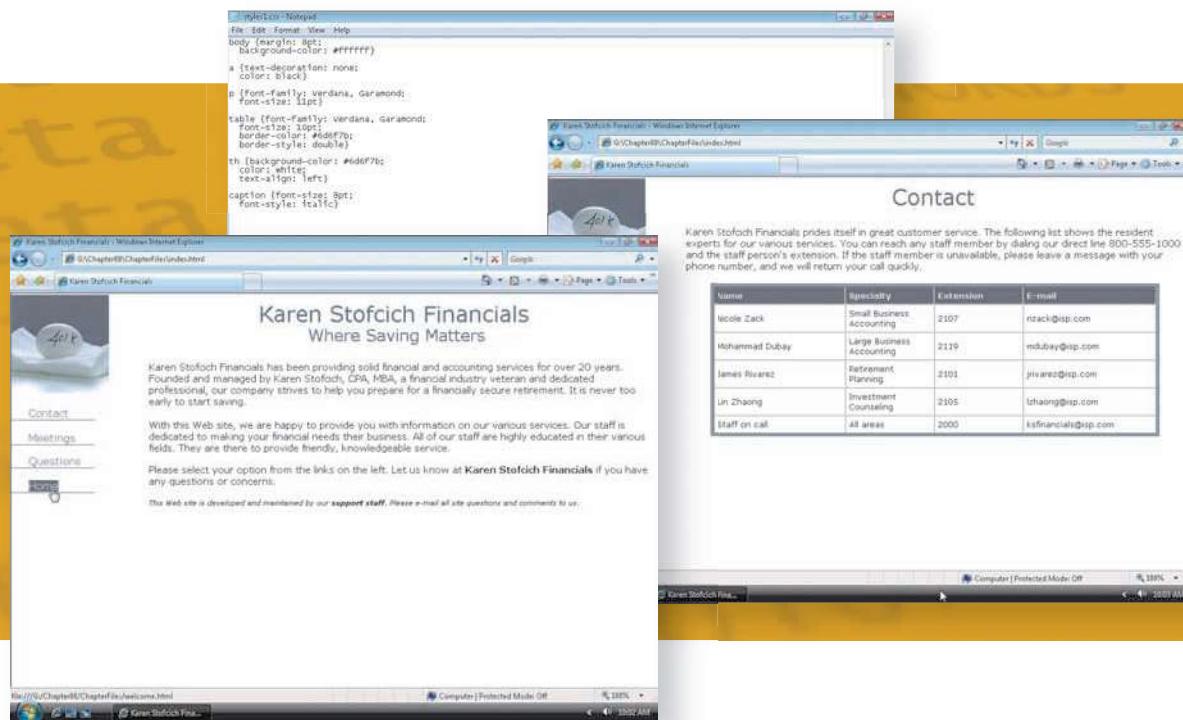


8 | Creating Style Sheets



Objectives

You will have mastered the material in this chapter when you can:

- Describe the three different types of Cascading Style Sheets
- Add an embedded style sheet to a Web page
- Change the margin and link styles using an embedded style sheet
- Create an external style sheet
- Change the body margins and background using an external style sheet
- Change the link decoration and color using an external style sheet
- Change the font family and size for all paragraphs using an external style sheet
- Change table styles using an external style sheet
- Use the `<link />` tag to insert a link to an external style sheet
- Add an inline style sheet to a Web page
- Change the text style of a single paragraph using an inline style sheet

8 | Creating Style Sheets

Introduction

In previous chapters, you used HTML tags to change the way a Web page is displayed in a Web browser, such as adding italics, bold, colors, headings, and tables. In this chapter, you learn an easier way to give your Web pages a consistent format and look: using style sheets.

Project — Using Style Sheets in the Stofcich Financials Web Site

When Karen Stofcich Financials decided to upgrade its corporate Web site, Karen Stofcich hired you to make the changes. The original Karen Stofcich Financials Web site was very basic, with a few simple pages of text information.

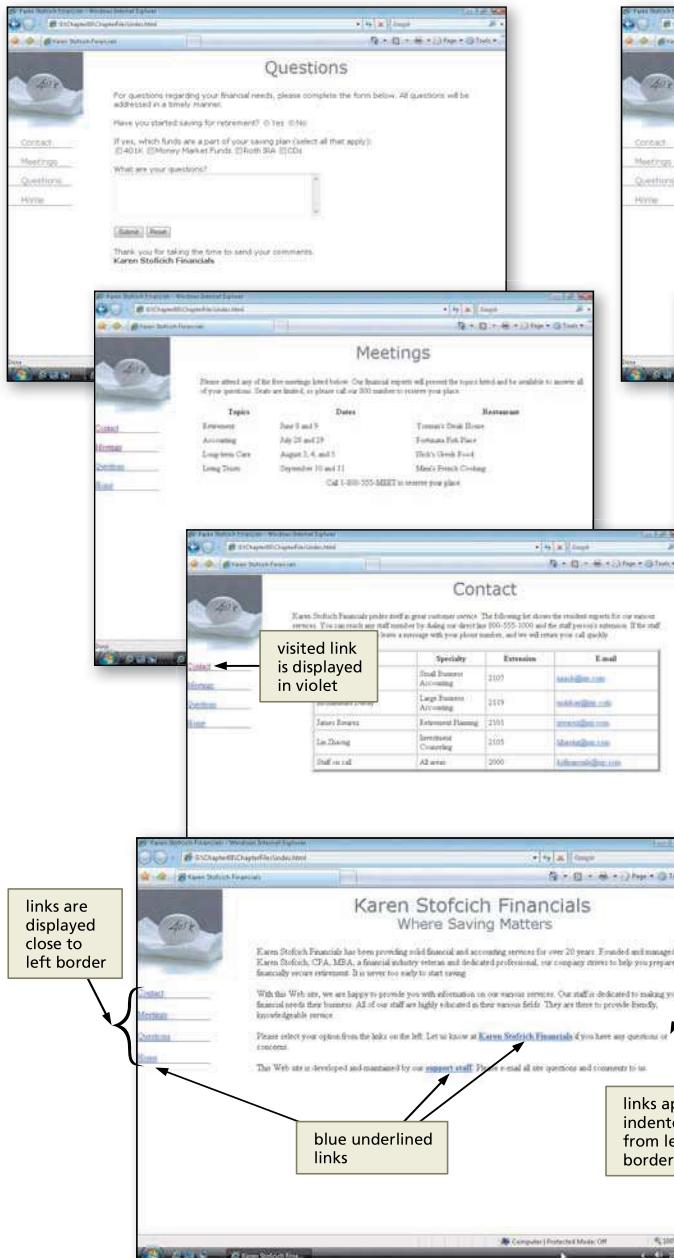
At Ms. Stofcich's request, you recently added several more Web pages to the Web site and updated it to use a frame structure, as shown in Figure 8–1a. Recognizing that the Karen Stofcich Financials Web site will continue to grow, you suggest that you should modify the Web site to use Cascading Style Sheets (CSS). You explain to her that Cascading Style Sheets maintain a consistent look across a Web site — especially Web sites that contain many pages, and can give the pages a more polished look. You show her some sample Web pages you have created using CSS (Figure 8–1b), so she can see the difference. Ms. Stofcich is supportive of the plan and encourages you to start as soon as possible.

Overview

As you read this chapter, you will learn how to create the Web pages shown in Figure 8–1b by performing these general tasks:

- Plan the CSS structure
- Enter HTML code into the Notepad window
- Save the file as an HTML file
- Enter basic HTML tags and add text to the file
- Create an external CSS file
- Use the `<style>` tag in an embedded style sheet
- Use the `<style>` attribute in an inline style sheet
- View the Web pages and HTML code in your browser
- Validate the Web pages
- Test and print the Web pages

(a) Web Pages without Style Sheets.



(b) Web Pages with Style Sheets.

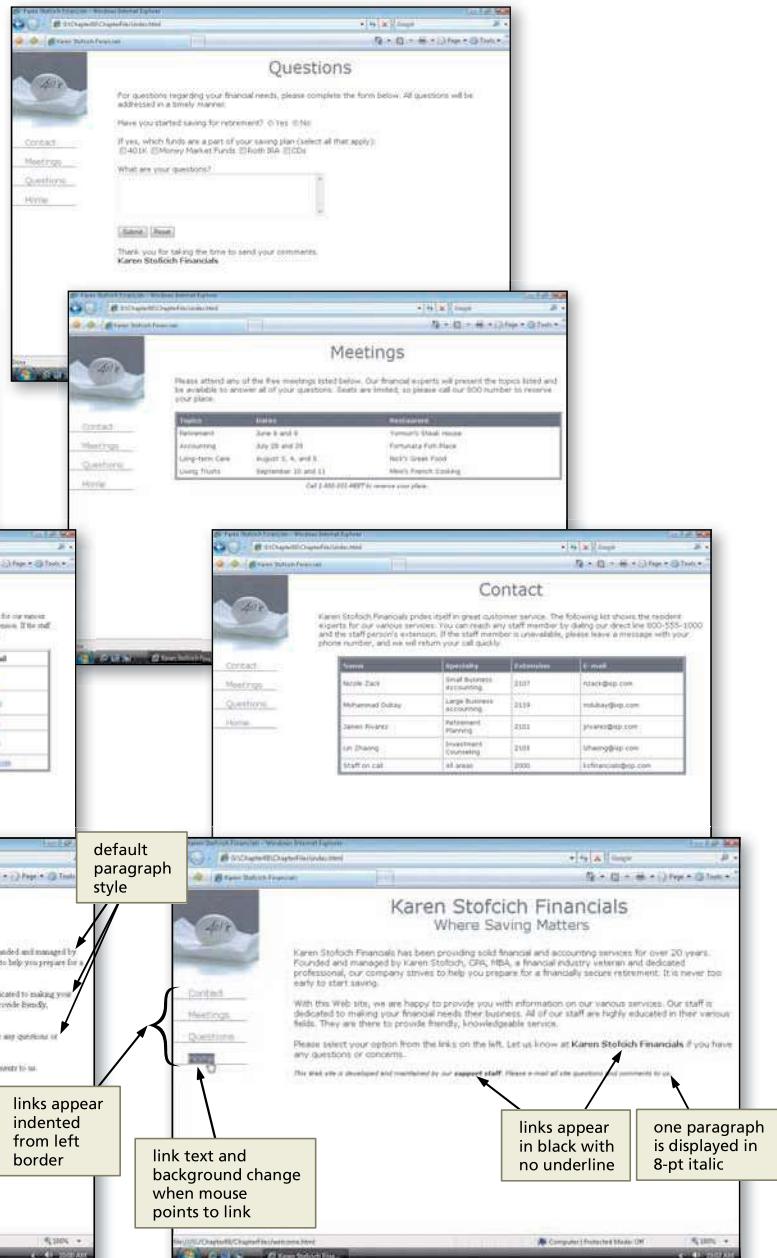


Figure 8-1

**Plan
Ahead****General Project Guidelines**

As you create Web pages, such as the chapter project shown in Figure 8-1 on page HTML 343, you should follow these general guidelines:

1. **Plan the Web site.** First, you should determine if using Cascading Style Sheets (CSS) is appropriate for your Web site. If you have several Web pages and need a consistent style that can be easily updated, CSS is a good choice. If you have a single page with mostly static content and formatting, CSS might not be needed.
2. **Analyze the need.** In the analysis phase of the Web Development Life Cycle, you should analyze what content to include on the Web page. Chapter 8 introduces a new Web development technique. Using style sheets can eliminate the need to edit multiple Web pages for simple changes. An external style sheet can be edited to make changes across a Web site. Part of the analysis phase then includes determining how the multiple Web pages work together using CSS.
3. **Choose the content for the Web page.** With a multiple-page Web site, you can distribute the content as needed throughout the Web site.
4. **Determine the type of style sheets to use for the pages and their precedence.** If you determine that CSS is appropriate, then you must decide which type or types of style sheet described in this chapter is best. For Web sites with many Web pages that have a common look, the best option may be to utilize an external style sheet. For Web sites with fewer similarities among pages, using embedded or inline style sheets may be a better option. Also, knowing style sheet precedence (described later in this chapter) helps you to understand how each style reacts with the others.
5. **Create the style sheets.** Once the analysis and design is complete, the Web developer creates the Web page using HTML. Good Web development standard practices should be followed in this step. Embedded and inline style sheets are used within particular Web pages. External style sheets require a two-step process. First, an external style sheet must be created and saved as a .css file. Then, a link statement must be inserted into all Web pages in which you want to use the external style sheet.
6. **Test all Web pages within the Web site.** An important part of Web development is testing to assure that you are following XHTML standards. In this book, we use the World Wide Web Consortium (W3C) validator that allows you to test your Web page and clearly explains any errors you have. When testing, you should check all content for accuracy. Finally, all of the Web pages with style sheets (external, embedded, and inline) should be validated per the standard set throughout this book.

