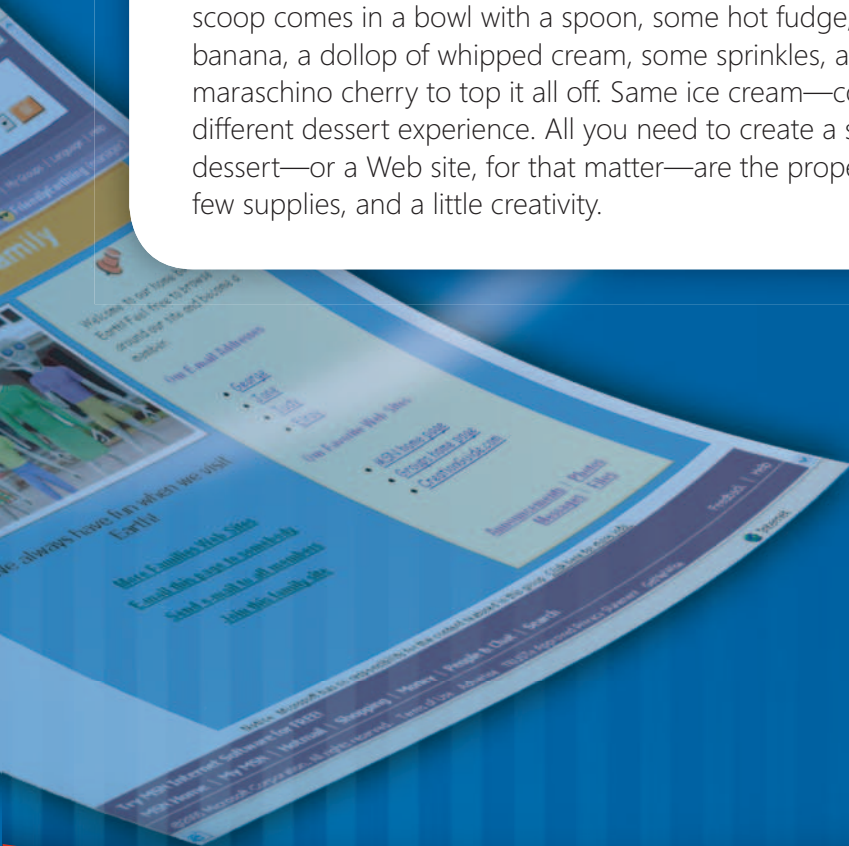


CHAPTER

5

Picture scoops of vanilla ice cream. One scoop is placed right into your hands without any utensils or toppings. The other scoop comes in a bowl with a spoon, some hot fudge, a sliced banana, a dollop of whipped cream, some sprinkles, and even a maraschino cherry to top it all off. Same ice cream—completely different dessert experience. All you need to create a satisfying dessert—or a Web site, for that matter—are the proper tools, a few supplies, and a little creativity.



Tools of the Trade

When you create a Web site, you need to have at least a couple (probably more) tools on hand. Mind you, we're not talking hardware—we're sure you've realized the importance of having a computer as well as possibly having access to a scanner, printer, and camera. In this chapter, our focus falls on the array of software that you can use to create, edit, and manipulate Web elements. As you'll see in Part Two, "The Walk—Creating Web Sites," you can create, edit, and publish Web sites by using a number of software applications and tools—we find that we frequently mix and match our weapons of choice. Likewise, knowing your choices will help you create a working environment that best suits your needs and personal style.

To get started, let's look at two of the most basic "tools" you'll need during your Web creation endeavors—an Internet connection and server space.

Internet Connectivity and Server Space

tip If you use your computer to surf the Web, rest assured—you have an Internet connection. Using a standard dial-up Internet connection, you can copy Web files from your computer onto a server that's connected to the Internet.

No matter how astounding the Web site you've developed on your computer, it will live in virtual anonymity if you can't connect to the Internet and transfer the site's files to a server. (Recall from Chapter 1, "Demystifying Your [Future] Web Site," that a *server* is a powerful computer that is connected to the Internet's backbone data lines, stores Web files, and responds to users' requests to view the stored Web files.) You must be connected to the Internet or have access to an Internet connection before you can achieve an online presence. Granted, you can *create* most Web sites without an Internet connection, but you'll be dead in the water when it comes time to make your pages available online.

In addition to the basic prerequisite of Internet connectivity, you might need to pay for some space on a server for your Web files. We say *might* because, in a lot of cases, server space is freely given away or provided in addition to other paid services. For example, your Internet service provider (ISP) might give you 30 MB (give or take 20 MB) of free server space in addition to your Internet connection. The notion of *free server space* catches many people by surprise—but it's out there,

and it's a thriving online practice. Not surprisingly, however, you'll find benefits in purchasing server space as well as using free space.

Free Space Online

It's true. You can create and display a Web site at this very moment for free—as in no cost whatsoever. All you need to spend is a little time and creative effort (and we'll make your task even easier by showing you how to get your own blog started on MSN Spaces in Chapter 7, “Posting a Web Site Within an Hour [or So]”). You don't need any additional software or Internet accounts—nothing but your text and a few pictures, if you want to include them. Of course, you face a couple minor limitations when you take this approach (such as a long Web address, limited space, advertisements, and limited page-layout options), but depending on your ultimate goal and the free service you choose, the limitations might not affect you all that much. So consider yourself informed—free Web space is readily available; we run into more than a few people who are amazed to discover this fact.

The number-one way to become the proud owner of a free Web page is to turn to *blogging* (short for *Web logging*) sites and *online communities*. Blogging sites offer Web-based tools that help you publish a Web site instantly, and online communities are areas on the Web where people share information, often organized by topic. One of the benefits of creating a blog or joining an online community (other than the “free” factor) is that most blogging sites and online communities enable you to create Web sites by using templates and wizards. A couple popular free blogging sites are:

- Blogger (www.blogger.com).
- MSN Spaces (spaces.msn.com).

