



Lessons - Plan and build your first website (with podcast)

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Lesson 1

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Introducing websites

This course covers all the topics everyone faces -- or should face -- when putting up that first purposeful site, from how to select and organize content to logistical concerns, such as where to have your site hosted, to implementing e-commerce on a small business site.

What is a website?

It may seem like a pretty basic question, but it's best to get this definition out of the way right off the bat so as to avoid confusion later. When we talk about websites in this course, we're talking about a collection of related documents on the web that are linked together and share a beginning file called a homepage. **Web pages** are the individual documents that are linked together to form a website.

Because this course is about building websites (not pages), you won't spend a lot of time on the technical workings of web pages and the Internet -- such as HTML (Hypertext Markup Language), CGI (Common Gateway Interface), JavaScript, and the hundreds of other protocols and languages that make the web work. The goal of this course is to prove to you that it's entirely possible to build a good first site without being a supergeek.

This is not to say there's no point to learning to build sites the "hard" way. Anyone considering a career in website development is encouraged to learn about the more technical aspects of the web. However, because this is your first site, it should be as much fun and as easy as possible.

What's the big idea?

You can't write a book unless you have some idea what that book is going to be about. You can't write a song without a clue as to what you want to sing about. In the same way, you can't design your own website unless you first know why you're creating the website and what's going to be on it.

There are countless reasons for building a website. Examples of reasons you might build a website include:

- Marketing your business
- Selling products or services
- Publishing your ideas (or musings) to be read by a global audience
- Showing off your children or grandchildren
- Showing off yourself

Your reason for building a website can be compared to a business's mission statement, which describes a company's reason for existence. Simply put, a mission statement tells the folks reading it just what a business is all about -- or at least what the business wants people to think they're all about. Examples of business mission statements might include:

- "We sell cars at the lowest prices"
- "Our mission is to provide the latest information on cures for blue-footed pigeon disease"
- "All music, all the time"

Your first task in creating your site is to write your website's mission statement.

What's your mission?

Mission statements can be as short as a sentence or as long as a paragraph. To write your own mission statement, sit down, get comfortable, and put pen to paper or fingers to keyboard. Try to describe your website's theme concisely in no more than one paragraph. To make it even harder, your goal is to adhere to a word limit -- use no more than 65 words.

The heart of your website

The point of this lesson is to help you find your focus before you start designing your website. Browse the Internet long enough and you'll see plenty of sites that try to do an awful lot and are often confusing as a result. Some sites, such as Yahoo! or Amazon.com, actually succeed with this model. However, what works for a large Internet portal or shopping site almost certainly won't work

Why are you here?

The reasons people decide to take a course on building a website are as diverse as the web itself. What are your hopes and expectations for this course? What kind of website are you dreaming up? Take a few moments to meet your instructor and fellow students on the class Message Board, and let us know a little about you. See you there.

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With thin lines, a cool touchpad design, and a sleek, touch-control panel, this 7.0 lb., 15.4" laptop PC redefines simplicity. In addition to being ultra stylish, the PCs in the Presario CQ50Z series are durable, powerful, and value-priced.

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From software, memory, and cards to carrying cases and docks, look to HP for all the accessories you need to make your notebook PC more suited to your personal needs.

for an individual web publisher or a small business owner. The reason is simple: they have the resources to successfully manage enormous amounts of content and hundreds of different products. Chances are good that you don't.

To avoid getting bogged down in endless busy-work and ending up with a site that no one can understand, decide on the central purpose of your site. With your mission statement in hand, you're almost ready to start your website construction. In the next section, you learn what kind of content you need to gather to give your website some meat and substance.

Collecting your content

You've decided on your mission. You wrote it. Then you rewrote it. Then you rewrote it again. Now it's time to gather the content that'll reflect the theme of your site. There are two types of content:

- **Content you already have:** If you're planning a business site, you probably have marketing brochures, product briefs, sales letters, and the like. Gather these in one place. With luck, everything you have is already in a digital format, otherwise you'll have to spend at least a few hours retyping (or scanning) hard copies.

If you're a business owner -- or if you have family members with time to spare -- consider delegating this task.

- **Content you may not know you need:** If you have competitors, your goal is to get web surfers to surf your site rather than your competitors' sites. To accomplish this, you have to find out just what your competitors have on their sites and "do them one better."

Let's say, for example, you want to build a website that provides the ultimate source for kite enthusiasts. You have a bunch of product brochures, but that really isn't sufficient to build a website that anyone's going to want to visit. So, it's off to the search engines to see what your competitors are doing.

The following are some good search engines you can use for your research:

- [Google](#)
- [MSN Search](#)
- [Yahoo!](#)
- [Ask](#)

You can use any of these to come up with a list of competitors. For example, searching for kite dealers, you get list of kite-oriented websites, including the one shown in Figure 1-1.

» HP Pavilion Elite PCs



The next generation of home entertainment; access TV, movies, music and photos, when and how you want.

» HP monitors



Find state of the art displays from HP with excellent picture quality in stylish designs.



Figure 1-1: One of the competitor sites in the kite web space is Into The Wind.

[Enlarge image](#)

The [Into The Wind](#) website contains a wide variety of content, including:

- Kite kits and supplies
- Kite comparisons
- Expert advice

- Forums
- E-newsletter
- Lists of kite-related events

There's a lot of content there and if you're going to compete in this area, you need content that's equally as dramatic.

Far too many people set out on building their first website with the idea they're going to compete with a site like Intothewind.com on a shoestring budget. Do not try this at home. It's true that many of today's most popular sites started out as someone's weekend project, but most of them didn't have any competition when they started.

When you plan the content for a website, there's also "wish list" content. This is content that you don't currently have, and isn't found on any competitor site, but that you think would be a great asset to your site. You may have seen something you like on a non-competitor's site, such as music, video, newsletters, and so on. Of course, you're walking a fine line here. Put too many things on your site and you run the risk of having a non-focused, confusing site. Put too little on your site and you run the risk of being boring.

Now it's time to make a list of what your site is going to contain.

Making a list and checking it twice

Make a complete list of everything you want to have on your website, even if you don't put it all online right away. First, list everything you own (meaning content -- no one cares about your SUV or stereo) and have readily available. Next, browse the web and see what your competitors are up to. Make a list of what they have and from that list, decide what you want to include on your site. Finally, add all those "must haves" you've seen on other sites to your list, even sites that aren't your competitors.

After you've made your list, go eat dinner or take a walk. There'll be plenty of time for staring at the computer later. After your break, return to the list and go over it, item by item. Put a "Yes" next to the items that really make sense for your site. Write "No" on items that might detract from your site.

Giving your website some structure

Roll up those sleeves again; it's time to get cracking. You're going to sketch out just what your website will look like. Use pen and paper or any computer drawing tool (including your word processor). The goal here is to plot out your site in a diagram format. A **site diagram** shows everything your site is going to have, along with the relationships between objects.

At this point, your site diagram serves as the blueprint for your site. After you've finished your initial construction, your site diagram can serve as a tool for visualizing or modifying your site. It can even be repurposed to give your visitors a bird's-eye view of your content and to provide an alternate method for them to navigate your site.

The first thing you put on your site diagram is the homepage. Your **homepage** is the entry point to the whole site. If your site diagram uses the inverted tree model, such as a family tree, the homepage should be at the top of the page. Draw a large box for your homepage, and give it a label ("homepage" works, but you can also give it the same name as your site). From the homepage, a visitor should be able to logically navigate to any page on the site.

It takes some practice to think of websites as inverted trees, and you may make some mistakes. This is where either an eraser or website diagramming software that allows you to move pages around comes in handy. See the sidebar, "Need a Site Diagramming Tool?" for more information about where to find such software. Also, many of the software programs available for designing websites, such as Microsoft FrontPage, feature a built-in site-diagramming tool. Visit the Web Style Guide [Creating site diagrams](#) web page for information about and illustrations of site diagrams.

One of the benefits of using a tool such as FrontPage is that the program creates the pages for you as you diagram the site. All that's left for you to do is to fill them with content.

Even with all of the software available to help you create your site diagram, sometimes it helps to use a pencil and paper at this stage. The important part is to have a plan for how the various types of content on your site will link together.

Don't worry if you don't know yet how to create the code to execute your ideas. In this lesson, we're learning how to use the concept of the site diagram to plan out your site.

What's next?

So, now you've written your website's mission statement, you've created a list of content, gathered your content, and diagrammed your site. Pretty good for one lesson. Lesson 2 shows you how to

Need a website diagramming tool?

There are a number of tools available that can make your site-diagramming job much easier. Try searching for **site map**, **sitemap**, or **site diagram** on a shareware download site, such as Download.com. Many of the tools you'll find can also reverse engineer an existing site to create a site diagram. Be careful which sites you use such a tool on, however, because many sites have thousands of pages and could potentially tie up your computer for a while.

» Desktop PCs



View our wide selection of desktop PCs to see reliable HP quality at a great value. We'll even help you choose the right desktop for your unique needs.

use the various web designer tools to make that content shine.

Before moving on, please complete the brief lesson quiz and assignment. Now is also a good time to visit the course Message Board and discuss your site diagram with your classmates and the instructor.

» Desktop PC accessories



From software and storage to cables, mice, and keyboards, all the accessories you need for your HP desktop PC are available to make your desktop experience more personal, powerful, and attuned to your specific needs.

Next steps»

Congratulations on completing the lesson! Don't forget the following:

- » [Assignment: Searching for site maps](#)
- » [Quiz: Lesson 1, quiz 1](#)
- » [Discuss what you've learned with your instructor and other students](#)
- » [Return to the lessons list to get a quick overview of the entire class](#)

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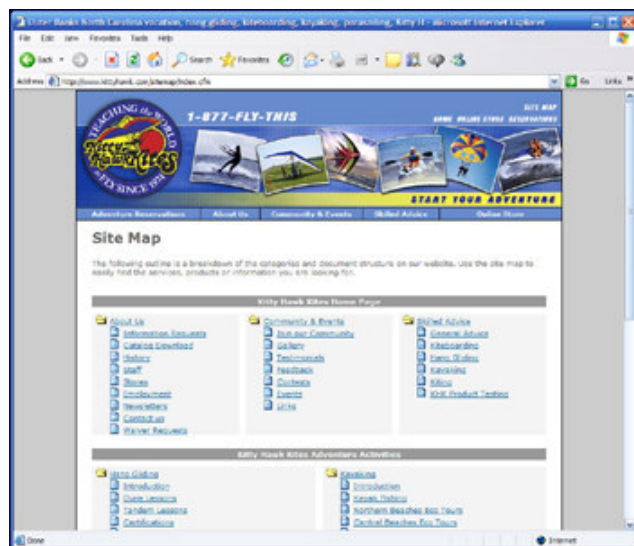


Elements of a website assignment

Assignments are designed to help you apply the information learned in the lessons.

Searching for site maps

As mentioned in Lesson 1, many websites use a site diagram as a navigation aid. When used in this way, it's usually called a **site map**. Your assignment is to browse the web and find some site maps. Notice that many site maps don't show the relationships between content the same way as your site diagram does. For example, Figure 1-2 shows a simple text-based site map.



[Enlarge image](#)

The basic concept of this site map and your diagram is the same: to present a hierarchical view of the website's content.

Assignment Completed >>

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Lesson 1, quiz 1

Quiz: Lesson 1, quiz 1

Quizzes are designed to give you a chance to test your knowledge.

1. **True or False: Creating a mission statement is the first thing you need to do to develop a focused website.**

- A. ☐ True
- B. ☐ False

2. **True or False: The goal of your website is to present your unique style or showcase your services; therefore, you should create all the content yourself.**

- A. ☐ True
- B. ☐ False

3. **What is a site diagram?**

- A. ☐ A hierarchical list of everything your website is going to have
- B. ☐ A wish list
- C. ☐ The collection of tools you use in a web editor to create a website
- D. ☐ A collection of all images you plan to use on your website

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Lesson 1, quiz 1

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0 items in My Cart

Hello, Truitt

[» Edit profile](#)[» Sign out](#)[» Online classes](#)[» Your classes](#)[» Contact us](#)[» FAQ](#)[» Digital Photography](#)[» Everyday Printing](#)[» PC Learning Center](#)[» Digital Entertainment](#)[» Activity Center](#)**Browse & Buy**[» Home & Home Office Store](#)[» Find a retailer](#)[» Rebate Center](#)**Product Support**[» Support & troubleshooting](#)[» Software & Drivers](#)[» HP Total Care](#)[» Register your product](#)**Quiz: Lesson 1, quiz 1**

Quizzes are designed to give you a chance to test your knowledge.

Please feel free to take this quiz again. We will update your score.

Quiz Results

✓ 1. True or False: Creating a mission statement is the first thing you need to do to develop a focused website.

A. ☒ TrueB. ☐ False**Correct answer(s): A****Explanation:**

Although collecting images and learning HTML are important, those are not the first tasks you need to do. You can't design a good website unless you can develop its focus, or theme, first. HTML and images come later.

✓ 2. True or False: The goal of your website is to present your unique style or showcase your services; therefore, you should create all the content yourself.

A. ☐ TrueB. ☒ False**Correct answer(s): B****Explanation:**

There are a lot of sources of content available for free. You just need to search the web to find most of what you need.

✓ 3. What is a site diagram?

A. ☒ A hierarchical list of everything your website is going to haveB. ☐ A wish listC. ☐ The collection of tools you use in a web editor to create a websiteD. ☐ A collection of all images you plan to use on your website**Correct answer(s): A****Explanation:**

A site diagram is a visual, structured map of what your site is going to look like.

You got 3 correct out of 3 questions.**Your Score: 100%****Next steps»**[Printable version](#)[» Bookmark HP Online classes](#)[Privacy statement](#)[Using this site means you accept its terms](#)[Feedback to Home & Home Office](#)

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Lesson 2

» [View single page](#)

Get this design started

Now that you've decided what your website is about and what content you're going to have on it, you need to figure out how to present this information to visitors. That's where your website design comes in. In this lesson, you learn how to lay out a page, pick colors to use in your site design, choose fonts, and find and create images for your site. You'll also learn about web usability and accessibility. We've got a lot to cover, so let's get started.

Page layout

When you lay out your website, you're creating a framework, or **template**, that applies to every page of your site. This framework is where you'll place your content. This template should include site navigation, the site's logo, a copyright statement, and any other items that should be on every page of the site. The template should be consistent throughout the site, with the exception of a few cases:

- **Homepage:** Your homepage template can be somewhat different, because it serves as a gateway to your entire site. However, many designers create the homepage template to be pretty darned similar to the rest of the site, if not exactly the same. If you have good reasons, go ahead and make it different -- but not so different as to be unrecognizable as part of the same site.
- **Store pages:** If part of your site is a store, you probably want to use a different template for that section. It should be similar in style, but the primary colors might be different, and the navigation options should be mostly limited to store functionality; therefore, users don't accidentally leave the store without buying something. You wouldn't want that, would you?
- **Feedback page:** If you have a form for submitting site feedback, put it on a page that has fewer navigation options than the other pages of your site. After all, you want users to fill out the form, not be distracted by the other riches your site has to offer.

Remember that every page template needs to represent the "look and feel" you've chosen for your company or endeavor. When a visitor moves around the site, they should feel as if each page is related to the others and come away with the same sense of purpose from every page. If your homepage is designed with subdued monotones, your visitors are going to be uneasy if they suddenly land on a page created in bold primary colors.

Standards exist for a reason

Website design has matured to the point that there are plenty of standards, and it's a pretty good idea to use them. Putting things where visitors expect to see them helps people use your site.

Logo placement

Website logos are almost always placed in the top-left corner of the page layout and are usually linked to the homepage. The logo should appear on every page of your site, in the same place. It can, however, be smaller on interior pages than it is on the homepage. By following this rule, you're ensuring your visitors always know they're on your site, and know when they've accidentally moved off the site.