When necessary, more specific details concerning the above guidelines are presented at appropriate points in the chapter. The chapter also will identify the actions performed and decisions made regarding these guidelines during the creation of the Web page shown in Figure 8-1 on page HTML 343.

BTW**CSS**

The World Wide Web Consortium (W3C) has a wealth of information about Cascading Style Sheets (CSS). You can find out what is new with CSS, access CSS testing suites, and find links to CSS authoring tools from this Web site. For more information, visit the W3C Web site and search for CSS.

Using Style Sheets

Although HTML allows Web developers to make changes to the structure, design, and content of a Web page, HTML is limited in its ability to define the appearance, or style, across one or more Web pages. As a result, style sheets were created.

A **style** is a rule that defines the appearance of an element on a Web page. A **style sheet** is a series of rules that defines the style for a Web page or an entire Web site. With a style sheet, you can alter the appearance of a Web page or pages by changing characteristics such as font family, font size, margins, and link specifications.

Like HTML, style sheets adhere to a common language with set standards and rules. This language, called **Cascading Style Sheets**, or CSS, allows a Web developer to write code statements that control the style of elements on a Web page. CSS is not HTML; it is a separate language used to enhance the display capabilities of HTML. The World Wide Web Consortium (W3C), the same organization that defines HTML standards, defines the specifications for CSS.

With CSS you can add visual elements such as colors, borders, margins, and font styles to your Web pages. CSS is not used to add any content to your Web site; it just makes your content look more stylish. For example, if you want all text paragraphs on a Web page to be indented by five spaces, you can use a style sheet to handle the indenting, rather than coding each paragraph. Style sheets allow you to change the style for a single element on a Web page, such as a paragraph, or to change the style of elements on all of the pages in a Web site.

CSS provides support for three types of style sheets: inline, embedded, and external (or linked). With an **inline style sheet**, you add a style to an individual HTML tag, such as a heading or paragraph. The style changes that specific tag, but does not affect other tags in the document. With an **embedded style sheet**, you add the style sheet within the `<head>` tags of the HTML document to define the style for an entire Web page. With a linked style sheet, or **external style sheet**, you create a text file that contains all of the styles you want to apply, and then you save the text file with the file extension `.css`. You then add a link to this external style sheet on any Web page in the Web site. External style sheets give you the most flexibility and are ideal to apply the same formats to all of the Web pages in a Web site. External style sheets also make it easy to change formats quickly across Web pages. For example, if you decide to change from the Verdana font to Arial for all Web pages in a Web site, using an external style sheet you only need to change the font in one place — the style sheet.

In this chapter, you learn to implement all three types of style sheets. First, an embedded style sheet is used to change the link styles in the menu in the left frame (Figure 8–2a on the next page). An inline style sheet is used to change the style for a single paragraph on the Welcome page (Figure 8–2b on the next page). An external style sheet is used to change the body, link, paragraph, and table styles in the main pages in the right frame (Figure 8–2c on page HTML 347). After the three different style sheets are added to the Karen Stofcich Financials Web site, the finished Web pages appear using styles that make them more attractive, polished, and professional-looking than the original Web pages (Figure 8–2d on page HTML 347).

BTW**CSS Benefits**

With CSS, you can establish a standard look for all Web pages in a Web site. Using CSS, you avoid the tedious steps of adding repetitive codes to format the same types of information. Instead of making all paragraphs of text 10pt Verdana in individual `<p>` tags, you can define that in a `.css` file and link that external file to all Web pages.

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Karen Stofcich Financials Menu</title>
<style type="text/css">
<!--
p {text-indent: 20pt}
a {text-decoration: none;
font-family: verdana, garamond;
font-size: 10pt;
color: #0000ff;
a:hover {background: #6666ff;
color: white}
-->
</style>
</head>
<body>
<a href="welcome.html" target="win-main">
![Nest egg logo](nestegg.jpg)
</a>
<p><a href="contact.html" target="win-main">Contact</a>
<br /></p>
<p><a href="meetings.html" target="win-main">Meetings</a>
<br /></p>
<p><a href="questions.html" target="win-main">Questions</a>
<br /></p>
<p><a href="welcome.html" target="win-main">Home</a>
<br /></p>
</body>
</html>

```

(a) HTML for menu frame with embedded style sheet.

```

<!DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Karen Stofcich Financials Home Page</title>
<link rel="stylesheet" type="text/css" href="styles1.css" />
</head>
<body>
<center></center>
<p>Karen Stofcich Financials has been providing solid financial and accounting services for over 20 years. Founded and managed by Karen Stofcich, CPA, MBA, a financial industry veteran and dedicated professional, our team of staff strives to help you prepare for a financially secure retirement. It is never too early to start saving!</p>
<p>With this web site, we are happy to provide you with information on our various services. Our staff is dedicated to making your financial needs their business. All of our staff are highly educated in their various fields. They are there to provide friendly, knowledgeable service.</p>
<p>Please select your option from the links on the left. Let us know at <strong><a href="mailto:kstofcich@isp.com">karen stofcich financials</a></strong> if you have any questions or concerns.</p>
<p style="font-style: italic; font-size: 8pt;">This web site is developed and maintained by our <strong><a href="mailto:kissupport@isp.com">support staff</a></strong>. Please e-mail all site questions and comments to us.</p>
</body>
</html>

```

(b) HTML for welcome page with external style sheet link and inline style sheet.

Figure 8-2

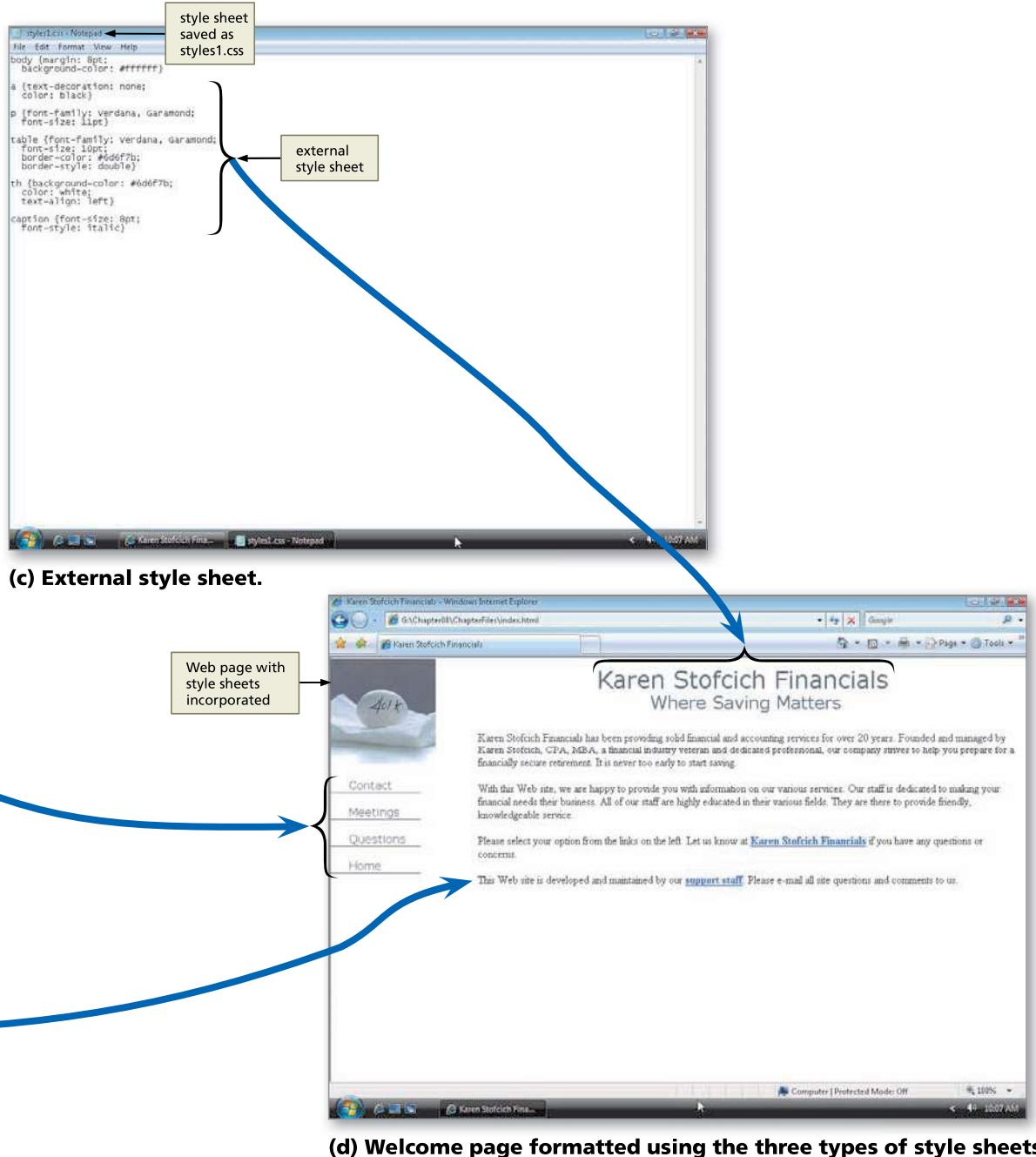


Figure 8–2 (continued)

Style Sheet Precedence

As shown in Table 8–1, the three style sheets supported by CSS control the appearance of a Web page at different levels. Each style sheet type also has a different level of **precedence** or priority in relationship to the others. An external style sheet, for example, is used to define styles for multiple pages in a Web site. An embedded style sheet is used to change the style of one Web page, but overrides or takes precedence over any styles defined in an external style sheet. An inline style sheet is used to control the style within an individual HTML tag and takes precedence over the styles defined in both embedded and external style sheets.

BTW

CSS Precedence

Although the three types of CSS (inline, embedded, and external) can co-exist, an inline style sheet takes precedence over any other style sheet, and an embedded style sheet overrides an external style sheet. So if you specify the style for your paragraphs in both embedded and inline style sheets, the style of the inline style sheet would override the embedded style.

Table 8–1 Style Sheet Precedence

Type	Level and Precedence
Inline	<ul style="list-style-type: none"> To change the style within an individual HTML tag Overrides embedded and external style sheets
Embedded	<ul style="list-style-type: none"> To change the style of one Web page Overrides external style sheets
External	<ul style="list-style-type: none"> To change the style of multiple pages in a Web site

Because style sheets have different levels of precedence, all three types of style sheets can be used on a single Web page. For example, you may want some elements of a Web page to match the other Web pages in the Web site, but you also may want to vary the look of certain sections of that Web page. You can do this by using the three types of style sheets.

Plan Ahead

Identify what style sheets to use.

The first step to consider when using style sheets is to lay out a plan that takes style sheet precedence rules into account. Three different types of style sheets exist, and as discussed, one takes precedence over the next. An inline style sheet takes precedence over either of the other two, and the embedded style sheet takes precedence over the external style sheet.

- **Use external style sheets for styles that you want across the Web site.** As mentioned, the greatest benefit of CSS is the ability to identify a style across a Web site. For Web pages in which you want a common look, use external style sheets.
- **Use embedded style sheets for single Web page styles.** This type of style sheet is good to use if you want the style to affect just one (or a few) Web pages, and not all pages across the Web site.
- **Use inline style sheets for individual styles.** If you want to change the style of one or a few sections of one Web page, then using inline style sheets is the most appropriate. Once the style is intended for most (or all) of the Web page though, you may want to switch to embedded or external style sheets.

Style Statement Format

No matter what type of style sheet you use, you must use a **style statement** to define the style. The following code shows an example of a style statement used in an inline style sheet:

```
<h1 style ="font-family: Garamond; font-color: navy">
```

A style statement is made up of a selector and a declaration. The part of the style statement that identifies the page elements is called the **selector**. In this example, the selector is h1

(header size 1). The part of the style statement that identifies how the element(s) should appear is called the **declaration**. In this example, the declaration is everything between the quotation marks: the font-family and font-color properties and their values (Garamond and navy, respectively). A declaration includes at least one type of style, or **property**, to apply to the selected element. Examples of properties include color, text-indent, border-width, and font-style. For each property, the declaration includes a related **value**, which specifies the display parameters for that specific property.

Each property accepts specific values, based on the styles that property can define. The property, font-color, for example, can accept the value, navy, but cannot accept the value, 10%, because that is not a valid color value.

The following code shows an example of style statements used in an embedded style sheet:

```
h1 {font-family: Garamond;
font-size: 32pt}
```

In this style statement, the h1 (header size 1) element is the selector, and the remainder of the code is the declaration. The declaration sets the values for two different properties. The first property-value statement sets the h1 font family to Garamond. The second property-value statement sets the font size to 32 point. This means that the browser will display all h1 headers in 32-point Garamond font.

Style sheets allow you to control many different property values for various elements on a Web page. Table 8–2 lists six main properties and related options that are used in style sheets. A complete list of properties and property values that can be used in style sheets is included in Appendix D.

BTW

CSS Tutorials

Many good CSS tutorials also can be found on the Web. Most sites start with CSS basics and then move to more advanced topics. CSS examples and quizzes are available along with many CSS references. Search for the term "CSS tutorial" to find great learning tools.

Table 8–2 Properties and Values

Property Name	Options That Can Be Controlled
background	<ul style="list-style-type: none"> color image position
border	<ul style="list-style-type: none"> color style width
font	<ul style="list-style-type: none"> family size style variant weight
list	<ul style="list-style-type: none"> image position type
margin	<ul style="list-style-type: none"> length percentage
text	<ul style="list-style-type: none"> alignment decoration indentation spacing white space

The next sections discuss each type of style sheet in more detail and give examples.

BTW

Inline Style Sheets

Inline style sheets give you a great amount of flexibility in Web page styling. Inline style sheets override both embedded and external style sheets. This means if you want all paragraph styles throughout the Web site to be 10pt Garamond except for one, for that one paragraph you can use an inline style sheet to alter its style.

BTW

Embedded Style Sheets

When you want to change the style of one Web page, you easily can do that with an embedded style sheet. The embedded style sheet needs to be put within the start `<head>` and end `</head>` tags. When you want to change the style of more than one Web page, using an external style sheet (a `.css` file) and linking to that style sheet is a more efficient method.

Inline Style Sheets

An inline style sheet is used to define the style of an individual HTML tag. For example, to change the style of a single paragraph, you could add an inline style sheet with the `<p>` (paragraph) tag as the selector and a declaration that defines new font style and color values for that paragraph, as shown here:

```
<p style="font-style: italic; font-size: 8pt">
```

Because they take precedence over the other types of style sheets and affect the style for individual HTML tags, inline style sheets are helpful when one section of a Web page needs to have a style different from the rest of the Web page.

Embedded Style Sheets

An embedded style sheet is used to control the style of a single Web page. To add an embedded style sheet to a Web page, you insert a start `<style>` tag at the top of the Web page within the `<head>` tags that define the header section. After adding the desired style statements, you end the embedded style sheet by adding an end `</style>` tag. The following code shows an example of an embedded style sheet:

```
<style type="text/css">
<!--
p {text-indent: 8pt}
a {text-decoration: none;
font-family: Verdana;
font-size: 14pt;
color: navy}
a:hover {background: navy;
color: white}
-->
</style>
```

This embedded style sheet defines the style for three elements on the page: paragraphs, links, and the link-hover property. The first style statement uses the selector `p` to specify that all text in a paragraph should be indented by 8 points. Adding space to indent the text ensures that the text does not run up against the left side of the Web page, thus giving the Web page a cleaner look.

The second style statement defines four properties of the link element. The selector `a` is used to indicate the link element. The property-value statement `text-decoration: none` changes the default, so that no line will appear under the links. The next two property-value statements change the font family and font size to 14-point Verdana. The final property-value statement changes the color of all link text to navy. Because the style statement uses `a` as the selector, it changes all link states (normal, visited, active) to these property values. You also can define a unique style for normal, visited, and active links by creating three separate style statements with `a:link`, `a:visited`, and `a:active` as the selectors.

The last style statement uses the **a:hover** selector to define the style of a link when the mouse pointer points to, or **hovers** over, a link. This statement tells the browser to display white link text on a navy background when the mouse hovers over the link (see the preceding sample code). Adding a link hover style significantly changes the look of the links and adds a dimension of interactivity to the Web page.

Recall that an embedded style sheet has the second-highest level of precedence of the three types of style sheets. Although an inline style sheet overrides the properties of an embedded style sheet, the embedded style sheet takes precedence over an external style sheet.

External Style Sheets

External style sheets are the most comprehensive form of style sheet and can be used to control the consistency and look of many Web pages within a Web site. Adding an external style sheet to a Web page involves a two-step process of creating an external style sheet and then linking this style sheet onto the desired Web pages.

An external style sheet is a text file that contains style statements for all of the styles you want to define. The sample code that follows shows an example of an external style sheet:

```
a {text-decoration: none;  
  color: blue}  
p {font-family: Verdana, Garamond;  
  font-size: 11pt}  
table {font-family: Verdana, Garamond;  
  font-size: 11pt}  
th {color: white;  
  background-color: blue;  
  font-size: 11pt;  
  text-align: left}
```

The format of the external style sheet is very similar to the format of the embedded style sheet. An external style sheet, however, does not need **<style>** tags to start and end the style sheet; it includes just the style statements.

To create an external style sheet, enter all of the style statements in a text file using Notepad or another text editor, and then save the text file with a **.css extension**. The code shown above, for example, can be saved with the file name **styles1.css** and then linked onto multiple Web pages.

For each Web page to which you want to apply the styles in an external style sheet, a **<link />** tag similar to the sample code below must be inserted within the **<head>** tags of the Web page:

```
<link rel="stylesheet" type="text/css" href="styles1.css" />
```

The **<link />** tag indicates that the style sheet **styles1.css** should be applied to this Web page. The property-value statement **rel="stylesheet"** defines the relationship of the linked document (that is, that it is a style sheet). The property-value statement **type="text/css"** indicates the content and language used in the linked document. The property-value statement **href="styles1.css"** indicates the name and location of the linked style sheet, **styles1.css**. To apply this style sheet to other pages in the Web site, you would insert the same **<link />** tag within the **<head>** tag of each Web page.

Adding Style Sheets to the Karen Stofcich Financials Site

The Karen Stofcich Financials Web site for this chapter consists of seven files, as shown in Table 8–3. The first Web page, index.html, is the frame definition file, which contains the frame layout for the Web site. The frame definition file designates the Web page, menu.html, to always appear as the navigation menu in the left frame and sets the right frame to display various Web pages, depending on the link that the user chooses. When you first open the frame definition file index.html, the Web page menu.html appears as the navigation menu in the left frame and the Web page welcome.html appears in the right frame.

Table 8–3 Files Used for Chapter 8

File Name	Purpose and Display Specifics	Changes Made in Chapter 8
index.html	<ul style="list-style-type: none"> • Frame definition file • Defines layout of frames on the Web page 	• None
menu.html	<ul style="list-style-type: none"> • Provides links to all other Web pages in the Web site • Is displayed in left frame 	• Add an embedded style sheet
styles1.css	<ul style="list-style-type: none"> • External style sheet that is linked to next four pages 	<ul style="list-style-type: none"> • Create as external style sheet • Save as a .css file
welcome.html	<ul style="list-style-type: none"> • Provides welcome to Web site • Is displayed in right frame 	<ul style="list-style-type: none"> • Add link to external style sheet • Add inline style sheet
contact.html	<ul style="list-style-type: none"> • Lists contact information • Is displayed in right frame 	• Add link to external style sheet
meetings.html	<ul style="list-style-type: none"> • Lists meeting dates/topics available • Is displayed in right frame 	• Add link to external style sheet
questions.html	<ul style="list-style-type: none"> • Displays form for questions • Is displayed in right frame 	• Add link to external style sheet

In this chapter project, you will add different types of style sheets to the Web pages in the Karen Stofcich Financials Web site, to update them from the style shown in Figure 8–1a on page HTML 343 to the style shown in Figure 8–1b on the same page. To add the style sheets, you will make changes to five Web pages stored in the Chapter08/ChapterFiles folder of the Data Files for Students: welcome.html, menu.html, contact.html, meetings.html, and questions.html. You also will create an external style sheet file, styles1.css.

Plan Ahead

Creating an embedded style sheet.

You would use an embedded style sheet if you want to set the styles within a Web page. In the case of this Web site, we wanted to set the link colors and hover effect in the menu.html file only.

- **Determine which Web pages vary enough that an embedded style sheet makes sense.** You may have only one, or even just a few, Web pages in a Web site that will vary slightly from all other pages. In this case, an embedded style sheet makes sense. If there are styles that are to be repeated on that one (or a few) Web page(s), you would be better off using an embedded style sheet rather than a series of inline style sheets. For instance, if you want all paragraphs of text to have the same style within one Web page, then it makes more sense to embed that style rather than adding the style to each paragraph tag within the Web page.
- **Copy an embedded style sheet onto other Web pages.** If you have a few Web pages that should have the same style, insert the embedded sheet on one Web page, and then save, validate, and test it. Once you have verified that it works as you intend, then you can copy/paste the embedded style sheet onto the other Web pages.

(continued)

(continued)

- **Change to an external style sheet when necessary.** If you find that the style from the embedded style sheet is used on more Web pages as time goes on, you should create an external style sheet and link that onto all Web pages in which you had previously inserted an embedded style sheet.

Plan
Ahead

Adding an Embedded Style Sheet

The first step in adding style sheets to the Karen Stofcich Financials Web site is to add an embedded style sheet to the navigation menu, menu.html. First, you look at the original Web pages provided in the Data Files for Students that do not use an embedded style sheet. To add an embedded style sheet, you open the file menu.html in Notepad and add the necessary code. Figure 8–3a shows the navigation menu in the default style without a style sheet, and after the embedded style sheet has been added (Figure 8–3b).

Karen Stofcich Financials
Where Saving Matters

Karen Stofcich Financials has been providing solid financial and accounting services for over 20 years. Founded and managed by Karen Stofcich, CPA, MBA, a financial industry veteran and dedicated professional, our company strives to help you prepare for a financially secure retirement. It is never too early to start saving.

With this Web site, we are happy to provide you with information on our various services. Our staff is dedicated to making your financial needs their business. All of our staff are highly educated in their various fields. They are there to provide friendly, helpful service. Let us know at [Karen Stofcich Financials](#) if you have any questions or concerns.

This Web site is developed and maintained by our [support staff](#). Please e-mail all site questions and comments to us.

(a) Menu Web page without embedded style sheet.

Karen Stofcich Financials
Where Saving Matters

Karen Stofcich Financials has been providing solid financial and accounting services for over 20 years. Founded and managed by Karen Stofcich, CPA, MBA, a financial industry veteran and dedicated professional, our company strives to help you prepare for a financially secure retirement. It is never too early to start saving.

With this Web site, we are happy to provide you with information on our various services. Our staff is dedicated to making your financial needs their business. All of our staff are highly educated in their various fields. They are there to provide friendly, knowledgeable service.

Let us know at [Karen Stofcich Financials](#) if you have any questions or concerns.

This Web site is developed and maintained by our [support staff](#). Please e-mail all site questions and comments to us.

(b) Menu Web page with embedded style sheet.

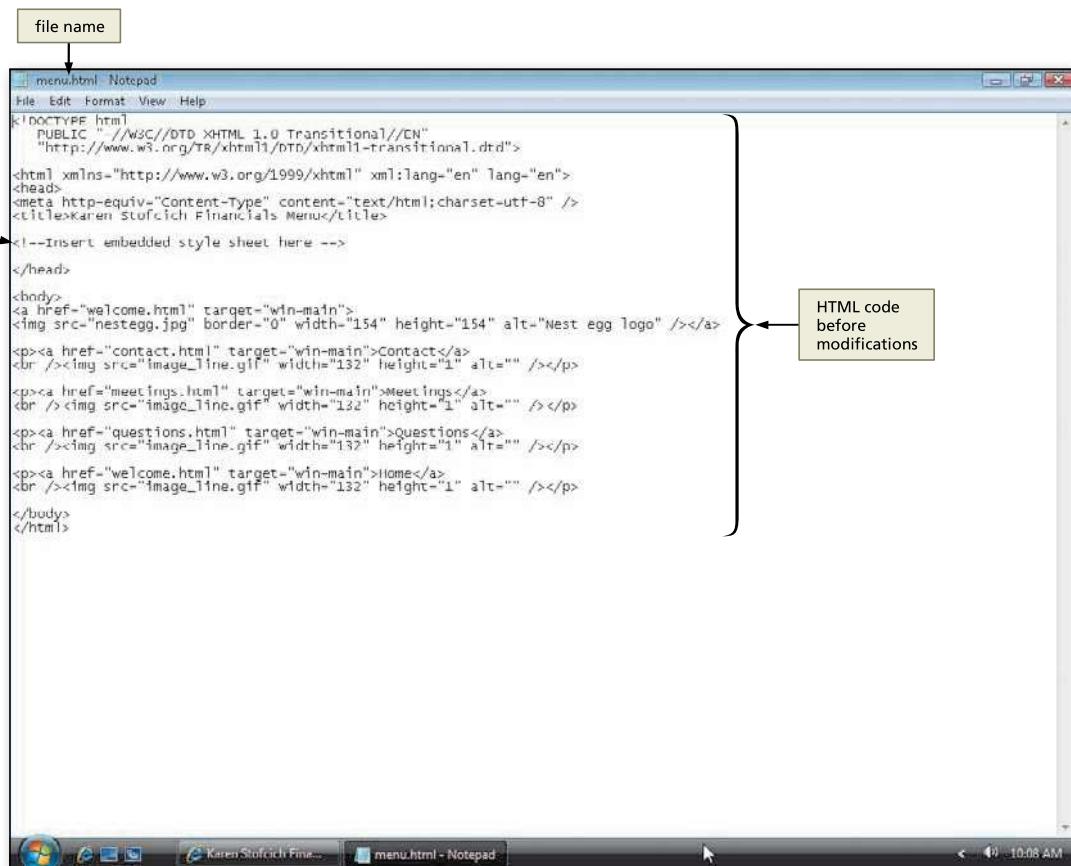
Figure 8–3

To Start Notepad and Open an HTML File

1

- With the USB drive plugged into your computer, start the Web browser and enter G:\Chapter08\ChapterFiles\index.html on the Address bar. Click the Contact, Meetings, Questions, and Home links to view the original Web pages provided in the Data Files for Students.
- Start Notepad and, if necessary, maximize the window.
- Navigate to the G:\Chapter08\ChapterFiles folder. If necessary, click the Files of type list arrow and then click All Files to display the menu.html file.

file name



