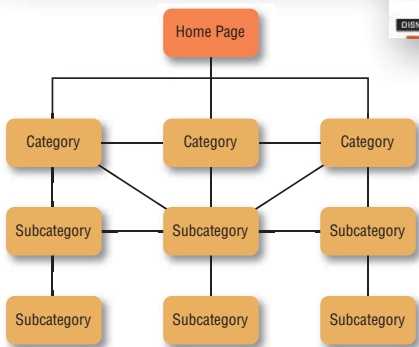
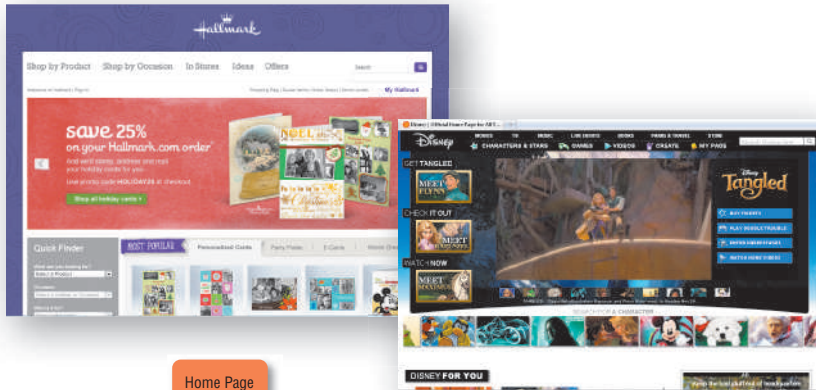


# 3 | Planning a Successful Web Site: Part 1



## Introduction

Chapters 1 and 2 introduced you to the Internet and the World Wide Web, different types of Web sites, and the basic Web design tools and roles. You also learned about important techniques for writing text for Web pages and using color as a design tool along with privacy and security considerations.

In this chapter, you discover the important facets of the Web site development process: defining the site's goals, objectives, and purpose; identifying the site's target audience or audiences; determining the site's general content; and specifying the site's structure. Then, using what you have learned about the Web site planning process, you begin to develop a plan for your own Web site. You complete your Web site's site plan in Chapter 4.

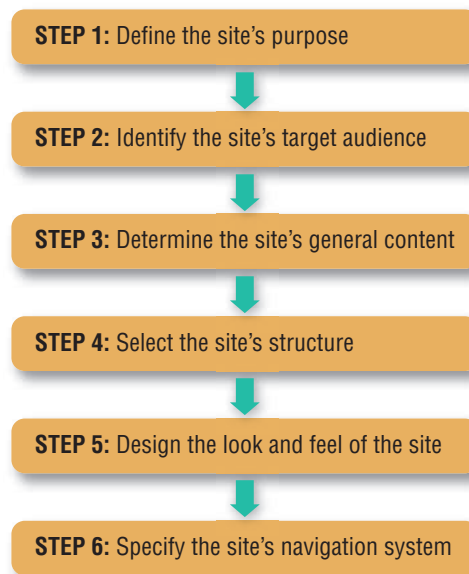
## Objectives

After completing this chapter, you will be able to:

1. Describe the Web site development planning process
2. Complete Step 1: Define the site's purpose
3. Complete Step 2: Identify the site's target audience
4. Complete Step 3: Determine the site's general content
5. Complete Step 4: Select the site's structure

## The Web Site Development Planning Process

An important part of any successful endeavor is careful planning. Because you must invest significant time and other resources when creating a Web site, you should plan ahead carefully to maximize your time and resources. Before you begin to create your first Web page, you must develop a solid, detailed plan for the Web site, called a **site plan** or **design plan**, that determines the purpose, audience, content, structure, visual design, and navigation system. Following the six major steps illustrated in Figure 3-1 is a good way to approach the development of a detailed site plan.



**Figure 3-1** Creating a successful Web site begins with developing a detailed site plan.

### DESIGN TIP

When creating a design plan, make sure to get the plan reviewed by colleagues, managers, or others with a stake in the outcome of your Web site. Although you might think that visual design would be the most important aspect of a Web site, you need to first determine the purpose, audience, content, and structure to come up with a visual design that meets the needs of your site.

