chapter 5

MULTIMEDIA ELEMENT—

Text

1. Discuss Fonts
2. Understand Fonts
3. Define Cascading Style Sheets (CSS)
4. Explain Additional Options for Implementing Text on the Web
Introduction
At one time, all Web content was disseminated with text. Although graphics and other media elements have since been added, text is still the primary vehicle for communicating content on Web pages because written words are an effective way to communicate. Similar to the way text is used in print, text on Web pages is used for headlines, subtitles, captions, and body copy. In addition to supplying content on Web pages, text can be used as a hyperlink, linking content and concepts within a Web page and between Web pages. Text-based menus and buttons provide navigational tools that help guide users through a Web site. Popular Web-based products, such as electronic books, magazines, and reference materials, use text to inform and educate.

The effective use of text on Web pages is dependent upon typography and the typefaces used. Typography is type design; it is the typeface used and the way the type is arranged to communicate an idea.

QUICK TIP
Technically, according to Wikipedia, typography is defined as “the art of arranging letterforms in space in any medium (including the printed page, Web pages, television, film, etc.), usually using a recognized typeface, in order to achieve a combination of both aesthetic and functional goals.”

A typeface is a set of characters, usually made up of alphabet letters, numerals, and symbols, that all follow the same rules within the set. A font is a set of characters within a typeface that has specific characteristics associated with it, especially with
respect to size (the height of the characters), weight (how dark the characters appear), and style (such as italic or condensed). Fonts belong to a font family such as Times New Roman. For example Times New Roman 12 point, bold, condensed is one font, and it is in the same font family as Times New Roman 16 point, light, expanded.

Good typography is as important on a Web page as it is on paper. Text should be easy to read and visually pleasing. One challenge of using text on a Web page is getting the message across in an exciting, creative, and visual way. Meeting this challenge means recognizing how text is used differently on the Web than in print. Although the results need to be the same, print typography and Web typography are very different. Why? Because Web designers need to design for computer screens of various sizes and resolutions, which carries with it a unique set of issues. In addition, the variety of browsers and platforms used by the Web community makes Web typography an even greater challenge. To top it all off, markup languages do not provide the control designers need and want to effectively implement Web typography. HTML was established for cross-platform distribution of functional text not visually appealing typography. This issue has been greatly resolved in XHTML and with the use of Cascading Style Sheets (CSSs).

People who work with print know that when the copy is printed, it does not always print the way it looked on screen in a desktop publishing program. This difference in print material can occur for a number of reasons: the printer may not be properly calibrated, which means the color may be off-register and print outside the intended image, making text blurry, or the text may bleed on the paper. The print designer can correct these problems and end up with a printed piece that remains consistent each time it is printed. A Web designer, however, does not have this luxury. The Web is an elastic medium that must work across different computer platforms, screen sizes, and available font sets. As a Web designer, it will be your job to understand these issues and to try to control them or at least minimize their negative impact.

This chapter focuses on the appropriate use of text in multimedia Web sites (see Figure 5-1) as well as some considerations and guidelines to keep in mind when working with text on the Web.

FIGURE 5-1
Effective use of text in a multimedia Web site: the use of type size, color, and font in the EURO RSCG Web site communicates a contemporary feel and quickly guides the user to key points about the company.
DISCUSS

Fonts

When your content is mostly text, the way you use typography to create readable and visually interesting text is of paramount importance. Unfortunately, the wonderful world of typography is somewhat muddled and confusing. You must understand many issues to effectively control how text appears on the Web. For example, users may not have the fonts you specify in your XHTML document installed on their computers. This means that if you use fonts haphazardly, what you see on your screen may not be anything close to what your users see on their screens.

Although readability is a vital part of type design, most Web designers also want the ability to use different fonts to help create the desired look and feel of the site for the target audience. Different fonts, when used properly, can help focus attention on certain text on the screen, enhance readability, set a tone (serious, light-hearted), and project an image (progressive, conservative).
There are **default fonts** that come pre-installed with each operating system (such as with Windows or Mac OS). See Figure 5-2 for a list of common default fonts currently pre-installed on Windows and Macintosh computers. Unless a user has specifically deleted a default font, these default fonts will be available for displaying text on a Web page.

**QUICK TIP**

Use default fonts to maintain consistency and obtain a certain degree of insurance that the text will appear on the Web page as you intended.

As you work with fonts, you will probably begin to recognize which fonts are the more commonly used default fonts. You can also view the fonts installed on a specific computer from the Fonts folder on that computer. The Fonts folder is located in the Windows folder on a PC and in the System folder on a Macintosh.

**QUICK TIP**

Macintosh users can obtain the versions of the major Windows fonts by downloading and installing Microsoft Internet Explorer.

### FIGURE 5-2

*Refer to this list of common default fonts when choosing fonts to be used for text delivery on the Web*

<table>
<thead>
<tr>
<th>Common Default Fonts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arial</td>
</tr>
<tr>
<td><strong>Arial Black</strong></td>
</tr>
<tr>
<td>Arial Narrow</td>
</tr>
<tr>
<td><strong>Arial Rounded MT Bold</strong></td>
</tr>
<tr>
<td>Book Antique</td>
</tr>
<tr>
<td>Bookman Old Style</td>
</tr>
<tr>
<td>Century Gothic</td>
</tr>
<tr>
<td>Century Schoolbook</td>
</tr>
<tr>
<td>Chicago</td>
</tr>
<tr>
<td>Courier</td>
</tr>
<tr>
<td>Courier New</td>
</tr>
<tr>
<td>Garamond</td>
</tr>
<tr>
<td>Geneva</td>
</tr>
<tr>
<td>Georgia</td>
</tr>
<tr>
<td>Helvetica</td>
</tr>
<tr>
<td>Monaco</td>
</tr>
<tr>
<td><strong>MS Dialog</strong></td>
</tr>
<tr>
<td>MS Dialog Light</td>
</tr>
<tr>
<td><strong>MS LineDraw</strong></td>
</tr>
<tr>
<td>MS Sans Serif</td>
</tr>
<tr>
<td>MS Serif</td>
</tr>
<tr>
<td><strong>MS SystemX</strong></td>
</tr>
<tr>
<td>New York</td>
</tr>
<tr>
<td>Palatino</td>
</tr>
<tr>
<td>Times</td>
</tr>
<tr>
<td>Times New Roman</td>
</tr>
<tr>
<td>Verdana</td>
</tr>
</tbody>
</table>
In addition, you can right-click on the font in Windows and choose Properties for additional details on the font (see Figure 5-3) or press CTRL and click on the Mac and choose Get Info.

An important consideration in selecting fonts for use on a Web page is whether the user has the same fonts available on his or her computer. From a Web designer perspective, you need to realize that all computer users will have a different set of fonts installed on their computers. Macintosh and Windows users will have a different set of installed fonts on their computers because a different set of default fonts comes with each operating system. Even users with the same platform may have different fonts installed on their computers. In addition to the operating system installing default fonts, most software programs come with default fonts that are installed when the programs are installed. Users rarely have the exact same software installed on their computers so that means available fonts vary from one computer to the next.

To further complicate matters, font sets can be downloaded from the Internet or purchased on CD. Many font designers sell or
offer royalty free fonts via the Web. For example, you can purchase font sets from the Fonthead Web site shown in Figure 5-4. There are many more sites on the Web similar to Fonthead. Take time to visit some of these sites.

