can be used with ChromeVox.
3. Now that you have some base experience using ChromeVox, open the Lone Star College main page and use the main Search textbox in the upper right to perform a search for “web programming”. Once the results are listed, use your Chromevox prompts and key combinations to navigate to and open some of the entries on this results page. Now turn off your computer monitor or cover the screen with a piece of paper and try to perform the same exact task using only what you hear with the ChromeVox reader.
4. Now visit a webpage of your choosing, e.g., espn.com or cnn.com and navigate through the site using ChromeVox. Feel free to visit as many sites as you like to see how easy/difficult they are to navigate with ChromeVox.
5. Based on your observations now, please write a short essay of your experiences and findings. This essay should be 300-600 words and follow the MLA standard layout. No citations are required, just a simple essay - see the sample first page found in the previous MLA link. In your essay:
    - Describe how it felt to use ChromeVox to navigate through a webpage and to perform a search function both with and without the screen visible (step 3).
    - Explain what you liked and didn’t like about the experience.
    - Explain how you might use ChromeVox to evaluate a webpage that you will build later in our class.
    - Share any other observations you made.
6. Save your essay as a .PDF document and upload into the assignment dropbox within D2L.

Further Reading

Here are several other resources on the topic of web accessibility:

- WebAIM: Web Accessibility in Mind, www.webaim.org
- A List Apart Article: Reframing Accessibility for the Web
- Wikipedia: Screen Reader

Attribution: This lab was derived from the Google lesson: Unit 1 - Introducing Web Accessibility & Tools