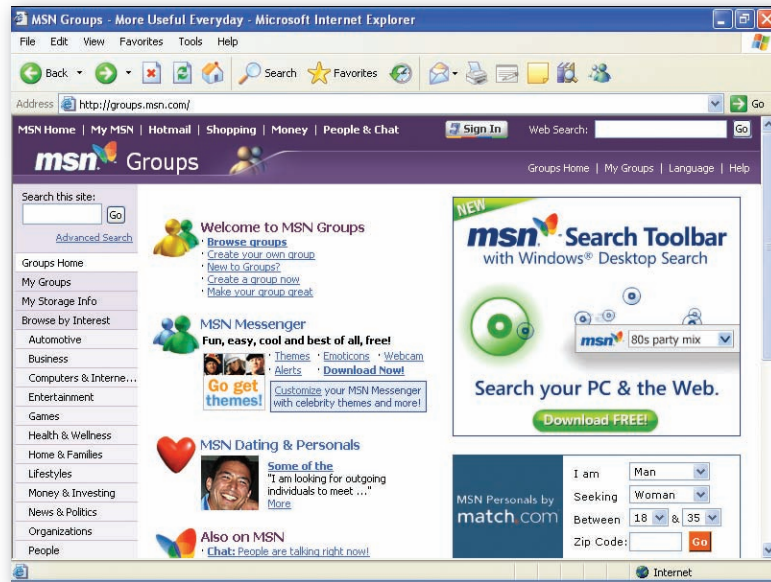
Some popular online communities include:

- Lycos Tripod (www.tripod.lycos.com).
- MSN Web Groups (groups.msn.com).
- Yahoo! GeoCities (geocities.yahoo.com).

As mentioned, in Chapter 7, we show you how to get started on the MSN Spaces blogging site so that you can create your own free Web

site in a matter of minutes. Figure 5-1 shows the MSN Groups home page, which is another way you can build a Web presence online for free. Notice the partial categories list along the left side of the page.

Figure 5-1 *The MSN Groups home page*



note Most enterprises that sponsor online communities make their money via advertising and selling upgrades and add-on features and services.

The biggest drawbacks of blogs and online communities are that your Web address might be fairly long (for example, the address for the family group site shown in Figure 5-2 is groups.msn.com/TheVisitingFamily), you generally have a limited amount of server space, your choices of page layouts are usually limited or highly controlled, you'll have advertisements on your site, and if you don't want to use the templates, customizing your site can be tricky or not permitted.

Similar to online communities, another free way to get on the Web is to create site-specific pages. During your surfing, you might find that some Web sites offer free Web space to registered members. For example, you can create an About Me page on eBay (www.ebay.com) if you're a registered site participant. The purpose of eBay's About Me pages is to introduce eBay users to other people who visit eBay.

In addition to blogs, communities, and site-specific pages, you can get free space from numerous free hosting providers. As you might imagine, using a free hosting provider has benefits and drawbacks.



Figure 5-2 An MSN family group site

The main benefits of free hosting providers are that they're inexpensive (free), they're quick and easy to use, they cater to all experience levels, and they provide just enough space for a basic site. Common drawbacks of free hosting providers usually are that they offer little or no support, they use overcrowded servers (which can cause slow downloads or server crashes that make your site temporarily unavailable online), they offer limited long-term reliability and fewer features (such as no e-mail addresses), and they post advertisements on your site. With that said, free hosting often provides a good way for you to practice setting up your first Web sites or short-term Web sites.

Yet another type of “free” online Web space—which technically isn’t free—is Web space that you get from your ISP. Because you most likely cut a check to your ISP on a regular basis (or at least record an automatic payment), we can’t exactly label ISP server space as free; it’s more like prepaid, available space. When you signed up with your current ISP (assuming you have one), they probably informed you in an excited voice or a sentence ending in an exclamation point that you get “X megabytes of free server space!” At the time, you probably didn’t know what that meant or didn’t care, so you might have just thought “Oh, that’s nice” and moved on to the next detail. Now that you’re thinking of creating a Web site, you should revisit the “free server space” component of your ISP agreement. Most likely, you’ll find that you have 10 MB to 50 MB of server space at your disposal.

try this!

To find free Web space, type **free “Web space”** in any search engine—you’ll be rewarded with a slew of sites offering to host your page. Or check out the 100 Best Free Web Space Providers Web site, at www.100best-free-web-space.com. This site provides reviews and site rankings, which makes it a great resource for locating and reviewing free Web hosting services.

The upside of ISP server space is that you’re already paying for it, so you might as well use it. Another advantage that ISP server space has over blogging sites and online communities is that you generally have greater freedom regarding how you create and display your site (which, of course, could also be a disadvantage if you prefer to work with the preconfigured templates). The downside of ISP server space is that you’ll probably have to live with a cumbersome Web address, similar to online community Web addresses. For example, a couple of our ISPs (we have several) grant “free” server space, but the Web addresses’ formats are *www.ISPdomainname.com/~username/filename.html* and *members.ISPdomainname.net/username/filename.html*. For most people, the preceding naming formats are a little long and not easy to remember.

All in all, the main point about free online sites is that Web space is instantly available to you. And as long as you don’t mind a longish Web address, some design limitations, and possibly advertising, free space is a great way to initiate yourself on the Web.

Purchasing Server Space

In contrast to using free Web space, you can shell out a few clams for a Web site that uses the Web address of your choice as long as someone hasn’t beaten you to the name. When you take this route, you have two main considerations—choosing and registering a Web address

name (such as creationguide.com), and signing up with a provider that will host (or store) your Web site (unless you're going to run your own server—but that topic is best saved for more advanced books). Let's look at how to register a Web address and obtain a hosting service.