Although using exotic fonts can be amazingly fun and beneficial if you plan accordingly, if you use these fonts as standard Web-based text, you are asking for trouble. If you choose a font that is not on a user’s computer, then, when he or she views the Web page, the system will substitute a default font. The system will try to match the developer’s font with a substitute font that resembles it. Unfortunately, even a close match can have disastrous effects on the appearance of the text—for example, it might change word spacing, wrap the text inappropriately, or even alter the size of the text. Ways to minimize these potential problems are discussed later in the chapter.

**QUICK TIP**

The font tag used in HTML to control typography has been deprecated and is being replaced by Cascading Style Sheets (CSS).

Remember that fonts are original creations. If you purchase the rights to use the font, be sure to read the licensing agreements very carefully. If you do not purchase the rights to use the font, make certain it is royalty free.

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**FIGURE 5-4**

Web sites, such as fonthead.com, sell fun and quirky font sets
Good typography is anything but boring. There are literally thousands of fonts on the market today. Slight differences between two fonts can create vast differences in the look and feel of a Web site. There are times when it is difficult to describe what distinguishes one font from another in technical terms, yet fonts often have a certain look or feel associated with them—in much the same way that colors often have emotions associated with them. See Figure 5-5 for examples of feelings associated with fonts. Regardless of how you describe them, each one would lend an entirely different mood to a Web site.

Emphasis can be added by varying the font, including the style, size, or color used. Special effects and drop shadows can be used to give the feeling of three dimensions. The subtleties of type foster a variety of impressions and can change the entire feeling of a Web site. Look at the typography in the three examples shown in Figure 5-6. It is obvious that the fonts used in these three examples were selected in part because of the mood they create. The fonts used lend meaning to the Web sites. They communicate a feeling to the user. It is important to remember that different fonts evoke different emotional responses.

**FIGURE 5-5**

Each of these fonts creates a different mood
FIGURE 5-6
The typography in these examples illustrates how type helps set the mood of a Web site.

Concept 2 Understand Fonts

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Serif, Sans Serif, Decorative
Fonts are classified as either serif, sans serif, or decorative. As shown in Figure 5-7, serif fonts have feet or short lines at the ends of the strokes of the letter, whereas sans serif fonts do not. Sans means “without”, so a sans serif font is one without serifs or without feet. A decorative font may have a combination of serif and sans serif fonts or it may be one that cannot be categorized either way.

Perhaps the overriding concern with text is readability. In print, serif fonts are used for long or dense bodies of texts, such as paragraphs, because, according to readability studies, serif fonts are more readable than sans serif fonts. The research indicates that the serifs create an imaginary line at the top and bottom of a text line, which helps guide the eye across the page. Generally, people in western culture are accustomed to reading text set with serif fonts because they use the little feet to track or lead their eyes along the horizontal line. Many people think serif fonts are easier to read on screen as well, however, other users believe that the serifs actually interfere with readability on the screen.

Although more research needs to be done in the area of readability on the Web, there are still text guidelines, as discussed in this chapter, that you can follow to help ensure your Web pages will be readable.

Sans serif fonts do not create the imaginary line, so the eye has difficulty reading along the text line; it wants instead to leave the text line and wander through the body of text. Sans serif fonts are most often used for headings, titles, and callouts because they are more likely to draw attention. They are also considered more recognizable at a glance than serif fonts, which makes them perfect for short bits of text. This is true both in print and on the Web.

Both serif and sans serif fonts can be used on Web pages. Serif fonts tend to be more traditional fonts so they are great for Web sites designed to set a conservative tone, while sans serif fonts tend to convey a more contemporary and modern feel. Because much of our text in multimedia applications is often quite short, sans serif fonts are used extensively on multimedia Web sites.
QUICK TIP

Because there are differences between serif and sans serif fonts in print versus on screen, entire font sets specifically for the Web are being created from the ground up. Generally these can be downloaded for free or for a fee.

It is acceptable, and even preferred, to use both font types on one Web page (see Figure 5-8), but it is not good practice to use too many different fonts on a single page or within a single Web site. As in print, it is best to choose one serif font and one sans serif font or two different sans serif fonts and use them consistently throughout the site. In addition, you should always test for readability and legibility. According to some Web designers, Georgia (a serif font) and Verdana (a sans serif font) tend to be more readable on screen than the commonly used Times (a serif font) and Arial (a sans serif font). See Figure 5-9 for a comparison of these fonts. Once again, however, you must remember that the font has to be installed on the user’s computer in order to display on a Web page on a user’s computer. If the font is not available on a user’s computer, a default font will be used in its place.

FIGURE 5-8
This Web page follows the traditional recommendation from the print world—serif fonts for body copy and sans serif fonts for titles

*serif fonts for body copy and sans serif fonts for titles*

FIGURE 5-9
Comparing fonts

**Serif**
This is an example of the Georgia font.
This is an example of the Times font.

**Sans Serif**
This is an example of the Verdana font.
This is an example of the Arial font.
Monospaced vs. Proportional

Monospaced fonts are those in which each character takes up the exact same amount of horizontal space. For example, the letter “i” would take up the same amount of horizontal space as the letter “w” although it is obviously not as wide as a “w”. Refer to Figure 5-10 for an example of a monospaced font. Monospaced fonts were commonly used on typewriters, and therefore they tend to appear “old-fashioned.” They are rarely used on Web pages.

Most fonts used in Web pages today are proportional fonts. Each character takes up a varying amount of horizontal space. Because the letter “i” does not require as much space as the letter “w”, it does not consume as much horizontal space. Figure 5-11 provides an example of a proportional font.

Style

There are many ways to emphasize a word or phrase, for example by using a different font, by changing the font size, or even by animating a word or phrase in a Web page. In essence, the goal of emphasizing a word or phrase is to set that specific text apart from the other text on the screen.

In the print world, designers generally draw attention to a word or phrase by applying a style to it. They use italic, bold, and underline to provide emphasis. On the Web, however, these three simple styles do not always achieve the same effect. For example, although the italic style works well on a printed page, italicized words pixelate (appear as a series of small dots) on a computer screen. Italicized fonts do not generally read well on screen.

QUICK TIP

You should avoid italic fonts because monitors display pixels based on a square grid, which works against slanted fonts.

Underlining has special meaning on Web pages. An underlined word or phrase usually indicates a hyperlink. Users automatically assume an underlined word or phrase can be clicked to access new information. Unless the text is a hyperlink, avoid the use of underline for emphasis or you will confuse and frustrate your users.
The case of the text also affects its readability. Sentence case (the first word begins with a capital letter), title case (each word begins with a capital letter), and lowercase (no word begins with a capital letter) are much easier to read than uppercase (all letters are capital letters) text. As shown in Figure 5-12, the use of all capital letters in body copy reduces the readability. This is because readers generally read by recognizing the shape of words; they do not read by examining individual letters and then assembling a recognizable word. Words created with capital letters are basically all the same size and shape, which means the shape of the words is not distinct enough to make the words easily recognizable.