Navigation

Website navigation is almost always in one of two places, and sometimes both, as shown in Figure 2-1:

- **Top navigation:** Along the top of the page or just under the page header, consisting of your logo, plus a search box and maybe a spot for banner advertising.
- **Left navigation:** In a column on the left side of the page. This is usually used for main content navigation.
- **Bottom navigation:** Along the bottom of the main frame on the page. These links are usually reserved for legal and non-commercial related links, such as the site map and copyright information.

» Norton Internet Security 2008



Travel the Internet while protected against viruses, hackers, spyware, and spam. Stay safe as you e-mail, swap files, download programs, and chat. You're automatically protected when you've got Norton Internet Security 2008, updated and enhanced with more features than ever.

» HP Total Care owner services



Protect your investment and achieve greater peace of mind with the right HP Extended Service Plan for your needs.

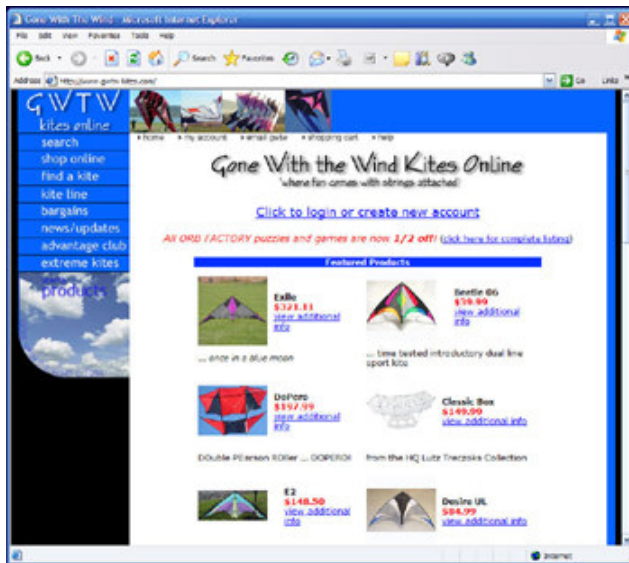


Figure 2-1: Gone with the Wind Kites Online offers top and left navigation links.

[Enlarge image](#)

You can put navigation in both locations, but avoid putting the same navigation items in both locations. When possible, use the left navigation for general maneuvering through the website and the top navigation for a more personalized experience, such as account and contact information.

Using the content list you generated in Lesson 1, make a note of how you'll link to that content from the homepage. Determine which content can be grouped together and reached from a common link, and then decide which links make sense in the left navigation and which belong at the top. Once you've figured all that out, it's time to move on to choosing colors. In the next section, you'll learn how to make good decisions about which colors are right for your site.

All the colors in the rainbow

Every website's got colors -- except maybe one for old-time photography. And why not? Unlike print, colors on the web don't cost any more than black and white. The temptation is to use all the colors. This, however, is a bad idea. Your challenge as a website designer is to use colors wisely to create a website that conveys the appropriate mood without going overboard.

Develop your color scheme

One of the first steps in website design is to determine the color scheme you're going to use. You don't have to decide right away which colors you're going to use where in your page layout, but knowing which colors you're going to use before you get too far along in your project will save you lots of headaches later.

The color wheel

You may remember the color wheel from art class or elsewhere. However, the color wheel is poorly understood by most people. Just so we're all on the same page, let's review the basics. Review the color wheel shown in Figure 2-2.

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HP has a PC with the features and price range to meet your needs. Check out the latest selection today. HP Pavilion PCs provide the versatile technology you need to communicate, create and enjoy your world more.

» Desktop PC accessories



From software and storage to cables, mice, and keyboards, all the accessories you need for your HP desktop PC are

available to make your desktop experience more personal, powerful, and attuned to your specific needs.

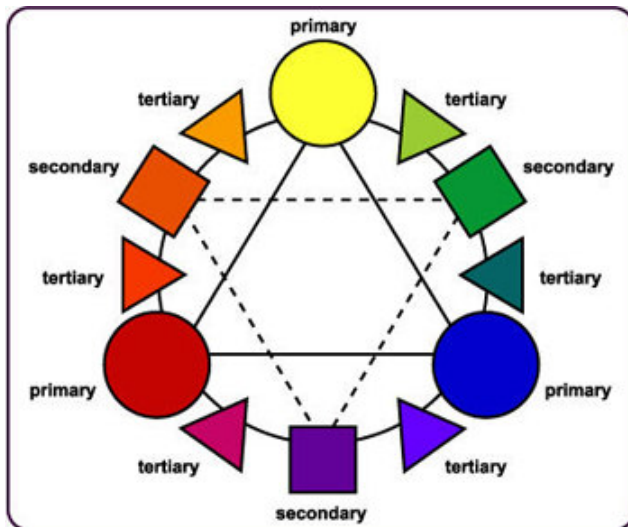


Figure 2-2: The color wheel.

Colors that go well together are:

- **Complementary colors:** Colors on opposite sides of the color wheel
- **Triad or tertiary colors:** Three colors that are equidistant from each other on the color wheel
- **Analogous colors:** Colors that are next to each other on the color wheel

Clearly, there are a lot of options here, and the colors that you select are largely based on your own subjectivity. The key is to pick something that looks good and is appropriate for your website.

Two of one, several of the other

Your color scheme should, in most cases, consist of two main colors, plus one or more second-level colors. This is not as complicated as it may sound. See Figure 2-3 for an example.

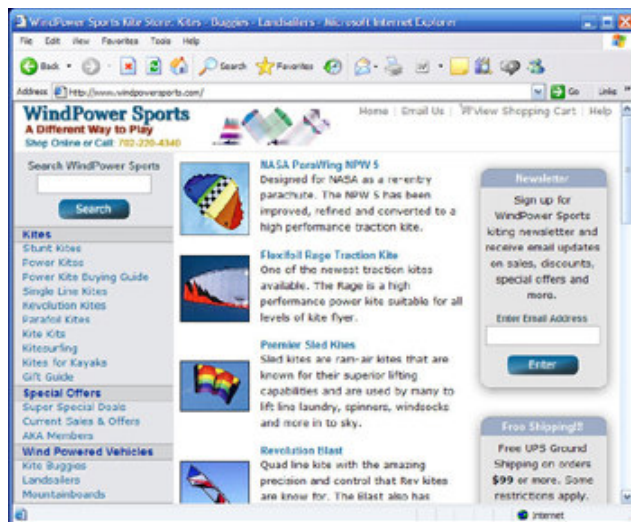


Figure 2-3: A sample color scheme.

[Enlarge image](#)

WindPower Sports uses a simple color scheme for its website. You can see the two main colors are blue and gray. The web designer used blue for the company name and navigation links, with a darker blue for the category headers. Gray is used as a background color to show off the blue. Two secondary colors, red and yellow, emphasize important information such as the tag line and phone number.

Tools to help you

A graphic designer can often help you to determine which colors work well together. When a graphic designer isn't available, you can use a handy online tool that generates color schemes automatically.

The Color Schemer Online, shown in Figure 2-4, provides color schemes based on a chosen color.

The company also sells a software version that provides more functionality.

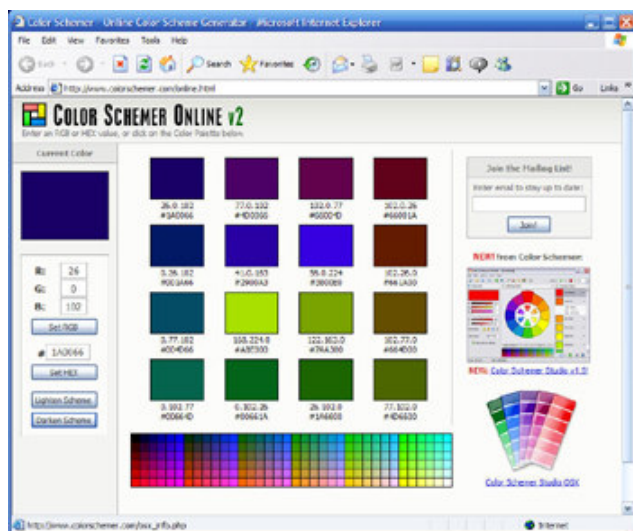


Figure 2-4: Color Schemer Online can help you develop your color scheme.

[Enlarge image](#)

So, what works for my site?

As mentioned previously, your color scheme should be appropriate for the type of site you're developing. Here are some guidelines to start your thought process:

- Sites for children (or child-related topics, like toys) typically use bright primary and secondary colors such as red, green, yellow, and blue.
- Professional and corporate sites tend to use more subdued shades of blue or green (such as navy blue or forest green), along with grays, tans, and beiges.
- Online store color schemes are all over the map and often relate to what they sell. For example, bath and beauty products can be presented in shades of pink and beige, or forest green and white. Clothes stores can be a bit bolder, using a bright navy blue or crimson red along with tan or gray.

Of course, all these color schemes should use plenty of soothing white or light gray, particularly for text-filled areas. Bold background colors often appear amateurish and distract from the intent of most websites. In the next section, find out how to use fonts to match the professional appearance of your colors.

Tips for tasteful font usage

The tasteful use of fonts on a website conveys a professional image, whereas wacky and tacky font usage does quite the opposite. Depending on the type of site you're creating, you'll want to go one way or the other. But, in most cases, tastefulness is what you'll be looking for.

One serif, one sans-serif

An oft-cited rule is to use one serif font and one sans-serif font in graphic design. There may be good reason to break this rule sometimes on the web, but it's nonetheless a good place to start.

First, you need to know the difference between serif and sans-serif. If you've used a word processor in the last 10 years, you've seen them both, but maybe without knowing it:

- A **serif** font has small decorative lines on each letter, and looks somewhat old-fashioned. Serif fonts are typically used for newspaper stories and novels. Times New Roman and Georgia are serif fonts. Serif fonts lead the eye from letter to letter, word to word, and are best used as paragraph text.
- A **sans-serif** font doesn't have serifs (for those of you spared the joys of learning French, note that sans means without) and creates a somewhat more modern look. Examples include Arial, Helvetica, and Verdana.

Sans-serif fonts are best used for short phrases or groups of text, such as headers or links. Serif fonts tend to be used for paragraphs. Figure 2-5 gives an example of how this would look on a web page.

» Compaq Presario CQ50Z series



With thin lines, a cool touchpad design, and a sleek, touch-control panel, this 7.0 lb., 15.4" laptop PC redefines simplicity. In addition to being ultra stylish, the PCs in the Presario CQ50Z series are durable, powerful, and value-priced.

» Notebook PC accessories

Fonts

There are two types of fonts -- serif and sans-serif.

Serif fonts have lines and swirls attached to each character helping to lead the eye as it reads the text.

San-serif fonts are simpler and plainer, perfect for headers and links.



From software, memory, and cards to carrying cases and docks, look to HP for all the accessories you need to make your notebook PC more suited to your personal needs.

Figure 2-5: Example of serif and sans-serif fonts on a website.

As is typical on the web, you can break the rules a little bit. Using Arial for both headers and text would be fine as long as the headers are sufficiently larger than the text (to clearly differentiate them). It might not be as visually interesting as mixing it up a bit more, though.

When you need a third style

On the web, there are page elements other than just headers and text, such as site navigation, sidebars, and/or pop-up windows. You want to use another font, or at least another style, to differentiate these areas from the rest of the page.

How to do this is partly a judgment call, but a good rule to remember is, if you're going to make it different, be sure to make it significantly different rather than slightly different. For example, if you're creating a sidebar for the style in Figure 2-5, you could make it Arial, but bold and green.

You can also differentiate special areas from the rest of the page using background colors.

Size matters

Another case in which to keep the make-it-significantly-different rule in mind is when creating various levels of headers. Your second-level header should be sufficiently smaller than your top-level header so users can notice the difference. When deciding on heading sizes, view your page in several different browsers to see whether it works.

Now you know how to use colors and fonts on your website. The next step is to add images to enhance your message. Pick up some tips for using images wisely on your website in the next section.

Use images wisely

Unless your site is purely technical, with no commercial or personal interest (the [W3C](#) website, for example), you want to use images to make it visually interesting. Images can help convey moods and ideas not easily described in words. They can also help users understand how to use the site.

Convey ideas with images

Say you own a miniature golf course, and you'd like to create a promotional website that encourages families to come out and play a round at your course. A good image to use might be one of a family playing miniature golf, laughing, and having a good time. This image conveys the feeling of fun and family bonding, without you actually putting the words "Fun and Family Bonding!" on the site.

Selecting an image to convey a feeling can be as straightforward as putting a big, juicy-looking orange on an orange juice website. Despite the fact that any visitor would already know that the site was about orange juice, the image of the big, juicy orange is a more positive and emotional way of getting the user engaged in the site. Putting the words "Yummy Orange Juice" in huge text across the homepage just wouldn't have the same effect.

On the other hand, some sites call for more subtle use of images to convey a feeling. For instance, many websites for funeral homes feature photographs or sketches of the funeral home or its employees. Both convey a feeling of reassurance to the potential customer. The funeral homes look invariably spotless, and the employees invariably respectful and professional.

Helping users get around with images

Images are often used on websites to help users figure out what to do. For instance, a picture of a pencil could indicate that a user can write to the webmaster by clicking there. Or an image of a cloud with the sun peeking out might indicate that weather information is available by clicking. One of the most ubiquitous images is a question mark, where a user can click for help.

» Desktop storage



Whether you want to back up your personal media and data for safety's sake or clear up your hard drive to make space, look to HP for your storage needs.

» Notebook storage



Such images, called **icons**, are often used together with text to guide users. For example, if you visit any of the numerous travel sites, such as [Expedia](#), shown in Figure 2-6, you might see an image of an airplane and the word **flights** to let the user know this is a link to the Flights section of the site. Both visual and literal people are served by using both.

Whether you need storage to back up your important memories and data or to clear up space on your hard drive, HP notebook storage cards and devices are designed to meet your specific needs.

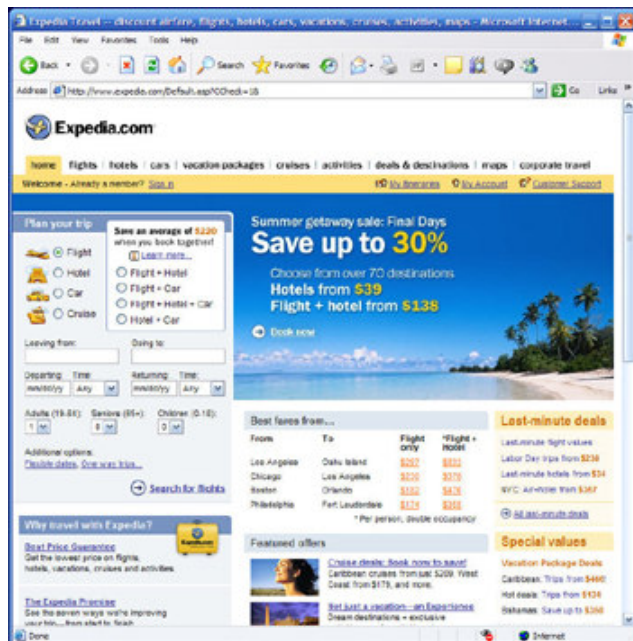


Figure 2-6: Icons help visitors visually identify links and information.

[Enlarge image](#)

Children's sites often use simply images as a navigation tool, partly because small children may not be good readers, and also because children enjoy more colorful media. Take a look at the instructions for a game on [SesameStreet.com](#) in Figure 2-7. The instructions for the visitor consist primarily of images.



Figure 2-7: SesameStreet.com uses images to help kids use the site.

[Enlarge image](#)

Images convey a lot of information about a site and should be chosen carefully. There are a seemingly infinite number of images to choose from, so the next step is to cull through them to find images that best suit your needs.

But how do I find images to use on my website?

One of the trickier tasks in website development is collecting appropriate images to use on your website. Assuming you don't have a big graphics budget, you'll be doing some scrounging to come

» **HP Pavilion Elite d5000t ATX series**

up with good material.

Don't steal images. Ah, there are so many sites out there with so many beautiful images. But they're not there for the picking. Although it's simple to download an image from someone else's website, you shouldn't do it, at least not for use on your own website.

