Demystifying Basic HTML

NOTE: This walkthrough is based on the project published in Chapter 8 of Faster Smarter Web <u>Page Creation</u>, 2^{nd} <u>edition</u>. This walkthrough uses HTML 4.0, including deprecated tags, to build a Web site using tables. To learn how to create a Web site using XHTML and CSS, please see the walkthrough presented in Chapter 8 of <u>Easy Web Design</u>, 3rd edition.

After completing this walkthrough, you will be able to:

- Understand the basics of HTML coding
- Use HTML tags
- Plan an HTML site
- Create a table with HTML
- Assemble a home page and subpages using HTML

Gathering Project "Supplies"

To create the Web site described here, you'll need the following "supplies":

- A basic text editor, such as Microsoft Notepad or WordPad (applications that are included with Microsoft Windows) or TextEdit (which comes with Macintosh OS X)
- 27 practice files, all of which can be found on www.creationguide.com/projects/chapter8/images:

b background.gif b lessons2.gif picture.gif b background2.gif b performances.gif sendnote.gif b performances2.gif b competitions.gif t background.gif b_competitions2.gif b_recitals.gif t_competitions.gif b contact.gif b recitals2.gif t contact.gif b contact2.gif bg.gif t home.gif b home.gif footer.gif t lessons.gif b home2.gif t performances.gif logo.gif b lessons.gif p_chris.jpg t recitals.gif

For detailed steps on setting up your practice files, see the section Getting Your Folders and Graphics in Place.

Some Background

Why HTML?

In Part One of our Web site creation books, we introduce fundamental HTML. Basically, we explain that you construct Web documents by including HTML commands (also called *HTML tags*) within the body of a basic text document. Although other technologies (such as XHTML, CSS, and XML) are beginning to significantly impact Web page development, HTML is still the foundation of many Web pages today—and if you're going to create a Web site, you need to know about HTML.

By knowing at least some HTML, you will be able to modify and tweak Web pages to suit your preferences in the future, even if the pages you're modifying have been generated by an HTML editor. Furthermore, knowing HTML means that you'll be able to remove unnecessary (and sometimes proprietary) HTML commands that HTML editors sometimes add to Web documents. Removing unnecessary code can make your HTML documents

smaller, which in turn means that your pages will load faster. Finally, as you become more proficient using HTML, you might find that you can make changes more quickly and precisely by adding, deleting, or modifying HTML code instead of modifying a Web page in an HTML editor.

We're now ready to get started. The first order of business, before we commence creating a Web site, is to briefly (very briefly) go over some basic HTML theory. By the way, when we say theory, we're talking clear, helpful information—not complex rhetoric. Think of the upcoming theory discussion as spreading a blanket before picnicking—you might as well get somewhat comfortable and discourage at least a few of the pests up front.

So You've Heard about Cascading Style Sheets, Deprecated Tags, and DTDs

Before we cover your screen with HTML facts, let's dust off a couple potentially confusing concepts.

Cascading style sheets (or CSS) is a technology that enables you to define a Web site's page formatting in a single place—either in a separate document or in a special area within each Web document. In many Web designers' and developers' eyes, everyone should be using CSS as soon as possible. But the reality of the situation is that many Web sites are slowly starting to incorporate style sheets. Fortunately, the Web continues to support older formatting techniques along with the newer CSS commands.

In relation to you, the goal of this walkthrough is to teach you HTML; therefore, we decided to omit teaching you how to use style sheets here. After you learn HTML, you'll be able to move on and learn CSS at your leisure. If you want to complete a walkthrough that uses CSS and XHMTL, check out our latest Web development book, <u>Easy Web Design</u>, 3rd edition. We show you how to hand-code a Web site using the latest XHTML and CSS standards.

In relation to CSS, you might hear that some of the HTML tags and attributes are *deprecated*. A deprecated element can be (and is) used on the Web; it is simply earmarked for eventual elimination. You can see a list of HTML tags along with notations regarding which are classified as deprecated at www.w3.org/TR/1999/REC-html401-19991224/index/elements.html.

Finally, due to the various levels of CSS and HTML compliance on the Web these days, you can help browsers interpret your Web pages by specifying whether your page is strictly compliant with the latest standards, transitional (includes deprecated HTML elements), or framed (includes deprecated HTML elements and frames within the Web site). To do this, you insert a particular version of the <!DOCTYPE...> HTML tag in your Web pages, as described here as well as in this lesson's project steps:

• If your Web page adheres to HTML 4.01 standards, insert:

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/html4/strict.dtd">

 If your Web page adheres to HTML 4.01 standards and includes deprecated HTML elements and attributes (most of which concern visual presentation), insert:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