**FIGURE 5-12**
The use of all caps in body copy reduces the readability.

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**Size**
Fonts are most often measured in point sizes. In print, there are 72 points per inch. Ten and 12 points are common point sizes for type displayed on a Web page. Choosing the proper point size depends on how the font is to be used—that is, as a title, as body text, and so on. Text that appears as a title at the top of a screen may be relatively large, whereas text that is used on a button might be quite small. Some guidelines regarding font size follow:

<table>
<thead>
<tr>
<th>Use</th>
<th>Point Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headings</td>
<td>14–48</td>
</tr>
<tr>
<td>Subheadings</td>
<td>Half the heading size, with a minimum that is not smaller than the body text</td>
</tr>
<tr>
<td>Body text</td>
<td>10–12</td>
</tr>
</tbody>
</table>

Headings and subheadings are used to attract attention and provide the user with quick identification of the screen content, while body text provides the substance. Subheadings must never be smaller than the body text.

A font with a specific size assigned to it may look different from one computer monitor to the next because the resolution of the user’s computer monitor, as well as the operating system installed on the computer, impacts how the font size is rendered on the final Web page. Text displayed on a monitor that is set to a higher resolution will appear smaller than text displayed on a monitor that is set to a lower resolution. In addition, type displayed in a Web browser on a Windows computer will look two to three points larger than it will on a Macintosh computer. This difference in font rendering can have a major impact on your Web pages, particularly the layout of Web pages. This difference is most notable when you are laying out your multimedia elements as the text may wrap unexpectedly forcing the layout to break down. It is important to test your Web pages on different monitors set to different resolutions, as well as on computers running different operating systems.

Although it may be tempting and certainly easy to use a variety of fonts, sizes, and styles, it is important to exercise restraint and to be consistent. Avoid too many font sizes and styles on one Web page. In addition, try to maintain consistency. For example, if several Web pages have a similar heading, use the same font, size, and style for all of the headings at this same level.
**Spacing**

**Kerning** is the term used to specify the amount of space between characters. Figure 5-13 shows some character pairs before and after kerning has been applied. **Leading** is the amount of space between lines of text. Kerning and leading are important in making text readable and are somewhat dependent on the font size and how the text will be used on the Web page.

Unlike familiar commands used in desktop publishing software to adjust character and line spacing for printed material, adjusting the spacing between characters and lines in an HTML document was a nightmare. In fact, there were no HTML tags available to adjust leading and spacing. As a result, many Web designers learned to use other tags to trick the HTML code into doing what they wanted it to do. These tricks included the use of tables and invisible graphics set to any number of pixels high or wide, which they would insert into a Web page to control spacing.

Fortunately, with newer Web technologies, such as Cascading Style Sheets (CSS) and features in Web authoring programs, kerning and leading of text used on Web pages is not only possible but extremely precise and easy to deploy. With CSS, Web designers can use the **letter-spacing property** to control kerning and the **line-height property** to control leading. These properties use a number of different **relative** or **absolute length units**, as shown in Figure 5-14, to create precise placement of text. A **length unit** is used to define the length of an object. Relative length units define the length of the object relative to another property, such as the size of the font. Absolute length units are dependent on the viewing medium (monitor resolution, for example) and are useful only if you know the properties of the viewing medium. In general, using relative units rather than absolute units provides a better design because there are no assumptions about screen resolution and window size.

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**FIGURE 5-13**
Proper kerning makes text more readable

| Unkerned pairs | AT | AY | Fo | Jo | Ke | To | Ve | Wo | r, | y, | 115 |
| Kerned pairs   | AT | AY | Fo | Jo | Ke | To | Ve | Wo | r, | y, | 115 |

**FIGURE 5-14**
Web designers use relative or absolute length in CSS to precisely control character and line spacing

### Relative length units

<table>
<thead>
<tr>
<th>Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>cm</td>
<td>the height of the current font</td>
</tr>
<tr>
<td>ex</td>
<td>the height of the letter “x”</td>
</tr>
<tr>
<td>px</td>
<td>pixels</td>
</tr>
<tr>
<td>%</td>
<td>percentage relative to some other measure</td>
</tr>
</tbody>
</table>

### Absolute length units

<table>
<thead>
<tr>
<th>Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>cm</td>
<td>centimeters</td>
</tr>
<tr>
<td>in</td>
<td>inches</td>
</tr>
<tr>
<td>mm</td>
<td>millimeters</td>
</tr>
<tr>
<td>pt</td>
<td>points (1pt=1/72inch)</td>
</tr>
<tr>
<td>pc</td>
<td>picas (1pc=12pt)</td>
</tr>
</tbody>
</table>
**Color**

Anything that deviates from the norm creates emphasis by causing a visual disturbance—the greater the visual disturbance, the greater the emphasis. Look at the Web site in Figure 5-15 and pay attention to what grabs your attention and where your eye travels as you look at this page. Does color impact your eye movement?

It is extremely important that you make your text readable. Good typography depends on the visual contrast between fonts, as well as the contrast between body text and white space. Strong contrast attracts the eye and engages the brain of the viewer. Creating strong contrast, however, requires careful design. It is very disturbing to encounter text on the Web set in a color that does not have enough contrast with the background color to make it readable. Text color can also be used to create a hierarchy of importance. Provided the other characteristics of the type are identical, text set in a color that has a greater contrast to the background than other text on the page will be noticed first. Which text color in Figure 5-16 do you notice first?

Along with the other colors used to design a Web site, color applied to text contributes to the overall mood and tone of the site. Color also conveys messages, impacts creativity, and influences responsiveness. A great deal of research has been compiled on color. Before you begin applying color to your type, it would definitely be worthwhile to review some of this research. Color scheme palettes, tools, and software are available to assist you in choosing just the right color for the fonts on your Web site.

**FIGURE 5-15**

On a Web page, color can be applied to text for emphasis.

**FIGURE 5-16**

The greater the contrast between the type color and the background, the more the type will be noticed.

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For example, some programs provide an eyedropper tool that lets you pick up the color in an object, such as a corporate logo, so the program can analyze the color and provide the hexadecimal values from the base-16 numbering system (see Figure 5-17) used to reference color on a Web page.

**QUICK TIP**

Adding color to text on your Web page does not cost a dime. Consider adding color to your text to create emphasis and to contribute to the mood of the piece.

If you are working with clients, you may find that they have established corporate colors that they would like to use for the text on their Web site. They might be surprised to learn that the colors they have selected may not display the same on a Web page as they do in print. There are many reasons for color variations that occur including the computer’s video card, monitor, and platform. For example, the gamma settings influence how bright items on the screen appear and the gamma settings vary from platform to platform. The gamma settings on Macs are lower than they are on PCs, which makes color on Macintosh computers appear brighter. To further complicate the Web designer’s life, even within the same platform no two monitors are calibrated the same. Remember that there are no absolutes and that testing the colors you choose on your Web sites is of utmost importance.

**Alignment**

Layout and alignment are important typographic considerations. In fact, when your content is primarily text, typography is used to create patterns of organization on the page. The first thing your reader will notice is the overall pattern and contrast of the Web page, not the title or the details. The user will scan your Web page in an effort to quickly organize the information and increase legibility.

Text can be left aligned, right aligned, center aligned, and justified. In general, body text is left aligned. Attempting to align text using markup tags was once an extremely painful process because HTML was not designed for layout. It was designed for cross-platform transmission of simple text. However, using Cascading Style Sheets, Web designers now have the control they need to follow basic design principles for aligning text.

**QUICK TIP**

In general, you should not center align body text because it is difficult to read. Center alignment should primarily be reserved for titles, headings, and callouts.

