

HOUR 3



Linking to Other Web Pages

In the previous two hours you learned how to use HTML tags to create a Web page with some text on it. However, at this point the Web page is an island unto itself, with no connection to anything else. To make it a “real” Web page you need to connect it to the rest of the World Wide Web—or at least to your own personal or corporate web of pages.

This hour shows you how to create *hypertext links*—those words that take you from one Web page to another when you click them with your mouse. You learn how to create links that go to another part of the same page in Hour 7, “Creating Text Links.”

Although the same HTML tag you study in this hour is also used to make graphical images into clickable links, graphical links aren’t explicitly discussed here. You’ll find out about those in Hour 9, “Putting Graphics on a Web Page.” For now you’ll focus your energy on linking to other pages via words, not graphics.

Linking to Another Web Page

The tag to create a link is called `<a>`, which stands for anchor. While the word “anchor” might seem a little obscure when describing links, it has to do with the fact that you can use the `<a>` tag to identify a particular spot within a Web page—an anchor point. Granted, there are certainly better words out there that would make more sense, but we’re stuck with anchor so just go with it! Within the `<a>` tag, you put the address of the page to link to in quotes after `href=`, like the following:

```
<a href="http://www.stalefishlabs.com/products.html">click here!</a>
```

This link displays the words `click here!` in blue with an underline. When a user clicks those, she would see the Web page named `products.htm`, which is located on the Web server computer whose address is `www.stalefishlabs.com`—just as if she had typed the address into the Web browser by hand. (By the way, Internet addresses are also called *Uniform Resource Locators*, or *URLs*, by techie types.)

Getting back to the `<a>` tag, `href` stands for hypertext reference and is an *attribute* of the `<a>` tag. An *attribute* is an additional piece of information associated with a tag that provides further details about the tag. You’ll learn more about attributes in Hour 5, “Basic Text Alignment and Formatting.”

NEW TERM

An *attribute* is an additional piece of information associated with a tag that provides further details about the tag. For example, the `href` attribute of the `<a>` tag identifies the address of the page to which you are linking.



As you may know, you can leave out the `http://` at the front of any address when typing it into most Web browsers. However, you cannot leave that part out when you type an Internet address into an `<a href>` link on a Web page.



One thing you can often leave out of an address is the actual name of the HTML page. Most computers on the Internet automatically pull up the home page for a particular address or directory folder. For example, you can use `http://www.stalefishlabs.com` to refer to the page located at `http://www.stalefishlabs.com/index.html` because my server computer knows `index.html` is the page you should see first (see Hour 4, “Publishing Your HTML Pages”).

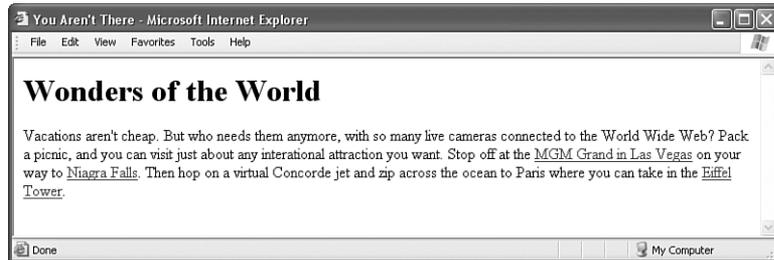
Listing 3.1 includes a number of `<a>` tags, which show up as underlined links in Figure 3.1. The addresses for the links are given in the `href` attributes. For example, clicking the words Eiffel Tower in Figure 3.1 will take you to the page located at http://www.abcparislive.com/eiffel_tower_webcams.htm as shown in Figure 3.2.