```

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Karen Stofcich Financials Menu</title>
<!--Insert embedded style sheet here -->
</head>
<body>
<a href="welcome.html" target="win-main">
</a>
<br /></p>
<p><a href="meetings.html" target="win-main">Meetings</a>
<br /></p>
<p><a href="questions.html" target="win-main">Questions</a>
<br /></p>
<p><a href="welcome.html" target="win-main">Home</a>
<br /></p>
</body>
</html>

```

HTML code before modifications

Figure 8-4

Setting the Paragraph Style, Link Style, and Link Hover Style

The code you will be entering for the embedded style sheet is shown in Table 8–4. Before entering the code, however, you should understand a little more about the styles you are setting.

Table 8–4 Code for an Embedded Style Sheet

Line	HTML Tag and Text
10	<style type="text/css">
11	<!--
12	
13	p {text-indent: 20pt}
14	
15	a {text-decoration: none;
16	font-family: Verdana, Garamond;
17	font-size: 12pt;
18	color: #6d6f7b}
19	
20	a:hover {background: #6d6f7b;
21	color: white}
22	
23	-->
24	</style>

The code for an embedded style sheet must be inserted between a start `<style>` tag (line 10) and an end `</style>` tag (line 24), which are positioned within the `head` element. Within the style tag container, Web developers generally follow the coding practice to add an HTML start comment code (line 11) and end comment code (line 23). The beginning and ending HTML comment lines hide any script language that a browser cannot interpret. Inserting these comment lines ensures that, if a browser does not support CSS, the browser will not try to interpret the code within the beginning and ending comment lines.

The first style statement is in line 13. This statement,

`p {text-indent: 20pt}`

indents the first word of each paragraph 20 points from the left edge of the browser window to make the navigation menu page look less cramped and unattractive. In addition to the points value used here, the `text-indent` property allows you to specify a fixed value in inches, centimeters, or pixels. You also can specify a relative value for a text indent using a percentage as the value. For example, the style statement

`p {text-indent: 10%}`

indents the first line of each paragraph 10 percent of the total width of the screen. Because the percentage indent is based on the total width of the screen, the indent widens when the screen is widened.

In general, paragraphs stand out better when they are indented from the rest of the text. In standard text applications, paragraphs generally are indented five spaces. On a Web page, you can use the text-indent declaration to set the value for the indent.

The next section of code in the embedded style sheet (lines 15 through 18 in Table 8–4) changes the style of the links in the menu page. The style statement uses the selector a and a series of property-value statements in the declaration to define the text decoration, font family, font size, and font color for all links.

As you have learned, links have three states (normal, visited, and active). You can change the style of the three states individually by using the selectors a:link, a:visited, or a:active, or use the selector a to set a style for all link states. In this chapter project, the selector a is used to change all link states to the same style.

Setting the text-decoration property to a value of none (line 15) will remove the underline from all links. You also can set the text-decoration property to the following:

- **blink** — causes the text to blink on and off
- **line-through** — places a line through the middle of the text
- **overline** — places a line above the text
- **underline** — places a line below the text

If you want to apply two different text styles to a link, you can specify two text-decoration values, separating the choices with a space. For example, to give links a style with both an underline and an overline, you would add the property-value statement:

{text-decoration: underline overline}

to the embedded style sheet.

The font-family property (line 16) allows you to define a font for use on a Web page. In this embedded style sheet, the font-family property is set to two different values: Verdana and Garamond. Line 17 sets the size of all links to a 12-point font. Line 18 sets the color of all links to #6d6f7b.

In general, it is good practice to specify more than one font-family value. If the first font is not available on the user's computer, the browser will display text in the second font. If neither of the fonts is available, the browser will display text in the default font.

To specify more than one value for a font-family property, separate the font-family values with commas. Also, if you want to use a font family with a name that has spaces (such as Times New Roman or Courier New), you must put the font-family name in quotation marks. The resulting code would have

{font-family: "Times New Roman", Verdana}

as the style statement.

The final section of the embedded style sheet (lines 20 and 21) defines the style of the link:hover property. As you have learned, the link:hover property defines the way a link appears when a mouse pointer points to, or hovers over, the link. In this chapter project, the selector a:hover is used to change the hover state of all links. The code in lines 20 and 21 of Table 8–4 sets the link background to appear in color code #6d6f7b and the text to appear in white when the mouse hovers over the link. Using a link:hover style gives the menu page an aspect of interactivity.

Word Spacing

The word-spacing property is a good way to add additional space between words. You can use any of the length units including inches, centimeters, millimeters, points, picas, ems, x-height, and pixels.

Font Families

You also can specify font-weight using numerical values from 100 to 900. Normal text that is not bold has a value of 400. Each larger number is at least as bold as the one above it, and 900 is the boldest option of the font. The browser determines how bold each value is as it is displaying the Web page.

To Add an Embedded Style Sheet

To add the embedded style sheet shown in Table 8–4 to the Web page, menu.html, the CSS code for the style sheet is entered directly in the header section of the HTML code for the Web page.

The following step illustrates how to add an embedded style sheet to the Web page menu.html.

1

- Highlight the comment `<!--` Insert embedded style sheet here -->, on line 10 and then press the **DELETE** key.
- Enter the CSS code shown in Table 8–4 (Figure 8–5).

Q&A

What is an easy way to find out what fonts are supported on your computer system?

One way is to review the font names and examples as they appear in an application, such as in the Font menu in Microsoft Word. You

may want to try different fonts and sizes in an application such as Word to see what they look like. You can save a document as a Web page from Word and view it in the browser as well.

Q&A

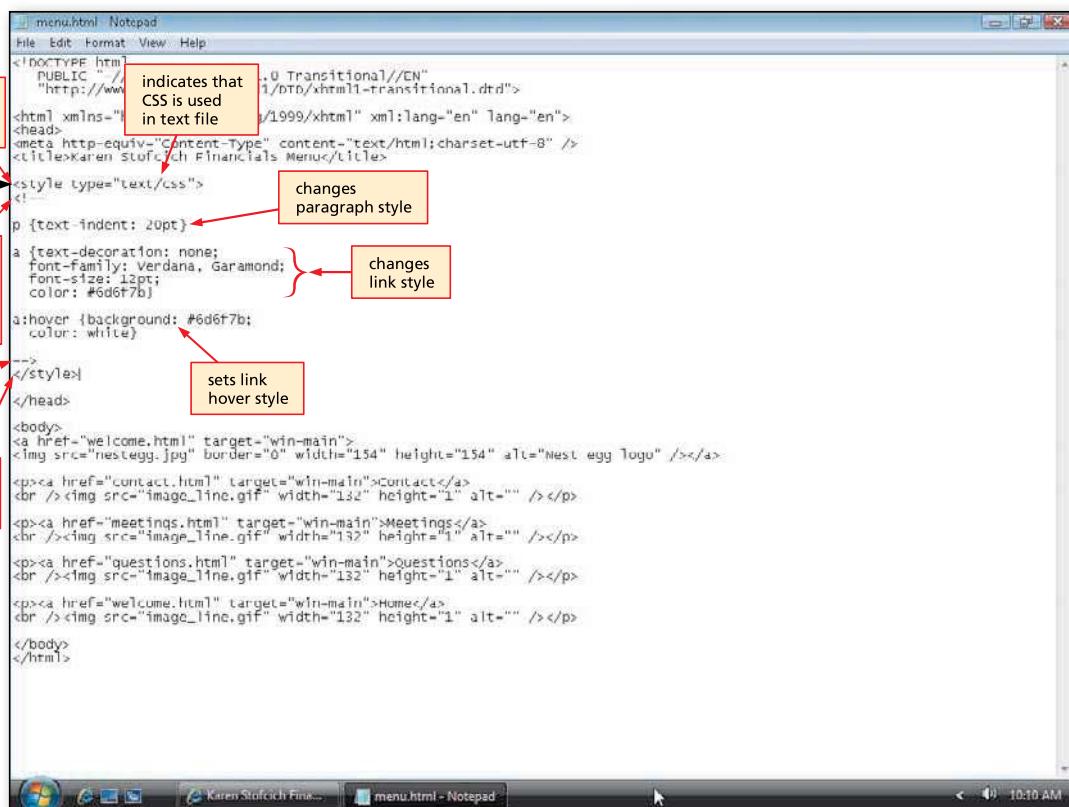
Why would I want to use the "hover" technique for links?

It adds a bit of interactivity and a different look when the background and font changes colors as the mouse hovers over a link.

Q&A

I notice that the borders of the table and the background of the hover are the same gray color as in the company "nestegg" logo. How did you figure out which color code to use?

To find a specific color, open the image file in a graphic editing software product such as Adobe Photoshop. Click a tool that allows you to select a color to use, such as the Text tool. Once the tool color selection is picked, click the color you want in the graphic image. In Photoshop, the Color Picker dialog box shows you the color code for the color you have clicked.



The screenshot shows the Notepad application with the HTML code for menu.html. The code includes an embedded style sheet within the `<head>` section. Annotations explain the following:

- start <style> tag**: Points to the opening tag of the style block.
- line 10**: Points to the line containing the style block.
- beginning comment line hides CSS from browser, if needed**: Points to the opening comment tag `<!--`.
- indicates that CSS is used in text file**: Points to the closing comment tag `-->`.
- changes paragraph style**: Points to the CSS rule `p {text-indent: 20pt;}`.
- changes link style**: Points to the CSS rule `a {text-decoration: none; font-family: Verdana, Garamond; font-size: 12pt; color: #6d6f7b;}`.
- sets link hover style**: Points to the CSS rule `a:hover {background: #6d6f7b; color: white;}`.
- end comment line**: Points to the closing comment tag `-->`.
- end </style> tag**: Points to the closing tag of the style block.

Figure 8–5

To Save, Validate, and View an HTML File

After you have added the embedded style sheet to the menu.html Web page, you should save the HTML file, and view the Web page to review the style changes. Before you can view the Web page to review the style changes, you must save the HTML file with the embedded style sheet.

1

- With the USB drive plugged into your computer click File on the menu bar and then click Save. If necessary, type menu.html in the File name text box.
- Validate the Web page using the W3C validation service.
- Open the index.html file in the Web browser to show the completed navigation menu as shown on the left side of the index.html Web page (Figure 8–6).

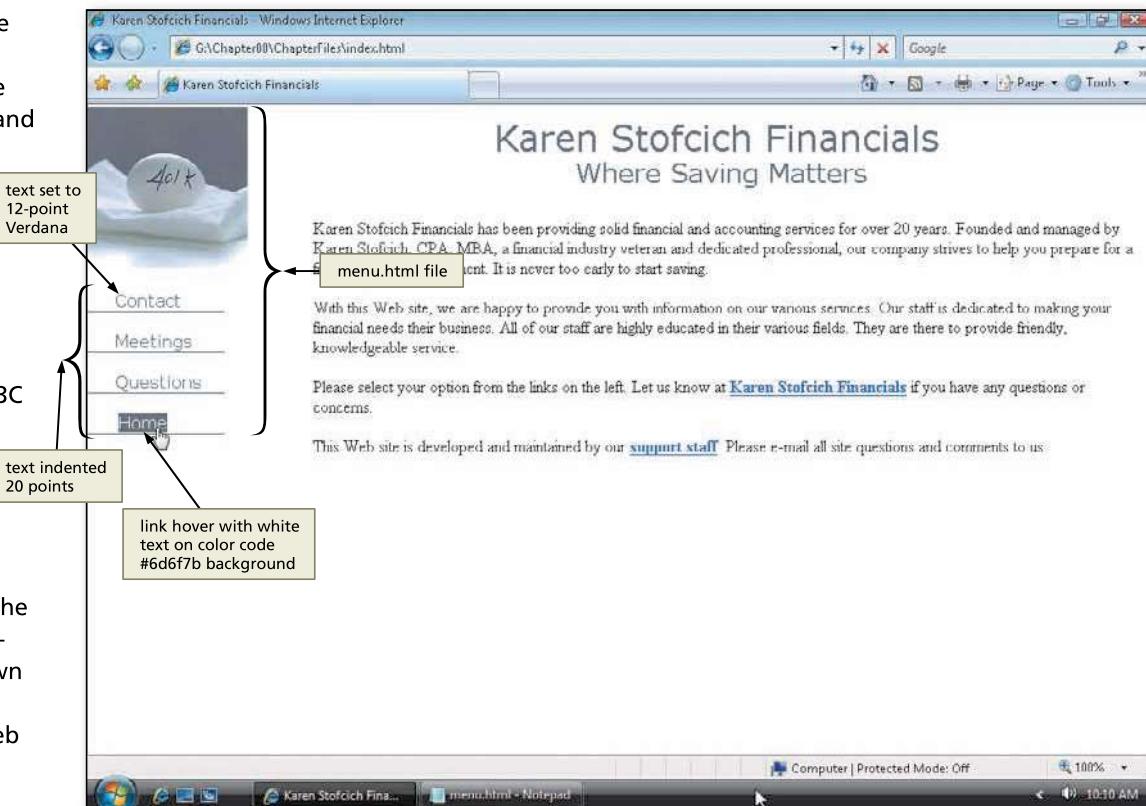


Figure 8–6

To Print an HTML File and Web Page

1

- Print the Web page from the browser.
- Click the menu.html - Notepad button on the taskbar.
- Click File on the menu bar and then click Print on the File menu.
- Click the Print button in the Print dialog box to print the HTML code (Figure 8–7).