There are three main sources of images:

- Copyrighted images you can get for free
- Copyrighted images you must buy
- Images that you create and own the copyright to

First, we'll explain a bit about copyrights. When you create something, you own it. No one else can use it unless they obtain permission to use it, or purchase rights to the item from you. Even though a site might not contain a copyright notice, assume that everything used on someone else's site is copyrighted. Whoever owns the site always owns all the words and all the images on the site (unless they stole the images -- or the text -- from someone else). This means that you risk legal problems, and sleepless nights, if you copy any part of the site.

Freebies

So what can you do if you're a terrible artist but you still want to jazz up your site with pretty pictures?

Most word processors, desktop publishing software, and image processing software applications come with a wide variety of free images. In Microsoft Word, for example, click **Insert > Picture > Clip Art**. Use the Microsoft Clip Art Organizer, shown in Figure 2-8, to organize all the clip art, pictures, sounds, and videos on your computer into one collection for easy viewing and selecting.

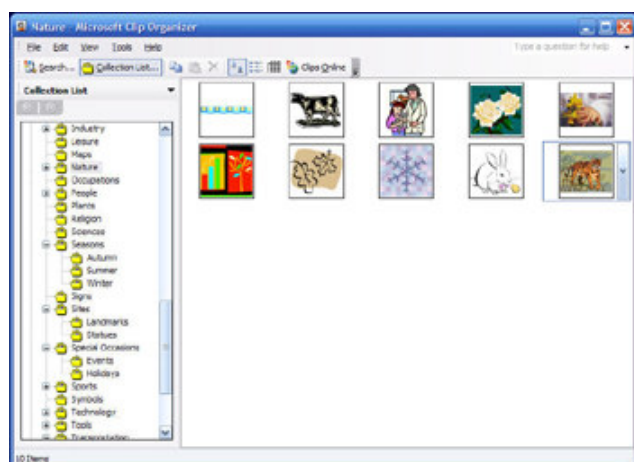


Figure 2-8: Clip Art Organizer helps you organize pictures and media files.

[Enlarge image](#)

Royalty-free artwork

Another option is to use royalty-free artwork. A royalty is the fee you pay the owner of a copyright to use the copyrighted item, each time you use it. Royalty-free means that instead of having to pay a fee each time you use the image, you can pay a flat fee once, and be able to use the image repeatedly. There are two ways to get images royalty-free:

- You can purchase CD-ROMs that contain thousands of royalty-free images. Check out your local, large office supply stores to see what's available. Be sure to check for legal notices on those CDs. There may be limits on what you can use the image for -- for example, use may be limited to schools and non-profit organizations.
- There are a bunch of places on the web to download royalty-free art, for a fee. One of the best values is [iStockphoto](#). You should also visit the [GettyImages](#), [Corbis](#), and [Clipart.com](#) websites. Or you can google **royalty free art**, **copyright free art**, or simply **free art**.

No matter where you buy get your artwork and images, make sure you read the fine print and the restrictions on use. Most royalty free work is available for use on a public website but sometimes they restrict use on business or e-commerce sites.

To clip art or not to clip art

Clip art is a mixed blessing. You'll find lots of it on the web or on inexpensive CDs, and you'll probably find images that express the idea you want to get across with your website. The trouble is that clip art images are simple line drawings, and as such they don't always convey the professional message a site designer needs.



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When considering clip art, look at a lot of it before you make a choice. Pick the best images that express the ideas you want, and be careful not to overuse clip art, or any kind of graphics, on your site. Discretion in the use of graphics prevents your page from looking cluttered.

Why use photographs rather than clip art?

Although a great deal of the royalty-free images available on the web consists of clip art, there are also many photographs and other high-quality images on the web, particularly through [iStockphoto](#), [GettyImages](#), and [Corbis](#). Because photographs usually look better than clip art, it's worth considering these images for your web pages.

On the downside, photos almost always require more disk space than clip art images do. This means that pages containing photographs usually take longer to download than pages with clip art -- especially if you use multiple photos on a page. That's not a fatal problem by any means, because more people are switching to broadband, which means download times are less of an issue. You can easily compress photographic images (and clip art, too). You'll learn about these techniques in Lesson 3.

If you've got a camera and a good eye, you can forgo searching for images altogether. In the next section, you'll learn how to create your own images.

Use original images

Freebies aside, there's nothing quite like custom-made graphics. That's where a graphic designer comes in. Designers can advise you about the best look for your site as a whole, and can create the kind of images for you that enhance its appearance significantly. Of course, you have to pay for their services, but sometimes it's really worth it.

If you have a bit of talent, you might want to take a course in digital design and learn how to think like a designer when approaching your website. You also learn how to use software tools that can help you create your own artwork.

Photography with digital cameras

The advent of digital cameras has made taking and uploading pictures to the web rather simple. These days, most digital cameras take great pictures and come with software that makes transferring the photos to your desktop a piece of cake.

Many graphics applications include a nifty tool that allows you to import digital camera images directly into the program via a plug-in. A **plug-in** (in a graphics application) is software that enables you to manipulate a specific camera or scanner within the application. In some cases, plug-ins are bundled with the application. In other cases, you need to install a plug-in for the camera or scanner you're working with. That software comes with the camera or scanner, which also includes instructions for installing it.

When using a digital camera, take the pictures at the highest resolution you can. This will give you more flexibility when working with your images later.

Film cameras work, too

If you don't have a digital camera, just how can you get your photographs into your computer? You can still use your regular camera. Take the pictures, but instead of getting paper prints, get your pictures saved to CD-ROM.

Kodak pioneered the concept of processing photographs to a CD-ROM, and this service is available at most photo counters. It's also available on the web through such services as [Shutterfly](#) and [Snapfish](#).

These services also publish your photos directly to the web, usually at little or no cost above film processing. You send them your film and get hard copy photos and a downloadable file of the film roll online. Once you're notified that your photos are available online, all you have to do is surf to the site, view your images, and then download them to your computer.

Drawing on the computer

If you have very good mouse-hand-screen-eye coordination, or have an electronic drawing pad, you might want to try drawing your own art on your computer. Microsoft Office comes with Paint, a basic drawing program that saves images in a variety of formats.

See Lesson 3 for more information on web-ready file formats.

More sophisticated drawing programs include [Adobe Illustrator](#) and [CorelDRAW](#). These programs

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require an investment of cold, hard cash, but it's worth it if you're interested in creating your own graphics. Download trial versions to compare the programs and pick the one that best suits you.

No matter where you decide to go for graphics for your website, the most important factor of all is that they add value to the site, not detract from what you're trying to accomplish. Not only do you want your site to be clear and professional looking, you want it to be easy to navigate and use. In the next section, you'll learn about usability and accessibility, and how to make your site meets these ideals.

Usability and accessibility

In the last few years, the concepts of usability and accessibility have become ever more important to web design. To make your site friendly to everyone who visits, it's important to keep both of these concepts in mind, and put them into practice as much as possible.

Usability

Usability is the technique of making something (in this case, a website) as easy to use as possible, so visitors can accomplish what they want in as little time as possible. There are a vast number of techniques to achieve usability, and we'll go over the basics here.

Don't get clever

Marketing people may get miffed when we say this, but overly clever names for the sections and links on your website are not a good idea. Whenever possible, use terms that reflect what the user will experience or is looking for. Instead of saying "Vision," use a phrase such as "What We Do."

Using color as a guide

If you're building a large site with many sections, consider color-coding the sections. Color-coding helps visitors stay aware of where they are on the site and alerts them if they inadvertently switch to another section.

Don't be afraid to use white

Make your text easy to read by sticking to black text on a white background as much as possible. Sometimes, to set a section apart from the rest of the web page, you'll want to use a light background color. That's okay, as long as it's light enough to still be readable. White text on a black background is also fairly easily read.

Do your homework

It pays to find out more about usability. Check out the following websites to solidify your knowledge:

- [Usability.gov](#)
- [Usability First](#)

A lot of sites are dedicated to this theme -- use your favorite search engine to find more.

Accessibility

Accessibility is the practice of making your website as usable as possible for people with disabilities. There are quite a few tools available these days to help people with disabilities use the web. Just a few tricks will make your site much friendlier to these tools.

Alt-text, alt-text, alt-text

Every image you use on the web has the option of showing alternate text, or **alt-text**. This was originally developed because in the olden days some browsers could not display images, and some people set their browsers to not load images to save download time. Nowadays, there are web navigation tools for vision-impaired people that actually read the contents of your site to the user. If there is no alternate text for your images, these visitors will have no idea what the image is. Even worse, if you're using images for your navigation buttons, the user won't be able to navigate the site without alternate text. It's quick and painless, so be sure to include it.

Avoid image maps

Image maps are images where certain parts of the image are clickable and linked to other parts of the website. These are difficult for accessibility tools to interpret, so it's best to avoid them. If they must be used, be sure to include the same links as regular text links on the same web page.

Learn more

A quick search on the web leads you to a wealth of resources on website accessibility. You can also check out these websites for more information:

- [Section 508](#)
- [Web Accessibility Initiative](#)
- [Dive Into Accessibility](#)

Be sure to read up on this subject before you get too deep into your website construction. If you plan

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for an accessible site from the beginning, you'll save yourself a lot of trouble down the road.

Next up

You've learned how to use colors, fonts, and image to create a great website design, and now it's time to put your ideas and design together to actually create your first website. First, though, try your hand at the quiz and assignment to make sure it all sank in. And don't forget to visit the Message Board to swap web design ideas with your classmates and instructor.

Next steps»

Congratulations on completing the lesson! Don't forget the following:

- » [Assignment: Get started with your own design](#)
- » [Quiz: Lesson 2, quiz 1](#)
- » [Discuss what you've learned with your instructor and other students](#)
- » [Return to the lessons list to get a quick overview of the entire class](#)

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Web design basics assignment

Assignments are designed to help you apply the information learned in the lessons.

Get started with your own design

1. Using a color wheel or [Color Schemer Online](#), develop three potential color schemes for your website.
2. Choose the color scheme that seems most appropriate for your site. Decide which colors are the main colors and which are second-level colors.
3. Visit the [iStockphoto](#) website and use the search function to find three graphics that convey an idea that you want to include in your website.

You have completed this assignment.

Next steps>>

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Lesson 2, quiz 1

Quiz: Lesson 2, quiz 1

Quizzes are designed to give you a chance to test your knowledge.

Please feel free to take this quiz again. We will update your score.

1. Where do you usually place logos on a web page?

- A. ☐ Top middle of page
- B. ☐ Bottom middle of page
- C. ☐ Top left of page
- D. ☐ Bottom right of page

2. True or False: Triad colors are three colors that are equidistant from one another on a color wheel.

- A. ☐ True
- B. ☐ False

3. True or False: Sans-serif fonts have small decorative lines on each letter.

- A. ☐ True
- B. ☐ False

4. True or False: To use royalty-free artwork, you must pay a small fee each time you use it.

- A. ☐ True
- B. ☐ False

5. True or False: To make digital pictures, you have to use a digital camera.

- A. ☐ True
- B. ☐ False

6. How do you ensure that accessibility tools can understand images?

- A. ☐ By providing alternate text
- B. ☐ By including a detailed explanation in plain text
- C. ☐ By including audio with every image
- D. ☐ It's impossible -- don't use images if you want accessibility tools to understand your website

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Quiz: Lesson 2, quiz 1

Quizzes are designed to give you a chance to test your knowledge.

Please feel free to take this quiz again. We will update your score.

Quiz Results

✓ 1. Where do you usually place logos on a web page?

- A. ☐ Top middle of page
- B. ☐ Bottom middle of page
- C. ☒ Top left of page
- D. ☐ Bottom right of page

Correct answer(s): C**Explanation:**

You usually place logos in the top-left corner of a web page.

✓ 2. True or False: Triad colors are three colors that are equidistant from one another on a color wheel.

- A. ☒ True
- B. ☐ False

Correct answer(s): A**Explanation:**

Triad colors are three colors that are equidistant from one another on a color wheel.

✓ 3. True or False: Sans-serif fonts have small decorative lines on each letter.

- A. ☐ True
- B. ☒ False

Correct answer(s): B**Explanation:**

Serif fonts have the small decorative lines, sans-serif fonts do not.

✓ 4. True or False: To use royalty-free artwork, you must pay a small fee each time you use it.

- A. ☐ True
B. ☒ False

Correct answer(s): B

Explanation:

Most royalty-free artwork requires a one-time payment.

✓ 5. True or False: To make digital pictures, you have to use a digital camera.

- A. ☐ True
B. ☒ False

Correct answer(s): B

Explanation:

You can convert regular film into digital pictures using a scanner.

✓ 6. How do you ensure that accessibility tools can understand images?

- A. ☒ By providing alternate text
B. ☐ By including a detailed explanation in plain text
C. ☐ By including audio with every image
D. ☐ It's impossible -- don't use images if you want accessibility tools to understand your website

Correct answer(s): A

Explanation:

Providing alternate text allows an image to be understood by accessibility tools.

You got 6 correct out of 6 questions.

Your Score: 100%

Next steps >>

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Lessons - Plan and build your first website (with podcast)

Plan and build your first website (with podcast)

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Welcome to your lessons. Some lessons may have quizzes or assignments for additional learning. Don't forget to join your fellow classmates and instructor on the message board.

Lesson 3

» [View single page](#)

Web design tools make it easy

You've got your big idea. You've collected your content. You've planned your website structure. Now it's time to put it all together. But wait! Just how are you going to do this?

If you don't know HTML, don't despair. There are plenty of web design tools available to create your site. You've got a lot of choices:

- [Nvu](#): This freeware program is an easy-to-use, intuitive tool for beginners. What it lacks in features and functionality, it makes up for in cost and ease of use. Perfect for a beginner and a simple website.
- [Adobe Dreamweaver](#): Another web design product that experienced users swear by is Adobe Dreamweaver. It's a little pricey at \$399 for a new copy, but it produces very clean HTML markup and is easy to use.

If you've used a word processor or desktop publishing software, adapting to a web design tool won't be too difficult for you. For instance, to insert a table, you just click **Table** (or a similar command) in the top toolbar. Same for images. Whichever tool you end up using, take the tutorial to understand the basics.

Although your desktop publishing and word processing software often offer a way to convert from document format to web format, don't use these tools for creating web pages. The HTML code generated by this software tends to be full of random characters specific to the type of document it was saved as originally and wreaks havoc with a variety of browsers.

Do some research, download free trials to give you a chance to get to know each of the different tools, examine your budget, and then decide on a web design tool and start using it. Your next step is to select a graphics editing tool, and begin laying out your website template. That's coming up next.

Freebies (or at least a month's trial)

A great way to determine whether you like a product before you buy it is to download a trial version. Most of the products mentioned in this lesson have trial versions, so you can get a feel for how the product works and whether you can work with it.

And then, there are always the freebies. CNET's [Shareware.com](#) is a repository of millions of software titles. Some are totally free and some are available on a trial basis. You might find a great tool there. Also visit [Download.com](#).

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Work with graphics

The web is nothing if not visual. In Lesson 2, you learned how to select appropriate images for your site. Now you'll learn a number of ways you can create a visually pleasing website using a combination of images and powerful tools.

Select a graphics tool

A number of graphics tools are available that are geared specifically for web site development. This is good news because more sophisticated programs such as Adobe Photoshop are rather expensive. Two relatively low-cost web-oriented graphics tools are:

- [Adobe Fireworks](#): From the creators of Dreamweaver and Flash, this product is heavily oriented toward website development, and makes it easy to create animations and image maps. It even allows you to "slice" your design into web page components, generating HTML automatically.
- [Corel Paint Shop Pro Photo X2](#): This image-editing software's web-specific tools include one that optimizes your image in a particular format and a "slicing" tool.