**FIGURE 5-17**

The six-digit hexadecimal value is used to reference color on a Web page.
Line Length
Many Web pages include lines of text that are much too long. Long lines of text are difficult to read. This is because many Web pages are almost twice as wide as the viewer’s eye can span naturally, which is about 3 inches. If you look at magazines and newspapers, you will notice that the text is almost always organized into narrow columns. This is because columns are more readable. Print designers try to keep long passages of text in columns no wider than the reader’s comfortable eye span, and the guideline is the same for the layout of long passages of text on the Web. Compare the readability between the two passages of text in Figure 5-18. If you are like most people, you will find the text set in narrower columns to be more readable.

In traditional print layout, it is recommended that designers allow for 30 to 40 characters per line. On the Web, your lines can be slightly longer. Although it is sometimes difficult to predict the exact number of characters per line due to variations in display across different platforms and browsers, setting a goal of approximately 50 characters per line should help you create an acceptable line length for reading text on screen.

QUICK TIP
Creating shorter lines of text will encourage your Web site visitors to read an online document instead of printing it or avoiding it altogether.
What You’ll Learn

In this lesson, you will learn about the four different types of Cascading Style Sheets (CSS)—inline, embedded, linked, and imported. You will also learn about some of the advantages of using CSS to design Web sites.

If you have ever used styles in a word processing or desktop publishing program then you know how useful they can be, particularly when you are working with large volumes of text or many pages with similar formatting. A Cascading Style Sheet is similar to a style used in a word processing program in that it defines the appearance of the text on a Web page. When the Cascading Style Sheet is applied to a Web page, the Web page displays the text and other style formats based on the information in the style sheet. For example, as shown in Figure 5-19, using CSS you can create a style named Heading with a font of Georgia, a font size of 48 points, and a .5 inch indent from both sides. Rather than applying these specifications to each heading in your Web page or Web site, you apply the Heading style that includes these specifications. If you later decide that you prefer Times, Bold, 36 point, no indent instead of Georgia, 48 point, indent, you need only to modify the Heading style and the changes you make will cascade through the Web page or the entire Web site depending on the type of style sheet used. After changing the style sheet, all headings will appear in Times, Bold, 36 point, no indent.

Fortunately for Web designers, improvements in Web authoring programs and the inclusion of CSS have made many typography features more palatable, more predictable, and much easier to develop and modify. CSS is a set of type specifications
that can be applied to a block of text, a single Web page, or an entire Web site. With CSS, you can control basic typographic needs, such as font, leading, kerning, font size, color, and alignment, which gives you control over how your text is displayed.

As explained earlier, even using CSS, you will still be restricted by the availability of fonts on the user’s system. However, CSS can save development time and effort by automatically modifying any text to which a style has been applied. Web designers can apply CSS to all pages on a Web site or to selected pages or even selected sections of pages within a Web site so that the formatting is applied consistently in the desired areas. Using CSS provides consistency of style throughout a Web site and enables the Web designer to update all pages of a Web site simultaneously simply by modifying the style sheet. In addition to making global changes, it is also possible to deliver the same content with different specifications according to the browser used. This makes it possible to optimize the user experience by calling for a different set of styles to be used based on the browser in which the Web page is displayed.

There are four different types of CSS (inline, embedded, linked, and imported), each with its own benefits depending on your goals as well as the type of Web site you are creating.

Figure 5-19
A style contains type specifications, such as font, color, and size; modifying the style causes any text using that style to change.
**Inline**

When you insert a style sheet in the middle of your markup code, the style is considered an **inline style**. An example of an inline style is shown in Figure 5-20.

The biggest disadvantage of inline styles is that they have to be added to each tag you want to modify. Inline styles are not as powerful as the other types of CSS. However, you can use more than one type of style within a Web site, so you might use an inline style to override another type of style. The power of using styles comes from combining them.

---

**FIGURE 5-20**

*Inline styles must be applied each time they are used*

```html
<html>
<head>
<title>Sample StyleSheet - Inline</title>
</head>
<body>
<h1 style=color:purple; font-family:Times, Georgia, serif>This is an example of an inline style.</h1>
<p style=background:orange>Styles are easy!</p>
</body>
</html>
```
Embedded
When you use an embedded or internal style all of the style information appears at the top of the XHTML document in the <head> section of the XHTML file, and it is separate from the <body> of the XHTML code (see Figure 5-21). Code in the <head> section of an XHTML file is applied to the entire file. Browsers recognize and use the styles from an embedded style sheet throughout the entire Web page. The style type=“text/css” attribute and the comment tags (<!-- and -->) allow older browsers that do not support CSS to ignore the style sheet code. Web page designers use embedded styles when they want to add style sheets one page at a time.

FIGURE 5-21
Embedded style sheet code appears at the top of the XHTML document in the <head> section

```xml
<html>
<head>
<title>Sample StyleSheet - Embedded</title>
<style type="text/css">

<!--

h1 {color: darkblue; font-family: Verdana, Arial, Helvetica, sans-serif;}
p {background: orange; font-family:Verdana, Arial, Helvetica, sans-serif;}
-->

</style>
</head>

<body>
<h1>This is an example of an embedded style </h1>
<p>Styles are easy!</p>
</body>
</html>
```
Linked

Linked styles are more powerful than inline or embedded styles. Linked styles are sometimes called external styles. Unlike embedded styles where the style code is inserted within the <head> section of each XHTML document one page at a time, linked styles direct multiple XHTML files to one common style sheet document. This external or linked file contains the specifications that will be used for all Web pages linked to the external style sheet. If you modify any detail of any style in the external style sheet file, all of the Web pages linked to that file will instantly reflect the change. Figure 5-22 provides an example of an external style sheet (named sitestyles.css), how the linked style sheet is referenced from within the XHTML file, and how the code is interpreted and displayed by the browser.

Any Web page can use the <link> tag to link the Web page to an external style sheet and the style specifications within it. There is no limit to the number of Web pages that can be linked to an external CSS file. This feature is priceless in maintaining a large site.

Imported

There is a fourth method of applying a style sheet to your pages. A style sheet may be imported with the @import statement, which may be used in a .css file or inside the <style> tag. In some ways a linked style sheet and an imported style sheet are very similar, but there is one major difference between them. By importing an external style sheet, you get the benefits of linking and you can use the other types of styles as well. This allows you to use one style sheet that you can override using inline, embedded, and linked styles.

**FIGURE 5-22**

Code in the <head> section of a Web page links the Web page to an external style sheet, which contains all the style specifications for the Web page and all other Web pages in the Web site that contain a link to the same external style sheet.

```html
<html>
<head>
<title>Sample StyleSheet - linked</title>
<link rel="stylesheet" href="sitestyles.css" type="text/css">
</head>

<body>
<h1>This is an example of a linked style.</h1>
<p>Styles are easy!</p>
</body>
</html>
```
To view the code used to import a CSS, see Figure 5-23.

When multiple styles are used, the browser determines the order of importance according to the official specification of CSS. The order of importance is as follows:

1. Inline styles
2. Embedded styles
3. Linked styles
4. Imported styles
5. Default browser styles

This means that inline styles override embedded styles, which override linked styles, and so on. It is important to know this order because if you use a linked style sheet and then use inline styles, the linked style sheet will be ignored and the inline styles applied.

Cascading Style Sheets are an incredible tool. They provide control over the layout of Web pages. They allow Web designers and developers to quickly, efficiently, and consistently modify and maintain large Web sites. They can be used to customize the user experience through a design that is browser-friendly as well as browser-specific. And because the style specifications can be in an external file, CSS files can be used to create smaller XHTML files that are quick to download.