```
<!DOCTYPE html
PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Karen Stofcich Financials Menu</title>

<style type="text/css">
<!--

p {text-indent: 20pt}

a {text-decoration: none;
font-family: Verdana, Garamond;
font-size: 12pt;
color: #6d6f7b}

a:hover {background: #6d6f7b;
color: white}

-->
</style>

</head>

<body>
<a href="welcome.html" target="win-main">
</a>

<p><a href="contact.html" target="win-main">Contact</a>
<br /></p>

<p><a href="meetings.html" target="win-main">Meetings</a>
<br /></p>

<p><a href="questions.html" target="win-main">Questions</a>
<br /></p>

<p><a href="welcome.html" target="win-main">Home</a>
<br /></p>

</body>
</html>
```

Figure 8–7

**Plan
Ahead****Creating an external style sheet.**

The external style sheet is the most powerful and lowest precedence style sheet. With this style sheet, you can easily create a common look across a Web site by creating the external (.css) style sheet and linking it onto all other Web pages.

- **Create the external style sheet.** The first step is to create the file itself. This file, which contains all of the style statements that you want, has to be saved with a file name extension of .css. Make sure to store this file in the same folder as the other Web pages.
- **Link the external style sheet onto the Web pages.** The second step is to link the external style sheet (.css file) onto the Web pages where you want it. The link statement is placed between the `<head>` and `</head>` tags.

Adding an External Style Sheet

External style sheets are ideal for giving multiple pages in a Web site a common look or style. Instead of displaying styles based on an embedded style sheet added to each Web page, each Web page in the Web site references the same external style sheet for style information, thus ensuring each Web page uses a consistent style. In the Karen Stofcich Financials Web site, for example, each of the four main pages (welcome.html, contact.html, meetings.html, and questions.html) can be linked to the same external style sheet to define a common style.

An external style sheet is a separate text file that contains the style statements that define how the Web page elements will appear. Table 8–5 shows the style statements for an external style sheet for the Karen Stofcich Financials Web site. After you create the text file with all of the desired style statements, you save the file with the file extension .css to identify it as a CSS file. You then use a `<link />` tag to link the external style sheet to any Web pages to which you want to apply the style.

Table 8–5 Code for an External Style Sheet

Line	HTML Tag and Text
1	body {margin: 8pt;
2	background-color: #ffffff}
3	
4	a {text-decoration: none;
5	color: black}
6	
7	p {font-family: Verdana, Garamond;
8	font-size: 11pt}
9	
10	table {font-family: Verdana, Garamond;
11	font-size: 10pt;
12	border-color: #6d6f7b;
13	border-style: double}
14	
15	th {background-color: #6d6f7b;
16	color: white;
17	text-align: left}
18	
19	caption {font-size: 8pt;
20	font-style: italic}

Setting the Body, Link, Paragraph, and Table Styles

The CSS code for the external style sheet shown in Table 8–5 defines a new style for four main elements on a Web page: body, links, paragraphs, and tables. For example, the first style statement on line 1 is entered as:

```
body {margin: 8pt}
```

to change the margin of the Web page body to 8 points. The margin is the amount of transparent space between elements on the page. Because it uses the margin property, the style statement sets the margin for all sides of the Web page. If desired, you also can set the margins individually for the top, bottom, left, or right of a page by using the properties margin-top, margin-bottom, margin-left, or margin-right, respectively. Like the text-indent property, the margin property can be set as a fixed length in points, pixels, inches, or centimeters, or as a relative length based on a percentage. Line 2 sets the color of the background to #ffffff.

Lines 4 and 5 of the external style sheet set the style for all link states to have no text decoration (that is, no underline) and to be displayed in the color black. The style statement in line 7 changes the style of all paragraph text to the font family Verdana or Garamond, depending on the fonts available on the user's computer. Line 8 sets the font size to 11 point, which is slightly smaller than the font selected for the link text in the navigation menu.

The next section of CSS code, lines 10 through 20, define the styles to be applied to tables. The style statement in lines 10 through 13 is entered as:

```
table {font-family: Verdana, Garamond;
  font-size: 10pt;
  border-color: #6d6f7b;
  border-color: double}
```

to set the style for table text to complement the style used for paragraph text. The border-color is set to color code #6d6f7b with a double-line style. The style statement in lines 15 through 17 sets the table header styles. Recall that table headers are bold and centered by default. In this code, all table headers are displayed with a background color of #6d6f7b and white text. The text also will be left-aligned, rather than the default center alignment.

Finally, lines 19 and 20 set the style of all table captions to appear in an 8pt italic font. Setting the caption to italic makes the table caption text different from the text in the table itself. The font-style property also can be set to values of normal (the default style) or oblique. An oblique font — one that is slanted to the right by the browser — can be used when the font itself does not provide an italic version. If you want to change italic or oblique text back to appear in the default or normal style, you insert a property-value statement font-style: normal in the style sheet.

BTW

Line Height

Another useful CSS property gives you the ability to control line height. With the line-height property, you can control the vertical spacing between lines of text. There are three ways to add the line-height value: by number, by length unit, and by percentage. If you specify by number, the browser uses the font-size property to determine the space. You also can use em and pt to set the height by unit. Finally, you can determine the line spacing by a percentage.

To Create an External Style Sheet

After you have defined the styles you want to use for various page elements, you can create the external style sheet. To create an external style sheet, you open a new text file and enter CSS code for the style statements that define the Web page style. After coding the style statements, you save the file with the file extension .css, to identify it as a CSS file.

The following step illustrates how to create an external style sheet.

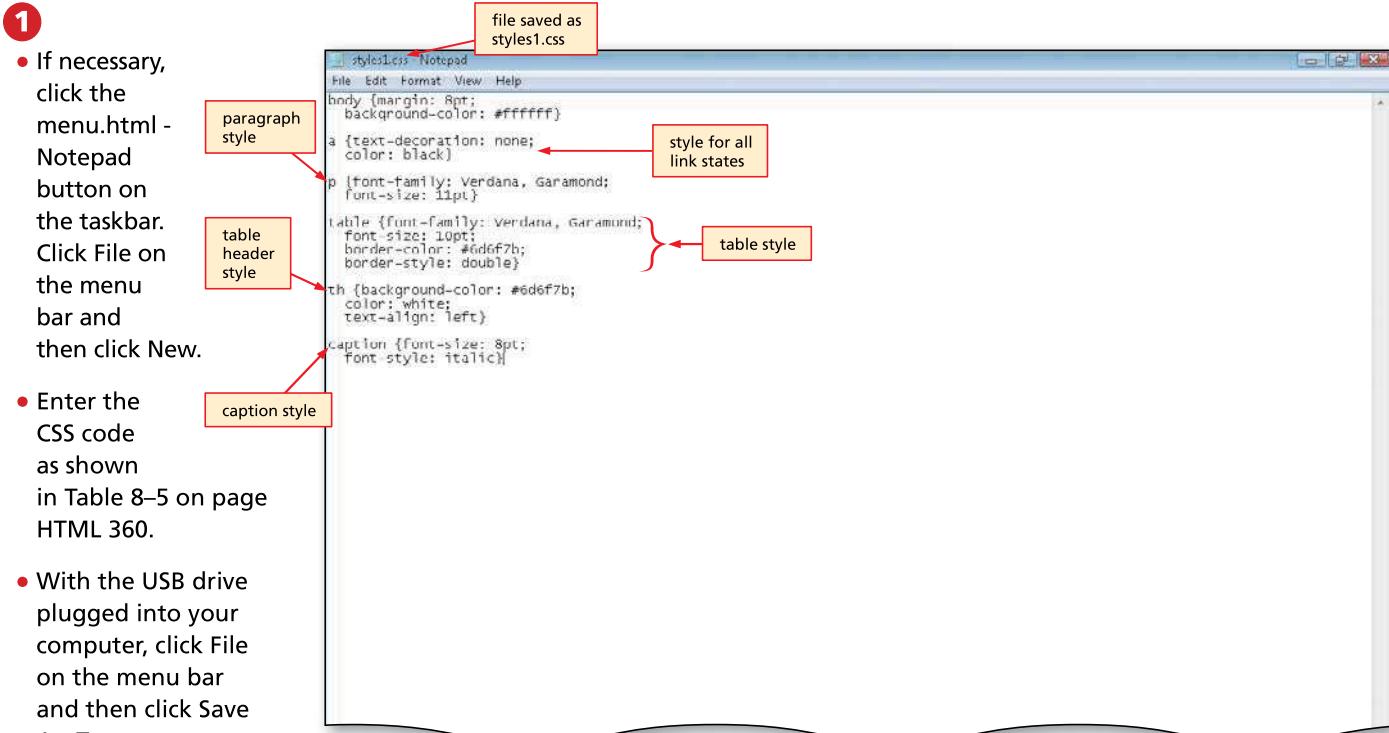


Figure 8-8

- Click the File menu, click Print on the File menu, and then click the Print button in the Print dialog box.

Q&A

What is the real benefit of using CSS?

With CSS, you can establish a standard look for all Web pages in a Web site. Using CSS, you avoid the tedious steps of adding repetitive codes to format the same types of information. Instead of making all paragraphs of text 10pt Verdana in individual <p> tags, you can define that in a .css file and link that external file to all Web pages.

Linking to an External Style Sheet

Four Web pages in the Karen Stofcich Financials Web site require the same style: welcome.html, contact.html, meetings.html, and questions.html. Linking the external style sheet to each of these Web pages gives them the same styles for margins, paragraph text, links, and tables.

To link to the external style sheet, a <link /> tag must be inserted onto each of these four Web pages. The <link /> tag used to link an external style sheet is added within the <head> tag of the Web page HTML. The general format of the <link /> tag is:

```
<link rel="stylesheet" type="text/css" href="styles1.css" />
```

where rel="stylesheet" establishes that the linked document is a style sheet, type="text/css" indicates that the CSS language is used in the text file containing the style sheet, and href="styles1.css" provides the name and location (URL) of the linked style sheet. To link a style sheet to a Web page, the `<link />` tag must use "stylesheet" as the value for the rel property and text/css as the value for the type property. The URL used as the value for the href property varies, based on the name and location of the file used as the external style sheet. The URL used here indicates that the external style sheet, styles1.css, is located in the main or root directory of the Web site.

To Link to an External Style Sheet

The following steps illustrate how to add a link to an external style sheet using a `<link />` tag and then save the HTML file.

1

- If necessary, click the styles1.css - Notepad button on the taskbar.
- With the USB drive plugged into your computer, click File on the menu bar and then click Open on the File menu.
- If necessary, navigate to the G:\Chapter08\ChapterFiles folder. Click the Files of type box arrow, and then click All Files to show all files in the Chapter08\ChapterFiles folder. Click the contact.html file.

link tag placed within `<head>` `</head>` tags

```

<!DOCTYPE html
PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">
<head>
<meta http-equiv="Content-Type" content="text/html; charset-utf-8" />
<title>Karen Stofcich Financials Contact</title>
<link rel="stylesheet" type="text/css" href="styles1.css" />
</head>
<body>
<center></center>
<p>Karen shows that by dialing member 1 of your call</p>
<table border="1" align="center" cellpadding="5" width="90%">
<tr>
<th width="30%">Name</th>
<th width="20%">Specialty</th>
<th width="20%">Extension</th>
<th width="30%">E-mail</th>
</tr>
<tr>
<td width="30%">Nicole Zack</td>
<td width="20%">Small Business Accounting</td>
<td width="20%">2107</td>
<td width="30%"><a href="mailto:nzack@isp.com">nzack@isp.com</a></td>
</tr>
<tr>
<td width="30%">Mohammad Dubay</td>
<td width="20%">Large Business Accounting</td>
<td width="20%">2119</td>
<td width="30%"><a href="mailto:mdubay@isp.com">mdubay@isp.com</a></td>
</tr>
<tr>
<td width="30%">James Rivarez</td>
<td width="20%">Retirement Planning</td>
<td width="20%">2101</td>
<td width="30%"><a href="mailto:jrivarez@isp.com">jrivarez@isp.com</a></td>
</tr>
<tr>
<td width="30%">Lin Zhaobing</td>
<td width="20%">Investment Counseling</td>
<td width="20%">2105</td>
</tr>
</table>

```

- Click the Open button in the Open dialog box.
- Highlight the text, `<!--Insert link statement here -->`, in line 10.
- Type `<link rel="stylesheet" type="text/css" href="styles1.css" />` to enter the link to the external style sheet (Figure 8-9).

Figure 8-9

2

- Click File on the menu bar and then click Save on the File menu.
- Validate the Web page using the W3C service.
- Open the index.html file in the browser and click the Contact link (Figure 8-10) to see the change on the Web page.

Q&A

Is that all it takes to use an external style sheet — to insert that link statement?

Yes, that is all you need to do to use the styles identified in the external style sheet. The styles specified in the external style sheet will apply to that page, unless an embedded or inline style sheet takes precedence.

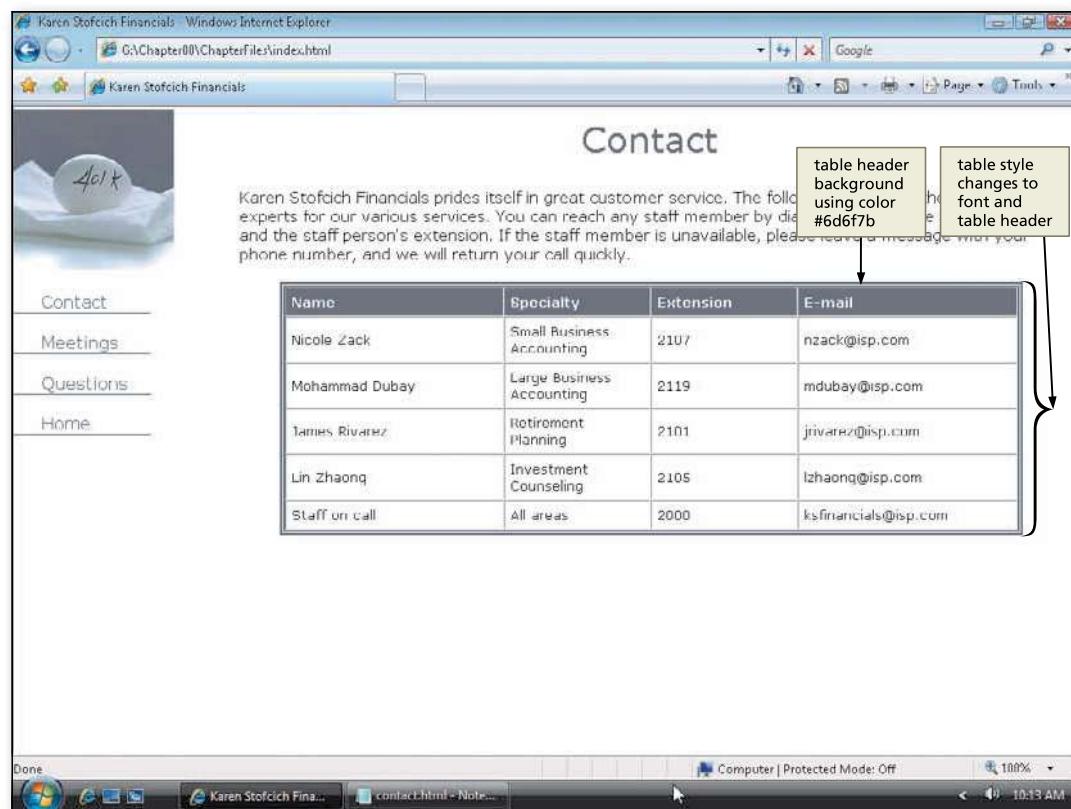


Figure 8-10

To Link the Remaining HTML Files to an External Style Sheet

You have linked the contact.html page to the external style sheet styles1.css. Now you need to link the meetings.html, questions.html, and welcome.html Web pages to the same style sheet. The following step shows how to add a `<link />` tag to the remaining three Web pages and then save the files.

1

- If necessary, click the contact.html - Notepad button on the taskbar.
- With the USB drive plugged into your computer, click File on the menu bar and then click Open on the File menu.
- If necessary, navigate to the G:\Chapter08\ChapterFiles folder. Click the Files of type box arrow, and then click All Files to show all files in the Chapter08\ChapterFiles folder. Click the meetings.html file.
- Click the Open button in the Open dialog box.
- Highlight the text, `<!--Insert link statement here -->` on line 10.
- Type `<link rel="stylesheet" type="text/css" href="styles1.css" />` to enter the link to the external style sheet.
- Click File on the menu bar and then click Save on the File menu.
- Validate the Web page.
- One at a time, open the HTML files questions.html and welcome.html, and repeat bullets 5 through 8 to replace the placeholder text with the link tag, then save and validate the code.

Q & A

Will the table styles from the styles1.css take effect for all tables within the Web site?

As long as you insert the style sheet link statement onto the Web page, then the table styles will take effect. Remember that you can override those styles with either an embedded or an inline style sheet. You would do this if there is a table that you want to vary from all other tables in the Web site. Note that you already added an embedded style sheet to the menu.html file. If you had added table tag modifications within that embedded style sheet, those styles would have taken precedence over this external style sheet.

Working with Classes in Style Sheets

In some Web sites, you might need to have more control over the style on a Web page. For example, rather than having all paragraphs of text appear in the same style, you might want the style of the first paragraph on a page to be different from the other paragraphs of text. To gain more control for these purposes, you can define specific elements of an HTML file as a category, or **class**. You then can create a specific style for each class. Using classes in style sheets thus allows you to apply styles to HTML tags selectively. Using a class, for example, you could apply one style to a beginning paragraph and a different style to a closing paragraph on the same Web page.

Defining and using classes in a style sheet is a two-step process. First, any elements that belong to the class are marked by adding the tag:

```
class="classname"
```

where `classname` is the identifier or name of the class. To define a class that includes any beginning paragraphs, for example, you would enter the code:

```
<p class="beginning">
```

where `beginning` is the `classname` and the `<p>` tag indicates that the class is a specific type of paragraph style. Any word can be used as a `classname`, as long as it does not contain spaces. In general, however, you should use descriptive names that illustrate the purpose of a class (for example, `beginning`, `legallanguage`, or `copyrighttext`), rather than names that describe the appearance of the class (for example, `bluetext`, `largereditalic`, or `boldsmallarial`). Using names that describe the purpose makes the code easier to read and more flexible.

After you have named the classes, you can use the names in a selector and define a specific style for the class. For example, within the `<style>` tags in an embedded or external style sheet, you enter a style statement in the format:

```
p.beginning {color: red;  
font: 20pt}
```

where the `p` indicates that the class applies to a specific category of the paragraph tag and `beginning` is the `classname`. The tag and the `classname` are separated by a period. Together, the tag and the `classname` make up the selector for the style statement. The declaration then lists the property-value statements that should be applied to elements in the class.

For instance, if you want to display the beginning paragraph text in a 20-point red font, you would add a style statement like the one shown in the sample code in Figure 8–11a and then use the tag, `<p class="beginning">`, to apply the style defined by the declaration associated with the `p.beginning` selector. If the paragraph `<p>` tag is used without the `classname`, the paragraph appears in the default style or other style as defined by a style sheet.

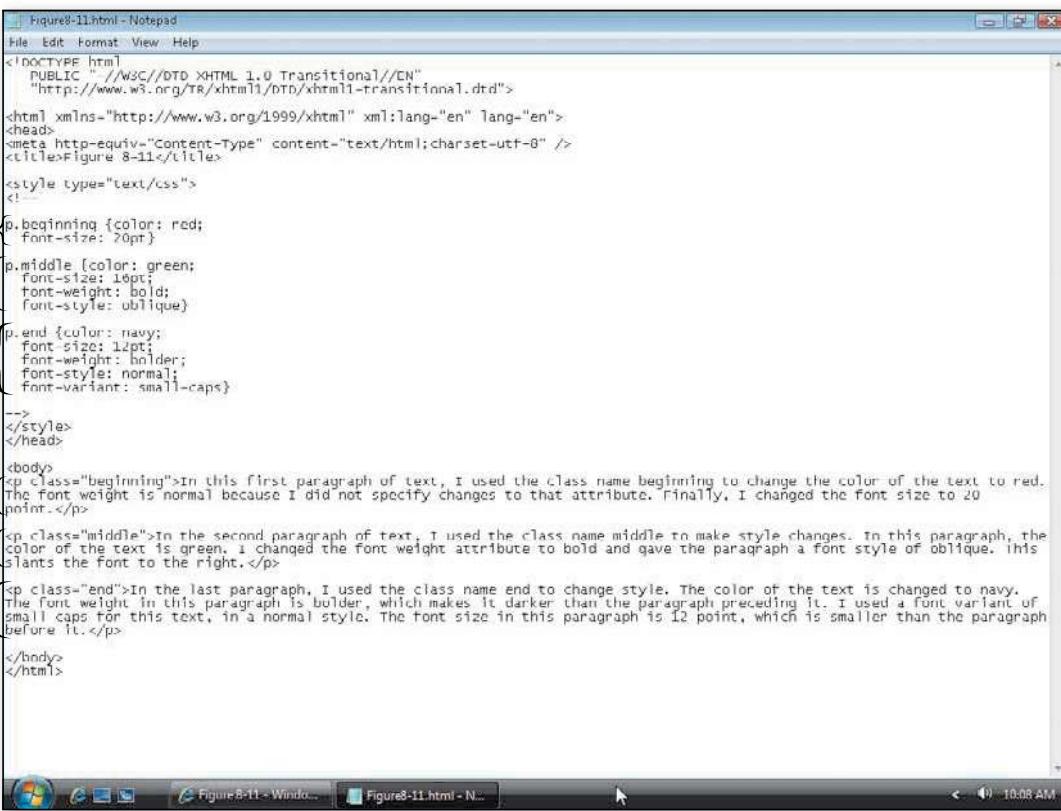
In addition to the style for the beginning paragraphs, Figure 8–11a shows an example of HTML code with classes defined for and applied to the middle and end paragraphs. Figure 8–11b shows how the resulting Web page appears in the browser.

Classes allow you to have more control over the style used for different sections of a Web page. One drawback is that classes can be defined for use only in embedded or external style sheets. Because the purpose of using classes is to format a group of elements at once, not individual elements, classes do not work in inline style sheets.

BTW
Classes

One very important advanced CSS topic is classes. With classes, you can create several variations for any one tag. You might utilize three different classes of paragraphs, and each one can have a different style sheet declaration. You can name classes anything that you want, but make sure to use a period before the class name in the style sheets rule.

(a) HTML code with classes defined

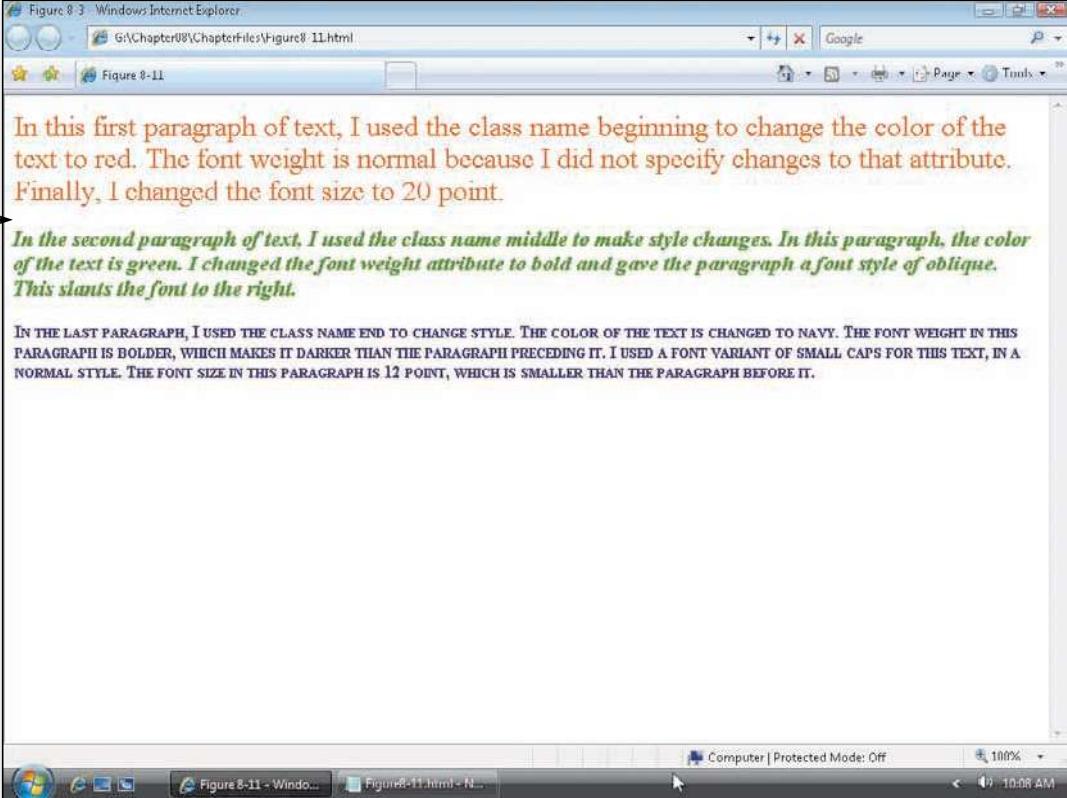