Both of these products have a wide range of capabilities, including controlling brush size, applying special effects such as textures and lighting effects, and font control. The more capabilities a graphics program has, the more it costs (for example, Photoshop costs \$650 retail) and the longer it takes to learn. If you decide to make your career in the web business, by all means take the professional route. For the rest of us, an easier, cheaper tool might be more what the doctor ordered. As with your web design tool, try out some free trial versions to figure out which graphics tool you like best.

Are your images web friendly?

Preparing images for the web is quite different from preparing images for print. So, if you've done print publishing before, you may need to "unlearn what you have learned," as Yoda told Luke Skywalker.

The web has rules for handling images. Basically, they are:

- You should only use **JPEG** (Joint Photographic Experts Group) and **GIF** (Graphic Interchange Format) images.
- Your image should be as small (in bytes) as possible. The smaller the file, the faster it loads.
- The resolution of your images should be 72 **dpi** (dots per inch).

Follow these simple rules and you shouldn't have any problems with download and pageload times.

Smaller is better

Both JPEG and GIF are compressed formats. This means that when you save anything in either format, the resulting file is smaller than it would be if you had saved the same image in uncompressed formats. By contrast, TIFF (Tagged Image File Format, which use the .tif extension) is among the highest-quality image formats. This format is typically used to save images that ultimately wind up in a printed publication.

GIF and JPEG are examples of two ways images can be compressed. The GIF format is excellent for compressing images with relatively few colors or no gradations in color, because it reduces the size of images by limiting the number of colors. The JPEG format reduces the quality of the image by selectively discarding information about the image that the viewer is unlikely to notice. That's why JPEG is best for compressing images with lots of colors. Drawings and clip art images make great GIFs, whereas color photographs look best as JPEGs.

What does all this mean for you? You're going to have to spend a lot of time manipulating your images. It's safe to say that you're probably going to spend more time fooling around with your images than working on the formatting of associated text.

What's your DPI?

You'll find that a digitized image is often quite large -- so large, in fact, that it barely fits on your monitor's screen. This is a good thing! When you shrink the image in your graphics application, you also decrease its file size without compromising its quality. Most graphics software enable you to choose new dimensions for an image.

When reviewing web development sites, you might come across the term ppi (pixels per inch). For the purposes of this course, you can assume ppi and dpi mean roughly the same thing.

As mentioned earlier, images for the web should be saved at a resolution of 72 dpi. If you create

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images with a higher dpi, they may appear larger onscreen than you intend.

Nice proportions

Notice as you move around the web that images are usually proportional to the web design -- no image is too big or too small. You might want to copy some of these images to your own computer. Open some in your graphics software and note their dimensions. Pretty soon you'll have a good sense of good image sizing parameters.

Take some time to play around with resizing your own images. Always resize them proportionally so that when you change one dimension, the other is changed by the same percentage. You can use HTML to choose size attributes for an image after you've placed it on a web page you're working on, but the full-size image must still be downloaded when someone accesses your page. If you size the image file itself before you add it to the page, it will be smaller to start with, and will download more quickly.

Images add pizzazz to your website but also provide a good way to link pages to each other. In the next section, learn about these links and how to connect pages to each other and other pages on the web.

Links make the web go 'round

There would be no World Wide Web were it not for hyperlinks. In fact, hyperlinks (or just links) are what make the web what it is: a worldwide network of interconnected documents.

Link within your website

Links within your website are called **internal links**. For instance, all of your navigation items should be internal links. You may want to link words or phrases in a text block to pages that have more information on that word or phrase. You also may want to link an image displayed on a page to a larger version of that image so users can see more detail if they choose.

Adding an internal link to a web page using a web design tool is pretty much the same procedure no matter which program you've chosen. You'll need to highlight the text to be linked, or select the image to be linked, and click the program's linking function. Then, you can use the tool to navigate to the HTML file or image that the link should go to. The web design tool will create the proper link automatically.

Be sure to read your web design tool's manual and take any tutorials to make sure that you understand how to use your specific web design tool's linking function.

Create a website map

Another way that internal links are used is in the creation of a site map. A **site map**, as you learned in Lesson 1, is a listing of all of the pages or (for larger sites) all of the sections of your website. Each page or section listed on the site map is linked to the actual page or section. It's usually presented hierarchically, such as on the [Apple](#) website.

Site maps are helpful when having your site added to a search engine. You'll learn more about this in Lesson 6.

For a better sense of how pages are linked together on other sites, look for site map sections of some of your favorite websites while you're browsing the web.

Link to other websites

The spirit of the web is one of interconnectedness. As the title of this page says, "Links make the web go 'round." And in that spirit, you should have links on your site to other websites. Some ways to use **external links** on your site are:

- Linking words or phrases in your site's text to websites with more information on that topic.
- Adding a list of resources on other websites related to a particular topic or topics covered on your website (and linking the items in the list, of course!).
- Creating a special web page on your site that lists related websites. If you're creating a personal site, it may just be a list of "websites That I Like."

Adding an external link to your site is pretty similar to adding an internal link. In your web design tool, highlight or select the text or image to be linked, and click the program's linking function. In the text

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box provided, type the entire URL (Uniform Resource Locator, or web address) of the page you're linking to, such as **http://www.google.com** or something more specific, such as **http://autos.netscape.com/?gname=uglycar**.

Use links to lay out how your website is going to flow. Be sure to think about how a visitor is going to want to intuitively go through the site gathering information, making decisions about which product makes the most sense for them, and then moving on to make a purchase. If you link your pages together intuitively, visitors will be more likely to feel good about your site and come back for more. In the next section, you'll learn how to preview your website to make sure everything is working and the visitor's path through the site makes sense.

Preview your website

As you develop your website, take a look at your web pages in a web browser to make sure they're looking good. It's best to do this locally (in other words, on your own computer) before uploading to the Internet.

To make sure you're on the right track, all you need is your browser. Then follow these steps:

1. Create a new directory on your computer and name it something relevant to this project (for example, **newweb** or **My First Website**).
2. Save your web files to this directory, including all HTML files and graphics.
3. Once you have at least one file in this directory, open a web browser, such as Microsoft Internet Explorer or Mozilla Firefox, and type the path and directory name in the browser's address field. No need to add **http://**. Just type **c:\newweb**, or, if you're using a Mac, your hard drive's name, a forward slash (/), and the directory name (**newweb**). You can also use the Browse feature to find your directory. You'll get a listing of what's in that directory, as shown in Figure 3-1.

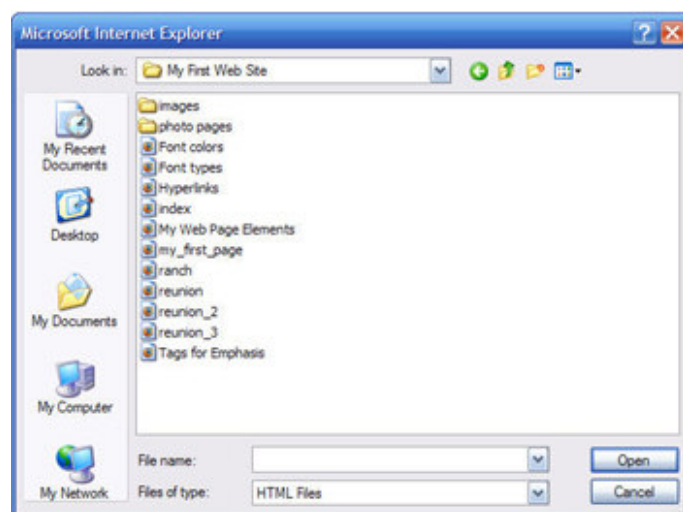


Figure 3-1: You can open your web design folder using your browser.

[Enlarge image](#)

4. Double-click any of the HTML files to display it in your browser.

Most web design programs help you develop your website structure automatically. They also typically have a Preview tool that shows your web pages in a browser.

That's all there is to using your own computer and browser to test your web designs.

How'd they do that?

Like most web developers, you've probably spent a lot of time browsing other people's websites, and getting ideas of what you like, and don't like, and what you want to do on your own site. But sometimes you may not know how to do what you want.

There are a few ways to find out. First, you can contact the website owner and ask them. Second, you can use the **View > Source** option in your browser to take a look at the HTML. Or, third, you can

» Notebook PCs



HP makes it easy to go wireless. Our notebooks are light, powerful, durable...and surprisingly affordable.

» Notebook PC accessories



From software, memory, and cards to carrying cases and docks, look to HP for all the accessories you need to make your notebook PC more suited to your personal needs.

download the web page to your local computer and take a look at in your web design tool.

You need to get permission to use someone else's proprietary web program. However, grabbing HTML or JavaScript code that you aren't yet familiar with is not a problem.

Save pages from the web

Log on to the Internet and go to any website. Save that page in your web design directory or folder using the browser's **File > Save As** command. Now point your web browser to your web design directory and open the HTML file you just saved. What happens? Does the page display as it did when you opened the page from its http address? Are things missing?

Unless you've downloaded a very plain web page, the page will be missing images and maybe its font styles. To download every file associated with a web page, select **File > Save As** and then select **Web Page, complete** (or something similar) in the **Save as type** drop-down list to save the entire web page, including all graphics. Internet Explorer creates a series of subdirectories within the directory you created to store these images and other web page items. Select **File > Save As** and then select **Web Page, HTML only** to save only the text.

Save Images from the web

Just want to save a website's images? Taking and using anything from other people's websites, including images, might be in violation of copyright laws. However, if you just want to copy an image from another website to view it, or if you're sure there are no copyright issues, place your cursor over the image and right-click the mouse button. Select **Save Picture As** from the shortcut menu. In the Save Picture dialog, save the image into your web design directory. Mac users can click and hold the graphic, and then select **Download image to disk** from the menu.

Next up

Now that you've learned how to put it all together, in Lesson 4, you learn how to give your website a home on the web (no, not on the range). But first, complete this lesson's quiz and assignment to solidify your new knowledge. After that, pop in at the Message Board to see what your classmates are saying about their web design tools.

Next steps>>

Congratulations on completing the lesson! Don't forget the following:

- » [Assignment: Add some elements to your site](#)
- » [Quiz: Lesson 3, quiz 1](#)
- » [Discuss what you've learned with your instructor and other students](#)
- » [Return to the lessons list to get a quick overview of the entire class](#)

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Putting it all together assignment

Assignments are designed to help you apply the information learned in the lessons.

Add some elements to your site

1. Download the latest version of [Nvu](#) (if you don't already have it).
2. Use Nvu to design the framework of your website -- that is, the title or logo, navigation, and body area elements. Add an image or two as well.
3. Save the web page you've created in Nvu and preview it in Microsoft Internet Explorer (select **File > Open** or **CTRL+O** to open the web page you just created).

What do you think? What would you like to change? Share your experience with your classmates and instructor on the Message Board.

You have completed this assignment.

Next steps >>

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Lesson 3, quiz 1

Quiz: Lesson 3, quiz 1

Quizzes are designed to give you a chance to test your knowledge.

Please feel free to take this quiz again. We will update your score.

1. **True or False: You should use word processing software to develop pages for your website.**

- A. ☐ True
- B. ☐ False

2. **What are the two web-friendly image formats? (Check all that apply.)**

- A. ☐ PNG
- B. ☐ GIF
- C. ☐ TIF
- D. ☐ JPEG

3. **JPEG images used on the web should have a resolution of _____ dpi.**

- A. ☐ 240
- B. ☐ 72
- C. ☐ 16
- D. ☐ 512

4. **What do internal links link to?**

- A. ☐ Other pages on your website
- B. ☐ Pages on other websites
- C. ☐ Search engine pages
- D. ☐ Graphics files on other websites

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United States-English

>> HP Home

>> Products & Services

>> Support & Drivers

>> Solutions

>> How to Buy

>> **Contact HP**Phone orders **1-877-801-7183**

Search:

☒ **Home & Home Office** ☐ All of HP United States

Lesson 3, quiz 1

>> **Home & Home Office** **My Cart**

0 items in My Cart

Hello, Truitt

- >> Edit profile
- >> Sign out

>> **Online classes**

- >> **Your classes**
- >> Contact us
- >> FAQ

- >> Digital Photography
- >> Everyday Printing
- >> PC Learning Center
- >> Digital Entertainment
- >> Activity Center

Browse & Buy

- >> Home & Home Office Store
- >> Find a retailer
- >> Rebate Center

Product Support

- >> Support & troubleshooting
- >> Software & Drivers
- >> HP Total Care
- >> Register your product

Quiz: Lesson 3, quiz 1

Quizzes are designed to give you a chance to test your knowledge.

Please feel free to take this quiz again. We will update your score.

Quiz Results

- ✓ 1. True or False: You should use word processing software to develop pages for your website.

- A. ☐ True
B. ☒ False

Correct answer(s): B**Explanation:**

Word processing and desktop publishing software add a lot of random characters to their HTML code, which can cause problems when creating web pages.

- ✓ 2. What are the two web-friendly image formats? (Check all that apply.)

- A. ☐ PNG
B. ☒ GIF
C. ☐ TIF
D. ☒ JPEG

Correct answer(s): BD**Explanation:**

The two web-friendly image formats are GIF and JPEG.

- ✓ 3. JPEG images used on the web should have a resolution of _____ dpi.

- A. ☐ 240
B. ☒ 72
C. ☐ 16
D. ☐ 512

Correct answer(s): B**Explanation:**

The optimal resolution for JPEG and GIF images is 72 dpi.



4. What do internal links link to?

- A. ☒ Other pages on your website
- B. ☐ Pages on other websites
- C. ☐ Search engine pages
- D. ☐ Graphics files on other websites

Correct answer(s): A

Explanation:

Internal links connect pages on your website to one another.

You got 4 correct out of 4 questions.

Your Score: 100%

Next steps >>



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Lessons - Plan and build your first website (with podcast)

Plan and build your first website (with podcast)

- » [Lessons](#)
- » [Message board](#)

Welcome to your lessons. Some lessons may have quizzes or assignments for additional learning. Don't forget to join your fellow classmates and instructor on the message board.

Lesson 4

» [View single page](#)

Where is the web?

The Internet is a global network of computer networks that are all configured to communicate using the same basic languages, or **protocols**. The key to its success is that it's highly distributed. There is no place, or even center, of the Internet -- although there are several very important routes that you can take through the Internet, which are called **backbones**.

Internet data travels over the existing public telecommunications network. Unlike phone calls or older types of computer networks, a message sent through the Internet doesn't travel as a single piece. Instead, it's broken up into **packets** that are individually routed to their destination and reassembled when they get there. It's very similar to how transporting probably works on Star Trek. This flexible routing ability is what makes the Internet so reliable. If you haven't been in a cave for the last decade, you're probably also aware that the Internet was originally designed to be able to survive almost anything. Even if the major Internet backbones were to disappear tomorrow, data would still find its way around the Internet -- probably somewhat slower, though.

When we use the Internet, we're actually using Internet applications. The most popular of these are e-mail and the web.

And your point is?

The reason for this brief detour into yet another explanation of the Internet and the web (which you clearly understand well enough, since you're using it right now), is that you need to make your new website a permanent fixture on it and you'll find out how to do that now.

Any computer that can use the basic Internet protocols can connect to the Internet and become a part of it very easily. One way to publish your site is to install the necessary software on your home computer, leave it connected to the Internet, and tell the world your Internet address (called an IP address).

This is not the best way to publish your website, however, for a number of reasons, including:

- Your ISP (Internet service provider) probably frowns on this, if it even allows it.
- Unless you're using broadband service, such as DSL or a cable modem, your connection to the Internet is likely too slow to provide a decent browsing experience for your visitors.
- If you use a modem and a phone line to connect to the Internet, the line is always in use.
- There are security hazards with opening your computer up to the Internet. By advertising your website to the world, you open yourself to potential hacking of your computer. If you're not trained to secure a web server, you should leave it to the professionals.

For these reasons (and several others), most people choose to outsource the hosting of their website. Often, the easiest way to outsource web hosting is to use the same company that provides you with access to the Internet, your ISP.

So how do you find a suitable ISP? Find out in the next section.