Registering a Web address

Before we go any further, let's nail down some simple vocabulary. In particular, instead of *Web address*, we really should say *domain name*. Loosely speaking (very loosely), a domain name is a Web address. As you might know, all Web addresses are actually groups of numbers (called *Internet Protocol*, or IP, numbers) that serve as Internet addresses. Being a human, you probably also know that, for most people, remembering a meaningful name is much easier than remembering a series of numbers divided by dots. Therefore, the *Domain Name System* (DNS) came into existence. Fundamentally, DNS simply assigns textual names (such as creationguide.com) to numbered Internet addresses (such as 207.155.248.5). Thus, to appear as if you know what you're doing, you should use the term *domain name* in place of *Web address* when you're referring to a Web site.

When you're ready to obtain your own domain name, you can pick a domain name (such as creationguide.com—although we can tell you right now that the name is already taken), see whether it's available, and if it is, register the domain name as your very own for a nominal annual fee. By nominal, we mean anywhere from the price of a cheap meal or slightly more per year.

Choosing and registering a Web domain name is straightforward after you access a legitimate registration site. Fortunately, InterNIC (which is under the umbrella of the U.S. Department of Commerce) hosts a Web page that lists all the acceptable domain name registration Web sites. Many hosting sites also offer name registration services (as we'll discuss in the next section). To see the official list of domain name registrars, visit www.internic.net/alpha.html.

While visiting the InterNIC site, check a few registration sites to review their pricing schedules and policies (or visit www.creationguide.com/resources, and we'll link you to a couple of our favorite hosting services, which will register as well as host your site for you). When

you've found a site you like, you can generally type your proposed domain name in a text box, and the site will then inform you whether the name is available. If it is, you work out a payment arrangement (usually by credit card), and the site registers your domain with InterNIC. Your next step is to find an ISP that will host your domain name and Web site.

Finding space for your domain

If you don't run your own server—and most people don't—your next step is to find an ISP or a hosting service that's willing to provide a home for your domain name, if you didn't complete this step during your domain registration process (as described in the preceding section). You can find numerous hosting services online—type **Web hosting** in any search engine, and you can have a field day researching various Web hosting providers. Or better yet, visit hostindex.com, a comprehensive site devoted to providing information about numerous aspects of hosting services, including a monthly list of the top 25 hosts. Finally, as mentioned a moment ago, you can visit www.creationguide.com/resources for links to hosting services and domain name registrars.

Regardless of how you conduct your research into finding server space, remember to check a few key facts, including fees, network configuration, Microsoft FrontPage Server Extensions (if you're using FrontPage features, as discussed in Chapter 11, “Going All Out with FrontPage”), and reliability. On average, basic Web hosting services charge a nominal fee along with a one-time setup fee. (See each hosting service's Web site for specific prices.) Unless the rates seem outrageous, don't let the fees rule your decision. Before signing on with a Web hosting service, find out how the host handles the following features:

- **Bandwidth** Most hosting companies are connected to the Internet by T1, T3, or OC3 (optical carrier) lines; anything less than a T1 and you might as well choose another company. Basically, a T1 line can carry up to 1.544 megabits of data per second (Mbps), a T3 line can carry 43.232 Mbps, and an OC3 line can carry 155 Mbps. For general Web browsing, hundreds of users

can easily share a T1 line comfortably, but if all the users are all downloading MP3 or video files simultaneously, higher speed lines like T3 and OC3 would be more effective.

- **Clients per server** In addition to Internet connection lines, you should check to see how many clients are hosted on each machine. If a hosting service overloads its machines, performance will be slow despite high-speed connection lines.
- **Space** When you sign up for Web hosting services, ISPs and hosting companies assign you a certain amount of server space (just as your computer has a certain amount of disk space that you can use to store files). Most ISPs and hosting services offer more space on their servers than you'll need (at least initially). However, you should get at least 10 MB of server space. Most hosts provide at least 25 MB.
- **Support** Technical support is an important element when you're choosing a Web hosting company—if you run into problems, you'll want to be able to turn to someone who can help. The most basic support consideration you should look for is the number of hours per day the technical support staff is available. Many sites offer 24 hours a day, seven days a week support, so look for round-the-clock support when you're weeding out potential companies. Round-the-clock support is important because you'll most likely be updating your pages during off-hours, so off-hours are the times you'll probably need support the most. Also see whether the site publishes its support response rate. Finally, check to see whether you can readily identify the avenues of support the company offers, including phone numbers (look for toll-free numbers), fax numbers, e-mail addresses, online informational reports, and a snail-mail address.
- **Extras** You might want to check to see what “extras” each company offers to entice customers. For example, most hosting services provide e-mail accounts you can use with your domain name (such as mm@creationguide.com or jc@creationguide.com). You can generally set up anywhere from 5 to 40 or more e-mail accounts with a single Web hosting agreement. Other features you might check out include the cost of adding space

to your site, in case your site grows larger than your originally allotted space; the cost of upping your traffic quota, in case more people visit your site than you anticipated; whether FrontPage Server Extensions (if you're using FrontPage) and streaming media are supported; and available add-on services, such as chat groups, e-commerce features, and site search features.

Now that you've considered your domain name, hosting services, and basic Web site options, we're ready to move closer to home and talk about desktop applications. In the next section, we look at software applications you can use on your system to create, edit, and publish Web sites.