**@SOURCE** **Planning**  
For more information about developing a design plan for a Web site, visit the Web Design 4 Chapter 3 Student Online Companion Web page at [www.cengagebrain.com](http://www.cengagebrain.com) and then click Planning in the @Source links.

Because planning is critical to the development of a successful Web site, this book has two chapters devoted to a thorough discussion of the six steps illustrated in Figure 3-1. This chapter discusses Steps 1 through 4. Chapter 4 discusses Steps 5 and 6. In this and subsequent chapters, a specific Web design scenario is used to explain the concepts related to developing a detailed design plan. In this scenario, you are the head of the Web Design Department at Regifting, a new B2C e-commerce company that focuses on selling reusable and recycled products and services. You need to work with your team of Web designers to develop a site plan for the new company.

## Step 1: Define the Site's Purpose

The first step when developing a solid Web site design plan is to define the site's goals and objectives and then formulate a written purpose statement for the site. **Goals** are the results you want your Web site to accomplish within a specific time frame, which can be weeks, months, or years. **Objectives** are those methods you will choose to accomplish the site's goals. A formal, written **purpose statement** summarizes your site's goals and objectives.

### Web Site Goals

Although a site has a primary goal, it might also have a combination of a primary and multiple secondary goals. For example, in this chapter's scenario, your Web site's primary goal is to sell products or services. You could have a combination of secondary goals that support your site's primary goal, such as providing customer service, educating customers about new products or services, promoting communication between employees and customers, keeping customers informed about business changes in your industry, and so forth.

In the scenario, your team has identified a primary goal and multiple secondary goals for the new Web site:

- Primary goal — Increase sales of reusable and recycled goods.
- Secondary goals:
  - Promote awareness of the company and its products and mission to customers and potential customers.
  - Establish the company's credibility in the field of environmentally sound businesses.
  - Educate site visitors about tips and developments in the environment and environmentally friendly products.
  - Encourage visitors to return to the site by providing updated information in the form of a video blog and articles by industry experts.

### Web Site Objectives

After identifying the Web site's goals, your next step is to determine the site's objectives, which are the methods the site developers use to accomplish the goals. For example, if the primary goal is to sell a product or service, the objectives to accomplish that goal might include posting testimonials from customers who have purchased the product or service or offering a 20 percent price discount for customers who purchase the product or service in the next 30 days.

You and your team work together to define the following objectives to accomplish the new site's primary and secondary goals:

- Develop an attractive, informative, and easy-to-use Web site to promote an online awareness of the company.
- Provide authoritative information and advice at the site to establish credibility.
- Include links to articles and quick tips to educate site visitors about the importance of using reusable and recycled products.
- Offer online tools to encourage site visitors to make changes to reduce their carbon footprint.

**DESIGN TIP**

You will constantly refer back to your goals and objectives as you complete the site plan. Before publishing the Web site, you should evaluate how well the site's content, structure, and design help to meet the site's goals and objectives.

## Web Site Purpose Statement

After determining your Web site's goals and objectives, you should create a formal written summary of reasons the site will be published, called a purpose statement. A well-written purpose statement synthesizes into a few words the reason or reasons you are publishing your site and explains a Web site's overall goals and the specific objectives designed to achieve those goals. Figure 3-2 illustrates the approved purpose statement for the new reusable and recycled goods Web site.



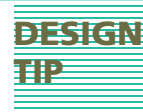
**Figure 3-2** A purpose statement explains a site's overall goals and the specific objectives that will be used to achieve those goals.

**YOUR TURN**

### Exploring Purpose Statements

1. Visit the Web Design 4 Chapter 3 Student Online Companion Web page at [www.cengagebrain.com](http://www.cengagebrain.com) and click Dr. Gourmet, Oakland, and San Jose in the Your Turn links to review three Web site purpose statements.
2. Write down your visitor expectations for the content and design of each Web site based solely on the information contained in its purpose statement. Do not look at other site pages.
3. Next, review the home page and at least two subsidiary pages at each site. Is each site's purpose statement reflected in the site's content and design? If yes, how? If no, what is missing?