Tour ISP offerings

Not all computers on the Internet are created equally. Some of their connections are faster, making it possible for these systems to handle a large amount of traffic, and to provide a gateway to the Internet for computers with slower connections. An ISP has a very fast connection to the Internet and is constantly connected to it.

So, what is an ISP and what do they do? Basically, **ISPs** have big, fast computers that are equipped to store e-mail and web pages, and even route Internet traffic from one place to another. These computers are called **servers**. Figure 4-1 shows a birds-eye view of a portion of the Internet. Notice

» Desktop storage



Whether you want to back up your personal media and data for safety's sake or clear up your hard drive to make space, look to HP for your storage needs.

» Notebook storage



Whether you need storage to back up your important memories and data or to clear up space on your hard drive, HP notebook storage cards and devices are designed to meet your specific needs.

» **Compaq Presario CQ50Z series**

that the ISP acts as a gateway to enable you to connect to the Internet. ISPs also serve as access points for other computers to connect to you -- either by routing e-mail to your computer, or by allowing other people to view your website.

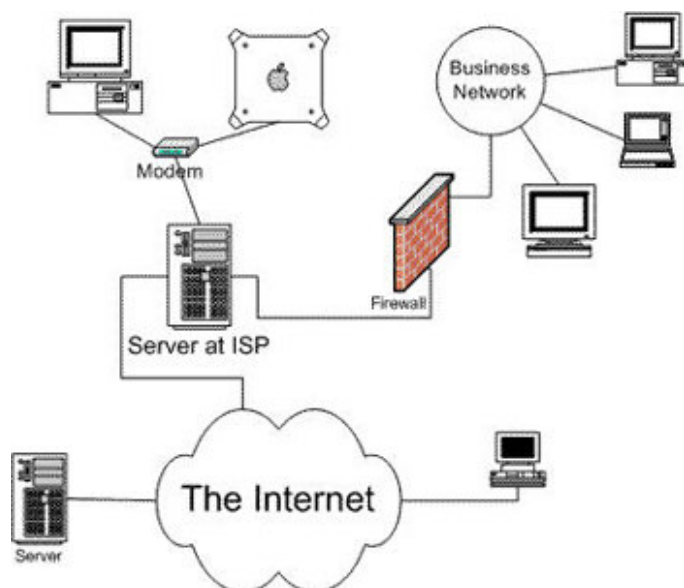


Figure 4-1: A birds-eye view of a portion of the Internet.

ISPs come in many sizes: AOL is an ISP, and so are Road Runner, AT&T Yahoo!, Comcast, Earthlink, and many others. Each offers different services and charges different prices, but all will get you or your content onto the Internet.

Most ISPs also offer a service called **web hosting**. When you sign up for web hosting, you get access to the ISP's web server, enabling you to transfer the web pages you've designed (including all of your GIF, JPEG, and HTML files) to your ISP's faster machine. If you look again at Figure 4-1, you can see how it works. You're sitting at one of the computers at the top of the picture. You design your web pages from the comfort of your own home. When your design is finished, you transfer your creation to the powerful hosting computer (server) at your ISP. It's from this location that anyone else with a connection to the Internet can browse your content. It's simple, really.

The first thing you have to do is find the ISP that's right for you. The following sections address questions you should consider

Which services does the ISP offer?

Does the ISP offer the services you need today -- and in the future? Let's say you start with a simple informational website. Most ISPs can do this at low cost -- all it takes is a small amount of server space. But let's say that you're thinking about selling some stuff over the Internet during the next year. This is known as **e-commerce**. Be sure your ISP offers the features you need. For instance, some ISPs offer e-commerce packages that include a secure server, shopping carts, and credit card processing. Although you could certainly change ISPs as your needs grow, it's usually best to find and stick with one you like, and whose services can grow along with your needs.

[Yahoo! Merchant Solutions](#) offers several all-in-one e-commerce packages for individuals and businesses. If you're more of a do-it-yourselfer, explore the [PayPal Merchant Services](#) web pages to get information about incorporating PayPal Buy Now buttons and other shopping cart tools into your website.

How many hops away from a backbone is your ISP?

Like you, most ISPs purchase their Internet connections from another company. The difference, of course, is that they purchase much, much faster Internet connections. If your ISP's Internet connection comes directly from one or more backbones, it's said to be one hop from the backbone. Having an ISP that's connected directly to an Internet backbone reduces the total number of hops that data needs to make to get to your computer, which increases the speed of your Internet connection and the speed at which your website will download for other people.

How much do you want to pay?



With thin lines, a cool touchpad design, and a sleek, touch-control panel, this 7.0 lb., 15.4" laptop PC redefines simplicity. In addition to being ultra stylish, the PCs in the Presario CQ50Z series are durable, powerful, and value-priced.

» Notebook PC accessories



From software, memory, and cards to carrying cases and docks, look to HP for all the accessories you need to make your notebook PC more suited to your personal needs.

There are thousands of ISPs out there. They offer varying levels of service, features, and support for varying price ranges. Some ISP services are even free. Once you determine which services you need today, and which ones you might need in the future, visit several websites to learn about ISP pricing. Find out what the market says the service you need is worth, and you'll probably find some bargains, especially if you do your homework before you buy.

Which level of support do you need?

It is not be a good idea to sign up with an ISP based on price alone, especially if that ISP has a reputation for poor service. Spend time at the ISP's website. What kind of support does it offer? Is there an 800 number you can call if you run into problems? Is there a special e-mail address for support? Does the ISP promise a response within 4 hours, 8 hours, 1 day, or 2 days? Ask your friends or business associates which ISPs they've used, and how they felt about the support they received.

Which extras does the ISP offer?

Some ISPs offer unlimited e-mail addresses. Some offer pre-built functionality to handle things such as auctions, chat, blogs, and message boards. Make a list of what you want and try to find an ISP that offers these options for little or no extra charge.

Do your homework. ISPs change their offerings, new ISPs appear, and pricing is constantly changing due to market demands, so spend a little extra time understanding what you want and what's available in your area before you make any decisions. Although it's easy to transfer a few simple web pages and graphics files from one ISP to the next, transferring a larger site can be a hassle and might cost you money you don't need to waste. Next, get some tips for doing the required homework to find the right ISP.

Find the best ISP for you

So where can you go to get information about which ISP you should use? The web, of course:

- [The List](#) contains a massive list of ISPs around the world. It's a particularly great resource if you want to choose an ISP that's headquartered in your area. You can search by area code, state, or country, and find lots of pricing information. You should, however, always verify prices with each ISP you're considering.
- [WebHosters.com](#) is an information-rich site with lots of information on different hosting companies.
- [HostReview.com](#) is another information-rich site providing details on various hosting companies.

Search your local yellow pages and ask around to find out which ISP your friends and family use, as well. There are a lot of local ISPs who do as good a job as the national services for the same price or less.

Shop the specs

At this stage in your web design career, you're not actually going to understand all of the features you see described on ISP sites. At a minimum, you're going to want the following features:

- **A minimum of 20 MB (megabytes) of disk space:** You want a large chunk of space to store your images, HTML files, and other content. The more, the better. Even if you're just getting started and your web pages barely use a fraction of that space, if the price for 20 MB of disk space is the same as the price for 5 MB, go with more space.
- **One GB of data transfers per month:** One GB is one billion bytes. Wow! Data transfer means the movement of bytes to and from your website. When a visitor downloads a page (and any associated images or multimedia files), the amount of data transferred is added to your tally for the month. Some web hosting companies charge you for data transfers exceeding a certain number of MB.
- **FTP access to your account:** FTP stands for File Transfer Protocol. You'll learn about FTP in-depth later in this lesson. For now, it's sufficient to say you need this to move (upload) your content from your PC or Mac to the hosting computer.
- **E-mail:** Make sure your account with an ISP includes e-mail, and that you can pick up your mail from the ISP's mail server directly. In addition, you want as many e-mail addresses as possible. You've probably noticed that many sites use an `info@ mywebsite .com` address, along with others for sales, jobs, etc. Of course, you'll want an address for each person associated with your site, too.

You should also have the ability to add interactive features to your site, and a toll-free, 24/7 tech

Beware the freebies

Don't be tempted by all those offers of free websites. They are indeed free but generally such sites often come with strings attached, and do not allow you to use your own domain name. Use these sites for personal pages and unlimited free practice if you need it. For your professional projects, do your users a favor and make the investment of a more professional solution.

» Norton Internet Security 2008



Travel the Internet while protected against viruses, hackers, spyware, and spam. Stay safe as you e-mail, swap files, download programs, and chat. You're automatically protected when you've got Norton Internet Security 2008, updated and enhanced with more features than ever.

support number and e-mail address. Make sure all this information is easy to find on your ISP's site.

Once you determine which ISP to contract with, it's time to decide on the name of your site. In the next section, you'll learn how to find a good name and purchase an appropriate domain.

» HP Total Care owner services



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www.icantbelieveitsmyfirstwebsite.com

If you plan to do any business on the web, you need your own domain. Many personal websites sport URLs like this:

`http://www.isp.com/mysite/home.html`

Trips right off the tongue, doesn't it?

If your web URL is going to be memorable and easy to include in printed material, it should look more like this:

`http://www.wonderfulkites.com`

The name you choose for your website is very important. It says a lot about who you are and what you do. What you call your website depends on several things:

- Your audience
- What information you want to convey, or what you sell
- Which domain names are available

To get the domain name you want for your site, you must first register it, and then let your ISP know that the domain is yours. Their techies do a little technical magic and, just like that, your site is live. Your job is to add content.

Determine your audience and market

You can register as many domains as you have money to pay for, assuming that someone else has not claimed them. This means that you're going to have to spend considerable time thinking of names, and then checking to see whether they're already in use.

The first step in thinking up a name is to decide who your audience is. Is it the teen market? The business market? The sports market? After you know whom you want to reach, think about exactly what you want to market. For example, let's say you're in the sporting goods business and know your audience is sports fanatics. Let's also say you specialize in volleyballs. The next step is to come up one or more names that "sell" directly to that market. You have several choices:

- Come up with a name, such as **www.volleyballs.com**, that's an exact match to your market. The value of this approach is that your domain name is the same name as the market. It's easy to remember and, more than likely, the first word someone will type into a search engine when searching for volleyballs.

Unfortunately, given the proliferation of websites, most simple and easy-to-remember domain names are no longer available.

- Choose a domain name that's similar to the name of your company, but that complies with the rules for domain names. For example, if your company is ABC Volleyballs, Inc., you might register **abcvolleyballs.com** to use for your site.
- Get radical. Try a name that's so unusual sounding that it gets noticed right away. For example, **www.monster.com** does not sell monsters -- it's a job search service. The **www.google.com** website is a search engine, and **www.amazon.com** is based in Seattle, which is nowhere near Brazil.

Domain registration logistics

It can take up to 72 hours for your name to be available after your ISP sends the forms to the domain registry service. This means you might get an error message when you type `www.yourdomainname.com` into your browser. Your ISP will also give you an IP address, which is a set of numbers (for example, 209.55.67.12). You'll be able to get to your website immediately using this address.

» HP Pavilion Elite PCs



The next generation of home entertainment; access TV, movies, music and photos, when and how you want.

» HP w2207 22-inch widescreen flat-panel monitor



Ready to widen your entertainment horizons? With an impressive maximum resolution of 1680 x 1050, our w2207 22-inch Widescreen Flat-Panel Monitor supplies

Whether you go conservative or highly creative, there are a few hard and fast rules you need to follow when choosing a domain name.

excellent picture quality and flexibility for sensational viewing.

Know the domain name rules

There are certain restrictions on which characters and how many characters can be in a domain name. In addition, certain types of domains have restrictions or recommendations (rules that aren't mandatory) on who can register them. Here are the most common rules:

- Use only letters, numbers, or hyphens (-)
- The URL cannot begin or end with a hyphen
- It must have less than 63 characters, not including .com, .net, and .org
- .com domains are for commercial and personal sites
- .net domains are recommended for companies involved in Internet infrastructure (such as ISPs)
- .org domains are recommended for not-for-profit organizations

Other domain types include .gov (government), .edu (education), and a plethora of foreign country abbreviations (uk, .jp, .au, and .ca). To register some of these types of domains (such as .gov and .edu), you have to actually prove that you're an educational or governmental institution. For .net, .com, .org, and the newer domains (such as .biz, .info, and .name), you only need to pay the fee to register.

Make a list of potential domain name candidates and ask your friends or family their opinions on each. When you get it narrowed down to two or three top choices, you're ready to figure out if they're available.

Find your perfect domain

The best way to search for a great name for your website is to spend a few minutes searching one of the domain registry sites to make sure your great name hasn't already been taken.

ICANN (Internet Corporation for Assigned Names and Numbers) is charged with collecting fees and keeping track of who owns what domain on the Internet. One of ICANN's functions is to accredit domain name registrars, but there are many places where you can register that all-important name. [Network Solutions](#), shown in Figure 4-2, is a good first place to go to find out which domain names are available. The site provides a nifty search tool -- Find A Domain -- that takes some of the pain out of searching for an available and appropriate name.

However, it pays to shop around, as Network Solutions is not the least expensive option available for domain registration.

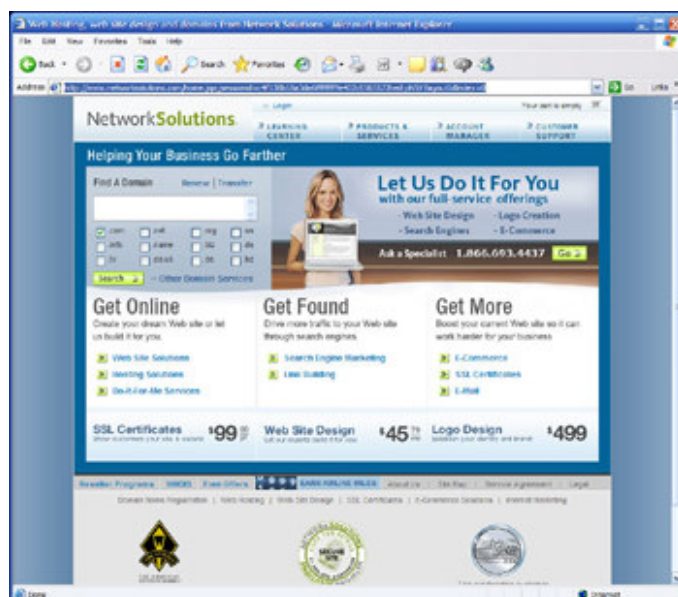


Figure 4-2: NetworkSolutions.com is one of the ICANN accredited registrars.

[Enlarge image](#)

Let's give it a try. Go to the [Network Solutions](#) website and type **wonderfulkites** in the Find a Domain text box. Notice the check boxes for selecting the type of domain you want. You can check

as many of these as you like. There's no law or rule preventing commercial use of .org or the use of .tv by a website that isn't based in Tuvalu.

Make sure .com is checked, at a minimum, and then click **Search**. The result appears in Figure 4-3, and you're in luck! This name is available in a number of domains, including .com, .net, and .biz. If you had found your domain name to be taken, you just search for your second choice, and then your third, and so on, until you find a name that's available.

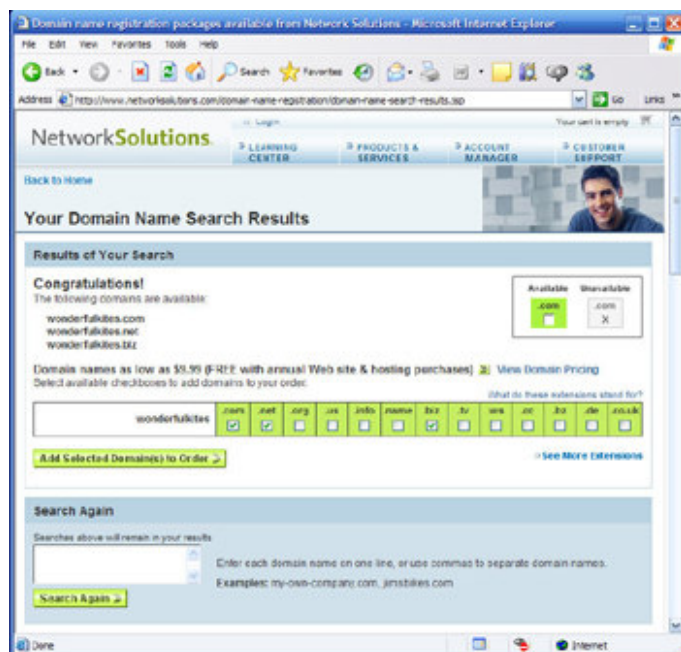


Figure 4-3: Use Network Solutions to determine if your desired domain name is available.