The biggest disadvantage to using CSS is that older browsers do not support CSS and therefore, as with any other Web page design technology, you need to test your Web site on as many different computers and browsers as possible.

**FIGURE 5-23**
A CSS may be imported with the `@import` statement

```html
<html>
<head>
<title>Sample StyleSheet - Imported</title>
</head>

<style type="text/css">
!---
import url(http://www.stylesheet.com/stylesheet.css) -->
</style>

<body>
<h1>This is an example of an imported style.</h1>
<p>Styles are easy!</p>
</body>
</html>
```
EXPLAIN ADDITIONAL OPTIONS
for Implementing Text on the Web

There are times when the multimedia Web site must include a great deal of text—for example, in reference Web sites such as encyclopedias. Combining other elements with text can often reduce the amount of text needed to convey a concept. There are ways to accommodate large amounts of text without overwhelming the user.

First, consider if there are other ways to communicate the message. For instance, can you show an animation or use narration rather than text to present the idea?

Second, consider including a small amount of text and then allowing the user to obtain more information as desired via a hyperlink (see Figure 5-24). A hyperlink allows the user to select a button (or word, graphic, or other element) that “jumps” or connects to another Web page or an entirely different Web site where more text and other information about the concept is presented.

Third, consider using drop-down boxes with scroll bars and list arrows, which will display more text when clicked by the user. See Figure 5-25.

In addition to those just named, there are other options and technologies that enable Web designers to work with larger amounts of text, have better control over the text, and have greater assurance that the text will display on the Web page as the Web designer intended. Those options are discussed next.

What You’ll Learn

In this lesson, you will learn about the advantages and disadvantages of using graphic-based typography and Portable Document Format (PDF) files on your Web pages.
Concept 4   Explain Additional Options for Implementing Text on the Web

This Web page has the expanded story, that is, the full text associated with the link.

The Web page on the left has a minimal amount of text, which is used to describe each link. The Web page on the right shows the text that appears when the link in the Web page on the left is clicked.

FIGURE 5-24
A hyperlink can be used to display additional text

FIGURE 5-25
Text boxes can be used to save screen real estate and accommodate larger amounts of text

Drag the scroll box to read the text

Click the down list arrow to show the drop-down menu
Graphic-based Typography
The Web may be the only text-based medium in which designers do not have complete control over the appearance of type. Although CSS helps control some of the uncertainties of text on the Web, it is still no help if a requested font is not on the user’s computer. One way to ensure that text will be displayed in a specific format is to change the text into an image—that is, to create the text and save it as a graphic.

There are problems with this approach. For example, more development time is often needed, which increases development costs. In addition, graphic files are much larger than text files, which may increase download time. Obviously converting entire paragraphs of body copy to graphics would be an unreasonable proposition, however, converting text such as that used in logos, headings, and titles to graphics works great. In fact, this is one of the best options to use if you really must have a particular font. As seen in Figure 5-26, a particular font is often associated with a logo. Converting the logo to a graphic ensures the company branding will not be altered in any way.

QUICK TIP
Provided you can keep the file size down to a few kilobytes, consider turning stylized type into a graphic and saving it in one of the graphic file formats supported on the Web.

In addition to creating a larger file, there is one other disadvantage to using graphics instead of XHTML-based text. The vision-impaired and site visitors who may be using text-only browsers, or individuals who have their browsers set so that they do not display graphics, will not be able to see or read your graphic-based type. If you choose to convert your text to graphics, always remember to include alternate text that can be read by a screen reader.

Portable Document Format
The Portable Document Format (PDF) was developed so documents could be transported and viewed without the requirement that the users viewing the documents own or have access to the software with which the document was created. In order for this to work, users need a reader that allows them to view the document in its original layout with all of the proper fonts and
Portable document software enables you to create, edit, and read PDF files. Many traditional document file formats, such as Microsoft Word or Adobe InDesign files, can be converted to a PDF format. Adobe Acrobat is the most common portable document application and reader used on the Web. The reader is available as a free download from Adobe, as shown in Figure 5-27. In addition, up-to-date versions of most browsers include the Adobe Reader plug-in, which enables users to save PDF files and view them offline or view them directly in the browser window provided the Acrobat Reader plug-in is available and has been properly configured in the Web browser. Thoughtful designers who have included PDF files on their Web sites should also include a direct link to the address from which the Adobe Reader can be downloaded.

Although the PDF file format was available long before the Web, it has become incredibly popular on the Web because of its versatility and the fact that it uses a reader, which helps guarantee that the original document will be seen by the user as it was intended. It is particularly popular for distributing forms and other documents that require specialized styles.

Although the PDF format is an incredible technology for delivering content via the Web, it is not a replacement for XHTML nor is it the best option for traditional online delivery. If the reader is not already available, it will have to be downloaded and installed. This can be time-consuming and confusing for beginners. In addition, unlike content within XHTML files, spider-based search engines do not automatically catalog the contents of PDF files. This means that the content within a PDF is not likely to be returned as a hit from a keyword search in a spider-based search engine. The PDF format is not a substitute for XHTML content, but it is a great option for distributing any file that needs to maintain its original formatting or that might need to be printed.

**FIGURE 5-27**
The Adobe Reader is available as a free download

Adobe Reader

Free software to view and print Adobe PDF files

Adobe Reader 5.0 is free software that lets you view and print Adobe Portable Document Format (PDF) files on a variety of devices and operating systems. This new version of the familiar Adobe Acrobat Reader provides a host of rich features that enable you to:

- Submit Adobe PDF forms that are created withfillable form fields in such applications as Adobe Acrobat 6.0 Professional and Adobe Designer
- Play back a variety of embedded multimedia content, such as QuickTime and MP3 files
- Read and organize high-fidelity e-books
- Activate search and accessibility capabilities built into your PDF files
- Display Adobe Photoshop Album slide shows and electronic cards and export images for online photo processing (online photo services vary regionally)
SUMMARY

Typography denotes the communication of a message using typefaces. Although good typography is as important on a Web page as it is on paper, print typography and Web typography are entirely different. Unlike the print medium, the Web is an elastic medium and the text must work across different computer platforms, screen sizes, and font sets. Fonts affect readability and visual interest. Fonts usually belong to a font family.

There are many issues that Web designers must understand in their ongoing effort to control type on the Web. Not all users will have the same fonts on their computers so you must specify fonts with caution. Default fonts come pre-installed with the operating system software and, unless the user has deleted one, these fonts should be available to display on a Web page.

There are thousands of fonts on the market today. Fonts are classified in a variety of different ways, such as serif, sans serif, or decorative. Serif fonts have short lines at the ends of the strokes of the letter. In the print world, serif fonts are generally used for larger bodies of text because they are considered more readable, however, some Web designers believe they are actually harder to read on screen. Sans serif fonts do not have short lines at the ends of the strokes and tend to be considered contemporary and quicker to recognize than serif fonts.

Fonts are also classified as monospaced or proportional. Monospaced fonts are those in which each character takes up the exact same amount of horizontal space. Most computer fonts are proportional, which means that each character takes up a varying amount of horizontal space.