Formulating a well-written purpose statement requires a clear understanding of a site's goals and objectives.



## Step 2: Identify the Site's Target Audience

Identifying the site's target audience is the second step in a Web site design plan. Although anyone around the world who has Internet and Web access can potentially visit your Web site, you must identify the specific group of visitors to which your site is targeted, called the site's **target audience**, to create a site that provides the most value for that audience.

### Target Audience Profile

To begin the process of creating a profile of your site's target audience, imagine the types of people who might visit your site. A **target audience profile** is a research-based overview that includes information about potential site visitors' demographic and psychographic characteristics. **Demographic characteristics** include gender, age group, educational level, income, location, and other characteristics that define who your site visitors are. **Psychographic characteristics** include social group affiliations, lifestyle choices, purchasing preferences, political affiliations, and other characteristics that explain why visitors might want to access your site.

Using research developed from sources such as the U.S. Department of Labor, the U.S. Census Bureau, the Small Business Administration, and reports prepared by and sold by companies who specialize in demographic and psychographic research, you can ask and answer questions similar to the following to develop a formal target audience profile for your site:

- What is the age range for your likely audience members?
- What are audience members' gender, educational background, and marital status?
- What are the typical careers and income levels of audience members?
- Where do audience members live?
- What are audience members' social group affiliations, lifestyle choices, interests, and purchasing preferences?

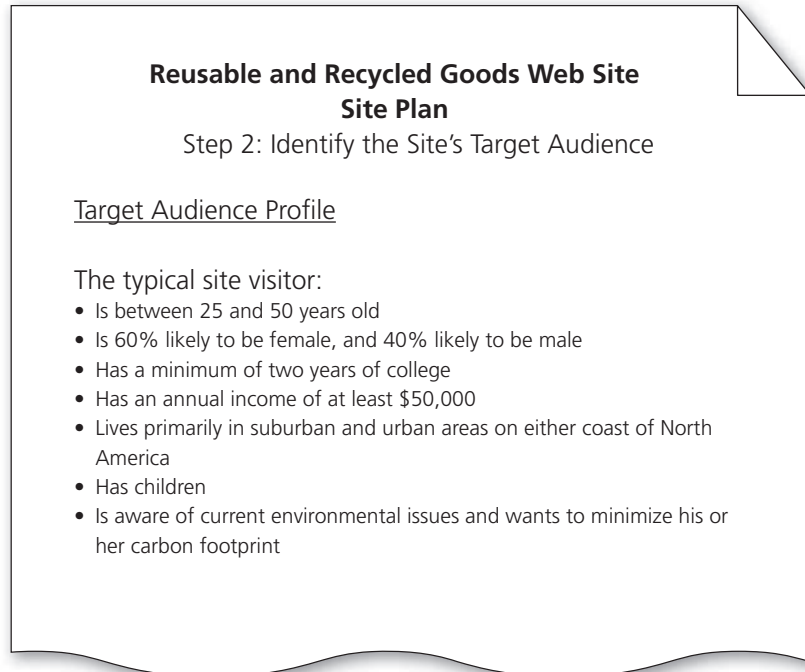
Your team has developed the target audience profile for the new site for the scenario, as shown in Figure 3-3.

#### Q&A Can a Web site have more than one target audience?

Yes, many Web sites have multiple target audiences. For example, the Office Depot e-commerce Web site promotes its brick-and-mortar stores for walk-in customers, sells office equipment and supplies online to individual consumers, and offers specialized services directed to business customers.

#### Q&A What are other considerations when defining a target audience?

You should also consider how the audience will access your site: primarily through a PC, primarily using a mobile or handheld device, or both? This information will help you determine whether you need to design a separate mobile site, or make changes to your site to make it accessible by mobile devices.



**Figure 3-3** A target audience profile identifies potential Web site visitors by defining *who* they are and *why* they are likely to visit your site.

**Audience Profile**  
For more information about developing a target audience profile, visit the Web Design 4 Chapter 3 Student Online Companion Web page at [www.cengagebrain.com](http://www.cengagebrain.com) and then click Audience Profile in the @Source links.

