Including images

Lesson 5

There's no doubt about it -- the Web is as successful as it is because Web pages can be built with both text and graphics. In our eye-candy-laden world, graphical appeal is just as important as content in selling people on anything -- including the usefulness of the content itself. Graphics can enhance content, break up the monotonous look of text, and catch a user's eye when some words on a page wouldn't.

Take a few minutes to surf the Web and you'll be bombarded by graphics. This doesn't necessarily mean that every Web page uses graphics well or that Web pages that use graphics are well designed. However, graphics do play a very large role in the look and feel of most Web sites, and you'll most likely want to include a graphic or two on your pages. It's really not that difficult to do, but before you begin plastering your pages with images, take a few minutes to read about how best to use graphics so they play well with the other content on your page instead of overwhelming it.

Images enhance content

The goal of images in a Web page is to enhance the content of your page. Images most often play a supporting role on a Web page instead of a starring one, but without the images pages would be pretty boring. Look at the interface for this course. Graphics of all kinds support the delivery of the material you're reading right now. Logos tell you in a colorful and fun way who's providing you with the class, icons help identify different kinds of content, and buttons provide an easy way to interact with the course materials (just to name a few examples).

Using images for navigation

In addition to enhancing content, images are frequently used as navigation tools. By using images to help users navigate through pages you combine visual interest with plain ol' utility. Each graphic does double duty as a navigation instrument and a visual addition to the page. Once again, look at the course interface. The graphical images across the top of the page help you move from one portion of the site to another. Small, tasteful graphics link you to the home page, help content, and information on teaching courses of your own.

If you're going to use graphics as navigation tools, be sure that you provide a text-only alternative for users who surf without graphics. Look at the very bottom of the course screen and check out the text links that mirror the graphical navigation tools on the rest of the page. While graphics can play a large role in building a user interface and navigation scheme, there are those who can't see or use graphics, and you don't want to exclude them from using your pages or viewing your content.

Obviously, if you are going to use graphics as navigation tools, you must be able to attach hyperlinks to the images that you've embedded in a document. This isn't particularly difficult to do. You simply combine the anchor and image tags to create a clickable image.

Graphics can make or break your page

Your choice of graphics and the techniques you use to include them on your Web pages can literally make or break your page. Whenever users view your Web page, they have to download temporary copies of all the page's components -- text and graphics alike -- over the Internet and to their own computer. The more graphics you have on your page, the longer it takes for users to download your page and view it in its entirety.

You add images to your Web pages using -- yep, you guessed it -- the image element. The image element is a singleton tag that embeds a graphic into your HTML page. When a browser encounters the image element, it simply replaces the element with the image to which the element points. A basic image tag looks like this:

```
<img src="mygraphic.gif">
```

That's it. The singleton tag is `<img>` and the attribute that must accompany every image tag is `src=` which stands for source. The image element tells the browser that there's an image to be embedded in the file, and the source attribute tells the browser where to look for the image.

In the end, the source file for an image has a Web address, just like a hyperlink does. This means image source files have the following in common with text hyperlinks:

- The file name must be exact. You can point to images that reside on your Web server or images that reside on someone else's Web server. Regardless of where the image lives, the link you make to it in your Web page must point to the file exactly.
- The value of the **src=** attribute must be in quotation marks.

While you can point to graphics that reside on external Web sites, you generally point to graphics that are stored on your own site. If you include a graphic on your page that is stored on someone else's site, you can't always be sure that the graphic is still available or that the site's Web server will be up and running 100 percent of the time.

Specifying alternative text

Earlier, you learned that each and every image should have a text alternative so that visitors who can't see your images can still take full advantage of your site. The text-based navigation at the bottom of the lesson page is one example of a method for providing alternate text.

The image element also has an attribute that allows you to provide a text alternative for an image -- the `alt=` attribute. Whenever you add an image to a Web page, you should be sure to include the `alt=` attribute and give it a value that describes the image. If it is an image that is part of a navigation scheme, give it a value that describes that image's function in the page, as in this bit of code:

```
<img src="home_button.gif" alt="Go to the Home
Page">
```

Because you can use spaces in the value for the `alt=` attribute, you should always put quotation marks around the value, as in the previous code sample.

The image element has a whole plethora of attributes that affect the way an image is displayed by the Web browser. The most commonly used attributes include:

- **align=**: This attribute specifies how the image should be aligned relative to the content around it. You can use the values **top**, **middle**, **bottom**, **left**, and **right** to set an image's alignment.
- **border=**: Use this attribute to place a border around the image. The number you set as a value for the attribute defines how many pixels wide the border is. Set a value of **0** for no border.
- **hspace=**: This attribute sets white space on either side of the image. The number you set as a value for this attribute defines how many pixels wide the white space is.
- **vspace=**: This attribute sets white space on the top and bottom of the image. The number you set as a value for this attribute defines how many pixels wide the white space is.

The best way to see how each of these attributes affects the way a browser displays an image is to add them to an image element, tinker with their values, and see how the results look in a browser.

Acquiring graphics

If you think graphics are cool but aren't sure where to get the right images for your Web pages, don't fret. You don't need to be a budding artist -- or pay through the nose for an artist -- to use graphics to enhance your Web site. There are a variety of resources that you can use to acquire quality graphics. For a good start, visit your favorite Web search engine (Yahoo, Google, or Ask, for example) and type in the search phrase "Web graphics." You'll find links to hundreds of Web sites where you can download graphics for free.

You might have noticed that the examples of the image tag use graphics saved as GIFs. While there are a wide variety of image formats out there, only two are safe to use for graphics that you intend to embed in a Web page: GIF and JPEG.

Both of these image formats are highly compressed and platform-independent, which means that you can create and store the graphics on any computer and serve them to any computer. Web browsers don't know what to do with graphics saved in other formats such as TIF or PICT, so you want to avoid those if possible. Most graphics editing tools save graphics in both GIF and JPEG format, so you shouldn't have to buy new software to find a tool that you can use to work with these two graphics formats.

Moving on

The assignment for this lesson gives you the chance to practice what you've learned about images. If you have questions about links and images, or about any other issue related to HTML be sure to post the question to the message board so your instructor and fellow students can answer it.

In the next lesson you will learn all you need to know to add lists to your Web page. A list can help organize like information together and can make your page more visually interesting.