• If your Web page adheres to HTML 4.01, includes deprecated HTML elements and attributes, plus uses frames, insert:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN"
"http://www.w3.org/TR/html4/frameset.dtd">
```

note If your Web documents adhere to XHTML 1.0 or XHTML 1.1, you will need to use a different DTD. To see valid XHTML DTDs, go to http://www.w3.org/QA/2002/04/valid-dtd-list.html.

Because the project in this lesson includes deprecated HTML elements but not frames, your documents will use the second statement—the transitional statement shown in blue—in the preceding list. We'll show you how to add this statement to your HTML document in the project steps later in this walkthrough.

Having a vague understanding of these concepts is fine for now. In fact, that's our goal at this point. Now, let's move on to the HTML basics.

HTML Basics

Fundamentally, HTML commands serve as instructions that tell a browser how to display a Web site's content. In other words, HTML commands provide

format information that controls the display of your Web site's text and graphics. Keep the purpose of HTML commands in mind. You'll see later how HTML commands weave their way in and around your Web site's content in an HTML document, but, basically, an HTML document contains two types of information:

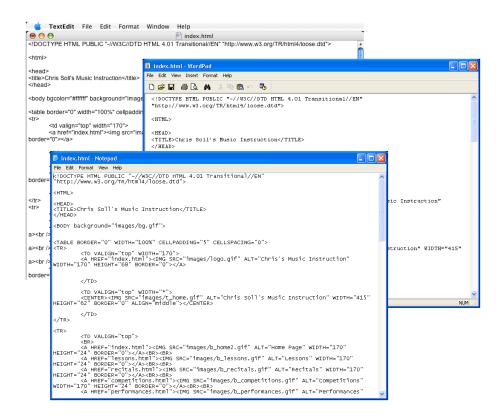
- Content information, including text and pointers to graphics
- HTML commands, which manipulate how content displays

In this walkthrough, we show you how to enter HTML commands and page contents into a plain-text document to create Web pages. Furthermore, you'll link the pages you create so that they can work together to create a Web site. To accomplish this feat, you'll need to use a text editor, such as Notepad or WordPad (if you're running Windows) or Text Edit (if you're using a Mac OS X, or SimpleText if you're using Mac 9x or earlier operating systems).

The upcoming figure shows how fully coded HTML documents appear in TextEdit, WordPad, and Notepad, respectively. When you start this lesson's project, you'll start with a blank page.

- To open Notepad, click Start, point to Programs, point to Accessories, and then click Notepad.
- To open WordPad, click Start, point to Programs, point to Accessories, and then click WordPad.

 To open TextEdit, double-click the TextEdit icon on your hard disk.



Viewing an HTML document in TextEdit, WordPad, and Notepad

Using HTML Tags

In this section, we introduce the basic rules of HTML along with a few common tags. Keep in mind that this section does not define every HTML tag out there; quite a few HTML tags exist, and plenty of books devoted to HTML provide comprehensive command lists. Our philosophy is that if you learn the basic rules of using HTML tags, you'll be able to use any of the tags you discover online or in HTML books.

Let's start our discussion of HTML tags with a simple rule:

HTML tags consist of commands that appear within angle brackets (<>).

For example, one of the first tags in a Web page's source code is typically httml. This tag tells a browser right off the bat that the text document is an HTML document. The browser knows that any text within angle brackets (<>) is an HTML command that needs processing and that all text outside angle brackets (<>) is content that needs to be displayed.

lingo Source code refers to the contents of the HTML document that creates a Web page. Most browsers enable you to view a Web page's source code. For example, to display a Web page's source code in Microsoft Internet Explorer, display a Web page, click the View menu, and click Source.

Here's the second rule you need to remember:

HTML tags are not case-sensitive, although XHTML tags must be lowercase.

This rule isn't earth shattering, but it's convenient to know. It means that browsers don't care whether the HTML text between the angle brackets is capitalized or lowercased. Therefore, when you use HTML, and are essentially the same tag (which, incidentally, is a tag that instructs the browser to display the text following the tag in boldface—the deprecated tag for boldface is). Similarly, <HTML>, <html>, <HtMl>, and

any other combination of capital and lowercase letters represents the same tag. Of course, with that said, we encourage you to use lowercase to comply with the latest standards.

Here's rule number three:

HTML tags almost always come in pairs.

Because most HTML tags are used primarily for formatting purposes, HTML tags often come in twos—a starting tag and an ending tag (also referred to as an *opening tag* and a *closing tag*). This pairing enables you to tell browsers where a particular formatting attribute (such as boldfacing) should start and where it should end. Think about when you go to the movies with a few friends and two friends go in to save seats while the rest of the group goes to the concessions counter. The two people saving the seats sit separately at each end of the saved seats to mark a span of seats that will contain the friends. If the seat-savers were HTML tags, they'd tell the browser that all the seats between them should be formatted as their friends' seats.

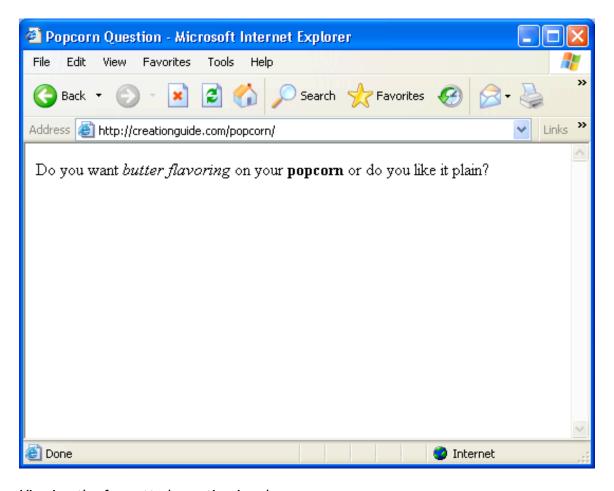
Starting tags and ending tags have very specific purposes—namely, a starting tag indicates when an action should start, and an ending tag indicates when an action should stop. (See, we're not talking rocket science here!) While starting and ending tags appear very similar they have a minor, albeit critical, difference. Ending tags are differentiated from starting tags by the inclusion of a forward slash (/) just after the left bracket, like this: </html>. The last

element in HTML documents is usually the </html> command, which indicates the end of the Web page's display.

Going back to the movie theater example, let's say that one seat-saver is sitting in an aisle seat and the other seat-saver is sitting in the middle of the row. The seat-saver sitting in the middle of the row is wearing a red shirt. Suddenly, a new arrival asks the seat-saver sitting in the aisle seat whether the seats are taken. The aisle-side seat-saver would say something like, "Yes—all the seats down to the person in the red shirt are taken." That's the role of a starting tag. The red-shirted seat-saver serves as an ending tag. For example, a tag tells a browser, "Please boldface all the text between me and that tag over there."

tip A common error in HTML coding is to forget a closing tag. When this happens, the browser is never told to stop processing a command. For example, if HTML code tells a browser to start bolding text () but doesn't indicate when to stop bolding text (), all text on the page will be boldface after the opening tag.

For further illustration, let's look at an example of text that uses HTML tag pairs. The following sentence includes HTML starting and ending tags that format the sentence as a paragraph (), display the phrase *butter flavoring* in italic (), and format the word *popcorn* in boldface (), as shown in the figure:



Viewing the formatted question in a browser

The popcorn sentence also illustrates an interesting concept called *nesting*. In HTML documents, nesting has nothing to do with twigs and feathers and everything to do with the order in which HTML tags appear. In the popcorn sentence, the italic tag set () and the boldface tag set () are nested within the paragraph tag set (). Here's a key rule you should follow when you're nesting HTML tags:

Nested HTML tags should close in the reverse order in which they open.

That rule might seem a little confusing, so let's look at an example. Basically, opening and closing HTML tags shouldn't get their lines crossed. Here's a correct pattern:

In this example, the (boldface) tags are nested within the (paragraph) tags, which are nested within the <html> (document identifier) tags. This setup would result in bold text within a paragraph within an HTML document. The following setup would also work:

Notice that this nesting example uses the same pattern as the popcorn sentence. In this example, the italic tag set and the boldface tag set aren't nested inside each other, but both tag sets are nested within the paragraph tag set.

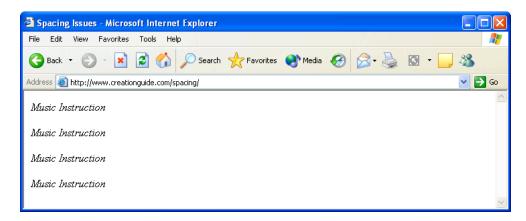
Now let's lighten up the discussion a bit and look at a more clear-cut rule:

By default, HTML documents display a single space between text elements.

This rule might seem odd to mention, but spacing issues are a great concern on the Web for a number of reasons (mostly because designers often have to deal with content that resizes and reflows—issues that are nonexistent in

printed documents). In an HTML document, adding any number of spaces within your code by using the spacebar, Tab key, or Enter key results in a single space. Therefore, you could embed the following four code snippets in an HTML document:

and the text will appear in a browser window as shown here:



Viewing how text displays with a single space between words, even when extra space is added between words in the HTML document

Now you're ready for the next rule, which adds some spice to HTML tags:

Some opening HTML tags can contain properties (also called *attributes*), which further refine an HTML tag's instructions.

In other words, you can frequently customize the instructions related to an HTML formatting command. For example, you can add a **color** attribute to the **** tag to change the display color of text, like this:

They say the grass is greener.

If you inserted the preceding sentence into an HTML document, the text would display the word *grass* in green.

Finally, here's the last rule in this section:

Numerous variations exist when it comes to the HTML nesting theme, properties, and use of tag sets.

As with all rules, you'll find that although most of HTML is predictable, the technology is as consistent as spelling rules, which means that you'll frequently find exceptions to the rules. For example, if you want to add a line break in HTML, you enter
br />. There's no closing tag for a line break—you either have a line break or you don't. Similarly, you insert a horizontal rule with the <hr /> tag; again, no closing tag required because the closing forward slash is included in the tag.

Don't worry if you're feeling slightly confused. You'll start to get a feel for HTML as you work through this walkthrough. There's nothing like hands-on experience to gain knowledge. We'll introduce you to additional HTML tags

and concepts in the walkthrough as we go. For added assistance, you might want to keep the following handy while you work:

HTML Tags Used in this Walkthrough

Tags	Function
	Marks the <i>anchor</i> , or clickable, portion
	of a hyperlink. The href attribute points
	to the information that should be
	displayed after the anchor's content is
	clicked. Anchor content is specified
	between the anchor tags (<a>) and
	can include text and images.
<blockquote></blockquote>	Offsets a paragraph from the regular
	body text, usually by indenting the
	paragraph's left and right margins.
<body></body>	Marks the start and end of the Web
	page's displayable content.
 	Inserts a line break. The tag
	doesn't have a closing tag, and this tag is
	sometimes used consecutively to create
	white space on a Web page.

<div align="center"></div> Centers the enclosed information on the

page or within a table cell.

<!DOCTYPE...>

Specifies the Web document type definition (DTD), such as whether the page uses strict HTML coding, transitional HTML coding (including deprecated HTML tags), or frames.

Instructs browsers to emphasize the text appearing between the and tags, which usually means the text appears italic.

<h1></h1>