After identifying the members of your target audience, your next step is to determine the audience members' wants, needs, and expectations to be fulfilled by a visit to your Web site.

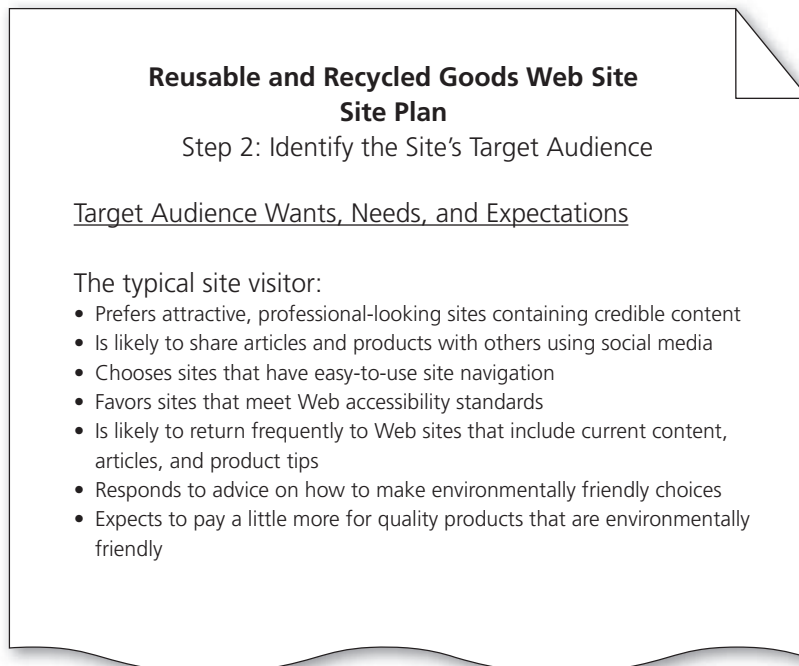
## Target Audience Wants, Needs, and Expectations

Successful Web sites fulfill their audience's wants, needs, and expectations in both general and specific ways. In general, all audiences expect an attractive, interesting, and well-organized site that conveys useful information and is easy to use. An audience's specific expectations for a site will vary based on the site's purpose. For example, a B2C site must offer the products or services that visitors want to purchase to meet its audience's specific expectations. If a site does not meet its target audience's various expectations, visitors will take their business elsewhere.

After you identify your site's target audience, conduct a **needs assessment** by answering questions such as the following to determine your target audience's wants, needs, and expectations:

- What do audience members expect to gain from a visit to your Web site?
- What usability or accessibility issues are important to audience members?
- Are audience members generally experienced or inexperienced Web users?
- Will audience members have any cultural biases, norms, or customs that must be accommodated in the site's design and organization?

Your team has performed a needs assessment and identified the target audience's major wants, needs, and expectations for the new site for the site scenario, as shown in Figure 3-4.



**Figure 3-4** A successful Web site meets its target audience's expectations by creating a content-rich, attractive, and usable site.

To create a successful Web site, you should assess your target audience's wants, needs, and expectations and then design your site to satisfy them.

**DESIGN  
TIP**

If you have limited resources and a tight time frame for your initial Web site development, begin by identifying your target audience's top two or three needs and plan your site to satisfy those needs. Then after you publish the site, continue to solicit feedback from your target audience to establish additional wants, needs, and expectations and update your site to satisfy them, as necessary.

**Q&A** **Is determining target audience wants, needs, and expectations a one-time process?**  
No. After creating your Web site, you should continually gather feedback from your target audience to update your target audience profile and fine-tune the site's content.

## Step 3: Determine the Site's General Content

A Web site's general content likely will include multiple Web pages using a combination of text, images, audio, video, animations, and multimedia elements. This section provides an overview of three types of Web pages: the home page, underlying pages, and a splash or entry page. Additionally, this section introduces the different kinds of Web content that might appear on these pages.

The content elements you choose for your Web site must support the site's purpose and satisfy your target audience's needs and expectations.