LISTING 3.1 `<a>` Tags

```
<html><head><title>You Aren't There</title></head><body><h1>Wonders of the
World</h1>Vacations aren't cheap. But who needs them anymore, with somany live
cameras connected to the World Wide Web? Pack apicnic, and you can visit just
about any international
attraction you want. Stop off at the <a
href="http://www.earthcam.com/usa/nevada/lasvegas/mgmgrand/">
MGM Grand in Las Vegas</a> on your way to
<a href="http://www.fallsview.com/Stream/PanLive.shtml">Niagra
Falls</a>. Then hop on a virtual Concorde jet and zip across
the ocean to Paris where you can take in the
<a href="http://www.abcparislive.com/eiffel_tower_webcams.htm">
Eiffel Tower</a>.</p>
</body>
</html>
```

FIGURE 3.1

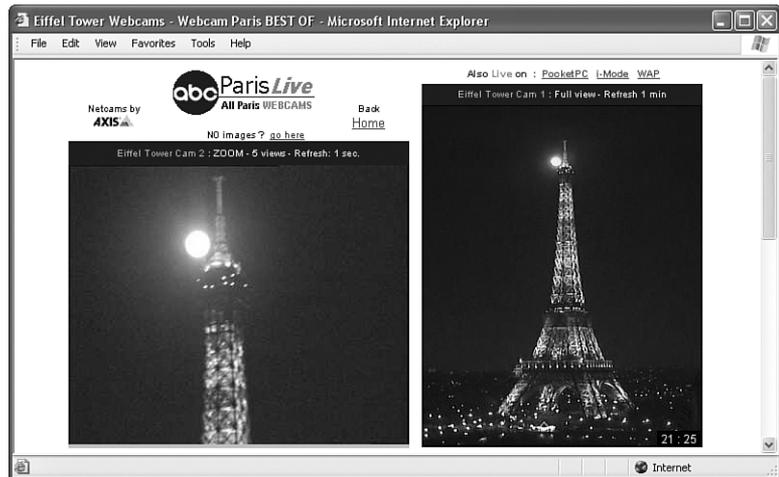
The HTML in Listing 3.1 produces this page, with links appearing as blue or purple underlined text.



You can easily transfer the address of a page from your Web browser to your own HTML page by using the Windows or Macintosh clipboard. Just highlight the address in the Location, Address, Bookmark Properties, or Edit Favorites box in your Web browser, and select Edit, Copy (or press `Ctrl+C` or `Command+C` on the Mac). Then type `<a href="` and select Edit, Paste (`Ctrl+V` or `Command+V`) in your HTML (text) editor.

FIGURE 3.2

Clicking the Eiffel Tower link in Figure 3.1 retrieves the Paris Live Eiffel Tower Cams page from the Internet.



Linking Between Your Own Pages

One exception to the rule earlier about needing to include `http://` before each address specified in the `href` attribute is when you're dealing with links between files on the same computer or Web server. When you create a link from one page to another page on the same computer, it isn't necessary to specify a complete Internet address. In fact, if the two pages are stored in the same folder, you can simply use the name of the HTML file:

```
<a href="pagetwo.htm">click here to go to page 2.</a>
```

As an example, Listing 3.2 and Figure 3.3 show a quiz page with a link to the answers page in Listing 3.3 and Figure 3.4. The answers page contains a link back to the quiz page. Because the page in Listing 3.2 links to another page in the same directory, the filename can be used in place of a complete address.

LISTING 3.2 Linking to Another Page in the Same Directory

```
<html>
<head><title>History Quiz</title></head>
<body>
<h1>History Quiz</h1>
<p>Complete the following rhymes. (Example: William the Conqueror played cruel
tricks
on the Saxons in... ten sixty-six.)</p>
<p>1. Columbus sailed the ocean blue in...<br />
2. The Spanish Armada met its fate in...<br />
3. London burnt like rotten sticks in...<br />
4. Tricky Dickie served his time in...<br />
```

```

5. Billy C. went on a spree in...</p>
<p><a href="answers.htm">Click here for answers.</a></p>
</body>
</html>

```

LISTING 3.3 This is the answers.htm file; Listing 3.2 is quizzer.htm, to which this page links back

```

<html
<head><title>History Quiz</title></head>
<body><h1>History Quiz Answers</h1>
<p>1. ...fourteen hundred and ninety-two.<br />
2. ...fifteen hundred and eighty eight.<br />
3. ...sixteen hundred and sixty-six.<br />
4. ...nineteen hundred and sixty-nine.<br />
5. ...nineteen hundred and ninety-three.</p>
<p><a href="quizzer.htm">Click here for the questions.</a></p>
</body>
</html>

```

FIGURE 3.3

This is the quizzer.htm file listed in Listing 3.2 and referred to by the link in Listing 3.3.