Web Site Creation and Management Tools

In this section, we outline the types of tools you might need to create Web sites, name a few applications we've found helpful, and point you down the path of finding other utilities that best suit your needs. As you might imagine, because of the Web's booming popularity, lots of software vendors have created Web publishing tools. In this chapter, we introduce many tools (but nowhere near all the available utilities), and in Part Two, "The Walk—Creating Web Sites," we show you how to use some of them to create complete Web sites. Ultimately, though, you have the pleasure of choosing the software that feels most comfortable for you.

To simplify our approach in this chapter, we've divided basic Web page development tools into the following four main categories:

- Templates
- Web editors
- Graphics applications
- File Transfer Protocol (FTP) utilities

Templates

If you create a Web presence using a blogging site or an online group, you'll most likely start by using templates to set up your site. A template is a preformatted page layout that incorporates graphical com-

tip You can download many of the applications (or demos of the applications) mentioned in this chapter from shareware sites such as www.tucows.com or www.shareware.com. *Shareware* can be best summed up as "try before you buy." When you download a shareware program, you try it out for a while for free. If you like it, you send the developer the requested fee. Too bad all merchandising isn't so user friendly!

ponents, font styles, colors, and other design elements. Figure 5-3 shows the theme and layout templates you can choose from when you create an MSN Spaces blog. Templates are also available online and with software applications that you can use to design your Web pages. We introduce you to a few templates in Part Two.

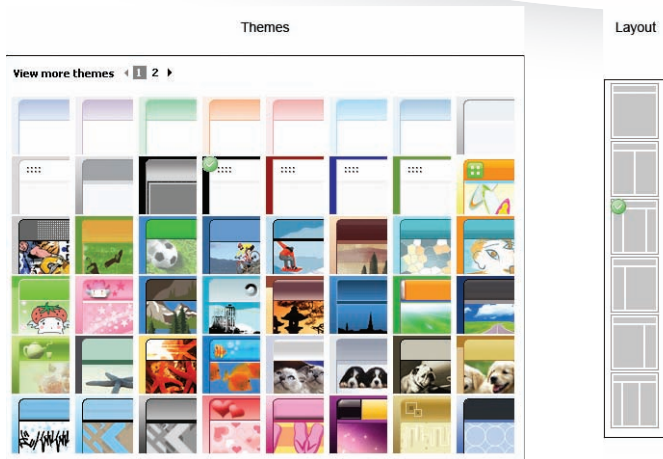


Figure 5-3 Using templates to select a theme and page layout style for an MSN Spaces blog

Web Editors

Overwhelmingly, when you create Web sites, you'll be spending the greatest amount of time interacting with a Web editor. You use Web editors to create Hypertext Markup Language (HTML) files, Extensible Hypertext Markup Language (XHTML), cascading style sheets (CSS), Extensible Markup Language (XML) documents, and other files that contain display instructions for Web browsers and provide content for your Web pages. When you use a Web editor, you have the option of working with a basic editor, in which you enter code manually; using a midrange editor that provides slightly more advanced Web development features; or using an advanced WYSIWYG (what you see is what you get—pronounced *wizzy-wig*) editor, which creates HTML code for you while you type text, insert images, and drag elements around in a Web design layout view. We take a quick look at all three types of editors in the next few pages.

tip You can search online to find hundreds of Web site templates, many of them free. Even if you don't use templates, you should spend some time looking at what's available. By perusing Web templates, you'll be able to see color combinations, page layouts, font styles, graphics, and design elements that you like (or don't like), which will help you make better design decisions when you create your custom designs.

Basic Web editors

A basic Web editor is a text editor. When you use a text editor to create a Web page, you type in all the HTML commands and your Web page's text into a blank document. The most basic of the basic text editors is the Notepad application that comes with the Microsoft Windows operating system. Figure 5-4 shows Notepad containing some HTML text.

Figure 5-4 Using Notepad as a basic Web editor



```
spacecamp[1] - Notepad
File Edit Format View Help
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
  <meta name="robots" content="noindex, nofollow">
  <title>Space Camp for Kids</title>
  <link rel="stylesheet" type="text/css" href="styles_main.css">
</head>
<body>

<table align="center" border="0" cellpadding="0" cellspacing="0" width="750">
<tr>
<td border="0" width="320" height="150"></td>
<td border="0" width="250" height="150"></td>
<td>
  <div class="titlebar_box">
    <p class="statbox"><strong>EARTH DATE:</strong> 11.04.05<br>
    <strong>EARTH TIME:</strong> 14:37<br>
    <strong>ALIEN VISITORS:</strong> 3,834,784<br>
    <strong>HUMAN VISITORS:</strong> 6,291</p>
  </div>
  </td>
</tr>
</table>
<table align="center" border="0" cellpadding="0" cellspacing="0" width="750">
<tr>
  <td class="rocket_bg" valign="top">
    <div class="sidebar">
      <p>&nbsp;</p>
    </div>
  </td>
</tr>
</table>
```

You might wonder why Web developers would opt to manually code their Web pages. The answer varies, but for the most part, Web developers hand-code their Web pages for any of the following reasons:

- **Control** Hand-coding enables you to use the codes you want instead of the codes a WYSIWYG editor inserts. For example, you might want to use two blank line breaks, but a WYSIWYG editor might insert a paragraph marker. Furthermore, some WYSIWYG editors create “messy” code; hand-coding can keep code orderly and easy-to-read, with code alignment set to the developer’s preferences.
- **Quick fixes** Knowing how to manually create and modify HTML, XHTML, CSS, and XML code enables Web designers to make quick changes to a Web site, regardless of how the Web

site was initially created. For instance, if you want to update your site's copyright date or title bar text, you could update and save the change in a text editor in less time than it would take to simply open the page in a WYSIWYG editor.