Some of the typical styles applied to fonts used in print are unacceptable on the Web. For example, the italic style pixelates on the computer screen and the use of italics should be avoided. Because underlining on a Web page generally indicates a hyperlink, the use of underlines for emphasis or as a font style should be avoided and reserved for hyperlinks. If you use underlining on text that is not a hyperlink, you will frustrate and confuse your readers. Case is also important on Web pages. The use of all capital letters should be avoided because the shape of words typed in uppercase is not distinct enough to be recognized easily.

Type size is also important. Choosing the proper font size depends on how the font is to be used, that is, as a title, as body text, and so on. The same size font may look different from one computer monitor to the next. The resolution of the user’s computer monitor as well as the operating system installed on the computer will impact how the font size is rendered on the final Web page. This difference in font rendering can have a major impact on the layout of your Web pages.

Kerning is the term used to specify the amount of space between characters. Leading is the amount of space between lines of text. Controlling the spacing on a Web page is challenging if you are using basic HTML. XHTML supports Cascading Style Sheets (CSS), which makes it possible and much easier to control how text looks through the use of the letter-spacing property and the line-height property, both of which permit the use of either absolute or relative length units. A length unit is used to define the length of an object.

Contrasts between text colors can be used to create emphasis, as well as a hierarchy of importance. In addition, color contributes to the mood of a piece as well as its psychological impact. The use of color should be carefully researched and analyzed before its hexadecimal value is used on a Web page. If
clients want corporate colors included on a Web site, you may need to help them understand that the colors may not display the same on a Web page as they do in print. Gamma settings, computer platform, and monitor calibration will impact how the color appears on screen.

Long lines of text are difficult to read. A viewer’s natural eye span is about 3 inches. To make longer passages of text more readable on a Web page use columns with lines that are approximately 50 characters long. Layout and alignment are important typographic considerations. The first thing your reader will notice is the overall pattern and contrast of the Web page. HTML was not designed for layout, but Cascading Style Sheets make it possible for Web designers to control text alignment.

More recent technologies enable Web designers to work with larger amounts of text, have better control over text, and have greater assurance that the text will display on the Web page as intended. Cascading Style Sheets (CSS) have made many type design features more palatable, more predictable, and much easier to develop and modify. CSS are a set of type specifications that can be applied to a block of text, a single Web page, or an entire Web site. There are four different types of CSS including inline, embedded (also called internal), linked (also called external), and imported. Each type has its own benefits depending on your goals, as well as the type of Web site you are creating.

Another way to control typography on the Web is to convert text to graphics. Because graphic files are much larger than text files, converting entire paragraphs of body copy to a graphic is unreasonable. However, converting logos, headings, and titles to graphics works great. This is one of the best options to use if you really must have a particular font.

The Portable Document Format (PDF) enables users to view a document using a reader that maintains the document’s original layout with all of the proper fonts and graphics included. Because these files are not dependent on a browser to interpret XHTML, documents displayed in a PDF reader look as they were designed to look. PDF files can handle any font and any layout. They can be viewed from any type of computer, which makes this file format extremely versatile. There are a few pitfalls to it, however. The reader may have to be downloaded and installed for the document to be read. In addition, content within PDF files may not be found by spider-based search engines using a keyword search. Like many Web technologies, PDF files are not designed as a replacement for XHTML but an enhancement to it. When you need a guarantee that your page will appear as you designed it or you have a long document that users might be inclined to print, PDF files are a perfect option. PFD files are created using portable document software. Adobe Acrobat and Adobe Reader are two popular PDF programs.
KEY TERMS

absolute length unit
Cascading Style Sheets (CSS)
decorative
default font
embedded style
external style
font
font family
gamma settings
hexadecimal value
imported style
inline style
internal style
kerning
leading

length unit
letter-spacing property
line-height property
linked style
monospaced font
Portable Document Format (PDF)
portable document software
proportional font
relative length unit
sans serif
serif
style
typeface
typography
Match each term with the sentence that best describes it.

a. CSS  
   b. default  
   c. font  
   d. internal  
   e. italics  
   f. kerning  
   g. leading  
   h. monospaced  
   i. PDF  
   j. relative  
   k. sans serif  
   l. serif  
   m. typeface  
   n. typography  
   o. underline

1. Fonts that come pre-installed with the operating system on the user’s computer.
2. A set of characters that all follow the same rules within the set.
3. Fonts that have feet or short lines at the ends of the strokes of each letter.
4. Fonts in which each character takes up the exact same amount of horizontal space.
5. Style that should be avoided because it pixelates on the computer screen.
6. Fonts that are generally considered more contemporary and modern.
7. Style that should be reserved for hyperlinks.
8. The art of arranging letterforms in space in any medium.
9. The amount of space between characters.
10. The amount of space between lines of text.
11. File format that requires a reader in order to be displayed.
12. Set of type specifications that can be applied to a block of text, a single Web page, or an entire Web site.
13. This CSS length unit makes no assumptions about screen resolution and window size.
14. A set of characters within a typeface that has specific characteristics associated with it.
15. This is another name for an embedded style.

Answer each question either in writing or in a class discussion as directed by your instructor.

1. What are some factors you should consider when selecting a font to be used on a Web page?
2. List and describe the different type design features. How can these different type design features be used to enhance a Web page?
3. What are the four types of Cascading Style Sheets and when would it be appropriate to use each type of style sheet?
4. How can graphic-based typography be useful on the Web?
5. What is a PDF file and what are some advantages and disadvantages of using PDF files on the Web?
You have been asked to modify the tour.htm Web pages. The WebsByCT multimedia development team has decided that this project would be ideal for you to master XHTML coding that relates to text, especially the use of style sheets. To complete the lesson in this design project, you will be using the authoring program, Macromedia Dreamweaver, to enhance the Tour Web page.

Working with Text

1. Working with Text in an XHTML Document Using Macromedia Dreamweaver

Introduction

This is a continuation of the Design Project in Chapter 4.

The client The Inn at Birch Bay has reviewed the Web pages and has asked that additional content be provided on the Tour page. They would like the following:

- A few paragraphs describing the area
- A list of recreation activities available
- A notice that the new conference center is open
What You'll Do

In this lesson, you will learn how to use Macromedia Dreamweaver to format and to change the appearance of text. You will also learn about the code view in Dreamweaver as a way to quickly make minor changes in the XHTML code within the document window.

Formatting and Enhancing the Appearance of Text

Because of the WYSIWYG nature of Macromedia Dreamweaver, it is relatively easy to work with text, whether aligning paragraphs, setting margins, applying colors to text or to text backgrounds, creating lists, specifying fonts and font sizes, or any number of other enhancements. In many cases, you can simply select the text and use the Property inspector to apply the desired effect. However, for more extensive changes that may affect several sections of a Web page or an entire Web site, it may be more efficient to create a style sheet, either internal or external.

Style Sheets

Earlier versions of HTML required you to write the code for defining the appearance of text individually. For example, the <h3> header tag caused text to display with a specific font and font size. Now, with style sheets, you can redefine existing tags, for example, by adding a specified color to the text.

Style sheets are made up of rules that have two main parts: the selector and the declaration. The selector identifies the tag to be formatted and the declaration provides the property and values. Figure 5-28 shows an example of a style rule that defines the <h3> tag as formatting text with a green color.