[Enlarge image](#)

If you're stubborn and you want your name and you want it bad, you can try tracking down the current owner of the domain name and find out if the name is for sale. Many Internet domain names are even auctioned. Sometimes, if you have a great name, people come right to you.

To find out who owns a particular name, use the Internet [WHOIS](#) service. You can surf to this website directly from the Network Solutions site -- a link to WHOIS appears on the bottom navigation bar. Enter the entire domain name, including the "www" portion -- for example, **www.kites.com**. You get the name and address of the owner and the rest is just business as usual.

If you're stumped as to which domain to register, or if you're just bored, go to [DeletedDomains.com](#), where they keep track of all the domain names that people once registered but have allowed to expire.

Once you have a domain selected and registered, you'll want to upload your web pages to the site. In the next section, you'll learn how to use FTP to populate your new site.

Using FTP to upload to your website

When you sign up with an ISP, you're given access to a chunk of disk space on their server, where you can store your images, HTML, and other files. Your next task is to get your site content from your PC or Mac to the server.

Some ISPs create easy-to-use procedures to assist inexperienced website owners with uploading stuff to the web. We sometimes find that, in spite of their best intentions, these easy-to-use utilities are anything but. Fortunately, the hard way is actually not that hard. Using FTP software, you can get your stuff uploaded to a web server in no time at all.

A free, easy-to-use Windows-based utility called SmartFTP is shown in Figure 4-4. Mac users can find similar functionality by using Fetch.

» Desktop PCs



View our wide selection of desktop PCs to see reliable HP quality at a great value. We'll even help you choose the right

desktop for your unique needs.

» Desktop PC accessories



From software and storage to cables, mice, and keyboards, all the accessories you need for your HP desktop PC are available to make your desktop experience more personal, powerful, and attuned to your specific needs.

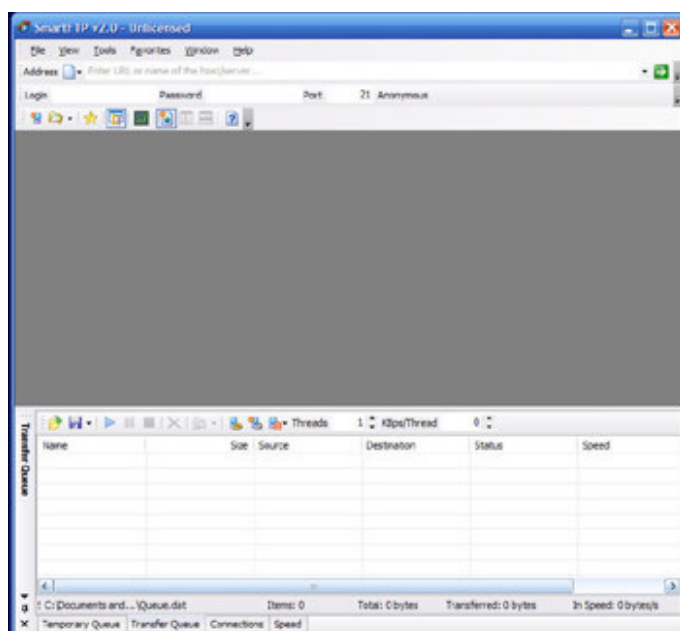


Figure 4-4: SmartFTP is a free Windows FTP client.

[Enlarge image](#)

If you don't already have an FTP client, download SmartFTP or Fetch now.

Get started

Before you can set up access to your web files on an ISP's server, you need to obtain some information from the company hosting your site. You'll need to know the address of the server you'll use, the directory into which your files will go, and a user name and password you can use to connect to the server. This information is usually provided when your account is activated. If you don't have it, call your ISP's tech support department or visit the ISP's website. You're looking for information about FTP access to your web site files.

When you have this information, type it in to the appropriate boxes in the FTP client software, including your user name and password, and it'll connect you automatically. Now you're ready to upload.

To upload a file to your website using SmartFTP:

1. In the Folders pane in the top part of the SmartFTP window, select the FTP server folder you want to transfer files to.
2. In the Transfer Queue pane at the bottom of the window, click the Open button. Select **All Files** from the files of Type drop-down list, select your website files, and then click **Open**. Click the Start button. Your files are copied to the server.

As your files transfer, SmartFTP displays their status.

3. After you've finished uploading, select **File > Disconnect** to log off your website, and then select **File > Exit** to close SmartFTP.

It's usually a good idea to upload the files, keep your session active, and open your web browser to see if you get what you expected. This way you can quickly make any needed changes, re-upload the changed file, and check to see that everything looks okay.

Test your website

After you've uploaded your site to the server, expect errors. Nobody creates her first website in one shot. Common problems you might find during testing are:

- **Missing images:** You may have forgotten to upload the image, or linked it incorrectly in HTML or the web page editor.
- **Your text is formatted incorrectly:** You may have made a mistake in coding or formatting your web page.

- **The spacing of text or objects on the page is wrong:** You may have misaligned something or left out a paragraph or line break.
- **Hyperlinks don't work:** A link may be wrong, or you may have neglected to upload the page you linked to.

Before you go live, you should fully test each page of your website. To do this, first test it on your computer by viewing the pages on your hard disk (locally) in a web browser. Better yet, view it in a variety of browsers to ensure everything you've created is compatible with Microsoft Internet Explorer, Netscape Browser, and Mozilla Firefox. Once you know everything looks good on your computer, upload all files to your website and then test, test, and test again.

Now that you know the basics

In this lesson, you learned about the workings of the Internet and the web, you got some tips on registering domain names, and you learned how to upload your website files to a server. At this point, you should have a functioning site. Congratulations! Pat yourself on the back. If you're still not quite there, take some time to visit the Message Board and get some tips from your instructor and classmates.

If you think you've got the material down pat, take a stab at the quiz, exercise your new skills with the end-of-lesson assignment, and visit the Message Board to show off your site.

When you're ready, proceed to Lesson 5 to learn different ways of integrating multimedia into your website.

Next steps>>

Congratulations on completing the lesson! Don't forget the following:

- » [Assignment: Post your site](#)
- » [Quiz: Lesson 4, quiz 1](#)
- » [Discuss what you've learned with your instructor and other students](#)
- » [Return to the lessons list to get a quick overview of the entire class](#)

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Give your website a home assignment

Assignments are designed to help you apply the information learned in the lessons.

Post your site

Finally, you're at the publishing stage in the course. Post your website and share the URL on the Message Board. Let your classmates be your test audience. Let them know how you created or obtained your graphics, and if there were any particular websites that inspired your project or gave you helpful ideas. Also post any questions you have about your work ("How do I make this image fit onscreen, change these colors, improve my download time?" and so on). Be sure to visit your classmates' websites and give them helpful feedback, as well.

You have completed this assignment.

Next steps>>

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Lesson 4, quiz 1

Quiz: Lesson 4, quiz 1

Quizzes are designed to give you a chance to test your knowledge.

Please feel free to take this quiz again. We will update your score.

1. **True or False: For the best results, you should host your website on your own PC or server.**

- A. ☐ True
- B. ☐ False

2. **True or False: All ISPs are the same.**

- A. ☐ True
- B. ☐ False

3. **Not-for-profit organizations tend to use which type of domain?**

- A. ☐ .gov
- B. ☐ .org
- C. ☐ .net
- D. ☐ .com

4. **Which organization collects fees and keeps track of who owns what domain on the Internet?**

- A. ☐ Network Solutions
- B. ☐ IBM
- C. ☐ ICANN
- D. ☐ IRS

5. **If your ISP doesn't provide an easy way to upload your web files to its server, which type of software can you use?**

- A. ☐ E-mail
- B. ☐ FTP
- C. ☐ Text editor
- D. ☐ Hyperlink detector

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Lesson 4, quiz 1

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Quiz: Lesson 4, quiz 1

Quizzes are designed to give you a chance to test your knowledge.

Please feel free to take this quiz again. We will update your score.

Quiz Results

✓ 1. True or False: For the best results, you should host your website on your own PC or server.

- A. ☐ True
B. ☒ False

Correct answer(s): B**Explanation:**

There are several reasons you don't necessarily have to use your own PC or server to host your website. This is one case in which you might be better off seeking the help of a professional.

✓ 2. True or False: All ISPs are the same.

- A. ☐ True
B. ☒ False

Correct answer(s): B**Explanation:**

ISPs are all different. Shop around and compare before you select one to host your website.

✓ 3. Not-for-profit organizations tend to use which type of domain?

- A. ☐ .gov
B. ☒ .org
C. ☐ .net
D. ☐ .com

Correct answer(s): B**Explanation:**

The .org domain is recommended for not-for-profit organizations.

✓ 4. Which organization collects fees and keeps track of who owns what domain on the Internet?

- A. ☐ Network Solutions
- B. ☐ IBM
- C. ☒ ICANN
- D. ☐ IRS

Correct answer(s): C

Explanation:

ICANN is responsible for collecting fees and keeping track of domain ownership, and accrediting domain name registrars.

✓ 5. If your ISP doesn't provide an easy way to upload your web files to its server, which type of software can you use?

- A. ☐ E-mail
- B. ☒ FTP
- C. ☐ Text editor
- D. ☐ Hyperlink detector

Correct answer(s): B

Explanation:

You can use FTP software to upload your files to your ISP's server.

You got 5 correct out of 5 questions.

Your Score: 100%

Next steps >>

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Lessons - Plan and build your first website (with podcast)

Plan and build your first website (with podcast)

» [Lessons](#)

» [Message board](#)

Welcome to your lessons. Some lessons may have quizzes or assignments for additional learning. Don't forget to join your fellow classmates and instructor on the message board.

Lesson 5

» [View single page](#)

Decide when to use multimedia

Used correctly, audio and video can be effective tools for getting your message across on the web. Used poorly, audio and video can actually drive visitors away and make people not want to return to your website. You're much less likely to make a disastrous mistake if you keep the following three things in mind:

- Your website's purpose (remember your mission statement from the first lesson?)
- Your audience
- The limitations of the web

For example, if you're a real estate agent, the purpose of your site might be to sell homes. To sell homes, you need people to visit your site, see listings, and become interested enough in a particular listing to contact you. To achieve this goal, you might decide that video clips of houses would be helpful.

As mentioned in previous lessons, you need to be aware of how fast an Internet connection your visitors are likely to have. In the case of a general-interest site, you have to assume the worst. Although about 50 million homes and businesses in the United States have broadband Internet access, it's still generally considered safe to design general-interest sites for a 56 Kbps (kilobits per second) modem.

In general, the broader your audience is, the more careful you need to be with using multimedia. On the other hand, if you have a limited and homogenous group of people accessing your site (as in the case of a company's internal website, or intranet), and if you know the speeds of their connections to the site are not a factor, you can make more liberal use of multimedia.

Think carefully about your target audience and how they access the Internet before adding multimedia to your website. A lot of companies currently track this subject, so google **broadband internet usage statistics** to find the latest information on broadband usage rates. You can even type in your state, region, or target audience (such as home buyers) to find targeted information about usage rates. In the next section, you'll learn how to add audio to your site.

Add audio to your website

As you browse the web, sometimes you come across a site that begins making noise as soon as you load the page (of course, you need to have your speakers plugged in and the sound turned on). Sometimes, you have to click a hyperlink to start the sound playing. That sound -- a person talking, sound effects, or music -- is contained in an audio file.

How do you add sound to a web page? You add an audio file the almost the same way as you add an image file. Both image and audio files must be linked to a web page and activated with HTML. The only difference is that instead of displaying a picture, an audio file plays a sound. Just as there are web-friendly formats for image files (such as GIF and JPEG), there are also web-friendly formats for different types of sound files. You find out about these throughout this lesson.

There are two ways to approach using audio on your site:

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- Send information about the music (the notes, volumes, instruments, etc.) and let the receiving computer's sound card play it.
- Send the actual music as recorded audio.

The difference between the two ways of using sound boils down to what you want the sound to accomplish on the web page. There are advantages and disadvantages to both types of web audio. In the next sections, you'll learn about how to use both types, as well as the reasons for using one over the other.

Recorded audio on the web

High-quality audio files can be very large. The WAV format, which is used to store audio on Windows computers, takes up about 10 MB of space for every minute of CD-quality, stereo sound. A typical 4-minute song, then, takes up 40 MB and would take about 90 minutes to download using a 56 Kbps modem. No one, not even the drummer's girlfriend, is going to wait that long to hear a band's demo song. So, what can you do?

Shrink it

There are several ways to reduce the size of digital audio files:

- **Use compression:** Compression is an extremely effective way to dramatically reduce multimedia file sizes while retaining quality. Compression uses what's called a **codec** to strategically remove information from the file that's least likely to be noticed during playback. MP3 is a codec.

By converting a 4-minute WAV file to an MP3 file, you can reduce the file size by a factor of 10, with no noticeable change in the quality.

- **Reduce the sampling rate:** A simplified way of looking at sampling rate is as a measurement of the quality of the audio. CD-quality sound has a sampling rate of 44 Khz (kilohertz). Phonograph-quality sound is 22 Khz. Telephone-quality sound is 11 Khz. A reduction in the sampling rate from 44 Khz to 22 Khz reduces the file size by half.
- **Convert it to mono:** By converting your stereo audio file to mono, you chop the file size in half. If you're planning to post a tape of yourself singing in the shower to your site, it'll probably sound just as brilliant in mono as in stereo. This isn't the best solution to your band's problem, however. In addition to making you sound worse, it still leaves you with a 20 MB file and a 45-minute download.

By combining these different methods for reducing audio file size, you can easily shrink your 40 MB audio file under 4 MB. Suddenly, the download time isn't all that bad. But, what do you do if you want to post an entire concert, lecture, or any other lengthy audio file to your site? This is where a technology called **streaming** comes in.

Stream it

Steaming means that when a visitor clicks a link to an audio file, the file isn't downloaded all at once and then played, as is the case with a WAV or MP3 file. Instead of downloading the full sound file, site visitors who click a link to stream content are able to listen to or view the file as it's downloading. This creates the appearance of the download time being faster, even if it actually isn't. Pretty clever, huh?

Streaming audio or video from the web can be somewhat more involved than simply providing files for download. Streaming requires you to have access to a streaming server or software to prepare your audio or video files for streaming (called an **encoder**). When you upload files to a streaming server, such as the one made by RealNetworks, it manages the process of sending it to users.

The actual process of using a streaming server is beyond the scope of this course; however, you can learn about creating and using streaming media from [Streamalot](#). The company includes a number of short tutorials to help you set up specific types of streaming media.

The ultimate in small audio file sizes

Say you're creating a website for your wedding. When people visit the site, you want the wedding march to play. Ignoring the corniness of this proposition, there are significant problems with using recorded audio to accomplish this. The issue that you've already seen is the file size problem. If the music plays every time someone visits the homepage, even a relatively small recorded audio file will quickly become very annoying.

The solution is MIDI (Musical Instrument Digital Interface). **MIDI** is a standard for encoding

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information about digital audio. The important thing to remember about MIDI files is that they don't actually contain the music. Instead, they tell computers how to play the music. Think of MIDI as sheet music for computers. If the actual performance isn't important, and you don't need lyrics, MIDI is the way to go.

To find MIDI files, simply search the web. There are hundreds of sites that give away free MIDI music files.

See the following table to get an idea of how small MIDI files are in comparison to WAV and MP3 files.