- **Code cleanup** Many advanced Web editors (as discussed later in this chapter) add extra code to documents. If you know how to create and edit standard HTML, XHTML, CSS, and XML code, you can clean out extra code and reduce the size of your files. And remember—on the Web, size matters, and the smaller, the better. Furthermore, because Web editors are only designed by humans, at times, Web editors might miscode your page. In those instances, you can save yourself lots of time and aggravation by changing the code directly instead of hunting down the proper dialog box setting (if the setting even exists) in the Web editor.
- **Fine-tuning** Another habit of advanced Web editors is that they sometimes use code that not all browsers support. You can use text editors to modify code so that it conforms to the capabilities of most browsers.

Of course, learning HTML and XHTML (a stricter version of HTML based on XML principles) is a prerequisite to creating your pages in a text editor. In Chapter 8, “Demystifying Basic CSS and XHTML,” we walk you through the process of hand-coding cascading style sheets and XHTML to give you an idea of how style sheets and XHTML work together to display Web sites. That chapter is just an introduction, however. You'll need to access additional resources if you really want to get serious about hand-coding Web sites.

The most popular text editors in use today include the following:

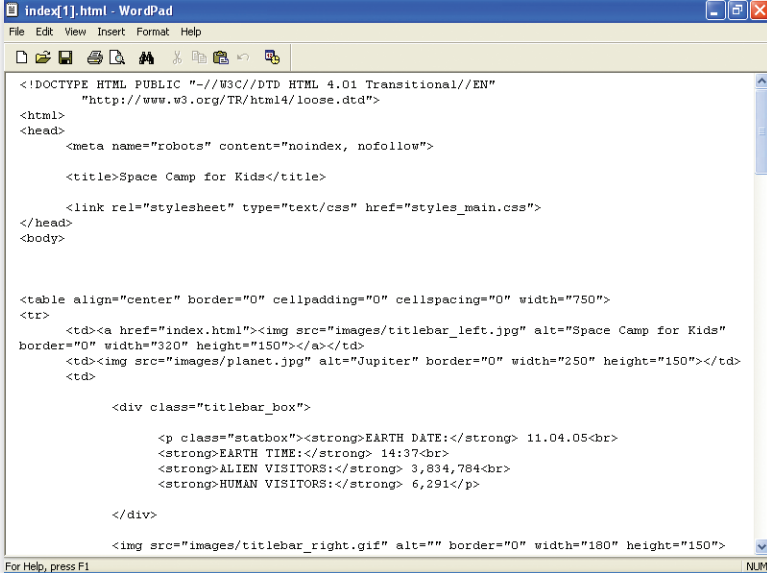
- **Notepad** Notepad comes with the Microsoft Windows operating system and is about as bare-bones as it comes when you're talking about text editors.
- **TextWrangler** (www.barebones.com/products/textwrangler) TextWrangler is a basic text editor designed by Bare Bones Software for Macintosh computers.
- **WordPad** WordPad is a step up from Notepad. It offers more word-processing features than Notepad, and it supports longer documents. Figure 5-5 shows an HTML document in WordPad.

try this!

Display www.creationguide.com/spacecamp (or any other Web page of your choice) in your browser, and then click

Source on your browser's **View** menu. A Notepad document opens that displays a text version of the Web page's HTML code.

Figure 5-5 *Using WordPad as a Web editor*



```

index[1].html - WordPad
File Edit View Insert Format Help
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
  <meta name="robots" content="noindex, nofollow">
  <title>Space Camp for Kids</title>
  <link rel="stylesheet" type="text/css" href="styles_main.css">
</head>
<body>

<table align="center" border="0" cellpadding="0" cellspacing="0" width="750">
<tr>
  <td><a href="index.html"></a></td>
  <td></td>

  <div class="titlebar_box">

    <p class="statbox"><strong>EARTH DATE:</strong> 11.04.05<br>
<strong>EARTH TIME:</strong> 14:37<br>
<strong>ALIEN VISITORS:</strong> 3,834,784<br>
<strong>HUMAN VISITORS:</strong> 6,291</p>

  </div>

```

Midrange Web editors

Midrange Web editors are one step up from basic text editors, and they include a number of time-saving and accuracy-assisting features. In this group, you'll often find applications that provide Web-coding-specific features, such as tag inspectors, tag generators, color coding, large file support, and more. Some of these editors start to enter the realm of WYSIWYG (such as Microsoft Word and Microsoft Publisher), but their main draw is that these programs include features designed to help you create HTML, CSS, XHTML, and related Web code. In this category, we recommend a few applications. You should test a couple to find which one feels most comfortable for you:

- **BEdit** (www.barebones.com/products/bbedit) This HTML editor from Bare Bones Software is popular among Macintosh Web developers. BEdit enables you to edit, search, transform, and manipulate text.
- **HomeSite** (www.macromedia.com/software/homesite) Macromedia's HomeSite is a popular code-only Web design tool used by many professional Web developers. You can download a 30-day trial version to test the product.

- **NoteTab** (www.notetab.com) The NoteTab editor by Fookes Software is Notepad on steroids (lots of them!). You can download NoteTab light for free, or purchase NoteTab Standard or NoteTab Pro to gain additional functionality.
- **sciTE** (www.scintilla.org/SciTE.html) The sciTE editor is a SCIntilla-based free text editor that provides a clean and easy-to-use interface for HTML, CSS, XML, and many other coding languages.
- **TextPad** (www.textpad.com) TextPad, created by Helios Software Solutions, serves as another beefed-up text editor.
- **Word and Publisher** (www.microsoft.com) Word and Publisher enable you to use a familiar interface to create Web documents via the Save As command. When you save an Office document as a Web page, the application automatically creates the HTML, CSS, XML, or other relevant source code. Chapter 9, “Diving into Design with Publisher Templates,” shows you how to create a Web site using Microsoft Office Publisher, and Chapter 10, “Swimming Deeper Into Web Waters with Word and XML,” shows you how to use Word to create an informational Web site. Figure 5-6 shows a Web page in Word’s Page Layout view as well as in the HTML Source view.

