# Making a Web Site Accessible



CALIFORNIA STATE UNIVERSITY, SACRAMENTO

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# INTRODUCTION

Accessibility in terms of Web design generally refers to facilitating the use of technology for people with disabilities. Providing equivalent access to Web sites for all students, faculty, and staff at Sacramento State is required by SB302. This Senate Bill extends the requirements of Section 508 of the federal Rehabilitation Act to the California State University. Visit the new Accessibility at Sacramento State website (http://www.csus.edu/accessibility) for more information on handling accessibility and the Accessible Technology Initiative.

# COMMON OBSTACLES AND SOLUTIONS

According to the accessibility bookmark titled *Common Obstacles and Solutions to Electronic Accessibility* published by the University of Wisconsin-Madison, there are seven common obstacles to Web accessibility.

# **Missing Alternate Text**

Include descriptive alternate text (alt-text) for every informative image. Decorative images can have the empty string ("") as the alternate text. Alternate text can be read aloud by a screen reader like JAWS to tell the user what is represented in the image, and can be displayed in browsers like Internet Explorer when a user hovers over the image or when images are disabled (not displayed). Always remember to add alternate text when inserting images into a Web page.

# **Missing or Poorly Used Headings**

Use headings such as heading 1 for page title, heading 2 for section heading, and heading 3 for subsection headings to give structure to your Web pages. These special heading tags act like the headings found in the table of contents of a book and help organize your content into major areas. Do not skip a heading level, such as heading 1 followed by heading 3. Be sure to use descriptive text in your heading that properly represents the content found on that page, section, or subsection.

The Sac State templates include style sheets for the various heading tags h1 through h6. Use these styles for your headings.

# **Scanned Documents**

Convert your original documents to PDF directly from Microsoft PowerPoint or Word, instead of scanning printed copies of them. Scanned documents are usually scanned as images instead of text, and are not accessible. If you do not have the original, try scanning your copy and saving it as a Word document using optical character recognition (OCR) software. The Faculty/Staff Resource Center has a scanner with OCR software. Optionally, try to link to an online article instead of scanning it.

# **Poorly Labeled Links**

Label the hyperlinks on your Web pages to describe where each link leads. For example, use "Sac State home page" instead of "home page", "click here" or "http://www.csus.edu". Your link text should be meaningful enough to make sense when read out of context – either on its own or as part of a sequence of other links.

With screen readers like JAWS, a user can display a list of all the link labels on a Web page with a few keystrokes. Many blind users of the Web use these shortcuts to quickly navigate through various Web pages as they search for information. For it to work effectively however, each link label must be unique and descriptive enough so that it can be easily understood.

# **Color Used to Convey Information**

When you use color to convey information on your Web pages, use symbols and color together to convey that information. For example, "the exam days are marked with an \* and in bold, red text." Color alone may not distinguish the content from surrounding content, especially for users who are colorblind or have vision problems.

### **One Click Drop-Down Menus**

Make your menus activate with two clicks. This allows the user to make a selection and then click "Go" to activate the selection. Following is an example from the Sac State home page that shows the Quick Links menu and its accompanying Go button.

Quick Links	×
	Go >>

# **No Skip Navigation Link**

Include a link at the beginning of each Web page titled "jump to content" or "skip navigation" that allows the user to skip any navigation and go directly to your content. The Sac State templates include the "jump to content" link at the top and a corresponding anchor titled "content" at the beginning of the main content area.

# **EVALUATING YOUR WEB SITE**

There are a variety of tools available to help you evaluate the accessibility of your Web site. The three main tools in use at Sac State are:

- 1. Dreamweaver accessibility reports
- 2. Firefox Web Developer toolbar
- 3. Manually check your other documents

## **Dreamweaver Accessibility Reports**

Here are the steps to run the accessibility reports in Dreamweaver.

- *step 1.* Open your site within Dreamweaver. Optionally, you can open an HTML file from your site in the Document window that you want to test for accessibility.
- step 2. From the Site menu, select Reports.
- *step 3.* Select either **Current Document** or **Entire Current Local Site** from the **Report on** drop-down menu.

Reports	
Report on: Current Document	Run Cancel
<ul> <li>Checked Out By</li> <li>Design Notes</li> <li>Recently Modified</li> <li>HTML Reports</li> <li>Combinable Nested Font Tags</li> <li>Accessibility</li> <li>Missing Alt Text</li> <li>Redundant Nested Tags</li> <li>Removable Empty Tags</li> <li>Untitled Documents</li> </ul>	
Report Settings	Help

*step 4.* Check the box next to Accessibility under the HTML Reports section.*step 5.* Click Run. The report results appear in the Site Reports tab of the Results panel, as shown below.