**DESIGN  
TIP**



## Home, Underlying, and Splash Pages

Most Web sites consist of two types of Web pages: a home page and underlying pages. The home page is the anchor for the entire site, and the **underlying pages** provide detailed content and interest. Some sites also have an entry or splash page that you see before moving to the home page, although the popularity of splash pages is diminishing.

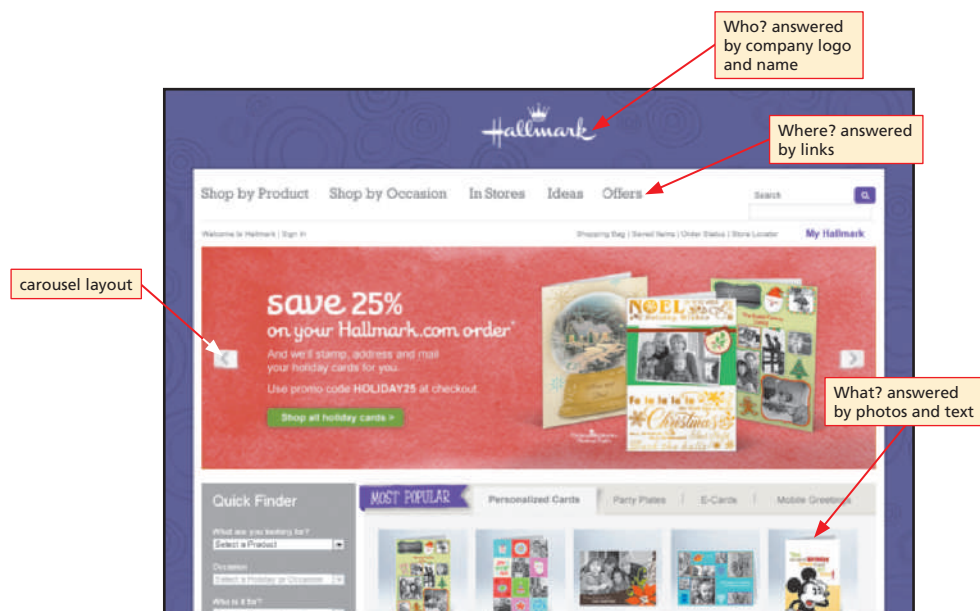
**HOME PAGES** As you learned in Chapters 1 and 2, a Web site's primary page is called its home page. Generally, a home page is the first Web page visitors see. A home page should indicate clearly *who* owns or publishes the site, *what* visitors can expect to find at the site, and *where* specific information or site features are located, as shown on the Hallmark home page in Figure 3-5. In designing a home page, you should include the following elements:

- **Who:** Company name in text format, graphic logo, tag line, copyright notation, and similar elements that clearly identify *who* owns and publishes the site
- **What:** Summary text and images that show visitors *what* content is available at the site
- **Where:** Easily identifiable navigational links to other pages at the site to indicate *where* specific information or features are found

The answer to the Who? question should be evident throughout the site through use of corporate logos, a contact link, and copyright notices. An e-commerce site's home page could answer the What? question using a slide show or tabbed window to show a variety of the types of products or services sold at the site, whereas a blog site home page could indicate the topics discussed in the various blogs. The home page of a B2B site that sells Web hosting services could have links to pages that detail the types of hosting services provided, fees, customer support information, privacy and security policy information, and so forth to answer the Where? question. A home page for a large site often includes a **search feature**, which is a text box into which users enter a search term; the search tool then searches the site for that term. Search features use similar technologies as search engines, but only search within the site for matching results.

### Q&A Do visitors always enter a site from its home page?

No. Site visitors might follow links from other sites to view specific pages at your site or use search tools to locate specific pages at your site. For these reasons, it is critical that all pages at your site contain elements that maintain unity and visual identity.