Specifies heading text. Heading sizes range from **h1** through **h6**, with **h1** being the largest heading size.

<head></head>

Provides an area in which you can display your Web page's title, include search engine information, add advanced formatting information, embed CSS coding or link to a style sheet, and write scripts. Other than the text within the embedded <title></title> tags, most head information doesn't display directly to viewers.

<html></html>	Delineates the start and end of an HTML
	document.
<pre></pre>	Displays an image on a Web document.
	The src attribute points to the particular
	image that should be displayed.
	Identifies a list item within an
	unnumbered (bulleted) list or an
	ordered (numbered) list .
	Specifies an ordered (numbered) list.
	Indicates the start and end of a
	paragraph. By default, paragraphs display
	left-aligned. The closing tag is
	optional in HTML but required in XHTML.
	Therefore, we include it throughout this
	walkthrough. Browsers typically insert a
	blank line (plus a little extra space)
	before starting a paragraph.
	Enables you to specify formatting for the
	enclosed contents, such as font, color,
	and size (in this walkthrough, you'll

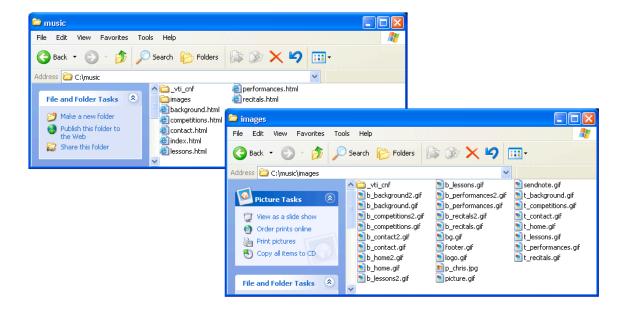
specify font and color).

	Instructs browsers to display text
	between the and tags
	with strong emphasis, which is usually
	boldface.
	Delineates the start and end of a table.
<	Defines the start and end of a cell within
	a table. tags are nested within
	tag sets.
<title></title>	Enables you to insert a Web document's
	title text that displays in the browser's
	title bar.
	Indicates a table row. > tags are
	nested within a tag set.
	Specifies an unnumbered (bulleted) list.

Handling HTML Documents and Web Graphics

When you create Web pages, you usually work with multiple files. At a minimum, you'll have your home page HTML file (generally named index.html or index.htm), a graphics file for each graphical element on your page, and additional HTML files for linked pages. Therefore, before you start creating, you have to think of an organizational scheme so that you don't drive

yourself crazy later. We highly recommend that you create a folder to contain all the HTML files used in your Web site, and, within the main folder, create a subfolder named *images*. Then you can store your main HTML documents in the main folder and place your graphics in the images folder. To illustrate, the following figure shows the HTML documents and images necessary to create this walkthrough's sample site:



Organizing files and folders in a simple yet logical manner

Keeping your files organized is imperative when you're adding graphics and creating hyperlinks because you must include instructions in your HTML document regarding where the browser should look for a particular graphic or linked page. Furthermore, being organized can greatly simplify the file uploading process when you're ready to go "live" by transferring your local files to a Web server. Your best bet is to create a folder that you can use consistently throughout the Web site creation process.

Along with being organized, you should religiously save and preview your Web pages throughout the development process, as described in the next section.

Saving and Previewing HTML Documents

When you create Web pages—especially when you're hand-coding HTML—you should save and preview with abandon. Speaking from firsthand "We can't believe we just lost all that data" experiences, we can recommend without reservation saving your work frequently—that pretty much goes without saying whenever you're working on any file on any computer. (If monitors grew grass, our mice would wear out well-worn diagonal paths to the Save button—not to mention that we knowingly contribute to the slow erosion of our *Ctrl* and S keys by pressing Ctrl+S every so often.)

tip "Save, save, save!" should be one of your mantras when you're working with computers.

In addition to frequently saving your files, you should preview the Web pages you build numerous times throughout the creation process. Previewing an HTML page simply means looking at your HTML document in a browser (or a couple browsers) as opposed to staring at the text and HTML code version of the document in a text editor. Performing this exercise, you can see how the HTML is formatting your content and you can troubleshoot display problems early. We'll often alter a site's layout simply because what looks good on paper doesn't transpose well to an online page.

To preview a Web page in your browser, use any of the following procedures after you've created an HTML file:

- Display the contents of the folder containing the HTML document, and double-click the HTML document's icon.
- Open your browser application (such as Internet Explorer),
 and type in the HTML file's location.
- Open your browser application, open the folder containing the HTML document, and drag the HTML file's icon from its folder into the browser window or the browser's Address bar.

note We suggest specific points at which you should save and preview the project Web site in the walkthrough steps. Feel free to save and preview your files more frequently than we suggest, however, especially if you take a break while creating.

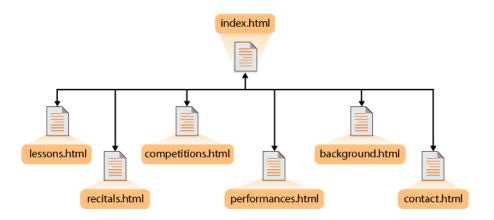
We've covered a good bit of theory; now it's the witching hour. If you've read the previous few sections, you're ready to tackle the HTML Web site creation walkthrough. You should have a workable knowledge of basic HTML tags, realize that you should save your HTML documents and images in designated folders, and recognize the importance of frequently saving and previewing your Web documents throughout the creation process. We're satisfied that you're ready, so let's get the project rolling.

The Walkthrough

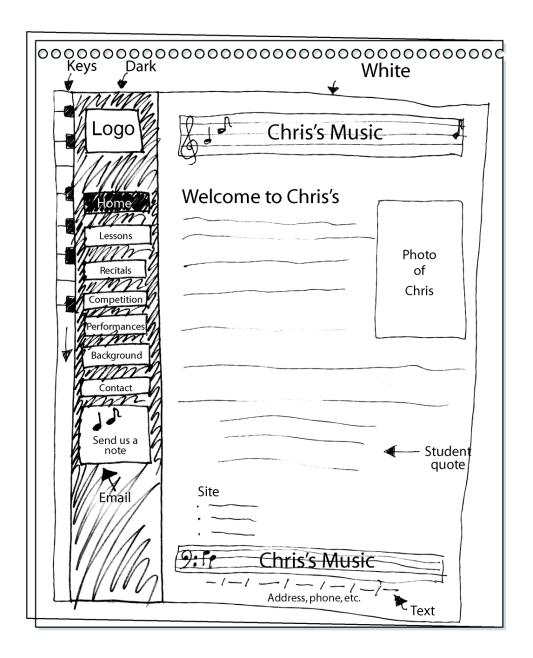
Planning the HTML Site

For the HTML project, we decided to create a Web site for Chris Soll, a professional musician and music instructor. Our first planning step involved meeting with Chris and finding out what types of information she wanted to include on her Web site. In our initial consultation, we found that she had a number of student-specific as well as professional-specific topics she wanted to incorporate into her site. Based on this information, we initially attempted to design a two-tier navigation bar, but the design started to look too cluttered. We determined that we could make a cleaner site by using specifically named buttons and providing a quick Site Overview section on the home page. The final design resulted in a clean, flexible layout.

After you create Chris Soll's Web site—which we quickly began to refer to as "the music site" during our consultation, based on the overwhelming presence of her baby grand piano, flute collection, and stacks of sheet music and music books in her studio—you can use your HTML document as a template to create similar Web sites that have a completely different look and feel. (Don't worry—we describe how to use the music site's code as a template later in this lesson.) The following figure shows the framework we came up with to illustrate the pages we wanted to include in the music site, and the next figure shows a finalized storyboard sketch of the music site's home page.



The music site's structure, which enables access to any page in the site from every location



Sketch showing the basic layout for the music site's home page design

note Notice in the storyboard sketch that we initially planned to insert the address information below the site's text links along the bottom of the page. Later, during the design process, we realized that placing the address above the links made better design sense. The links were already listed in the navigation bar on the left, so we wanted to present the "new" and more important address information before repeating the text link information.

Getting Your Folders and Graphics in Place

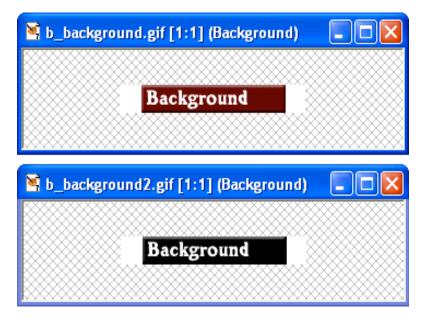
As we mention in the Gathering Project "Supplies" section, your first task is to create a folder for your Web files and organize your graphics. Here's the process we suggest you follow (though feel free to change the folder location and name to suit your preferences):

- 1. Create a folder on your C:\ drive and name the folder *music*.
- 2. Open the music folder, and create a subfolder named *images*.
- Copy all of the files (or the ZIP file) from <u>www.creationguide.com/projects/chapter8/images</u> into the images subfolder that you created in step 2.

As you copy files into you images folder, notice the naming scheme we've used to label images:

b_xxx Specifies that the image is a button. A b_ graphic appended with the number 2 (for example, b_background2.gif) indicates a second version of the button that displays whenever the associated page is displayed. (You'll see what we mean later.)

Therefore, b_background.gif is the Background button, and b_background2.gif is the "current page" version of the Background button, as shown in the following images.

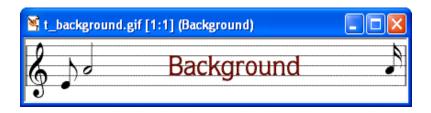


A regular button and a "current page" version of the button

note The black version of the button displays when the linked page is the active page. This visual cue enables viewers to look at the navigation bar and quickly identify which page they are currently viewing

- bg.gif Specifies the background graphic. The music site uses
 the same background graphic throughout the site, so only
 one bg.gif file is required.
- footer.gif Identifies the graphic as a running footer graphic used at the bottom of the site's pages.
- logo.gif Identifies the logo graphic. The music site uses the same logo graphic throughout the site, but it's possible that you'd have a few versions of a logo graphic (especially if you're using a smaller or modified version of the logo on subpages).
- **p_xxx** Specifies that the graphic is a picture. The music site has only one photograph, and it's on the home page.

- sendnote.gif Identifies the graphic as the "send mail" icon.
 Later, you'll link this icon on the music site so that users can click the sendnote.gif graphic to open a preaddressed e-mail message when they want to send a message to Chris Soll.
- t_xxx Specifies that the image is a title bar banner graphic.
 For example, t_background.gif is the Background page's title bar banner graphic (which displays the word Background and is placed at the top of the page that presents background information about Chris Soll), as shown in the following figure.



The Background page's banner graphic

When you create your own Web pages and Web graphics, you'll probably devise your own naming scheme. We've shown you the method we used to name our graphics to give you an idea of how helpful having a naming system can be. You'll see the benefit of a well-planned graphics-naming scheme as you start to insert HTML code in the upcoming sections.

Preparing Your Home Page File

After you have your folders and graphic files in place, you're ready to begin creating your site's home page. To begin the creation process, you need to create an HTML document that contains the standard tags that appear in all HTML documents. The standard tags are:

- <!DOCTYPE...>
- <html></html>
- <head></head>
- <title></title>
- <body></body>

Notice that, with the exception of the <!DOCTYPE...> tag, the standard tags all come in sets. The following figure shows the proper way to nest the standard HTML tag sets in an HTML document and shows how to insert title text. After you type the standard HTML tags in a text document, you need to save the text document as an HTML document, as described in the next procedure.