```

<!DOCTYPE html>
PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//CN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
<title>Figure 8-11</title>
<style type="text/css">
<!--
p.beginning {color: red;
font-size: 20pt;
}
p.middle {color: green;
font-size: 16pt;
font-weight: bold;
font-style: oblique;
}
p.end {color: navy;
font-size: 12pt;
font-weight: bolder;
font-style: normal;
font-variant: small-caps;
}
-->
</style>
</head>
<body>
<p class="beginning">In this first paragraph of text, I used the class name beginning to change the color of the text to red. The font weight is normal because I did not specify changes to that attribute. Finally, I changed the font size to 20 point.</p>
<p class="middle">In the second paragraph of text, I used the class name middle to make style changes. In this paragraph, the color of the text is green. I changed the font weight attribute to bold and gave the paragraph a font style of oblique. This slants the font to the right.</p>
<p class="end">In the last paragraph, I used the class name end to change style. The color of the text is changed to navy. The font weight is bolder, which makes it darker than the paragraph preceding it. I used a font variant of small caps for this text, in a normal style. The font size in this paragraph is 12 point, which is smaller than the paragraph before it.</p>
</body>
</html>

```

(b) Resulting Web page



Web page from HTML code above

In this first paragraph of text, I used the class name beginning to change the color of the text to red. The font weight is normal because I did not specify changes to that attribute. Finally, I changed the font size to 20 point.

In the second paragraph of text, I used the class name middle to make style changes. In this paragraph, the color of the text is green. I changed the font weight attribute to bold and gave the paragraph a font style of oblique. This slants the font to the right.

IN THE LAST PARAGRAPH, I USED THE CLASS NAME END TO CHANGE STYLE. THE COLOR OF THE TEXT IS CHANGED TO NAVY. THE FONT WEIGHT IN THIS PARAGRAPH IS BOLDER, WHICH MAKES IT DARKER THAN THE PARAGRAPH PRECEDING IT. I USED A FONT VARIANT OF SMALL CAPS FOR THIS TEXT, IN A NORMAL STYLE. THE FONT SIZE IN THIS PARAGRAPH IS 12 POINT, WHICH IS SMALLER THAN THE PARAGRAPH BEFORE IT.

Figure 8-11

**Plan
Ahead****Creating an inline style sheet.**

An inline style sheet takes precedence over the other two styles, meaning that even if you have an external style sheet that is linked to a Web page, or a paragraph style in an embedded style sheet, the inline style would be the style that is displayed. Inline style sheets are used within individual tags, so you have to make sure that you use them when needed.

- **Utilize inline style sheets to set pieces of a Web page apart from the rest.** If you have a component of a Web page that needs to be different than all others, an inline style sheet is a good option.
- **Graduate to embedded or external style sheets when necessary.** Sometimes you find that the inline style that you used for one component of a Web page is something that you want throughout the Web page or even throughout the Web site. In that case, you should change from the inline style sheet to an embedded or even external style sheet. For instance, if you utilize a particular font for one paragraph of one page, and you determine that it is a style that you would like to see throughout the Web site, you could make that an external style sheet rather than copying/pasting the same inline style to all paragraphs on a Web page.
- **Use inline style sheets to test styles.** When you are first beginning to use style sheets, it might be helpful to use inline style sheets to test different styles. You can change the look of certain tags (i.e., paragraphs or tables) with inline style sheets just to see how they look.

BTW**CSS Negative**

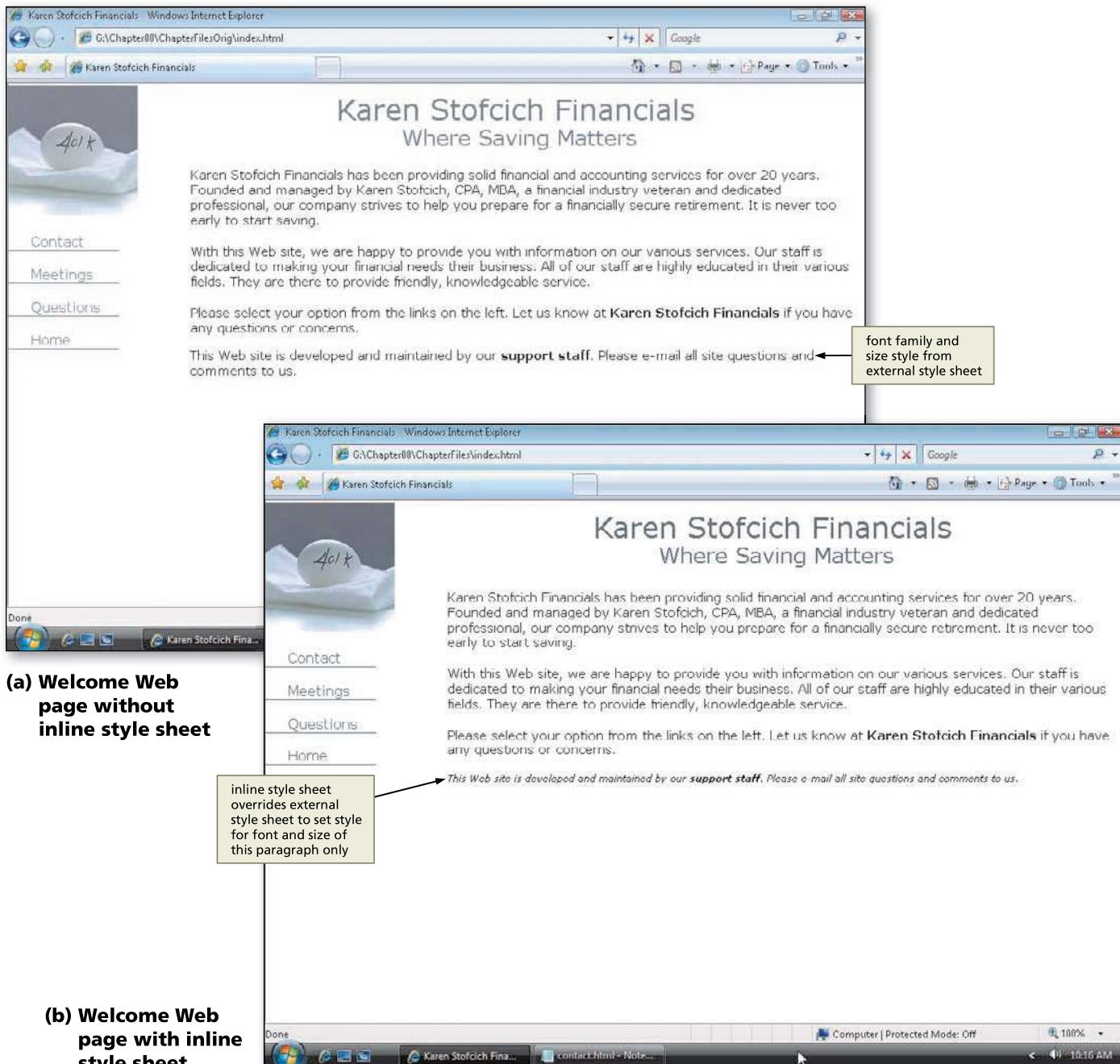
The only bad news about using CSS is that not all browsers support Cascading Style Sheets. Therefore, not all users will be viewing the same style on your Web pages. The good news is, over 90% of users use a browser that does support CSS. For specific details, you need to test your Web pages with multiple browsers.

Adding an Inline Style Sheet

The Karen Stofcich Financials Web site now includes two of the three types of style sheets: an embedded style sheet and an external style sheet. The embedded style sheet defines the style for the menu Web page, menu.html, which is displayed in the left frame. The external style sheet is linked to and defines the style of the main Web pages that are displayed in the right frame. To complete the new design for the Karen Stofcich Financials Web site, one additional type of style sheet — an inline style sheet — is needed to define a paragraph style that will appear only on the Welcome page that users see when they first visit the site.

The last paragraph on the welcome.html Web page provides basic information about Web site development and support. You would like the style for this paragraph to use a smaller font size with an italic style, so that it does not distract users from the more important information on the Welcome page.

An inline style sheet allows you to add a style to an individual HTML tag, such as a heading or paragraph. The style changes only that specific tag and does not affect other tags in the document. Because an inline style sheet also overrides the styles defined in embedded and external style sheets, it is ideal to use inline style sheets for making style changes to a single paragraph. For example, based on the external style sheet linked to the page, all text is displayed in 11-point normal font (Figure 8–12a). Using an inline style sheet, the external style sheet can be overridden to set the style of that one paragraph to be displayed with a font style of italic and a font size of 8 points, as shown in Figure 8–12b.

**Figure 8-12**

To add an inline style sheet, you enter the declaration within the HTML tag to which you want to apply the style. For example, for the Welcome Web page, the format of the inline style sheet is:

```
<p style="font-style: italic; font-size: 8pt">
```

with the HTML tag `<p>` functioning as the selector and the remainder of the style sheet functioning as the declaration.

To Add an Inline Style Sheet

The following step shows how to add an inline style sheet to the Welcome Web page.

1

- If necessary, click the welcome.html - Notepad button on the taskbar so the file welcome.html is displayed.
- Click immediately to the right of the **p** in the **<p>** tag on line 30. Press the SPACEBAR and then type **style="font-style: italic; font-size: 8pt"** to insert the inline style sheet (Figure 8-13).

- Click File on the menu bar and then click Save.
- Validate the Web page.

```

<!DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
<title>Karen Stofcich Financials Home Page</title>
<link rel="stylesheet" type="text/css" href="styles1.css" />
</head>
<body>
<center></center>
<p>Karen Stofcich Financials has been providing solid financial and accounting services for over 20 years. Founded and managed by Karen Stofcich, CPA, MBA, a financial industry veteran and dedicated professional, our company strives to help you prepare for a financially secure retirement. It is never too early to start saving.</p>
<p>With this web site, we are happy to provide you with information on our various services. Our staff is dedicated to making your financial needs their business. At Karen Stofcich Financials, we are highly regarded for our expertise in their various fields. They are there to provide you with the information you need to make informed decisions. Your option is to contact us via e-mail or phone. We are always available to answer any questions or concerns you may have.</p>
<p style="font-style: italic; font-size: 8pt;">This web site is developed and maintained by our support staff. Please e-mail all site questions and comments to us.</p>
</body>
</html>

```

Figure 8-13

Q&A

What is a good rule of thumb to use when determining whether to use an inline, embedded, or external style sheet?

If you want to change the style of all of the paragraphs on a Web page, it makes more sense to use an embedded style sheet. If you want that same style throughout the entire Web site (i.e., all paragraphs on all Web pages), then you should use an external style sheet. If you want to change a single feature on one page, an inline style sheet might be best.

Q&A

Can I use an inline style sheet for most HTML tags?

The inline style sheet can be used on most HTML tags in which style is appropriate, such as tags for paragraphs and tables.

Viewing and Printing Framed Web Pages

Having added links to the external style sheet to all of the Web pages and an inline style sheet to the Welcome Web page, you should view the HTML files in your browser to confirm that the styles defined in the style sheets appear correctly on the Web page. To view the style changes in the menu.html Web page, you must open the frame definition file, index.html.

After viewing the Web page in the browser, you should print a copy of each Web page for reference. Because the Web pages are displayed in frames defined by the frame definition file index.html, several printing options are available. The Print dialog box default is to print all frames individually. To print the Web pages as they are displayed in the browser, select the As laid out on screen option.

To View and Print Framed Web Pages

By clicking the links to display the four Web pages in the main frame on the right, you can verify that the styles defined by the external style sheet `styles1.css` appear correctly on each of the four Web pages with the `<link>` tag. You also can confirm that the paragraph style defined by the inline style sheet is displayed correctly on the Web page `welcome.html`. Perform the following step to view and print all of the framed Web pages in the Web site as laid out on screen.

1

- Click the browser button on the taskbar.
- Open the `index.html` file in the browser (Figure 8-14).
- Click the File menu, and then click Print.
- When the Print dialog box is displayed, click the Options tab.
- Click As laid out on screen and then click the Print button.
- One at a time, click the links, Contact, Meetings, and Questions, and repeat bullets 3 through 5.

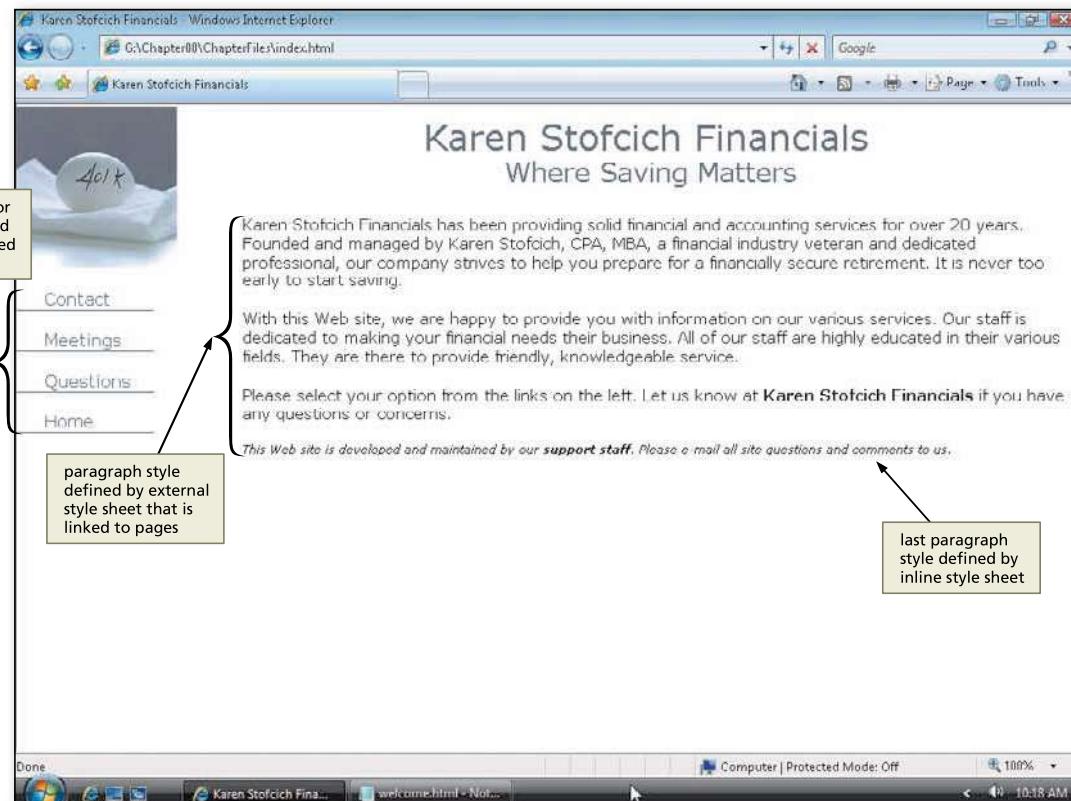


Figure 8-14

Q&A

My external style sheet does not work. What have I done wrong?

Make sure that you saved the external style sheet (the `.css` file) in the same folder in which you have stored the `.html` files. Also make sure that you have used straight (not curly) quotation marks to enclose your style definitions, and check that you have separated multiple property definitions with a semicolon.

Viewing and Printing HTML Files

After verifying that each Web page is displayed correctly in the browser window, you should print the HTML file for each Web page for reference. Because these Web pages are in a frame structure, printing the HTML source code requires you to right-click the Web page that you want to print in the frame and then click View Source on the shortcut menu to open the Web page file in Notepad. After the file is open in Notepad, you then can print the HTML file.

To print the HTML files for all the Web pages that are displayed in the right frame — Contact, Meetings, Questions, and Home (Welcome) — you must click each of the four menu links to display the page in the browser and then follow the steps outlined