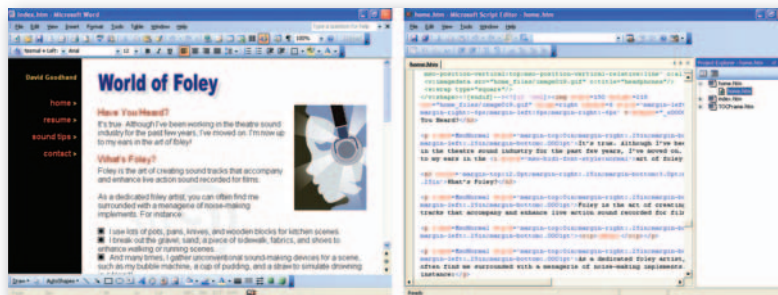


Figure 5-6 Web Layout and HTML Source views of a Web page created in Word (with a WordArt title)

note Similar to Word and Publisher, other Microsoft Office programs—such as Excel and PowerPoint—enable you to save your files as Web pages or XML documents. In Chapter 9, you learn how to create a Web site and newsletter using Publisher, and in Chapter 10, you create a Web site using Word. One point you should keep in mind is that Office applications are useful for creating simple Web sites and editing simple Web pages that were created using a particular Office application. Office applications do not always work as well when you attempt to edit more advanced sites or Web sites created in applications other than those in Microsoft Office.

note Keep in mind that your Web site creation environment doesn't have to be an either/or kind of setup. At times, we find it's quickest to use an advanced WYSIWYG application (especially when reorganizing a design layout), but at other times, a quick edit in Notepad serves us best.

Advanced Web editors

The third and final group of Web editors includes the advanced applications that enable you to create and edit Web pages by using graphical interfaces. In advanced editor applications, you can view and edit source code directly as well as work in the WYSIWYG interface. Further, most advanced editors provide a preview feature, which enables you to view how a Web page will be displayed online (sometimes in various browsers) before you view the page in your browser as well as other advanced tools, as you'll discover in the walkthrough project in Chapter 11, "Going All Out with FrontPage." Popular advanced Web editors are well documented online, so instead of wasting page space here summarizing online statistics, we've provided pertinent URLs for the Web sites that offer the applications appearing in our short list. Although other editors are readily available, the following applications are some of the most popular Web development programs around:

- Adobe GoLive (www.adobe.com/products/golive)
- CoffeeCup HTML Editor (www.coffeecup.com/html-editor)
- Macromedia Dreamweaver (www.macromedia.com/software/dreamweaver)
- Microsoft FrontPage (office.microsoft.com)
- NetObjects Fusion (www.netobjects.com/products/html/nof8.html)

Of the preceding applications, Dreamweaver is probably the most popular (yet most challenging to learn) Web editor among professionals for a number of reasons, including its support for the latest developments in Web technologies, advanced scripting and authoring, and integration with other Macromedia development tools. On the other hand, FrontPage (shown in Figure 5-7) is the easiest advanced HTML editor for beginners to learn and provides many of the advanced features offered by Dreamweaver. Further, FrontPage is also popular with the business community. As we mentioned, you'll get a feel for creating a Web site in FrontPage in Chapter 11.