```
File Edit Format View Help

<!DOCTYPE HTML PUBLIC "-//w3C//DTD HTML 4.01 Transitional//EN"

"http://www.w3.org/TR/html4/loose.dtd">

<html>
<head>
<title>Chris Soll's Music Instruction</title>
</head>
<body>

</body>

</html>
```

The standard HTML tags with title text inserted between the <title> tags

note Remember that HTML isn't case-sensitive, so you can type <HTML>, <html>, <HtMl>, or any other combination of capital and lowercase letters and your tag will be fine. In this walkthrough, we use lowercase letters for HTML tags throughout because XHTML, the next incarnation of HTML, requires lowercase tags. Therefore, we're hoping to help you get into the habit of using lowercase tags now.

To begin creating the music site's home page and save it as an HTML file, follow these steps:

- **4.** Open Notepad, WordPad, or TextEdit. We use Notepad throughout this project.
- 5. Click in a new blank document and type the following document type definition (which indicates that the document uses the HTML 4.01 standard and contains deprecated tags):

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

- 6. Press Enter twice.
- 7. Type <html>, and then press Enter twice.
- 8. Type <head> and press Enter.
- Type <title>Chris Soll's Music Instruction</title>, and then press Enter.
- 10. Type </head> and press Enter twice.

11. Type <body>, press Enter a few times (to give you some breathing room when you enter your Web page's content information), type </body>, and press Enter twice.

note Content text—text that displays between and outside HTML tags—displays in the same case as it is entered in the text document. Thus, if you type *chris soll's* instead of *Chris Soll's* in step 4, Chris's name will appear in all lowercase letters on your Web page. Also, remember that you don't have to worry about putting too many spaces (including blank lines) between content text and HTML tags. When a browser displays the document, it ignores the extra spaces.

12. Type </html> to complete the standard HTML tag setup.

You're now ready to name and save the file to your C:\music folder.

- 13. On the File menu, click Save.
- 14. In the Save As dialog box, type index.html in the File Name box and ensure that Text Documents is selected in the Save As Type dropdown list. (If necessary, click the arrow to select the Text Documents option.)
- 15. Use the Save In drop-down list and navigate to the C:\music folder on your computer.
- **16.** Click **Save** and close Notepad.

The file should now display as index.html in your C:\music folder, and the icon should indicate that the file is an HTML document. At this point, you can already view your file in your browser. To view your newly created HTML

file, double-click index.html. The file should open in your Web browser.

Notice that the only content is the Web page's title text, which displays in your browser's title bar.

Now that the Web page's title and standard HTML tags are in place, let's add the page's background image and default link colors.

Specifying the Background and Link Colors

You can include attributes in the <body> tag to add background colors, background images, default text link colors, and so forth, as described in the following steps:

Open Notepad, WordPad, or TextEdit, and then open the C:\music\index.html file from within the text editor. If you don't see the file index.html listed in the Open dialog box, ensure that the Files Of Type list box displays All Files (*.*). If you're using Mac OS X, TextEdit automatically displays an HTML document as a Web page by default. To open and display the HTML code instead of the Web page, select the Ignore Rich Text Commands check box in the Open File dialog box (note that you can select this option in the program's Preferences dialog box as well, if you don't want to select the check box on a case-by-case basis).

tip You must open your HTML file by using the text editor's Open command, by dragging the document's icon into the text editor's window, or by right-clicking the HTML file and choosing Notepad on the Open With menu. If you double-click an HTML file in folder view, you'll display the HTML document in your Web browser.

17. In the **<body>** tag, click after the **Y** and before the **>**, press the spacebar, and then enter the following attributes and values, including the quotation marks:

```
bgcolor="#ffffff" background="images/bg.gif" link="blue" vlink="purple"
alink="red"
```

The **<body>** attributes you just added are defined as follows:

bgcolor defines a background color. Although the music site
uses an image for the background, we defined a white
background for folks who view the site with images turned
off. In the color chart shown on
www.creationguide.com/colorchart, you can see that #ffffff
is a hexadecimal number that equates to white.

note Hexadecimal numbers are base 16 numbers that includes 0 -- 9 and a - f

background enables you to specify a graphics file to use as a background image. Remember that browsers automatically tile background images to fill the browser window. The music page uses the bg.gif file, which is stored in the images subfolder of the music folder, as a background image.
 Because both the index.html document and the images folder reside in the music folder, you don't have to indicate the image's complete address. If your image was saved elsewhere (that is, not within a subfolder of the folder that contains the index.html document), you'd have to enter the entire address that points to the image.

lingo *Tiling* refers to repeating an image across a window's area and down until the entire window is filled with the repeating image.

- **link** enables you to specify the color in which unvisited text hyperlinks display.
- vlink enables you to specify the color in which visited hyperlinks display. In other words, after a user visits a site's Contacts page, any text links pointing to the Contacts page will display in the visited link color (purple, in this case).
- alink enables you to specify the color in which links display
 while users click the links. Showing a different color while
 the users click links clearly indicates to users that they are
 activating a hyperlink.

Your HTML code should now display as shown in the following figure.

```
index.html-Notepad

File Edit Format View Help

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"

"http://www.w3.org/TR/html4/loose.dtd">

<html>
<head>
<title>Chris Soll's Music Instruction</title>
</head>

<body bgcolor="#ffffff" background="images/bg.gif" link="blue" vlink="purple" alink="red">

</body>
</html>
```

Page formatting attributes in the <body> tag (the newly added code shown in red)

tip Whenever you enter HTML code, always verify that you've included all angle brackets (<>) and quotation marks ("") in your HTML code as well as spelled the HTML commands properly. Missing small elements or misspelling commands can cause your Web document to display incorrectly or not at all. We've included screen shots of the code you're creating throughout this walkthrough so that you can easily check your work.

18. Save your HTML document, open your browser, and view index.html in your browser window. (You don't have to close your text document, but you do have to ensure that you've saved your most recent changes.) The index.html file should now display the background image in your browser window.

tip You *must* save changes made in a text document before the updates will display in a browser. If changes don't display in the browser and you have refreshed, return to your text document, save, and then refresh the view in the browser again.

Now that the standard HTML tags, default background image, and link colors are in place, the next step is to begin to format your Web page's
body> area.

Creating a Table

In this section, we show you how to create a table that will contain all the elements of your Web page. Controlling elements on a Web page is a little tricky because of the variable nature of browsers and browser windows, so many sites are designed using tables with hidden borders to help lay out Web pages. Eventually, style sheets will take over the job of formatting and aligning Web pages, but for now thousands and thousands of Web pages rely on tables to control the display of Web page elements. Of course, not every Web page uses a table, but you'll find tables to be an extremely useful tool.

Basically, tables use three tags:

delineates the start and end of a table.

- indicates a table row. tags are nested within a
 tag set.
- defines the start and end of a cell within a table.
 tags are nested within a tag set.

In the music site, you'll create a two-column, three-row table:

- If necessary, open Notepad, WordPad, or TextEdit, and then open C:\music\index.html from within the text editor. If you don't see the index.html file, remember to ensure that the Files Of Type list box displays All Files (*.*).
- 2. In the index.html file, click below the opening <body> tag (the <body> tag should now contain the attributes you added in the previous section), type and press Enter. Notice the quotation marks around the attributes' values. Make sure you include beginning and ending quotation marks throughout. Here's the purpose of each of the attributes included in the opening tag:
 - border defines the width of the table's outline in pixels. For now, we're showing a 1-pixel border to aid in seeing the table while you design. After the page design is complete, you'll change border="1" to border="0" to hide the table borders on your Web page.
 - width defines the table's exact pixel width or specifies the
 percentage of the browser's window that the table should
 fill. We're using a table to format the entire page, so the
 table is sized to fill 100 percent of the browser's window
 space.

- cellpadding creates a space (measured in pixels) between the
 cell contents and the table border. After sampling a few
 spacing parameters, we found that adding a cellpadding value
 of "5" did the trick. This type of setting exemplifies the value
 of testing settings, saving, and previewing your HTML page
 during the creation process.
- cellspacing specifies the amount of space (in pixels) between cells. In the music site, we didn't need to specify any spacing between cells, so we set the attribute to "0".
- 3. Type to start the first table row.
- 4. Press Enter, press Tab to make reading your code easier, and type to begin the first cell in the first row. The valign="top" attribute indicates that you want to align the cell contents to the top of the cell (by default, cell contents align to the middle). You can align cell contents using the values top, middle, bottom, or baseline. Also, by default, cell contents align at the left. (Later we show you how to change the default alignment by centering contents within a cell.)
- Press Enter twice, press Tab, and type to mark the end of the first cell in the first row.
- 6. Press Enter twice, press Tab, and type to create the second cell in the first row.
- Press Enter twice, press Tab, and type to mark the end of the second cell in the first row.
- 8. Press Enter and type to complete the first row of your table.

- 9. Press Enter and repeat steps 3 through 8 to create the second table row (or copy and paste all the code starting with
 and ending with
 to create a second table row, as described in the tip).
- 10. Press Enter after creating the second table row, and then create a third row by retyping the commands in steps 3 through 8 or by copying and pasting the table row code.
- 11. After entering the third table row, press Enter and type
 to complete the table tags.

tip If you prefer not to retype the table row commands when creating the second and third table rows, click before the first row's
 command and drag to select all the text up to and including the
 closing command. Then press Ctrl+C to copy the selected code. Click after the
 command, press Enter, and press Ctrl+V to paste the copied HTML code into your text document. Press Ctrl+V again to create the third table row.

Copying and pasting saves time as well as helps to ensure accurate coding—as long as the original copied code is error-free.

Finally, you'll add a width attribute to the two cell tags () in the first row of the table. You can assign column width by percentage (for example, the left column could be assigned to take up 50 percent of the browser window), or you can insert an exact pixel measurement. By default, if you don't include the width attribute in table cells, the table sizes the columns based on the size of the cell content and the size of the browser window. You need to add the width attribute to only one cell in a column (and if you have conflicting measurements in cells in the same column, the browser will

use the largest setting by default). To keep our setup orderly, we'll add the width attribute to the cells in the first row:

tip Using fixed measurements are useful for navigation bars. Using percentages is useful for large areas that can resize to accommodate a browser window

note If you don't define column widths in tables by adding the **width** attribute to tags, browsers automatically size the columns based on each column's widest item and the browser's window size.

- 12. In the first cell in the first row, click after "top", press the spacebar, and type width="170" to set the first column to 170 pixels wide.
- 13. In the second cell in the first row, click after "top", press the spacebar, and type WIDTH="*". The asterisk in place of a pixel number indicates that the browser should allow the second column to be as wide as necessary to fill the remaining table width.

 Because this table is formatted as 100 percent of the browser window, the asterisk instructs browsers to expand the second column to fill the remainder of the browser window area.

note An asterisk in the width attribute equates to "the rest of the browser window" and enables developers to configure a cell to resize as the browser window is resized without specifying a percentage number.

14. Save your HTML document. Your HTML code should look like the code shown in the figure.

Creating the structure for your Web document's contents (added table code shown in red)

Now that your table is in place, you're ready to enter content into the table. The first order of business is to insert the logo into the top-left corner.

Inserting and Linking the Logo

We're creating a standard page design, so we opted to insert the logo in the top-left (prime real estate) corner. We plan to use the home page as a template for all subpages, so we're going to link the logo to the home page. That way, when you use the home page as a template, all subpages will automatically include a logo that links to the site's index.html home page.

When you insert a logo, you're basically inserting an image. To insert an image in an HTML document, you use the tag with the src attribute,

which points to a particular graphic. For example, to specify the music site's logo, you'd type . Similarly, when you insert your logo and format it as a hyperlink, you use the same HTML codes that you use to link any graphic. So pay attention to the following steps—you'll find yourself using these commands quite a bit. First, let's insert the logo graphic (we take care of linking the graphic in just a bit):

note src is an abbreviation for source, as in the source of the image.

- 1. If necessary, open your text editor and open index.html.
- 2. In the first cell in the first row, click after the tag, press Enter, press Tab, and type the following HTML tag, which points to the logo image:

```
<img src="images/logo.gif" alt="Chris's Music Instruction" width="170"
height="68" border="0">
```

tip Adding spaces and returns in your HTML code won't affect your Web page's appearance, so you don't need to add returns in your HTML document to match the examples in this walkthrough.

With the exception of the **src** attribute, the **** tag's attributes used in the music site are optional (but very useful) and are defined as follows:

- src specifies the filename of the image (the source of the image) to be displayed.
- alt enables you to provide descriptive text that displays when the cursor is placed over the image area, displays when

browsers are set to not display images, or is read by a text reader.

- width and height specify the image's width and height. You should specify the sizes of your images because doing so helps browsers display your Web page's layout faster. Keep in mind that any actual image resizing (as in making an image larger or smaller) should be done in your image editing program and not by using width and height attributes in your HTML document—ideally, you want your images to be sized as closely as possible to the size you'll display the images on your Web pages.
- border specifies the thickness of the border around the image. By default, a 1-pixel border appears around graphics that are formatted as hyperlinks. Generally, designers change the default by setting the border attribute to "0".

Next you'll format the logo.gif image to serve as a hyperlink to the home page. Basically, creating a hyperlink entails marking some text or a graphic as an *anchor* by using the <a><a> tag set around the text or image you want to serve as a hyperlink, and then specifying to the browser what should be displayed after the anchor element is clicked. To make the logo a hyperlink, follow these steps:

lingo An *anchor* is either the clickable text or graphic component of a hyperlink or a specified target area within a document. Most notably, anchor text is surrounded by the <a> tag set in HTML documents.

3. Click before the <img...> tag and type to specify that when users click the logo, they will be taken to the

home page. (As mentioned earlier, this linking information will come in handy when you copy the home page to create subpages.)

Click after the closing > of the <img...> tag and type > to specify the end of the anchor's contents.

tip If you're using Notepad and your code goes beyond the edge of the window, open the Format menu and choose Word Wrap. When Word Wrap is activated, Notepad automatically wraps your text and displays all your text in the current window.

Save index.html. Your HTML code should look similar to the code shown in the following figure.

Inserting and linking the logo image to the home page

Inserting the Home Page Banner Graphic

After inserting the logo, inserting the home page's banner graphic will be a piece of cake. This step entails inserting an image in the second cell of the first table row. You won't have to link this graphic, so the procedure is fairly straightforward. The only twist to inserting the banner graphic is that you'll want to center the graphic within the table cell by nesting the tag

within the <div align="center"></div> tag set. To insert a banner graphic on the home page, perform the following steps:

- 1. If necessary, open your text editor and open index.html.
- 2. In the second cell of the first row, click after the tag, press Enter, press Tab, and then type the following:

```
<div align="center"><img src="images/t_home.gif" alt="Chris Soll's Music
Instruction" width="415" height="62" border="0" align="middle"></div>
```

Save index.html. Your HTML code should display as shown in the following figure.

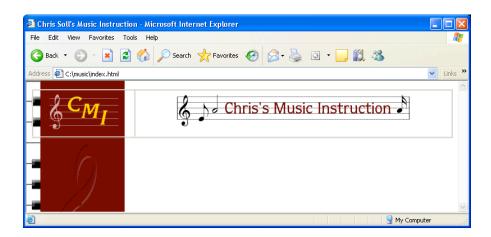
Banner image code

4. Open index.html in your browser. (If index.html is already open in your browser, click the Refresh button to update your view.) The browser should display your version of index.html as shown in the next figure. In the figure, notice that the table borders for the first

row display around the inserted graphics. Hold your cursor over the logo or banner graphic to display the image's ALT text.

note ALT text displays like ToolTip text, in a small pop-up window when the mouse cursor hovers over an image or button

tip You must save your HTML document before you can view the document's changes in a browser window. If your most recent changes aren't displaying in your browser, ensure that you've saved your HTML document. If you still aren't seeing the changes, click the Refresh button in your browser to ensure that you're viewing the most up-to-date version of your page.



Previewing index.html with the linked logo and home page banner graphic (which were positioned using a table)

In the , you'll see how to create a navigation bar that you can use throughout the music site.

Adding Navigation Links

Creating a navigation bar for the music site entails inserting button graphics and linking each graphic to a Web page. You've already inserted the logo and banner graphics, so you know how to use the tag. Furthermore, you've linked the logo, so you're also familiar with the <a> anchor tags. The only slightly tricky part about using navigation buttons in the music site is that each page shows a custom button for the current page. For example, whenever a user visits the home page, the black version of the Home button displays, and whenever a user visits another page in the site, the standard maroon Home button displays. This setup will become clearer as you progress through this section. To create a navigation bar on the home page, follow these steps:

- 1. If necessary, open your text editor and open index.html. You'll place the navigation bar in the first column of the table's second row, which will cause it to display on the left side of the page.
- After the second tag, click after the first
 tag, press Enter, press Tab, and type

 between the logo graphic and the upcoming navigation bar.

In the next few steps, you'll embed each button's image tag within an anchor tag that links the button to an appropriately named Web page. You haven't created the subpages yet, so take note of the filenames provided in the anchor tags. The subpage's filenames will have to match the filenames in the anchor references. In all, you need to add seven buttons. You'll start by

adding the current-page version of the Home button. (Recall that you downloaded two versions of each button—the current-page version of each button has a "2" at the end of the button's filename.)

note If filenames in the button anchors don't match the actual filenames, the buttons will not work. In this project, you name the files before you create them because you will be using the index.html page as a template to create the subpages. In future Web development endeavors, a file might already be named and the existing name should be used in a button's anchor code.

3. Press Enter, press Tab, and type the following:

```
<a href="index.html"><img src="images/b_home2.gif" alt="Home Page"
width="170" heigh="24" border="0"></a>
```

Type

 />

 to add two line spaces, press Enter, and press Tab.

You're now set up to enter the next button link and graphic.

tip You can repeatedly type the HTML code with varied href file references, src filenames, and alt information, or you can copy the code you type in steps 3 and 4 and paste the copied code into the table cell six times. Then, replace the href file references, src filenames, and alt text definitions in each entry, as shown in the figure located after step 14.

5. Type the following:

```
<a href="lessons.html"><img src="images/b_lessons.gif" alt="Lessons"
width="170" height="24" border="0"></a><br /><br />
```

6. Press Enter, press Tab, and type:

```
<a href="recitals.html"><img src="images/b_recitals.gif" alt="Recitals"
width="170" height="24" border="0"></a><br /></br />
```

7. Press Enter, press Tab, and type:

```
<a href="competitions.html"><img src="images/b_competitions.gif"
alt="Competitions" width="170" height="24" border="0"></a><br />
```

8. Press Enter, press Tab, and type:

```
<a href="performances.html"><img src="images/b_performances.gif"
alt="Performances" width="170" height="24" border="0"></a><br />
```

9. Press Enter, press Tab, and type:

```
<a href="background.html"><img src="images/b_background.gif"
alt="Background" width="170" height="24" border="0"></a><br />
```

10. Press Enter, press Tab, and type:

```
<a href="contact.html"><img src="images/b_contact.gif" alt="Contact"
width="170" height="24" border="0"></a><br /><br /><br />
```

Notice that there are four **
** tags at the end of step 10. The extra line spaces are included because we also want to insert the Send Us A Note icon to give users an easy way to send e-mail messages to Chris. When you create an e-mail link, you use a special **href** format in the anchor tag, as follows.

11. Press Enter a couple times to separate the Send Us A Note HTML code from the main navigation bar HTML code, press Tab, and then type

except replace *username@domain.com* with your own e-mail address so that users will open a blank e-mail message addressed to you when they click the Send Us A Note icon.

note A mailto link opens a blank preaddressed e-mail message window when the link is clicked. To avoid spam, consider using an e-mail address encoder when you create mailto links. An e-mail address encoder (such as www.wbwip.com/wbw/emailencoder.html) enables you encode your e-mail address by using character entities instead of standard text. A character entity reference is a special key combination that includes the ampersand (&) symbol and enables you to display nonstandard characters—such as accent marks, registered trademarks, and so forth—in Web pages.

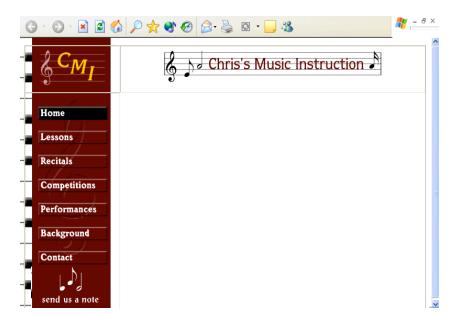
12. Insert the Send Us A Note icon and close the anchor reference by typing:

```
<img src="images/sendnote.gif" alt="E-mail Chris" width="170" height="77"
border="0"></a>
```

13. Save index.html. Your HTML code should look similar to the code shown in the following figure.

The navigation bar HTML code in a single table cell

14. Open index.html in your browser. Your home page should now include a navigation bar on the left, as shown in the following figure. Notice that the Home button displays differently than the other buttons to show that users are currently viewing the home page. Click the logo and Home button to make sure that the home page redisplays. (Clicking any other button in the navigation bar will display an error because you haven't created those pages yet.) Hover your cursor over each button to ensure that the ALT text is correct throughout. Click the Send Us A Note icon to ensure that a blank e-mail message opens and is addressed to you.



Testing HTML coding by clicking the Home button and the Send Us A Note image

Inserting Footer Information

You next need to add the footer information. The music site's footer includes a footer graphic, the address and phone number information, text links that correspond to the navigation bar links, and some copyright text.

The process of inserting a footer graphic is similar to the process of inserting the header graphic described earlier in this lesson. The main difference in the footer area is that you're going to place the footer graphic in the second cell in the third row and you're going to insert some additional information in the cell along with the graphic (as described in the next section). Because you're going to include other information below the footer graphic, you'll nest the footer graphic within paragraph tags

() to ensure that space will be included above the graphic. Let's
start to create the footer element by inserting the footer graphic:

- 1. If necessary, open your text editor and open index.html.
- 2. In the third row of the table, click after the second tag, press Enter, press Tab, and then type to indicate the start of a paragraph and to specify to center align the paragraph's contents. (By default, paragraphs are left-aligned.)
- 3. Specify the footer image's information by inserting the image tag with the following attributes:

```
<img src="images/footer.gif" alt="Chris Soll's Music Instruction"
width="415" height="62" border="0" align="middle">
```

4. Type to indicate the end of the paragraph section.

Next you'll insert a second paragraph that centers the address and phone number information.

5. Press Enter twice, press Tab, and type:

```
1234 Songbird Alley, Mesa, AZ 85201<br /> 555 555-5555
```

Notice the
 tag in the preceding HTML code between the address text and the phone number. Adding the
 tag inserts a line break and displays the phone number below the address on the next line.

Now you'll add some text links in the footer area that correspond to the navigation bar's buttons—that way, if any users have graphics turned off, they can still navigate around your site. To add text links, you follow a procedure similar to creating graphic links. The difference between the two tasks is that you enclose text between anchor links instead of enclosing an IMG tag, as shown in the following steps. First, you'll center the paragraph that will contain the text links.

- 6. Press Enter twice, press Tab, and type .
- 7. Press Enter, press Tab, and type:

```
<a href="index.html">Home Page</a> |
```

In the preceding link, the words *Home Page* will display as hypertext on the Web page. If users click the words Home Page, the index.html file will display. Also notice the pipe symbol (|). You type this symbol between each text link to make differentiating the links easier. The symbol is optional but popular. You're now ready to add the remaining text links.

tip You don't have to press Enter and Tab between each of the text link entries in steps 8 through 14. Browsers will show the links in a row regardless of the space you add in the HTML document. We chose to format the text links in the described way to make working with the information easier.

8. Press Enter, press Tab, and type:

```
<a href="lessons.html">Lessons</a> |
```

9. Press Enter, press Tab, and type:

```
<a href="recitals.html">Recitals</a> |
```

10. Press Enter, press Tab, and type:

```
<a href="competitions.html">Competitions<a> |
```

11. Press Enter, press Tab, and type:

```
<a href="performances.html">Performances</a> |
```

12. Press Enter, press Tab, and type:

```
<a href="background.html">Background</a> |
```

13. Press Enter, press Tab, and type:

```
<a href="contact.html">Contact Information</a> |
```

The final text link entry is the text equivalent of the Send Us A Note icon you inserted earlier. Thus, this text link uses the mailto: component in the href attribute. Remember to replace <code>username@domain.com</code> with your own e-mail address in the following step.

14. Press Enter, press Tab, and type:

```
<a href="mailto:username@domain.com">E-mail Chris</a>
```

15. To complete the text link paragraph, press Enter, press Tab, and type .

The final component of the footer is the copyright information. In this section, you create a centered paragraph and enter the copyright information. One interesting twist here is that you can use a special character entity reference to create a copyright symbol.

16. Press Enter twice, press Tab, and type:

```
&copy 2002 Chris Soll. All Rights Reserved
```

17. Save index.html. Your HTML code should look similar to the code shown the following figure.

Footer information in the last cell in the table

18. Open index.html in your browser. The footer in the index.html file should look similar to the footer information in the page shown in the following figure.



HTML footer code interpreted by a browser

You might have noticed that you've designed everything on the home page except the main content. You'll be happy to hear that there's a method to our madness. Now that you have the basic structure of the home page created, and because you're planning to mimic the home page structure on the subpages, you can use the index.html file to quickly create the foundation pages for the subpages, as described in the next section.

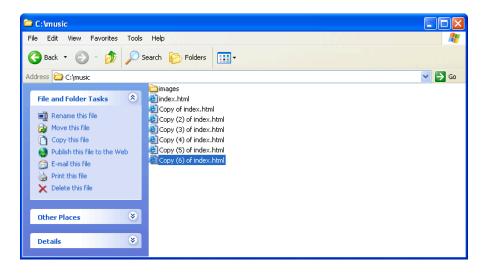
Copying the Home Page Framework to Subpages

By now you've probably realized that we need to make some pages for the navigation bar and text links to link to. Namely, the music site calls for the following pages:

- index.html (which you're already in the process of creating)
- lessons.html
- recitals.html
- competitions.html
- performances.html
- background.html
- contact.html

In this section, you're going to create the six additional HTML pages that make up the music site. You could copy all the code from index.html, paste it into a blank text document, and then save the text document as an HTML file, but we're much lazier than that! Here's how we went about creating most of the code for the subpages:

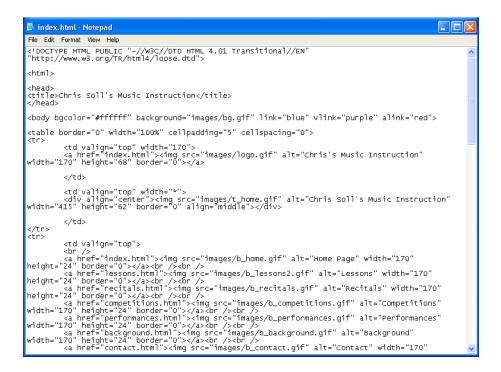
- 1. Open the C:\music folder.
- 2. Right-click the index.html file and click **Copy** on the shortcut menu.
- 3. Rick-click in the folder and click Paste.
- 4. Repeat step 3 five times (so that you have six copies of the index.html file). Your music folder should display as shown in the following figure.



Copying index.html six times to create templates for your site's subpages

- 5. Right-click the first copy of index.html, click Rename on the shortcut menu, type lessons.html, and press Enter. Ensure that you rename the copied files accurately and using all lowercase letters; if you change the names of the files at this point, the links you created in your HTML code won't work.
- 6. Using the procedure described in step 5, rename the subsequent files recitals.html, competitions.html, performances.html, background.html, and contact.html.
- 7. Open your text editor, open the lessons.html file, and then perform the following six changes, which are shown in red in the following figure:
 - In the <title> tag, click directly after the n in the word
 Instruction and type: Lessons.
 - In the tag, change the border attribute to "0".
 - In the second cell of the first table row, change t_home.gif
 to t_lessons.gif.

- Also in the second cell of the first table row, replace the text alt="Chris Soll's Music Instruction" with the text alt="Lessons".
- In the navigation bar HTML code, change the b_home2.gif
 Home button text to b_home.gif.
- Also in the navigation bar HTML code, change the b_lessons.gif Lessons button text to b_lessons2.gif.



Modifying the HTML code for each subpage

8. Save lessons.html.

You've just completed the foundation document for the Lessons page. Not too bad! To check your page, double-click lessons.html to view the page in your browser. If everything looks good (as shown in the following figure), you're ready to move on. Your next step is to repeat the short customization process in the remaining subpage documents.



Completed Lessons subpage with a custom title banner and "active" black button

tip Using a completed foundation page to create subpages is fast and promotes consistency throughout your site

- Open recitals.html in your text editor, and make the following changes:
 - In the <title> tag, click directly after the n in the word
 Instruction and type: Recitals.
 - In the tag, change the border attribute to "0".
 - In the second cell of the first table row, change t_home.gif
 to t_recitals.gif.
 - Also in the second cell of the first table row, replace the text alt="Chris Soll's Music Instruction" with the text alt="Recitals".

- In the navigation bar HTML code, change the b_home2.gif
 Home button text to b_home.gif.
- Also in the navigation bar HTML code, change the b_recitals.gif Lessons button text to b_recitals2.gif.
- 10. Save recitals.html.
- 11. Open competitions.html in your text editor and make the following changes:
 - In the <title> tag, click directly after the n in the word
 Instruction and type: Competitions.
 - In the tag, change the border attribute to "0".
 - In the second cell of the first table row, change t_home.gif
 to t_competitions.gif.
 - Also in the second cell of the first table row, replace the text
 alt="Chris Soll's Music Instruction" with the text
 alt="Competitions".
 - In the navigation bar HTML code, change the b_home2.gif
 Home button text to b_home.gif.
 - Also in the navigation bar HTML code, change the b_competitions.gif Lessons button text to b_competitions2.gif.
- 12. Save competitions.html.
- 13. Open performances.html in your text editor and make the following changes:

- In the <title> tag, click directly after the n in the word
 Instruction and type: Performances.
- In the tag, change the border attribute to "0".
- In the second cell of the first table row, change t_home.gif
 to t_performances.gif.
- Also in the second cell of the first table row, replace the text alt="Chris Soll's Music Instruction" with the text alt="Performances".
- In the navigation bar HTML code, change the b_home2.gif
 Home button text to b_home.gif.
- Also in the navigation bar HTML code, change the b_performances.gif Lessons button text to b_performances2.gif.
- 14. Save performances.html.
- 15. Open background.html in your text editor and make the following changes:
 - In the <title> tag, click directly after the n in the word
 Instruction and type: Background.
 - In the tag, change the border attribute to "0".
 - In the second cell of the first table row, change t_home.gif
 to t_background.gif.
 - Also in the second cell of the first table row, replace the text
 alt="Chris Soll's Music Instruction" with the text
 alt="Background".

- In the navigation bar HTML code, change the b_home2.gif
 Home button text to b_home.gif.
- Also in the navigation bar HTML code, change the
 b_background.gif Lessons button text to b_background2.gif.
- 16. Save background.html.
- 17. Open contact.html in your text editor and make the following changes:
 - In the <title> tag, click directly after the n in the word
 Instruction and type: Contact.
 - In the tag, change the border attribute to "0".
 - In the second cell of the first table row, change t_home.gif
 to t_contact.gif.
 - Also in the second cell of the first table row, replace the text alt="Chris Soll's Music Instruction" with the text alt="Contact".
 - In the navigation bar HTML code, change the b_home2.gif
 Home button text to b_home.gif.
 - Also in the navigation bar HTML code, change the b_contact.gif Lessons button text to b_contact2.gif.
- 18. Save contact.html.
- 19. Open index.html in your browser. Click each navigation bar button to check your work. A foundation page should display after you click each button; each subpage should include the current page title bar text, a custom title banner graphic, and a current page (black) navigation bar button that corresponds to the displayed page. Also, the table border lines shouldn't display on the subpages

(because you changed the **border** attribute in the tag to "O" on each subpage).

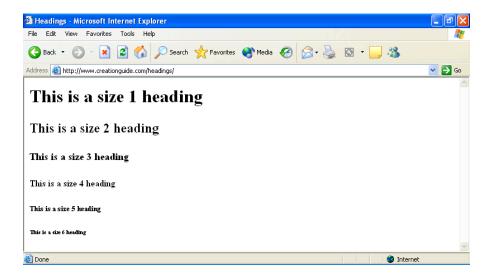
Congratulations! You've created the structure for the entire music site. Now we'll insert some content on the home page.

Inserting Body Text on the Home Page

In this section, you're going to insert some body text into the music site's home page. What this endeavor actually boils down to is a practice in formatting text. The main content of the home page consists of a couple headings, paragraph text, colored block quotes, and a linked unnumbered list. So as you can imagine, we'll be in this walkthrough's next few sections.

Creating Headings

In HTML coding, you can define six heading levels by using <h1></h1>, <h2></h2>, and so on through <h6></h6> tag sets, with the size 1 heading being the largest and size 6 being the smallest. The following figure shows a sample of the various heading sizes. To view the headings in action, visit www.creationguide.com/headings.



Six standard HTML heading sizes

note Different browsers might display headings in different ways (i.e. different fonts, different sizes, boldfacing, and so forth). But in all browsers, the hierarchy presentation coincides with the heading setting

The music site uses one heading tag on the home page, which formats the welcome message at the top of the page:

- 1. Open your text editor, and then open C:\music\index.html.
- In the second row and second cell of the table (the cell after the navigation bar information), click after , press
 Enter, and press Tab.

First you'll define the font style for the cell's body text:

3. Type the following:

```
<span style="font-family: verdana, arial, sans-serif;">
```

Notice in step 3 the three font names in the **face** attribute. Because you never know what fonts users will have installed on their systems, you should provide a backup plan when you define font styles. In step 3, if a user's computer has the Verdana font installed, the browser will display upcoming body text in the Verdana font style. If Verdana isn't installed on the user's computer, the browser will look for the Arial font family. If neither Verdana nor Arial is installed on the user's system, the browser will display the body text in a sans serif style. If fonts listed in the font tag can't be found on the user's computer, the browser will display the text in the browser's default font style.

Next you'll add a line break and insert a "welcome" heading on the music home page.

4. Press Enter, press Tab, type

br /> to add a line break, press Enter, press Tab, and then type the following size 3 heading information:

<h3>Welcome to Chris Soll's Online Resource for Music Instruction and
Performance Information!

5. Save index.html. Your code should appear as shown in the following figure.

```
File Edit Format View Help

***Cdiv** align="center">

***Cdiv** align="center"

*
```

Specifying a font style and adding size 3 heading.

Adding Paragraph Text

Below the welcome heading you created in the previous section, you'll add some body text. The <P></P> tags are the main tags you'll use when entering paragraph text, which you'll do next.

- Click after the </h3> tag you created in the previous section, press Enter, press Tab, and type Meet Chris!.
- 2. Press Enter, press Tab, and type the following:

She's an internationally certified senior music instructor who teaches piano and flute to budding musicians, hobbyists, and professionals.

3. Press Enter, press Tab, and type the following:

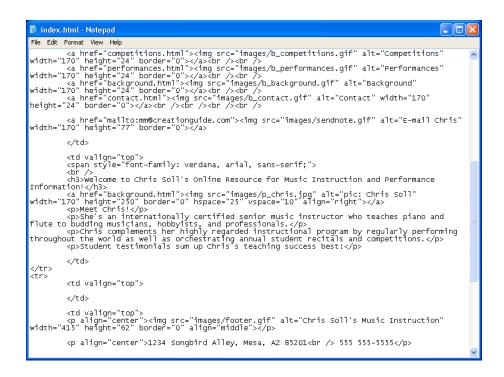
Chris complements her highly regarded instructional program by regularly performing throughout the world as well as orchestrating annual student recitals and competitions.

4. Finally, press Enter, press Tab, and type the following:

Student testimonials sum up Chris's teaching success best:

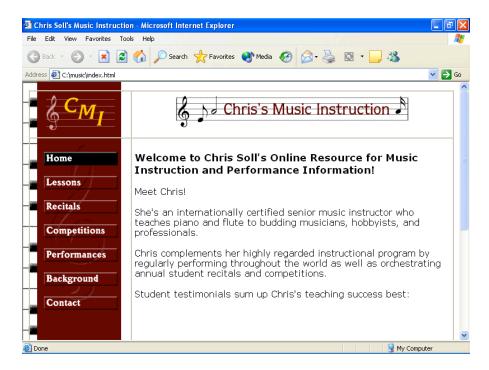
Save index.html.

Your HTML code should appear as shown in the following figure.



Adding paragraph text to the music site's home page

If you preview index.html in your browser, your home page should look similar to the page shown in the next figure.



Previewing your home page.

At this point, your page is all set up except for adding a block quote or two, which is the topic of the next section.

Formatting Block Quotes and Coloring Text

You can format text as a block quote to set off the text from the surrounding body text. Generally, browsers interpret the
 blockquote></blockquote> tag set by indenting the enclosed text's left and right margins. If you really want to indent your paragraph, you can nest block quote commands inside one another, as here:

<blook
duote></blockquote></blockquote>.

In this section, you'll create block quotes with maroon text:

- Open index.html in a text editor if necessary, click after best:
 in the second cell of the table's second row, press Enter twice,
 and press Tab.
- Type <blockquote><blockquote> to create a block quote nested within a block quote.
- 3. Press Enter, press Tab, and type the following:

```
<span style="color: maroon;"><em>Chris is by far the best
music teacher I've ever had! She taught me more than I could
have learned in a lifetime from Viktor McTonedeaf, the Royal
Music Instructor!</em>
```

Notice that the **color** attribute in the **font** tag is used to modify the color of the paragraph text.

4. Press Enter twice, press Tab, and type the following:

```
<em>- Moe Zart</em>
```

This inserts a right-aligned, italicized name, which is associated with the block quote entered in step 3.

5. Press Enter twice, press Tab, and type the following:

```
<em>Chris Soll is the best teacher I had before "the incident" that ended my professional music career--she's a true master!</em>
```

6. Press Enter twice, press Tab, and type:

```
<em>- Vincent Vanngo</em>
```

- Press Enter, press tab, and type to end the maroon font color formatting.
- Press Enter twice, press Tab, and type </blockquote>blockquote> to end the block quote formatting setting.
- Save index.html.

Your block quote text should display in your HTML document as shown in the following figure.

Adding block quotes to offset text

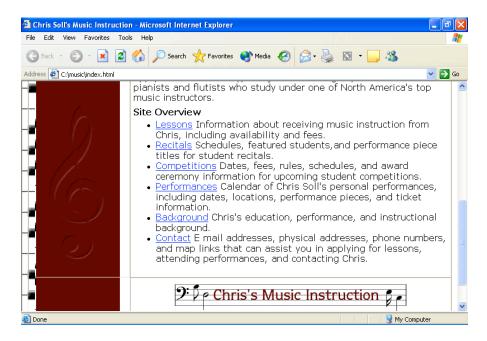
The next figure shows the block quote text when it's viewed in a browser.



Viewing blockquotes in Internet Explorer

Creating a Linked Unnumbered List

The final type of body text you'll create on the music home page is an unnumbered list. An unnumbered list appears as a bulleted list on a Web page, as shown the next figure.



Viewing an unnumbered (bulleted) list

note Numbered lists are used to show steps or chronological order.
Unnumbered lists are used to show items that can be displayed in any order, such as a grocery list or list of supplies.

note You can use
HTML commands to create numbered (ordered) lists, or you can use
commands to create unnumbered (bulleted) lists. Each list item within either type of list is identified by the

In this section, you'll first add a small amount of text that introduces the unnumbered list, and then you'll create the list (which includes links to appropriate pages):

 Open index.html in a text editor if necessary, click after the final </blockquote> in the second cell in the second table row, press Enter twice, press Tab, and then enter the following paragraph:

Apply for lessons today, and join the elite group of world-class pianists and flutists who study under one of North America's top music instructors.

2. Press Enter twice, press Tab, and then type the following:

```
<strong>Site Overview</strong>
```

In step 3, you'll begin the unnumbered list by inserting the
 tag.

3. Press Enter twice, press Tab, and type .

In steps 4 through 9, you'll create list items by surrounding each list item with the tag set. Furthermore, you'll format the first word of each list entry as a hyperlink to another page in the site.

4. Press Enter, press Tab, and type the following:

Lessons Information about receiving music
instruction from Chris, including availability and fees.

5. Press Enter, press Tab, and type the following:

Recitals Schedules, featured students, and
performance piece titles for student recitals.

6. Press Enter, press Tab, and type the following:

Competitions Dates, fees, rules,
schedules, and award ceremony information for upcoming student
competitions.

7. Press Enter, press Tab, and type the following:

Performances Calendar of Chris Soll's
personal performances, including dates, locations, performance pieces, and
ticket information.

8. Press Enter, press Tab, and type the following:

Background Chris's education,
performance, and instructional background.

9. Press Enter, press Tab, and type the following:

Contact E-mail addresses, physical
addresses, phone numbers, and map links that can assist you in applying for
lessons, attending performances, and contacting Chris.

- 10. Press Enter, press Tab, and type
- **11.** Press Enter, press Tab, and type to complete the body text and end the font family specification.

12. Save index.html.

Your unnumbered list code should display as shown in the following figure (and your index.html page should display as shown in the figure at the beginning of this section).

Viewing code for an unnumbered list

Last but not least, you'll insert a linked photograph into the body area of the music site's home page.

Inserting and Linking a Picture

By now, you should be very comfortable with inserting and linking graphics. (You had a lot of practice just a little while ago when you were creating the navigation bar.) For this page, we opted to display the picture below the size 3 heading and along the right side of the page. Furthermore, because the photograph is a picture of Chris, we linked the photograph to the Background page.

To insert a linked picture within your page's body text, follow these steps:

Open index.html in a text editor if necessary, click after the </h3>
tag in the second cell in the second row of the table, press Enter,
and press Tab.

tip The <h3> tag is near the top of cell 2, row 3

2. Type the following link and image information:

```
<a href="background.html"><img src="images/p_chris.jpg" alt="pic: Chris
Soll" width="170" height="250" border="0" hspace="25" vspace="10"
align="right"></a>
```

In this step, you can see some added attributes to the tag, which are defined as follows:

- hspace enables you to specify extra space (in pixels) between the image and text on the left and right sides of the image.
- **vspace** enables you to specify extra space (in pixels) between the image and text above and below the image.
- align indicates to align the picture on the page, and text wraps accordingly. In this example, the picture is aligned to the right side of the page.
- 3. Save index.html.

Finalizing the Home Page

Finally, you need to remove the table borders on the home page before you can proclaim your project complete. In addition, you should check your links

and view all your pages to ensure that you've entered accurate HTML code. First let's get rid of those borders on the home page:

note Table borders were shown during the design process to help illustrate where their information was being added within the table. For this Web site, the borders should be hidden

- 1. Open index.html in a text editor.
- 2. In the tag, change the border attribute from "1" to "0".
- 3. Save index.html.

Now let's click around and check your links, graphics, ALT text, and other page elements. For example, you need to make sure that none of your pages display with two black buttons.

4. Open your browser, display index.html (or if the document is already open in your browser, click Refresh), and then click every link (including the linked picture, logo, Send Us A Note icon, and text links) to verify that your links work properly and your pages display correctly. If any links don't respond as expected, open the proper HTML document in your text editor and check the HTML code carefully. Check your banner graphics and button graphics to ensure that you've included the proper graphics on each page.

note You might have noticed that we provided content only for the home page. At this point, we think you're well enough prepared to enter content into the other pages if you desire more practice using HTML.

note You can visit an online version of the practice site at
www.creationguide.com/music. You can use the site to check your code if
your are having problems

Using the Music Site's Framework as a Template

After all your hard work creating the music site, we wanted you to have a useful HTML template that you can easily customize. Therefore, we're going to let you in on a little secret. You can create a Web site using the music template even if you don't have any graphics. You don't have to have a background image, banner graphics, or buttons. Instead, you can create an entire Web site using text links and color backgrounds by replacing the content elements in the music site's Web pages. The following figure illustrates a Web site that uses the music Web site without graphics.

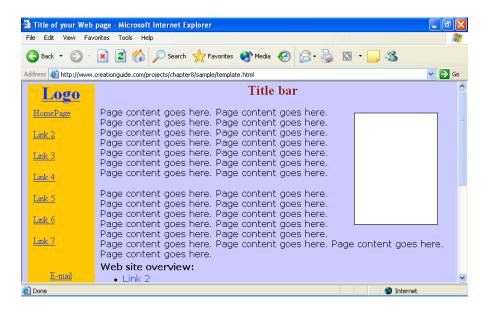
note Many times, an existing Web site can provide a structure for Web sites that might look significantly different.



Using the music site as a template

tip The small graphics on the sample page in the preceding figure are clipart images downloaded and pasted together to create a simple picture. If you prefer not to include a graphic on your page, simply delete the tag in your HTML document.

The next two figures show the template page and some of the template's source code.



Viewing the sample template available online

Viewing the template's source code

To speed along your progress when using a template to build a custom page, display the template's source code by clicking the View menu and then clicking Source. Then in the source code window, click the File menu, click Save As, and save the source code to your computer. At that point, you're free to modify your local version of the template by replacing the placeholder text with your custom content.

lingo In the template code (see the preceding image), you can see HTML code entries that begin with an exclamation point and two dashes: <!-- logo --->. These types of entries are called *comments*. Comments don't display on a Web page; they're used as notes to developers to help label parts of the HTML document. Comments have been added to the sample template to help you identify HTML components when you customize the source code.

Finally, notice that the template's **<body>** tag's **bgcolor** attribute has been changed from white (#ffffff) to purple (#ccccff), and that the first **tag** in each table row contains a **bgcolor** attribute set to gold (#ffcc00). You can use the **bgcolor** attribute to color your page's background as well as to color your table's cells if you're not using a background image. You can get fairly creative with color by coloring the background one color and then selectively coloring table cells various other colors. (You don't have to color all your table cells the same color.) Just remember to make sure you use a background that ensures that your text is easy to read.

tip To view a color chart of Web safe colors along with their hex codes, students can visit http://www.creationguide.com/colorchart.html

Key Points

- HTML commands serve as instructions that tell a browser how to display a Web document's content.
- HTML commands appear between < > marks, usually come in pairs, and are not case-sensitive.
- Opening HTML tags frequently contain attributes to further refine the tag's instructions.
- The standard tags for HTML documents consist of the following:

<!DOCTYPE...>
<html>

```
<head>
<title></title>
</head>
<body>
</body>
</html>
```

- If possible, store all your Web site documents and graphics within the same master folder. Create an images folder for your Web site's images within the master folder.
- To make life easier, devise a graphics naming system to help differentiate various image types, such as buttons, banners, pictures, and so forth.
- When creating Web pages, save your HTML documents and preview your pages in a browser frequently.
- Always verify that you've included all angle brackets (<>) and quotation marks (" ") in your code. Missing small elements or misspelling HTML commands can cause your page to display incorrectly (or not at all) in a browser.