**Figure 3-5** A site's home page should answer visitors' Who?, What?, and Where? questions.



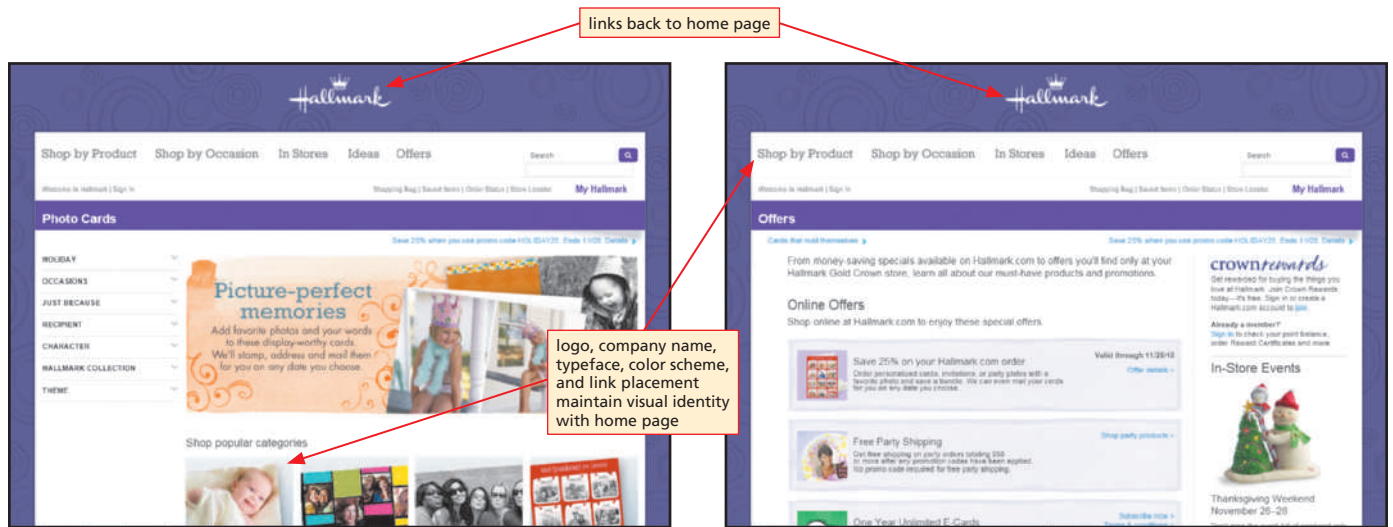
A Web site's home page should contain elements that draw the visitor in and encourage further exploration. The home page should also be different enough to stand out as the primary page, but still connect visually with other pages at the site.



Additionally, a site's home page should contain elements that establish the site's visual identity. Chapter 2 introduced the concepts of branding and using design elements to create and maintain visual identity. Organizations and companies spend a large amount of time and money defining, creating, and maintaining a positive, recognizable brand. Often, branding is so successful that the company then becomes synonymous with or symbolizes a specific product or service. For example, through successful branding, McDonald's is synonymous with fast food and the American Red Cross symbolizes disaster relief. As you learned in Chapter 2, you can exploit the power of branding on a home page using design elements — images, logo, typeface, and color scheme — alone or in combination to establish and maintain visual identity.

One way to add content to a home page without creating clutter is to use a tabbed window, or a slide show or carousel to provide access to several articles, videos, or other content at once. On most pages, these elements display a rotation of articles or images and automatically advance to the next tab or screen, as well as provide user controls to navigate to or pause at a certain screen (Figure 3-6). Clicking a screen in the tabbed window, slide show, or carousel opens the complete content page in the browser.

**@SOURCE** **Home Page**  
 For more information about strategies for creating home pages, visit the Web Design 4 Chapter 3 Student Online Companion Web page at [www.cengagebrain.com](http://www.cengagebrain.com) and then click Home Page in the @Source links.



**Figure 3-6** An underlying page should include most of the same visual identity elements as the home page.

**YOUR  
TURN****Exploring Home Page Content**

1. Visit the Web Design 4 Chapter 3 Student Online Companion Web page at [www.cengagebrain.com](http://www.cengagebrain.com) and click Art Institute, NAPA, and Uvault in the Your Turn links to review three Web site home pages.
2. Review each home page and determine how well each page's content answers the Who? What? and Where? questions site visitors have when visiting these sites.
3. Write a report for your instructor that summarizes your home page review. Discuss the content employed at each site to address these three questions. Note the site that, in your opinion, does the best job of answering these three questions and the one that does the poorest job. What design recommendations would you make to improve the home page that does the poorest job of answering these questions?