FIGURE 5-28
A style rule

<table>
<thead>
<tr>
<th>Selector</th>
<th>Declaration</th>
</tr>
</thead>
<tbody>
<tr>
<td>h3</td>
<td>{color: green;}</td>
</tr>
</tbody>
</table>
Notice that there are specific symbols used in a rule. The tag is followed by a left-facing brace ({), then the property is followed by a colon (:), then the value is followed by a semi-colon (;), then a closing right-facing brace (}). Additional properties (such as a font type) can be added after the semi-colon.

You can create internal style sheets, which are included in the coding for each Web page, or external style sheets, which are created in a separate text document and linked to a Web page. The advantage of an external style sheet is that you can make a change in just one document (the style sheet) and have it affect any number of Web pages in a site. Figure 5-29 shows a style sheet named mystyles.css linked to a Web page. The css filename extension indicates that this is a Cascading Style Sheet, which is the standard for XHTML coding. The code used to create the link between the two documents is placed in the <head> tag of the Web page: `<link href="mystyles.css" rel="stylesheet" type="text/css" />

This code instructs the browser to use the style sheet (which is a text css type) named mystyles.css. In this example, the mystyles.css file is placed in the same folder as the Web page.
Internal style sheet rules use the <style> tag as shown in Figure 5-30. The <style> tag is placed within the <head> tag of individual Web pages. Any number of rules can be placed within the <style> tag using the same format as for external style sheets. Style sheets save time in creating and updating Web sites as well as helping to ensure consistency in the appearance of the site.

In Macromedia Dreamweaver, creating style sheets is done using the Design palette and completing dialog boxes to indicate the tags, selectors, and declarations. External style sheets appear in the Files panel making it easy to display and edit them.

**Working with Colors**

Colors for text and backgrounds can be specified using six characters that represent the values of three colors (red, green, blue), referred to as RGB. When these colors are combined in various ways they can represent a spectrum of colors. The values are in a hexadecimal format (base 16), so they include letters and digits (A-0, 0-9 = 16 options), and they are preceded with a pound sign (#). The first two characters represent the value for red, the next two for green, and the last two for blue. For example, #000000 represents black (lack of color); #FFFFFF represents white; #FF0000 represents red, #00FF00 represents green, and #FFCC33 represents a shade of gold.

**QUICK TIP**

You don’t have to memorize all the numbers for all the colors. There are reference manuals available for looking up colors, and most Web-authoring programs allow you to set the values visually by selecting a color from a palette.
Additional XHTML Tags and Attributes That Will Be Used in This Lesson

- `<ul>...</ul>`: Used to create an unordered list.
- `<li>...</li>`: Specifies the text for each bulleted item in a list.
- `<marquee>...</marquee>`: Causes text to scroll across the screen.
- `<b>...</b>`: Applies a bold emphasis to text.

Attributes:

- `font-family` — Specifies the font to apply to the text.
- `font-weight` — Specifies the emphasis to apply to the text, such as bold.
- `color` — Specifies the color to apply to the text.
- `background color` — Specifies the color to apply to the Web page or selected text.
- `margin-left(-right)` — Specifies a left (or right) margin.
- `justify` — Causes paragraphs to be formatted using the justify alignment.
- `square` — Causes the bullets in a list to be displayed as squares.

Displaying the XHTML Code in the Dreamweaver Document Window

Macromedia Dreamweaver provides three views when working with the document window: Design, Code, and Split. You have been working in the Design view, which displays the document in a WYSIWYG format. The Code view shows the XHTML code that has been generated as you are developing the Web page. The Split view splits the view between Design and Code. Using the Split view you can select an area within the document design, and the corresponding code will be displayed as shown in Figure 5-31. This makes it easy for you to edit the code without having to use a text editor. You switch between the views using the buttons on the document toolbar.

QUICK TIP

The exercises in this chapter were created with the screen resolution set at 800 x 600. If your computer’s screen resolution has a different setting, the figures in the book may appear different. You may want to verify the screen resolution on your computer and set it to 800 x 600, if necessary.

FIGURE 5-31
The Split view in the Dreamweaver document window
Copy text into an XHTML document

1. Start Dreamweaver MX 2004, then open the tour.htm document in the InnWebsiteDW folder created in Chapter 4.
2. Locate the files that are used for this book and copy the tourtext.txt file into the InnWebsiteDW folder you created in Chapter 4.
3. Start a text editor, then open the tourtext.txt document from the InnWebsiteDW folder.
4. Select all the text as shown in Figure 5-32, then copy the text.
5. Return to the Dreamweaver document window, position the insertion point above the Video placeholder, click, then click the Align Left button in the Property inspector as shown in Figure 5-33.
   Note: the Video placeholder will align to the left. This will be fixed later.
6. Paste the copied text.
7. Position the insertion point just in front of Now near the middle of the copied text, click, then press [Enter] (PC) or [return] (Mac).
8. Position the insertion point just after Sound., click, then press [Enter] (PC) or [return] (Mac).
9. Save the document, preview it in a browser, verify the text has been added, then return to the Dreamweaver document window.

You copied text from a text editor to a Web page document.
Create an internal style

1. Click **Window** in the menu bar, then click **CSS Styles** if it is not already selected.

2. Click the **down arrow** in the Design panel, as shown in Figure 5-34, then click **New**. The New CSS Style dialog box appears, allowing you to specify the tag to be defined and whether this is an external or internal (This document only) style.

3. Delete any text in the Name box, type **p** in the Name box, click **Tag**, click **This document only**, then click **OK**.

4. Click **Block** in the CSS Style definition for p dialog box.

5. Click the **down arrow** for the Text align option, click **justify**, then click **OK**.

6. Save the document, then display it in a browser.

   Notice how the paragraphs are formatted using the justify alignment. Also, notice that the Video placeholder has lost its center alignment. This is because the placeholder was within a <p> tag and the style was applied to it. You will fix this in the next objective.


   You created an internal style element to format text displayed on this page.
Use the split view to edit code

1. Click the Video placeholder to select it.
2. Click the Split button on the document toolbar.
   Notice that the <img...> tag is selected. Just above the tag is the <p align="left"> tag. This <p> tag needs to be deleted and the image centered.
3. Select <p align="left"> as shown in Figure 5-35, then press [Delete].
4. Click the Design button on the document toolbar.
5. Click the Video placeholder to select it, then click the Align Center button in the Property inspector panel.
6. Save the document, preview it in a browser, then verify the Video placeholder is center aligned.

You used the Split view to edit code in a Dreamweaver document.

Create an unordered list

1. Position the insertion point after Puget Sound. in the body text, then click.
2. Hold down [Shift], then press [Enter] (PC) or [return] (Mac) twice.
3. Type If you are looking for recreational activities we have:, then press [Enter] (PC) or [return] (Mac).
4. Type Kayaking, then press [Enter] (PC) or [return] (Mac).

(continued)
5. Type Swimming, then press [Enter] (PC) or [return] (Mac).

6. Type Hiking, then press [Enter] (PC) or [return] (Mac).

7. Type Golfing, then press [Enter] (PC) or [return] (Mac).

8. Type Fishing.

9. Select the five items, then click the Unordered List button in the Property inspector panel, as shown in Figure 5-36.

10. Select If you are looking for recreational activities we have:, then click the Bold button B in the Property inspector panel.

11. Save the document, preview it in a browser, then verify that bold and bullets have been added.


You created an unordered list and applied a bold style to text.