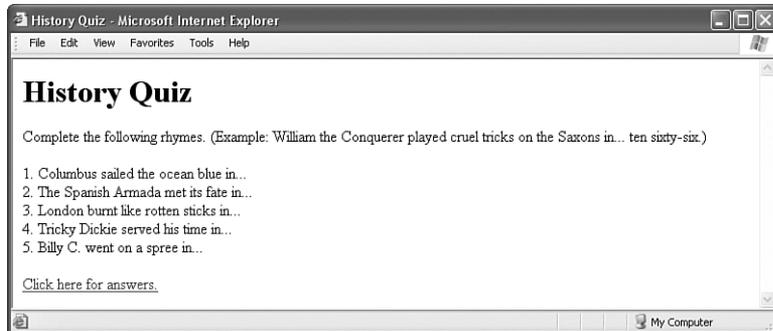
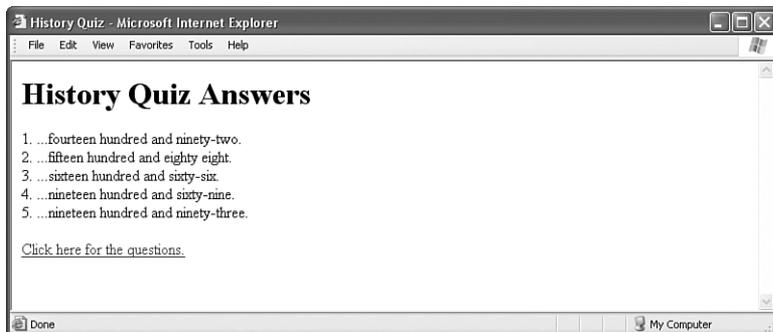


FIGURE 3.4

Click here for answers in Figure 3.3 takes you here. Click here for the questions takes you back to Figure 3.3.



Using filenames instead of complete Internet addresses saves you a lot of typing. More importantly, the links between your pages will work properly no matter where the group of pages is stored. You can test the links while the files are still on your computer's hard drive. You can then move them to a computer on the Internet, or to a CD-ROM or DVD disk, and all the links will still work correctly. There is nothing magic about this simplified approach to identifying Web pages—it all has to do with Web page addressing, which you learn about next.



At the *24-Hour HTML Café*, you'll find some fun sample pages demonstrating hypertext links, including a tour of Indigestible Ingestibles Research sites on the Internet and a light-hearted literary history quiz. These intriguing pages can be found, along with the other examples from this hour, at <http://www.24hourhtmlcafe.com/hour3/>.

Addressing Web Pages

The simplest way to organize Web pages for an individual Web site is to place them all in the same folder together. When files are stored together like this, you can link to them by simply providing the name of the file in the `href` attribute of the `<a>` tag. If you have many pages, you may want to put them in more than one folder for better organization. In that case, you still shouldn't use the full Internet address to link between them. You can use *relative addresses*, which include only enough information to find one page from another.

NEW TERM

A *relative address* describes the path from one Web page to another, instead of a full (or *absolute*) Internet address.

For instance, suppose you are creating a page named `zoo.htm` in a directory folder named `webpages` on your hard drive. You want to include a link to a page named `african.htm`, which is in a subfolder named `elephants` within `webpages`. The link would look like the following:

```
<a href="elephants/african.htm">learn about african elephants.</a>
```



The `/` forward slash is always used to separate directory folders in HTML. Don't use the `\` backslash normally used in Windows and DOS! I apologize if the reference to DOS was shocking, but believe it or not there are still a few remnants of it in the Windows operating system, such as backslashes.

