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# How to make websites accessible

Creating accessible web pages has never been more important than today. With the adoption of accessibility standards in the United States, Canada, the European Union, Australia, Japan, and other countries, designers and developers need to ensure that people with disabilities can access the contents of websites and web applications, as well as the authoring tools used to create them.

*Accessibility* refers to making websites and web products usable for people with visual, auditory, motor, and other disabilities. Examples of accessibility features for software products and websites include screen reader support, text equivalents for graphics, keyboard shortcuts, change of display colors to high contrast, and so on. Dreamweaver provides tools that make it accessible to use and tools that help you author accessible content.

Dreamweaver enables designers and developers to create accessible pages that contain useful content for screen readers and comply with federal government guidelines. For example, dialog boxes prompt you to enter accessibility attributes—such as text equivalents for an image—when you insert page elements. Then, when the image appears on a page for a user with visual disabilities, the screen reader voices the description.

**Note:** For more information about two significant accessibility initiatives, see the World Wide Web Consortium Web Accessibility Initiative (www.w3.org/wai) and Section 508 of the U.S. Federal Rehabilitation Act (www.section508.gov).

No authoring tool can automate the development process. Designing accessible websites requires you to understand accessibility requirements and make ongoing decisions about how users with disabilities interact with web pages. The best way to ensure that a website is accessible is through deliberate planning, development, testing, and evaluation.

## Accessibility preferences options

To create accessible web pages, page elements need to be marked up with information for assistive technology, such as screen readers. For example, each image on a page should be given a text equivalent, called *alternative text* (*alt text*), that a screen reader voices to users in place of the image (**Figure 1**).



Figure 1 Displaying alternative text

Designers often overlook accessibility features such as alt text when creating websites, but Dreamweaver enables you to set preferences that prompt you to provide accessibility information as you're building the page. By activating options in the Preferences dialog box, you'll be prompted to provide accessibility-related information for form objects, frames, media, images, and tables as each element is inserted in a page.

To set the accessibility preference, choose Edit > Preferences (Windows) or Dreamweaver > Preferences (Mac OS) and select the Accessibility category in the Preferences dialog box (**Figure 2**).

Preferences	and the second se		×
Preferences Category General Accessibility AP Elements Code Coloring Code Format Code Rewriting Copy/Paste CSS Styles File Compare File Types / Editors Fonts Highlighting Invisible Elements New Document Preview in Browser Site W3C Validator Window Sizes	Accessibility Show attributes when inserting:		
	Help	OK	Cancel

Figure 2 Dreamweaver Preferences dialog box, Accessibility category

For example, if you choose the Images option in the Show Attributes list, you are prompted (**Figure 3**) to provide the alt text equivalent and a description for each image as you insert it.



Figure 3 Image Tag Accessibility Attributes dialog box

Creating accessible tables and forms presents some challenges, but Dreamweaver simplifies the process. For example, as you insert a data table within Dreamweaver, you're immediately prompted to provide summary information, a caption, and the position of heading cells in the table (**Figure 4**). Incidentally, by adding identifying heading cells—an important but often overlooked design step—you make it significantly easier for assistive technology users to navigate tables.

Table		<b>— X</b> —
Table size		
Rows:	3	Columns: 3
Table width:	200	pixels 🔻
Border thickness:	1	pixels
Cell padding:		
Cell spacing:		<b>H</b>
Header		Top Both
Accessibility		
Caption:		
Summary:		▲ ▼
Help		OK Cancel

Figure 4 Table dialog box

Creating accessible forms is also easy with Dreamweaver. When you select the Form Objects option in the Preferences dialog box, you're prompted to provide a label for each form object, along with a shortcut key and the tab order position (**Figure 5**). Specifying the label allows assistive technology users to understand the purpose of each form object as they complete the form.

Input Tag Acces	ssibility Attributes	×
ID: Label:		OK Cancel
Style: Position:	<ul> <li>Attach label tag using 'for' attribute</li> <li>Wrap with label tag</li> <li>No label tag</li> <li>Before form item</li> </ul>	Help
Access key: If you don't w inserting object	After form item Tab Index: ant to enter this information when cts, change the Accessibility preferences.	

Figure 5 Input Tag Accessibility Attributes dialog box

### Accessibility validation

There are a number of third-party web accessibility evaluation tools that you can use to validate your completed websites. The W3C Web Accessibility initiative provides a comprehensive list of these tools at http://www.w3.org/WAI/RC/tools/.

### Accessible templates

Dreamweaver includes several templates designed for accessibility. These templates are visually balanced, as well as accessible to people with disabilities (**Figure 6**). They provide you with a fast and easy way to create exciting, engaging, and accessible content.

Insert_logo (180 x 90)		
Link one	Instructions	Backgrounds
Link two	Instructions	By poturo the
Link three	Be aware that the CSS for these layouts is heavily commented. If	by flature, the
	you do most of your work in Design view have a peek at the code to	on any div will
Link four	get tips on working with the CSS for the fixed layouts. You can	only show for the
The above links	remove these comments before you launch your site. To learn more	length of the
demonstrate a	about the techniques used in these CSS Layouts, read this article at	content. If you'd
basic navigational	Adobe's Developer Center -	like a dividing
structure using an	http://www.adobe.com/go/adc_css_layouts.	line instead of a
unordered list		color, place a
styled with CSS.	Clearing Method	border on the
Use this as a		side of the
starting point and	Because all the columns are floated, this layout uses a clear:both	.content div (but
modify the	declaration in the .footer rule. This clearing technique forces the	only if it will
properties to	.container to understand where the columns end in order to show	more content)
produce your own	any borders or background colors you place on the .container. If your	more concent).
unique look. If	design requires you to remove the .footer from the .container, you'll	
you require flyout	need to use a different clearing method. The most reliable will be to	
menus, create	adu a < or class= clearioat /> or < div class= clearioat >	
Spry monul a	This will have the same clearing effect	
menu widget from	This will have the same cleaning effect.	
menu wugee nom	I PI	

Figure 6 Dreamweaver sample HTML template

#### How to meet accessibility requirements

The W3C Web Accessibility Initiative has developed a quick reference list Web Content Accessibility Guidelines 2.0 requirements and techniques.

- 1. Text Alternatives: Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.
- 2. Time-based Media: Provide alternatives for time-based media.
- 3. Adaptable: Create content that can be presented in different ways (for example simpler layout) without losing information or structure.
- 4. Distinguishable: Make it easier for users to see and hear content including separating foreground from background.
- 5. Keyboard Accessible: Make all functionality available from a keyboard.

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- 6. Enough Time: Provide users enough time to read and use content.
- 7. Seizures: Do not design content in a way that is known to cause seizures.
- 8. Navigable: Provide ways to help users navigate, find content, and determine where they are.
- 9. Readable: Make text content readable and understandable.
- 10. Predictable: Make Web pages appear and operate in predictable ways.
- 11. Input Assistance: Help users avoid and correct mistakes.
- 12. Compatible: Maximize compatibility with current and future user agents, including assistive technologies.