Apply a style to a list

1. Click a blank area in the document window to deselect the text.

2. Click the down arrow in the Design panel, then click New.

3. Type ul in the Tag box, click Tag and This document only if necessary, then click OK.

4. Click the down arrow for the Font option, then click Arial, Helvetica, sans-serif.

5. Click the down arrow for the Weight option, then click bold.

(continued)
6. Position the insertion point in the Color box, click, then type \#C0C0C0.
   Your dialog box should resemble Figure 5-37.

7. Click the List option in the Category box.

8. Click the down arrow for the Type option, click square, then click OK.

9. Save the document, preview it in a browser, then verify the list uses square bullets.
   Note: The list is displayed in gray when viewed in the browser.

    You created a style for an unordered list.

Create and apply an external style sheet

1. Click the down arrow in the Design panel, then click New.

2. Type h1 in the Tag box, verify that New Style Sheet File is selected, then click OK.

3. Verify the Save in folder is InnWebsiteDW, then type sitestyles in the File name box (PC) or Save As text box (Mac).
   The external style sheet file that you are creating will be named sitestyles.css and will be placed in the InnWebsiteDW folder.

4. Click Save to display the CSS Style Definition dialog box.

5. Position the insertion point in the Font box, click, then type Brush Script MT, Arial, sans-serif.
   (continued)
6. Position the insertion point in the Size box, click, then type 50 as shown in Figure 5-38. This code defines the <h1> heading, which will display text using the Brush Script MT font in a font size of 50 points. Per the code specifications, if the Brush Script MT font is not available on the user’s computer, Arial is used, and if Arial is not available a generic sans-serif font is used.

7. Click OK, save the Dreamweaver document, preview it in a browser, then verify the heading appears per the code specifications.

You created and applied an external style sheet.

Edit an external style sheet

1. Double click sitestyles.css in the Files panel to open the document in Dreamweaver.

2. Type the following text as shown in Figure 5-39.

   ```
   h3 {background-color:#C0C0C0}
   body {
     background-color: #6600FF;
     margin-left: 100px;
     margin-right: 100px;
   }
   ```

This code creates two styles, one for the <h3> tag and one for the body tag. All text formatted with an <h3> style will have a silver (#C0C0C0) background color. The background for the page will be blue (#6600FF), and there will be left and right margins of 100 pixels.

(continued)
3. Save the style sheet document, then click tour.htm at the top of the document window.

4. Preview tour.htm in a browser.
   Notice the page background color, the margins, and the background color for the navigation text at the bottom of the page (this background color may not show on a Mac). Applying a background to <h3> text displays a colored bar, in this example silver per the code (#C0C0C0), across the page.

5. Return to the Dreamweaver document window.
   You edited an external style sheet.

Create a marquee

1. Position the insertion point before the word Beachwalkers in the body text, then click.

2. Press [Enter] (PC) or [return] (Mac), then press the up arrow.

3. Type Our new Conference Center is now open!

4. Select the text, then click the Tag Chooser icon in the Insert bar (click Window, Insert if this bar is not open) as shown in Figure 5-40.

5. Click HTML tags, then scroll to display marquee.

6. Click marquee, click Insert, then click Close.

7. Using the Split view, position the insertion point between the e and > in the first marquee tag, click, press the Spacebar, then type loop="2".

8. Click the Design button in the document toolbar to display the Design view.

(continued)
Lesson 1 Working with Text in an XHTML Document Using Macromedia Dreamweaver

FIGURE 5-41
The completed dialog box

9. Select the text Our new Conference Center is now open!, click the down arrow for the Format option in the Property inspector, then click Heading 3.

10. Delete the entry in the Text Color box, click, type #008000, then press [Enter] (PC) or [return] (Mac).

11. Save the document, preview it in a browser, verify the marquee appears, then return to the Dreamweaver document window.

You created a marquee.

Attach the style sheet to other Web pages

1. Double-click homepage.htm in the Files panel to display the document.

2. Click the down arrow in the Design panel, then click Attach Style Sheet.

3. Click the Browse button, then navigate to the InnWebsiteDW folder.

4. Select the sitestyles.css file, then click OK (PC) or Choose (Mac).

5. Click OK in the Attach External Style Sheet dialog box as shown in Figure 5-41.

6. Save the document, preview it in a browser, verify the styles, such as background color, have been applied, then return to the Dreamweaver document window.

7. Repeat steps 1 and 2, then 5 and 6 for the contactus.htm and directions.htm documents.

You copied the style code to the other Web pages in the Web site.
You are an intern with a company that develops Web sites for clients. During your internship training you learned how important text is in the development of Web pages. One of the most important considerations when evaluating how to utilize text is the target audience. The variance in text is evident in different Web sites that target adults and children, and even in Web sites that target both. You have been asked to write a report that compares how text is used within a Web site that has different target audiences.

1. Connect to the Internet, go to www.course.com, navigate to the page for this book, click the Student Online Companion link, then click the link for this chapter.

2. Navigate through the Web site (see Figure 5-42) and study the use of text for the Web pages targeting kids and for those targeting adults. (Note: In the kids section of the Web site there is a link in the upper-right corner for the parents. This directs adults to the home page for the site.)

3. Open a document in a word processor, save the file as Ch5pb1, create a table with these column heads: topic, adult viewer, child viewer; then create one row for each topic that follows:
   a. Amount of text used
   b. Fonts (serif, sans-serif, decorative)
   c. Font sizes
   d. Text colors
   e. Text emphasis (bold, italic, underline)

4. Complete the table by comparing the Web pages based on the topics listed in your table.

One Step Beyond
5. Do you think the use of text was appropriate for each target audience? Why, or why not?
6. What recommendations would you make to improve the use of text?

Two Steps Beyond
7. Conduct a Web search for two online encyclopedias. List the URL for each site.
8. Choose one subject and search for it in each Web site. Specify the subject.
9. Briefly describe the use of text (amount, font, font sizes, colors, and so on) for each site.
10. For the subject you choose:
   a. Do you think the use of text was appropriate for encyclopedia Web sites? Why, or why not?
   b. What recommendations would you make to improve the use of text?

FIGURE 5-42
A Web site targeting children
You have been studying Web development. You decide it would be useful to apply various text features to a portfolio Web site. Complete the following steps to create a Web page similar to the one shown in Figure 5-43.

1. Start Dreamweaver, then open mysite.htm and edit as follows.
2. Type your name and type at least four lines of body text.
3. Separate the body text into two or more paragraphs.
4. Create an unordered list of at least four items using the heading: “My areas of interest:”.
5. Create internal style sheet rules to format:
   a. list items to display with square bullets, Arial font, and bold emphasis
   b. paragraphs using the justify alignment
   c. <h2> tags as center aligned
6. Create an external style sheet as follows:
   a. <h3> tag to display
      i. fonts: Georgia, Arial, sans-serif
      ii. size: 20 pixels
      iii. alignment: center
      iv. color: #330099
   b. <h1> tag to display
      i. alignment center
      ii. color: #330099
   c. body
      i. background color: #CCCCCC
      ii. left and right margins: 75 pixels
7. Save the document with the file name mysitexx.htm (where xx are your initials).

One Step Beyond
8. Create a second Web page named Contact me with the same formatting as the main page.
9. Use your contact information where the body text appears.
10. Link the two pages.

Two Steps Beyond
11. Using a text editor, duplicate the Web site you developed using Macromedia Dreamweaver, and save it as Chpb2_texx.html.

FIGURE 5-43
The completed Web page