The `african.htm` page might contain a link back to the main `zoo.htm` page:

```
<a href="../zoo.htm">return to the zoo.</a>
```

The double dot (`..`) is a special code that indicates the folder containing the current folder—in other words, the parent folder. (The `..` means the same thing in Windows, Macintosh, and UNIX.) In truth, specifying a filename by itself is also a form of relative addressing because you're saying that the file resides in the current folder.

If you use relative addressing consistently throughout your Web pages, you can move the pages to another folder, disk drive, or Web server without changing the links. Or using the example, everything will work as long as you always put `african.htm` inside a subfolder named `elephants`.



The general rule surrounding relative addressing (`cow.html`) versus absolute addressing (`http://www.accsyst.com/cow.html`) is that you should use relative addressing when linking to files that are stored together, such as files that are all part of the same Web site. Absolute addressing should be used when you're linking to files somewhere else—another computer, another disk drive, or more commonly, another Web site on the Internet.

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Relative addresses can span quite complex directory structures if necessary; Hour 21, “Organizing and Managing a Web Site,” offers more detailed advice for organizing and linking among large numbers of Web pages.

To Do

▼ To Do

You probably created a page or two of your own while working through Hour 2, “Create a Web Page Right Now.” Now is a great time to add a few more pages and link them together:

- Use a home page as a main entrance and central hub to which all of your other pages are connected. If you created a page about yourself or your business in Hour 2, use that as your home page. You also might like to make a new page now for this purpose.
- On the home page, put a list of `<a href>` links to the other HTML files you've created (or plan to create soon). Be sure that the exact spelling of the filename, including any capitalization, is correct in every link.
- On every other page, include a link at the bottom (or top) leading back to your home page. That makes it simple and easy to navigate around your site.
- You may also want to include a list of links to sites on the Internet, either on your home page or a separate hotlist page. People often include a list of their friends'



- ▼ personal pages on their own home page. (Businesses, however, should be careful not to lead potential customers away to other sites too quickly—there’s no guarantee they’ll come back!)
- ▲



There is one good reason to sometimes use the complete address of your own pages in links. If someone saves one of your pages on his own hard drive, none of the links to your other pages from that page will work unless he downloads all of the pages or you’ve included full addresses.

A good middle-of-the-road solution to this addressing problem involves including a link with the full address of your main home page at the bottom of every page, and use simple filenames or relative addresses in all the rest of the links.

Remember to only use filenames (or *relative addressing*) for links between your own pages, but full Internet addresses for links to other sites.

Opening a Link in a New Browser Window

Now that you have a handle on how to create addresses for links, I want to share one additional little linking trick. I’m referring to opening a linked page in a new browser window, which leaves the original page still open in its original window. To accomplish this feat, you simply include an additional attribute in the `<a>` tag called `target`. You must set the `target` attribute to `_blank` for this nifty little trick to work, as the following example shows:

```
<a href="../zoo.htm" target="_blank">return to the zoo.</a>
```

When someone clicks the linked text in this example, the `zoo.htm` Web page is opened in a completely new browser window. I don’t encourage you to use this technique too much because most people don’t enjoy new browser windows popping up everywhere. One scenario where I’ve found it useful is when you link to a page that isn’t located on your site. This can be a helpful way to keep your site active in the background so you aren’t forgotten when the link is followed!

Summary

The `<a>` tag is what makes hypertext “hyper.” With it, you can create clickable links between pages, as well as links to specific anchor points on any page. This hour focused on creating simple links to other pages using either relative or absolute addressing to identify the pages.

When creating links to other people's pages, you learned that it's important to include the full Internet address of each page in an `<a href>` tag. For links between your own pages, include just the filenames and enough directory information to get from one page to another.

Table 3.1 summarizes the `<a>` tag discussed in this hour.