II 🔻	Re	sults Search   Reference	Valida	tion   Target Browser Check   Link Checker Site Reports FTP Log   Server Debug		=				
►		File	Line	Description		^				
۲	×	myindex.htm	125	Non spacer IMG with valid ALT [S508 a/WCAG 1.1P1] FAILED No ALT defined for image.		7				
٢	?	myindex.htm	75	Non spacer IMG with equivalent ALT [S508 a/WCAG 1.1 P1] MANUAL						
	?	myindex.htm	187	Non spacer IMG with equivalent ALT [S508 a/WCAG 1.1 P1] MANUAL						
	?	myindex.htm	193	Non spacer IMG with equivalent ALT [S508 a/WCAG 1.1 P1] MANUAL						
	?	myindex.htm	199	Non spacer IMG with equivalent ALT [S508 a/WCAG 1.1 P1] MANUAL		~				
	<				>					
	Complete.									

*step 6.* Based on the report results, correct any errors or warnings that appear. If you double-click an item in the **Results** panel, it opens the file and highlights the HTML code and the element where the error occurred in the Document window.

### Firefox Web Developer Toolbar

There is an add-on toolbar for the Firefox browser for both Mac OS X, Windows, and Linux called "Web Developer", that can help you check the accessibility of your published Web pages. Here are the steps you can follow to download and install this add-on toolbar to Firefox.

- *step 1.* Open Firefox and go to the Mozilla Web site to obtain the Web Developer Toolbar. https://addons.mozilla.org/en-US/firefox/addon/60
- *step 2.* Click the **Install Now** button and follow the directions it's a very small plug-in for the browser. After you install and restart Firefox, the new toolbar appears below the Web address at the top of the browser.
- step 3. To configure the accessibility report in the Web Developer toolbar follow these steps:a. Click the Tools menu on the new toolbar.
  - *b.* Select **Edit Tools** from the menu.
  - c. In the Web Developer Options window, select the Validation category.
  - *d.* In the Validate Local Accessibility section be sure the box for Section 508 is checked. Checking WAI Priority 1 and Priority 2 are optional.*e.* Click OK.
- *step 4.* To run an accessibility report on a Web page you are viewing in Firefox, simply click the **Tools** menu on the new toolbar and select **Validate Section 508**. The report opens a new tab in Firefox and display the results of the accessibility report.
- *step 5.* Review the accessibility report and make any necessary corrections to the Web page using Dreamweaver or Contribute.

# **Manually Check Your Other Documents**

There are no automated tools to check the accessibility of your Microsoft Office documents (PowerPoint, Word), so you need to manually check these documents if you are sharing them on the Web. Your Adobe PDF documents can be checked for accessibility using the tools in Adobe Acrobat Professional.

For instructions on how to make your Microsoft PowerPoint, Word and Adobe PDF documents accessible, refer to the Training Handouts website at http://www.csus.edu/training/handouts.

# RESOURCES

### Faculty / Staff Resource Center

Located in ARC 3012. Assistance available on walk-in basis. Open Lab on Fridays, 1-4 pm (Fall, Winter, Spring) Open Lab on Thursdays 1-4 pm (Summer only) FSRC Website http://www.csus.edu/uccs/fscenter/

# **Getting Help**

University Help Desk (916) 278-7337 or helpdesk@csus.edu Academic Technology Consultants http://www.csus.edu/atcs/contact.htm Help Desk - Problem Reports & Contact Information http://www.csus.edu/uccs/helpdesk/contact.stm Web Development Questions web@csus.edu

### **Campus Resources**

Training http://www.csus.edu/training Training Handouts http://www.csus.edu/training/handouts Online Tutorials http://www.csus.edu/atcs/tools/tutorials.htm Educational Tools http://www.csus.edu/atcs/tools Accessibility at Sacramento State http://www.csus.edu/accessibility

# Web Accessibility Resources

Dreamweaver Accessibility Resources http://www.adobe.com/accessibility/products/dreamweaver/ Firefox Web Developer Toolbar https://addons.mozilla.org/en-US/firefox/addon/60 WebAIM: Web Accessibility in Mind http://www.webaim.org/