Track Title	Format	File Size
Take Five by The Dave Brubeck Quartet	WAV	55 MB (56,320 KB)
	MP3	5 MB (5,120 KB)
	MIDI	15 KB

Table 5-1: Comparison of WAV, MP3, and MIDI file size.

Using recordings of someone else's works (such as Mr. Brubeck's) on your web site could possibly be a violation of copyright law. Make sure that you have permission from the copyright holder before making anyone else's material available on your site.

Although MIDI files are small and easy to find freely on the web, the sound quality of MIDI files leaves a lot to be desired. Unless you absolutely have to have some sort of music load automatically for visitors to your site, it's best to leave MIDI audio off.

Record on your PC

Microsoft includes a utility called Sound Recorder, shown in Figure 5-1. It's generally found in the Accessories/Entertainment folder on Windows PCs.

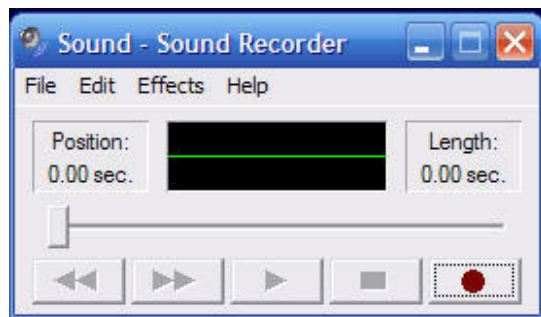


Figure 5-1: Microsoft Sound Recorder.

Sound Recorder lets you play and record WAV files. You'll need a microphone to record sounds, and speakers and a sound card to hear them. You can buy an inexpensive microphone at your local computer retailer or electronics store. Be sure the one you buy has the same kind of connector your computer does.

On the Macintosh, the Sound control panel has similar functionality to Sound Recorder.

The Sound Recorder and the Mac's Sound control panel work just as conventional tape recorders. The red button is the record button, the square button is the stop button, and so on. You can tell right away whether you're actually recording by the activity in the display.

After you've finished recording, you might notice that your WAV file includes dead air -- a few seconds at the beginning or end of the recording. Sound Recorder provides a minimal editing capability that lets you cut out parts of your WAV file. There's even some sound effects functionality.

If you're going to do any serious recording or sound editing as part of your web page development process, you want to use a more robust sound-editing package, and quality recording equipment. Another, more robust, sound editor is [Audacity](#), which is free, and includes a host of editing features that give you a lot of freedom and power to create and edit audio files.

Add sound to a web page

After acquiring or creating sound files, it's time to add a link between your web page and the sounds you want to play on it. Your web editor ought to be able to handle this task handily but you'll learn some HTML code in this lesson to help you if you get stuck.

If all you want to do is allow your visitors to listen to a sound file if they choose, you simply link to a sound file the same way you create any hyperlink. For example, to link the sound file **happy_birthday.wav** to the text **Happy Birthday**, create this code in your HTML where you want the link:

```
<a href="happy_birthday.wav">
  Happy Birthday!</a>
```

That's all there is to it.

Now let's go one step further. Let's set up the page so that a WAV file plays when a visitor loads the page.

```
<embed src="happy_birthday.wav"
  width="144" height="60" autostart="true"
  loop="true">
```

The height and width attributes are for the sound bar that's displayed when the sound starts using the **<embed>** tag. The autostart attribute is self-evident and the loop attribute indicates to the browser that the sound should be repeated over and over.

It's just that simple. Adding video can be a little more complex though. In the next section, you'll learn the simple way to add video and discover where to go for more information about adding more complex types of video.

Add video to your website

Adding video to your site is very similar to adding audio, and has the same potential drawbacks -- only more of them. Whereas audio files can be large, video files are a whole lot larger. It's not only the length of the video clip that increases file size, but the number of colors, the number of frames within the clip, and the size of the images. It's not unusual for one-minute of compressed video to gobble up 50 MB of disk space.

Consider that many folks surfing the web from home are still using a 56 Kbps modem. Now divide 50 MB (or roughly 50,000,000 bytes) by 56 KB (or roughly 5,600 bytes) and you can see how many seconds it takes someone to download a video clip using conventional technology. If you don't feel like doing the math, the answer is almost 9,000 seconds, or 148 minutes. That's a longer wait than most movies just to watch a one-minute clip. Take a look at the following table to get a good idea how long it takes to download files from the Internet.

Content	Size	14.4 Kbps	28.8 Kbps	64 Kbps	1.5 Mbps
Small graphics and animation	30 KB	30 seconds	10 seconds	6 seconds	1 second
Small complete movie clip	100-200 KB	180 to 300 seconds	90 to 180 seconds	20 to 40 seconds	1 second
Short video clip	500 KB	300 to 400 seconds	120 to 240 seconds	90 seconds	3 seconds

Table 5-2: Comparison of various file download rates and times.

It's also possible to create your own brief video clips right at your desktop. Fortunately, it's getting easier all the time to capture and edit video on your PC.

Video compression

Because video files tend to be so large, it's best to consider employing some type of compression before you post your video to your website. Compression is essentially the process of discarding information from a video that isn't discernable to a viewer in order to reduce the size of the file. There are a number of compression methods and tools available but the most popular format is MPEG (Moving Picture Experts Group). The current standard for this format is MPEG-4, although MPEG-7 is under development.

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Windows provides a free video compression utility called Windows Media Encoder. This works only on the Windows platform. For a utility that's both Windows and Mac friendly, use QuickTime. You can download either version of QuickTime from [Download.com](#).

Get video onto the web

Once you've created and optimized video for the web, you need to note where the video will appear. Just like with audio files, you can either link to video using the standard HTML linking code, or you can embed the video into the page. If you do embed video into an HTML page, use the following code:

```
<embed width="100%" height = "100%"
  fullscreen="yes" src="welcome.mov">
```

Unlike most web images, and some sound file formats, all video requires some kind of browser plug-in in order to play. A **plug-in** is software that can handle file formats that your browser can't. To play a video clip that is linked to the current page, for example, a site visitor needs to have a plug-in that can read the video format you've chosen. Some plug-ins, such as Apple's QuickTime, Real Networks' RealPlayer, or Microsoft Windows Media Player, can handle several audio and video formats.

You can raise the chances that your plug-in-based video is viewable by most site visitors if you include a link to a download site where site visitors can download the plug-in they need. You've probably seen this before; a button and a bit of text that says you need QuickTime, RealPlayer, or Windows Media Player to view a video image. Once the visitor downloads and installs the plug-in, the video begins to play automatically according to the directions you've given in your HTML code.

If you've been browsing the web for video files and playing them back, you've already noticed that downloading these movies is a time-consuming task. This is why streaming video was invented. Like streaming audio, a streaming video file begins playing right away as the file is being downloaded. QuickTime Video, RealVideo, and Windows Media are all popular streaming video formats.

Just what is Shockwave?

Macromedia Shockwave is used for creating interactive multimedia. Like other types of multimedia, a plug-in is required to view Shockwave files. Unlike audio and video files, your visitors can interact with Shockwave files, which makes it a great format for online games. You can see great examples of what's possible with Shockwave by visiting the [Shockwave.com](#) website.

You can create Shockwave files using Macromedia Director, which currently retails at over \$1,200. Most people creating multimedia for the web don't need Director, however. For less demanding multimedia and for better web integration, Adobe offers Macromedia Flash. Priced at \$400, it's a much less expensive and an easier to learn solution than Director.

One of the advantages of Flash is that the file sizes are remarkably small, and the plug-in is small as well. The result is that Flash content is rapidly becoming as widespread as the use of animated GIFs.

Audio, video, Flash, oh my! What if you just want to put some of your existing collateral and printed material on the web? If other types of multimedia are so easy to add, you can bet that adding your existing materials is just as simple. In the next section, you'll learn the ins and outs of adding presentations and printed documents to your site.

Putting a slide show and printed documents on the web

There may come a time when you want to present a series of informational slides to folks who visit your website. This course, for example, could be presented in a classroom setting with a slide projector displaying information and illustrations. Most people have seen presentations built with Microsoft PowerPoint, and many have used it to build their own. Available for both Mac and PC, PowerPoint is the most widely used slide creation (presentation) software available, but it isn't alone in the market. Keynote is a popular Mac alternative to PowerPoint.

With PowerPoint, you can easily turn your presentations into HTML documents ready to publish to the web. PowerPoint helps you customize your presentation. For example, you can include animations, use frames, choose the way you move to other slides or documents, and select different button styles. PowerPoint maintains the interactive settings that jump to other slides or documents.

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To publish pages to the web with PowerPoint:

1. Open the presentation you want to save in HTML format.
2. Select **File > Save As**, select **Web Page** and then follow the instructions.

Figure 5-3 shows a screenshot of a PowerPoint presentation that's been saved as a web page.



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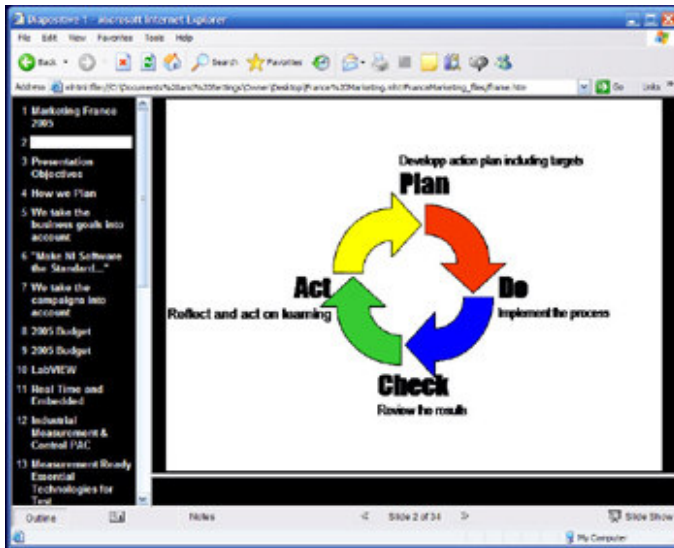


Figure 5-2: A slide show generated from PowerPoint.

[Enlarge image](#)

You can find many examples of PowerPoint presentations by searching the web for **slideshow** or **PowerPoint slideshow**.

Publish printed documents to the web as PDFs

If you've browsed the web for a while, you've probably come across PDF files. **PDF** (Portable Document Format) files are an invention and trademark of [Adobe Systems](#). Essentially, PDF files are duplicates (in appearance and content) of documents created in a word processor, spreadsheet, or desktop publishing application, to name a few. The advantage of PDF is that anyone who has the free [Acrobat Reader](#) program can read and print the files, regardless of which application was used to create them. PDFs weren't invented for the web, but they can easily be added to a website, and are viewable and sometimes editable there. When you install the current version of Acrobat Reader, a web plug-in is also installed in your browser's Plug-Ins folder.

The IRS uses PDF files to enable folks to download tax forms right from the [IRS](#) website. When you find the form you're looking for (in this case a W-9 form), just click the link and you'll see something that looks like Figure 5-3.

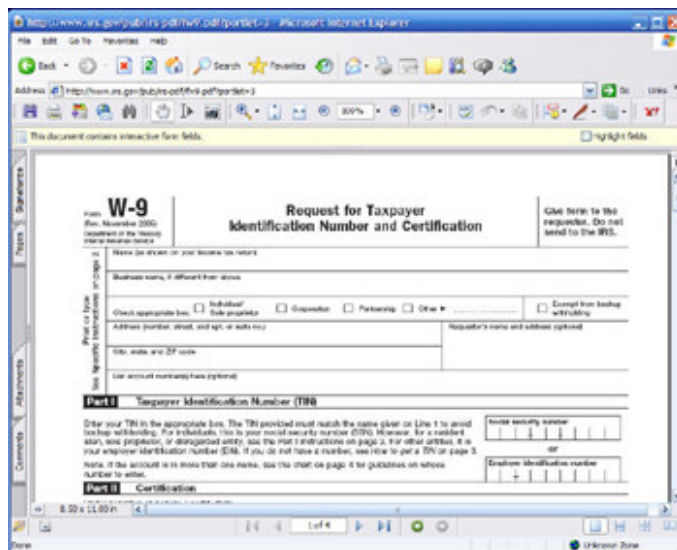


Figure 5-3: Viewing an Adobe Acrobat PDF file on the IRS site.

[Enlarge image](#)

Figure 5-3 illustrates just how valuable a utility Adobe PDF is. You can create forms and display complete brochures. You can link to PDF files in the same way you link to other web pages.

Wrap up

The best way to learn the proper way to create and use multimedia is to experiment with it. Find out if your website building software of choice provides any assistance with inserting multimedia, try creating different kinds of multimedia, and record and edit your own sound files and video. Live it up. In Lesson 6, you'll find out how to make your site more visible and draw in the visitors.

To review the material in this lesson and to get started with your multimedia adventure, take a stab at the quiz questions and the assignment. As always, we encourage you to share your experiences and ask questions on the Message Board.

Next steps>>

Congratulations on completing the lesson! Don't forget the following:

- » [Assignment: Test the multimedia waters](#)
- » [Quiz: Lesson 5, quiz 1](#)
- » [Discuss what you've learned with your instructor and other students](#)
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Jazz up your website with multimedia assignment

Assignments are designed to help you apply the information learned in the lessons.

Test the multimedia waters

Multimedia doesn't always have a place on everyone's website. If you can't think of a good reason to implement it, chances are you shouldn't. When purposefully employed, however, multimedia enhancements can give your web site a real edge over those competing for its attention. The trick is to employ meaningful content, giving users a reason to stick around. For example, if you're advertising your private swing dance lessons, you could include a few video clips to teach people the basic steps. If you're promoting your band or teaching the Korean alphabet, don't miss the opportunity to include some audio files.

Visit the Message Board and discuss whether multimedia has a place in your project at this time and how you plan to integrate it. If you run across examples out there of very useful -- or shamelessly gratuitous -- multimedia, please share them.

You have completed this assignment.

Next steps >>

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Lesson 5, quiz 1

Quiz: Lesson 5, quiz 1

Quizzes are designed to give you a chance to test your knowledge.

Please feel free to take this quiz again. We will update your score.

1. About how many homes and businesses in the United States have broadband Internet access?

- A. ☐ 10 million
- B. ☐ 25 million
- C. ☐ 50 million
- D. ☐ 100 million

2. True or False: WAV is a type of video file.

- A. ☐ True
- B. ☐ False

3. True or False: A streaming media file begins to play only after your computer reads the entire file.

- A. ☐ True
- B. ☐ False

4. True or False: The best way to reduce the size of an audio or video files is through compression.

- A. ☐ True
- B. ☐ False

5. If you want to post a word processing document or spreadsheet on the web, which technique easily solves your problem?

- A. ☐ Use Adobe PDF
- B. ☐ Use Macromedia Flash
- C. ☐ Encode the file in HTML
- D. ☐ Use Adobe Reader

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Quiz: Lesson 5, quiz 1

Quizzes are designed to give you a chance to test your knowledge.

Please feel free to take this quiz again. We will update your score.

Quiz Results

✓ 1. About how many homes and businesses in the United States have broadband Internet access?

- A. ☐ 10 million
B. ☐ 25 million
C. ☒ 50 million
D. ☐ 100 million

Correct answer(s): C**Explanation:**

About 50 million and counting.

✓ 2. True or False: WAV is a type of video file.

- A. ☐ True
B. ☒ False

Correct answer(s): B**Explanation:**

A WAV file is an uncompressed, non-streaming audio file. WAV files can be very large and take a long time to download. They usually don't require a plug-in.

✓ 3. True or False: A streaming media file begins to play only after your computer reads the entire file.

- A. ☐ True
B. ☒ False

Correct answer(s): B**Explanation:**

A streaming media files begin to play as it is downloading.

✓ 4. True or False: The best way to reduce the size of an audio or video files is through compression.

- A. ☒ True
B. ☐ False

Correct answer(s): A

Explanation:

Compression can dramatically reduce file size before affecting the quality of the piece.