TABLE 3.1 HTML Tags and Attributes Covered in Hour 3

<i>Tag/Attribute</i>	<i>Function</i>
<code><a>...</code>	With the <code>href</code> attribute, creates a link to another document or anchor.
Attributes	
<code>href="..."</code>	The address of the document or anchor point to link to.
<code>target="_blank"</code>	Opens the linked page in a new browser window.

Q&A

- Q** When I make links, some of them are blue and some of them are purple. Why? How come most of the links I see on the Internet aren't blue and purple?
- A** A link appears blue to anyone who hasn't recently visited the page to which it points. Once you visit a page, any links to it turn purple. These colors can be (and often are) changed to match any color scheme a Web page author wants, so many links you see on the Web won't be blue and purple. (Hour 10, "Custom Backgrounds and Colors," tells how to change the colors of text and links on your Web pages.)
- Q** What happens if I link to a page on the Internet and then the person who owns that page deletes or moves it?
- A** That depends on how that person has set up his server computer. Usually, people see a message saying page not found or something to that effect when they click the link. They can still click the Back button to return to your page.
- Q** One of my links works fine on my computer, but when I put the pages on the Internet it doesn't work anymore. What's up?
- A** The most likely culprits are
- Capitalization problems. On Windows computers, linking to a file named `Freddy.htm` with `` will work. On most Web servers (which are often UNIX machines), the link must be ``

(or you must change the name of the file to `freddy.htm`). To make matters worse, some text editors and file transfer programs actually change the capitalization without telling you! The best solution is to stick with all lowercase filenames for Web pages.

- Spaces in filenames. Most Web servers don't allow filenames with spaces. For example, you should never name a Web page, `my page.htm`. Instead, call it `mypage.htm` or `MyPage.htm`.
- Local absolute addresses. If for some reason you link to a file using a local absolute address, such as `C:\mywebsite\news.html`, the link won't work when you place the file on the Internet. You should never use local absolute addresses; when this occurs it is usually an accident caused from a temporary link created just to test part of a page. So, be careful to remove any test links like this before publishing a page on the Web.

The next hour explains how to upload files to a Web site and how to rename files once they're online so that you can make sure the spelling and capitalization are perfect.

Workshop

The workshop contains quiz questions and activities to help you solidify your understanding of the material covered. Try to answer all questions before looking at the "Answers" section that follows.

Quiz

1. Your best friend from elementary school finds you on the Internet and says he wants to trade home page links. How do you put a link to his page at `www.cheap-suits.com/~billybob/` on your page?
2. Your home page will be at `http://www.mysite.com/home.htm` when you put it on the Internet. Write the HTML code to go on that page so that when someone clicks the words `all about me`, they see the page located at `http://www.mysite.com/mylife.htm`.
3. You plan to publish a CD-ROM disk containing HTML pages. How do you create a link from a page in the `\guide` directory folder to the `\guide\maine\katahdin.htm` page?
4. How about a link from `\guide\maine\katahdin.htm` to the `\guide\arizona\superstitions.htm` page?

Answers

1. Put the following on your page:

```
<a href="http://www.cheapsuits.com/~billybob/">  
my buddy billy bob's page of inexpensive businesswear</a>
```

2.

```
<a href="mylife.htm">all about me</a>
```

The following would work equally well, though it would be harder to test on your hard drive:

```
<a href="http://www.mysite.com/mylife.htm">all about me</a>
```

3.

```
<a href="maine/katahdin.htm">mount katahdin</a>
```

4.

```
<a href="../arizona/superstitions.htm">
```

```
the superstition range</a>
```

Exercises

To make a formatted list of your favorite sites, click the Bookmarks button on the toolbar in Netscape Navigator, click Edit Bookmarks, and then select File, Save As. You can then open that bookmark page in any text editor and add other text and HTML formatting as you prefer. (Alas, there's no easy way to export your Microsoft Internet Explorer favorites list as a single Web page, but I'm working on it!)