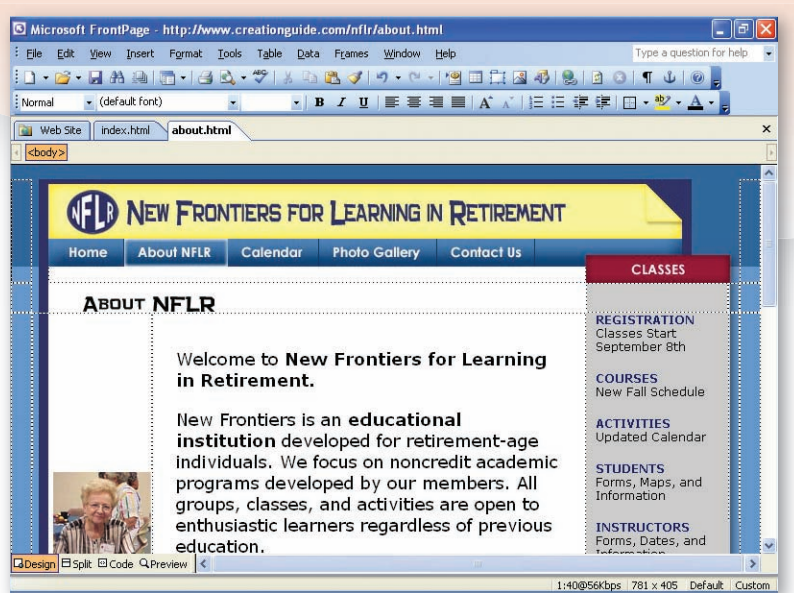


Figure 5-7 Microsoft FrontPage's WYSIWYG design view

Graphics Applications

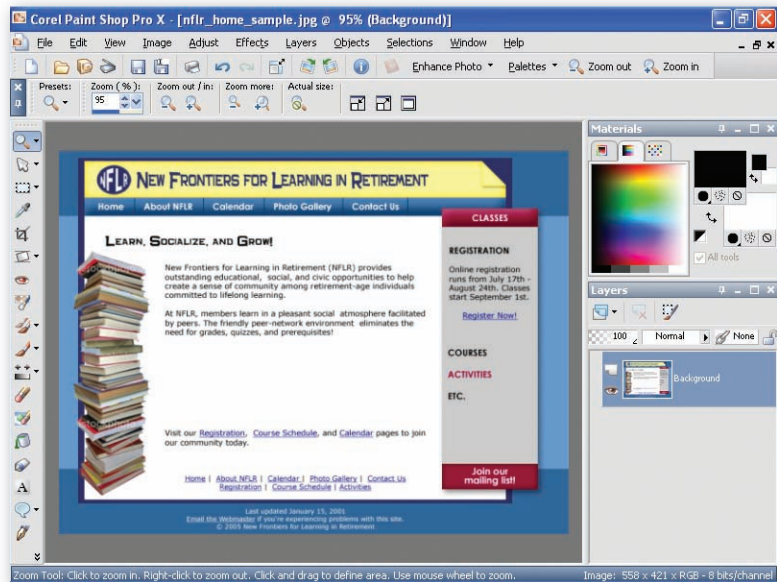
When it comes to Web site development, graphics applications come in a strong second behind the all-important text or Web editor. After all, most sites use graphics, and you'll want to either create or tweak the graphics you use on your Web site. Therefore, you'll need to have a graphics package installed on your system. Our personal favorites are Corel Paint Shop Pro and Adobe Photoshop (or Photoshop Elements)—both appear in the graphics application list that you're about to run into after the next paragraph.

Regardless of your graphics package, the five main skills you'll need to acquire when using a graphics program are cropping, cutting, resizing, recoloring, and saving as a different file format. So check your application's help files to brush up on your technique. Now, here are some popular graphics programs along with their Web addresses:

- **Fireworks** (www.macromedia.com/software/fireworks) This application is easy to use and especially convenient when you need to create buttons and other basic Web site graphics. Macromedia developed Fireworks specifically for creating Web graphics.

- **LView Pro** (www.lview.com) LView Pro is a popular shareware graphics program that includes typical graphic features as well as Web page utilities
- **Paint** Microsoft Paint is a graphics program that comes with Microsoft Windows. Paint is a scaled-down graphics package, but it serves as a handy graphics tool when you're in a pinch.
- **Paint Shop Pro** (www.corel.com) Paint Shop Pro is an affordable, all-purpose graphics program used by many designers. Visit the Corel Web site to download a free trial demo. Figure 5-8 shows a Web site we created mocked up in Paint Shop Pro.

Figure 5-8 Viewing a mocked-up version of a Web site in Paint Shop Pro before building the site



note The newest kid on the Web graphics block is Microsoft's Expressions Suite. Be prepared to hear a lot more about this graphics package in relation to Web development. You can edit both vector-based and pixel images in the Acrylic program, which is part of the suite.

- **Photoshop** (www.adobe.com/products/photoshop) Photoshop is probably the leading image-editing program. It can be a little tricky to use when you're first learning it, but once you get the commands mastered, you'll be highly satisfied with the application's flexibility.
- **Photoshop Elements** (www.adobe.com/products/photoshopelwin for Windows, or www.adobe.com/products/photoshopelmac for Macintosh) Photoshop Elements is a photo editing software application for consumers. For Web developers, Photoshop Elements includes a Save For Web optimizing feature that you can use to resize and compress images for your Web sites.

In addition to the preceding graphics applications, you can also use illustration programs to create *vector-based graphics*. In a vector-based graphic, you can move, resize, and otherwise manipulate an image's elements (such as moving an entire shape around within an image). Vector-based illustration programs that frequently come in handy when creating Web pages include Adobe Illustrator (www.adobe.com/products/illustrator), Macromedia Freehand (www.macromedia.com/software/freehand/), and CorelDraw (www.corel.com).

lingo *Vector-based graphics* are images made with lines and shapes instead of shaded computer pixels.

FTP Utilities

Last but not least, you might need one of those mysterious FTP utilities. Actually, FTP utilities aren't at all mysterious, but whenever we mention "FTP" to people, the color drains from their faces. Basically, FTP utilities are programs that allow you to copy files and directories from your computer to another computer across the Internet. For example, whenever we complete a chapter of this book, we FTP the chapter's graphics to Microsoft Learning in Redmond, Washington, even though we're just down the hill a bit, in beautiful Portland, Oregon.

You can find numerous FTP programs online, many of which are shareware or freeware programs. Popular FTP programs include the following:

- BulletProof FTP (www.bpftp.com)

try this!

If you want to include an animated GIF on your Web site but you aren't itching to build one from scratch, you'll be glad to hear that Microsoft Office XP includes a number of small animations that you can use on Web pages. To insert an animated GIF:

- 1 Open Word (or other Office application), and on the Insert menu, click Picture, and then click Clip Art.**
- 2 In the Clip Art task pane, search for a clip art item, and double-click an item that is displayed with a gold star in the lower-right corner.**
- 3 To see the animation in action, on the File menu, click Web Page Preview.**

As we've suggested before, insert animated components in moderation. Animation can quickly become overly distracting, which will detract from your page rather than add to its appeal.

- CoffeeCup Direct FTP (www.coffeecup.com/free-ftp)
- CuteFTP (www.globalscape.com/cuteftp)
- Fetch (www.fetchsoftworks.com)

Now that you know vaguely what FTP programs do and that you can download them from the Web, don't worry too much about them. At this point, knowing that they exist is enough—if you're really gung ho, you can download an FTP application so that you're ready to upload pages after you create them, but you don't need to do that now. We help you out with FTP programs and file management later in this book, in Part 3. But before we do that, we want to finish our discussion in Part 1 as well as tackle the fun stuff in Part 2, “The Walk—Creating Web Sites.”

A Bit About Browsers

tip No two browsers (or browser versions) process Web code in exactly the same way. Therefore, view the Web pages in as many browsers as possible before publishing your site.