✓ 5. If you want to post a word processing document or spreadsheet on the web, which technique easily solves your problem?

- A. ☒ Use Adobe PDF
B. ☐ Use Macromedia Flash
C. ☐ Encode the file in HTML
D. ☐ Use Adobe Reader

Correct answer(s): A

Explanation:

Adobe's PDF format easily converts any document file (word processing, desktop publishing, or spreadsheet, for example) to a viewable and printable web document.

You got 5 correct out of 5 questions.

Your Score: 100%

Next steps >>

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Lessons - Plan and build your first website (with podcast)

Plan and build your first website (with podcast)

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Welcome to your lessons. Some lessons may have quizzes or assignments for additional learning. Don't forget to join your fellow classmates and instructor on the message board.

Lesson 6

» [View single page](#)

About search engines and directories

You're finished. You're ready to open the doors and let in the cheering crowds. Don't break out the champagne just yet. You still have a lot of work to do. Your first step is to get your website listed on all the major search engines and directories.

What's a search engine?

You're probably thinking, I already know what a search engine is, why are they going to explain it to me? Well, there are some common misconceptions out there about search engines and what they do, and we're here to set you straight.

A **search engine** is a site that compiles a database of websites using a spider program. When you enter a term in a search engine's keyword field, the search engine doesn't search the entire Internet at that exact moment and return the results to you. Instead, it searches its own internal database and then displays results of this search.

A **spider** is a piece of software that browses the web, similar to what a human user does, but much faster and more thoroughly. When a spider hits a page on your website, it gathers information on the page, and then follows all links on that page and gathers info on those. And then it follows all of the links on all of those pages, and gathers info on those. And so on, and so on.

So, if my website is on the web, it'll be on a search engine, right?

Well, maybe, but it may take a long time for the spider to get to you. After all, there are millions of web pages. So you have to tell it to visit your site. You do that by visiting the major search engine sites and submitting your site. Your site is then put on a list to be indexed (visited) by the spider, and will likely be indexed within a few weeks.

Because so many search engines have consolidated in the past few years, there are only three search engines you need to target:

- [Google](#)
- [Yahoo!](#)
- [MSN](#)

Figure 6-1 shows what you can expect to see when you submit your site to Google. You just type your URL and add any comments about the content, and then submit it.

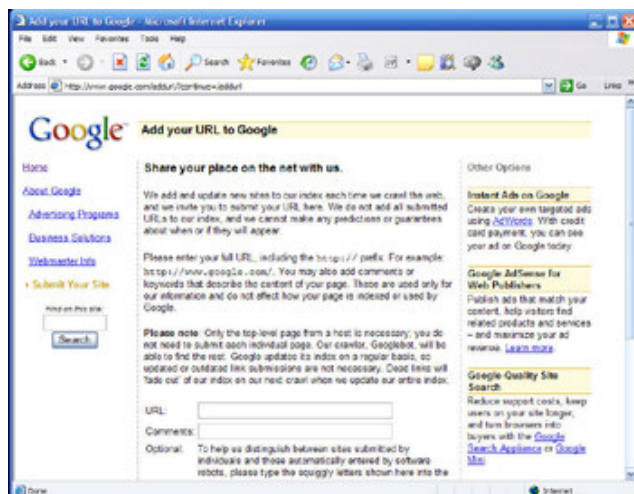


Figure 6-1: Submitting a URL to Google.

[Enlarge image](#)

» [Compaq Presario CQ50Z series](#)



With thin lines, a cool touchpad design, and a sleek, touch-control panel, this 7.0 lb., 15.4" laptop PC redefines simplicity. In addition to being ultra stylish, the PCs in the Presario CQ50Z series are durable, powerful, and value-priced.

» [Notebook PC accessories](#)



From software, memory, and cards to carrying cases and docks, look to HP for all the accessories you need to make your notebook PC more suited to your personal needs.

If you've created a site map on your site, submit that page's URL to the search engines. It links to all parts of your site, after all.

After you submit your URL to these search engines, the rest of the work is done for you. Most second-tier search engines use one of the three major search engines to perform their search operations. For example, AltaVista uses Google and Netscape uses Yahoo!.

Well, then, what's a directory?

A directory site can seem the same as search engine, but it's actually a human-edited hierarchical directory of websites. Key examples of directories are:

- [Yahoo! Search Directory](#)
- [LookSmart](#)
- [dmoz Open Directory Project](#)

To have your site listed on a directory, you have to submit it for consideration. Some directories, such as LookSmart and Yahoo! Search Directory, charge you a fee to be listed (check the site for the current pricing). Others, such as Open Directory, are free, with no guarantee that your site will be added.

To submit your site to Open Directory, go to the [dmoz](#) website, navigate to the category appropriate for your website, and click **suggest URL** on the toolbar. You're then taken to a form in which you can enter your site's URL, title, and description.

Follow all instructions on the dmoz website to make it more likely that your site will be included.

So, should I use a search engine submission service?

The number of well-trafficked search engines and directories is small enough these days to allow you to submit your site to all of them yourself in about 1 hour. The real value provided by search engine submission services is in setting up your site for the best performance on a search engine. You can do this work yourself, though, if you'd like to save some dough. By following our suggestions on the next few pages of this lesson, your site will be well equipped to show up high in the rankings for appropriate searches. So, let's move on to learning about metadata and other low-cost ways to promote your site.

Understand search engine relevancy

Search engines have gotten incredibly sophisticated over the past decade. They each use complex and slightly different algorithms to determine the ranking of pages relevant to the key words or terms being searched. Think about it, there are hundreds of millions of pages on the web. Imagine how difficult it must be for a search engine to determine which page is most closely related to what you're looking for.

Each search engine performs the deed a little differently; however, the fundamentals are the same: the page that has the most content about what is being searched, combined with the most traffic from other people interested in the same information, wins.

Content

The best thing you can do to help your website be listed high on a search engine's list of relevant pages is to make sure your headers and subheads accurately reflect what you sell or want to be known for. If you sell kites, for example, put a few headers and subheads on your pages that have the word **kite** in them.

You can also help your relevancy by using links and alternate text that use the words and terms a web surfer is most likely to type into a search engine to find a product or service like yours. Of course, make sure there is plenty of body text about your product or service also.

Links

If your site and your competitors' sites have roughly the same amount of content relating to a specific search, the search engine can't call it a tie. It has to choose one over the other to list. As a second measure of a web site's relevancy, a search engine looks at human behavior, as well; if humans value one site more than another, that site gets listed higher.

The search engine determines how much humans value each site by looking at how much traffic each site gets and how many people link to that site. They figure if humans like the site well enough to visit it and link it to their own content, then that's probably a pretty good endorsement.

» Norton Internet Security 2008



Travel the Internet while protected against viruses, hackers, spyware, and spam. Stay safe as you e-mail, swap files, download programs, and chat. You're automatically protected when you've got Norton Internet Security 2008, updated and enhanced with more features than ever.

» HP Total Care owner services

Swapping links with other websites is a really good idea, not only to drive traffic to the site but to show your relevancy to a search engine.



Protect your investment and achieve greater peace of mind with the right HP Extended Service Plan for your needs.

Meta tags

When search engine results are returned, the title of your website listing is whatever you've entered in the <title> HTML tag for your homepage. The blurb below the title is whatever you've put in the description <meta> tag.

In Figure 6-2, you can see that Into The Wind Kites is the title in that page's HTML tag for the company's homepage, and the meta tag says, "Hundreds of classic, sport and power **kites**, accessories, building materials, flags, windsocks and . . ."

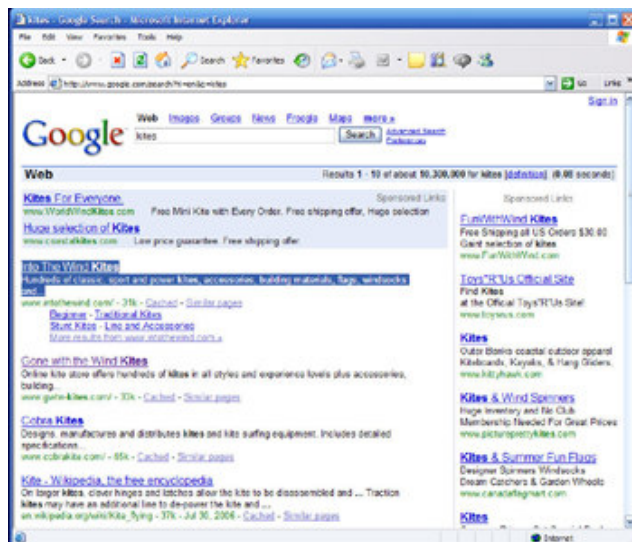


Figure 6-2: Meta tags define and describe your site to a search engine.

[Enlarge image](#)

You use meta tags to control the presentation of your website listing on search engines. So, be sure to add meta tags to your homepage -- and all the other pages of your site as time permits -- to ensure you're being shown in your best light.

Meta tags for search engine placement

The **keywordsmeta tag** is very important, too. It's a list of words and phrases relevant to your website. A search engine spider indexes all of the text on your website along with the metadata, but there are probably some words or phrases relevant to your site that aren't explicitly mentioned on any of your web pages. Include those terms in the keywords meta tag. Also list more obvious keywords, such as **string** for the previous example. It's best to be thorough.

Keep your keywords meta tag to a reasonable length, and keep those keywords relevant to your website. Otherwise, your site might be removed from search engines. Don't put your competitors' names in your keywords meta tag in hopes of luring their customers away -- that's a big no-no.

Using meta tags appropriately can help your website relevancy for appropriate searches, and ensure the way it's listed is how you like it. In the next section, you'll learn how to advertise your site without breaking the bank.

The best free and low-cost promotion techniques

There was a time when many website owners had money to burn when it came to marketing their sites. Remember the Pets.com sock puppet? Those days are definitely over. Now, most people want to promote their sites with minimal cash investment. Here are some of the best ways to do it.

» Desktop PCs



Google AdWords

The most popular search engine today, Google is known for providing excellent search results. You can buy a piece of that action through the company's AdWords program.

One key aspect of website ownership is the ongoing task of keeping your site current. There are two reasons you want to keep your website up to date:

- People will get bored and stop coming back if nothing ever changes on your site.
- Search engines might drop your listing. That's right! Some search engines check to see if your site is old and musty -- if it is, they delete you.

Here are some good ways to get people to come back to your site time and time again:

- Post a monthly newsletter about your company or your industry
- Add a blog, bulletin board, or live chat to your site
- Add an RSS (Really Simple Syndication) feed to automatically give people updates when they occur
- Give away something for free (a report, a sample, and so on)
- Run a monthly contest

Syndicated content

One place you can go to get some fresh content for your site is [FreeSticky](#). This site is a content syndication service that distributes a broad selection of written, graphical, audio, and video content from almost 1,000 sources to a vast and diverse network of more than 200,000 websites. Just sign up, paste some code into your website, and you're in business.

Affiliate programs

Another way to keep your site up to date, promote it, and make some additional money on the side to boot, is to join one or more affiliate programs. For example, if you join an online bookstore's affiliate program, every time someone buys a book as a result of a hyperlink from your site, you get a small percentage.

When you sign up for an affiliate program, you're given an ID and some HTML that contains that ID embedded in it. You add this information to URLs on your site. The site you're affiliated with may ask you to display a banner or button announcing your relationship with them. When someone clicks the links you've created and ends up buying something at the remote site, it's cash city for you (maybe).

The focal point of affiliate programs is [LinkShare.com](#), as seen in Figure 6-4. Notice the wide selection of programs.



Figure 6-4: LinkShare.com.

[Enlarge image](#)

Each of these companies will supply you with one or more types of links to their sites. Some of these will be text hyperlinks and some will be banners. The affiliate site will provide you with HTML code to insert into your web pages, depending upon what kind of link you want to set up.

You may choose to run affiliate links as banners on the top or bottom of your page, or use them to highlight products related to your industry, or recommended by you or your colleagues.

Wrap it up

In this course, you learned to design an effective website, use a web design tool to develop it, find an appropriate ISP to host it, use multimedia and interactivity to spice it up, and effectively promote your site. With hard work and a little luck, you'll have a great first website up and running soon -- if you don't already.

» HP Pavilion Elite d5000t ATX series



Get premium performance and maximum expandability with our Pavilion Elite d5000t ATX series. With quad-core processor technology and discrete graphics on a full ATX motherboard, this dynamic PC will meet your most demanding business and entertainment needs. Note: this series is only available online.

It takes a lot of effort to thrive on the web. One thing you can do is stay informed, which means finding out everything you possibly can about the business of the web. To that end, here's a list of places you can go to keep up with your reading:

- [WebsiteTips](#)
- [Good Practices](#)
- [ZDNet](#)
- [ecommerce-guide.com](#)
- [CNET News.com](#)

But before you go, complete your last assignment and quiz, and stop by the Message Board one last time to share your thoughts and discoveries -- and find out what your classmates are up to. Good luck with your website!

» **Compaq FS7600 17"**
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Want stellar viewing plus minimal glare and distortion? With 0.25–0.28 mm dot pitch, and 1280 x 1024 maximum resolution, this flat-screen CRT monitor will supply you with a steady stream of crisp, clear images.

Next steps»

Congratulations on completing the lesson! Don't forget the following:

- » Assignment: Get your site noticed
- » Quiz: Lesson 6, quiz 1
- » Discuss what you've learned with your instructor and other students
- » [Return to the lessons list to get a quick overview of the entire class](#)

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Promote your website assignment

Assignments are designed to help you apply the information learned in the lessons.

Get your site noticed

1. Find five websites that are complementary to your website's big idea and collect contact information for possible link swaps.
2. Create or revise your website's title and description, which can be used to determine how your listing looks in search engines.
3. Come up with a list of 25 to 40 keywords that are relevant to your web site.
4. If your website is already partially or fully developed, add these meta tags to every page.

Assignment Completed >>

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Lesson 6, quiz 1

Quiz: Lesson 6, quiz 1

Quizzes are designed to give you a chance to test your knowledge.

1. What is a search engine?

- A. ☐ A site that compiles a database of websites using a spider program
- B. ☐ A human-edited hierarchical listing of websites
- C. ☐ A means of adding links to your website
- D. ☐ A site that contacts you via e-mail for information about your website

2. True or False: Meta tags determine a page's ranking by a search engine.

- A. ☐ True
- B. ☐ False

3. What is one of the best ways to build a community of loyal customers for your site?

- A. ☐ Great customer service
- B. ☐ Flash demos
- C. ☐ Banner ads
- D. ☐ Colorful marketing brochures in PDF format

4. True or False: Freesticky.com is an affiliate program

- A. ☐ True
- B. ☐ False

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Lesson 6, quiz 1

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Quiz: Lesson 6, quiz 1

Quizzes are designed to give you a chance to test your knowledge.

Please feel free to take this quiz again. We will update your score.

Quiz Results

1. What is a search engine?

- A. ☒ A site that compiles a database of websites using a spider program
- B. ☐ A human-edited hierarchical listing of websites
- C. ☐ A means of adding links to your website
- D. ☐ A site that contacts you via e-mail for information about your website

Correct answer(s): A**Explanation:**

A search engine is a site that compiles a database of websites using a spider program.

2. True or False: Meta tags determine a page's ranking by a search engine.

- A. ☐ True
- B. ☒ False

Correct answer(s): B**Explanation:**

Meta tags are just one way a search engine determines a site's ranking.

3. What is one of the best ways to build a community of loyal customers for your site?

- A. ☒ Great customer service
- B. ☐ Flash demos
- C. ☐ Banner ads
- D. ☐ Colorful marketing brochures in PDF format

Correct answer(s): A**Explanation:**

Great customer service generates good word-of-mouth, which builds a community of loyal customers.



4. True or False: Freesticky.com is an affiliate program

- A. ☒ True
B. ☐ False

Correct answer(s): B

Explanation:

Freesticky.com is a syndicated content service. Like an affiliate program, it can help keep your site up to date.

You got 3 correct out of 4 questions.

Your Score: 75%

Next steps >>



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