We'd be completely remiss if we wrapped up this chapter without addressing the most obvious software application tool of all—a browser. You need to have a browser (or a few browsers) installed on your computer so that you can preview your pages before you publish them online. Remember that browsers are applications that interpret Web files. Unfortunately, not all browsers interpret Web files in exactly the same way. Therefore, a page you design and then view in Microsoft Internet Explorer could very easily be displayed as a shocking mess in another browser. Even well-designed pages appear slightly differently in various browsers.

Some of the ways Web pages can look different in various browsers include the following:

- Default bullet styles vary in size and fill. For example, the bullets on Internet Explorer and Safari are slightly bolder than the bullets in Firefox.

tip You probably won't need to use an FTP program if you're creating a blog or an online community Web page. Further, you can use the My Network Places feature in Windows to transfer files from your computer to your server space. Eventually, though, you might need to use an FTP utility to delete, copy, and otherwise manage online files. In Chapter 11, “Going All Out with FrontPage,” and Chapter 12, “Sending Web Pages into the Real World,” we fill you in on the details of online file management, where you'll see that being comfortable with FTP applications and My Network Places can come in handy.

- Margin spacing (or offset) around page perimeters varies. For example, Internet Explorer tends to leave more margin space at the top by default than other browsers.
- Default font size is smaller on Windows than on Macintosh, which means that text wraps differently on Macintosh systems than on Windows-based systems.
- Because text wraps differently in different browsers, varying amounts of information appears “above the fold.”
- Browser window widths vary due to toolbar and scroll bar widths.

A number of browsers exist on the Web. You might or might not want to verify that your pages are displayed appropriately in all browsers out there. For most designers, ensuring that pages are displayed properly in the biggies—Internet Explorer and Firefox—is plenty; combined, these two browsers account for over 90 percent of all browsers accessing the Internet. Of course, you must always consider your audience. If you *know* your viewers will be using Safari browsers, you better ensure that your page looks good in Safari. For edification purposes, here’s a short list of browsers you can find lurking on the Web:

- AOL Explorer (downloads.channel.aol.com/browser)
- Apple Safari (www.apple.com/macosx/features/safari)
- Microsoft Internet Explorer (www.microsoft.com/windows/ie)
- Mozilla Firefox (www.mozilla.org)
- Netscape (browser.netscape.com/ns8)
- Opera (www.opera.com)

Previewing your Web site simply entails displaying your Web documents in a browser window locally—so the process is quick and simple. Most important, though, you should ensure that you have access to at least one version (Windows or Macintosh) of Internet Explorer and Firefox for testing and previewing purposes. Don’t worry—we’ll remind you a few more times in Part Two about the importance of previewing your Web pages in more than one browser as well as in more than one version of each browser, if possible.

note Although cross-platform fonts—Arial, Comic Sans, Courier, Georgia, Times New Roman, Trebuchet (MS), and Verdana—are displayed on both Windows-based and Macintosh systems, their default sizes vary, with the fonts consistently displayed smaller on the Macintosh.

tip To see which browsers other readers are using, visit www.creationguide.com/2cents and view the results for the Web Browsers poll.

Tracking Tools While browser statistics are readily available online, you can gather your own browser and visitor statistics for the sites you build. To do this, you use tracking tools, which tell you how many people visit and how visitors view your site. Knowing these types of details can help you make informed design decisions.

Some common statistics gathered by tracking tools include time zones, languages, monitor resolutions, and color depths. Sometimes, you can see how many visitors' computers support JavaScript, style sheets, and other technologies. Often, you can see how long visitors stay on each page, which pages visitors view most, and which pages visitors view last before they leave your site (which sometimes indicates a design flaw).



Many hosting services provide some logging capabilities and tracking services. In addition, we recommend Site Meter (www.sitemeter.com), a free tracking tool that you can add to a Web site. To view Site Meter in action, click the rainbow-colored square located at the bottom of this book's companion Web site, at www.creationguide.com.

Web Extras

In addition to the standard tools we introduce in this chapter, which are necessary to create Web sites, loads of other applications and tools are available to create added functionality. For instance:

- If you want to include multimedia elements such as movies, audio, and animations, you need special programs to develop those.
- If you want to include payment services, you need to find secure payment options and applications, such as PayPal (www.paypal.com) and VeriSign (www.verisign.com).
- If you want to dynamically display text from content services, you might need to work with custom interface utilities.
- If you want to supply information from databases, you need a database to handle the information.

The preceding list of Web tools is just the tip of the iceberg, and many of these topics are deserving of a book of their own. With that said, we're all for introducing you to as much as we can fit into this book.

You don't need to collect tools for advanced Web features yet. The goal here is to help you gather basic tools for getting a custom Web site online—Internet connectivity, server space, a Web editor, a graphics program, a file transfer application, and a browser or two.

check it!

- You need Internet connectivity and server space to display a Web site online.
- You'll find that free Web space is readily available online, particularly on blogging and online group sites, or you can purchase a domain name and buy server space to have full control over your Web site and Web address.
- You can use templates and Web editors to create Web sites. Web editors range from all-text programs to midrange coding applications to advanced WYSIWYG interfaces.
- Graphics applications enable you to create Web graphics, edit pictures, and create mock-ups of future Web pages.
- You can find GIF animators, banner creation sites, button creators, and image map utilities online (in addition to lots of other freeware and shareware programs) and as part of graphics programs.
- FTP programs and the My Network Places feature enable you to copy files from your computer to a remote computer.
- Not all browsers are created equal—different browsers display the same Web files in various ways, so you should always view your Web pages in Internet Explorer and Firefox (at least) before publishing your Web site online.
- Tracking tools help you learn how visitors view your pages, which can help you make informed design decisions.
- Many tools are available that enable you to add functionality to your Web sites, including multimedia features, shopping utilities, databases, and so forth.