**UNDERLYING PAGES** In Chapter 2, you also learned that a Web site generally includes multiple subsidiary or underlying pages that provide details to the summary information shown on the site's home page. Links connect the home page with an underlying page and, where necessary, connect one underlying page to another underlying page. For example, typical underlying pages found at an e-commerce site include pages that provide the following:

- Product catalogs
- Checkout information
- Customer account information
- Customer service information
- Contact information
- Privacy policy and security information
- A business blog

Each underlying page at a site should include the same elements — name, logo, typeface, color scheme — as its home page to provide unity and promote visual identity. Figure 3-6 (on the previous page) depicts two underlying pages at the Hallmark site — comparing these pages with the home page shown in Figure 3-5 illustrates how Hallmark has implemented visual unity throughout its site. Additionally, like the two Hallmark underlying pages, each underlying page at a site should provide a link back to the site's home page.

**Q&A** **What is a landing page?**

A *landing page* is a page that appears when a visitor reaches a site by clicking on an advertisement. They are used as marketing tools to measure the effectiveness of the advertisement by evaluating the number of times the page is visited and whether the visitor completes any transactions on the site.

**YOUR  
TURN****Exploring Types of Underlying Pages**

1. Browse the Web or use a search tool to locate at least five commercial Web sites. Include two each B2C and B2B sites and one C2C site.
2. Review the types of underlying pages offered at each site.
3. Write a report for your instructor that summarizes the typical underlying pages found at each type of commercial site. Be prepared to discuss your report in class.

**SPLASH AND ENTRY PAGES** A **splash page** uses images, animation, and sound to capture visitors' attention and draw them into the site for further exploration. Visitors generally can click a link on the splash page to move on to the home page or, in some instances, wait until the home page automatically appears. A traditional splash page has little or no content beyond visual or sound elements. However, some sites use a splash page to help the visitor make choices about how to view the site, such as language or Flash versions. *Warning! Many visitors strongly dislike dealing with splash pages.* Decide whether to include an entry or splash page in context with your site's purpose and the needs and expectations of its target audience.

If you must include a splash page, be sure to add a link that jumps to the site's home page for those visitors who do not want to view the splash page.



In the reusable and recycled goods Web site scenario, you and the team agree that a splash page is not appropriate for the new site, which will consist of a home page and multiple underlying pages, as shown in Figure 3-7.

**Reusable and Recycled Goods Web Site  
Site Plan**

Step 3: Determine the Site's General Content

Web Site Pages

The site will contain the following page types:

- Home page with slide show layout; no splash page
- About Us summary page, plus Annual Report, Management Team, and History detail pages
- Customer Testimonials page
- Products pages, including categories for Lunch Boxes, Bedding, Cleaning Products, and Clothing
- Contact Us page with customer service links

**Figure 3-7** The reusable and recycled goods site will consist of a home page and multiple underlying pages.

**@SOURCE** **Splash Pages**  
For more information about the pros and cons of splash pages, visit the Web Design 4 Chapter 3 Student Online Companion Web page at [www.cengagebrain.com](http://www.cengagebrain.com) and then click Splash Pages in the @Source links.

## Value-Added Content

Although it is tempting to fill your Web site with content, you should be selective, basing your choice of elements on how effectively they will contribute to your site's message and purpose. Content that furthers a Web site's purpose adds value, not merely volume. **Value-added content** is information that is relative, informative, and timely; accurate and of high quality; and usable.

In general, you should create original content elements prepared specifically for the Web instead of choosing existing content elements designed for print. For example, when including a written purpose statement, incorporate a short video clip of the CEO explaining the site's purpose.

If you must use an existing content element from another medium, you should **repurpose**, or modify, the element for the Web. Repurposing content frequently involves abbreviating and rewriting text, adding hyperlinks to background or additional information, rescanning or altering photos, and editing or segmenting video and audio. Most important, it requires creative thinking and keeping the Web environment and audience needs and expectations as a foremost consideration.

### DESIGN TIP

Do not reuse content created for print on Web pages. Repurpose the content so that it will add value.

The following questions help you determine if the content you plan to add is truly worthwhile, regardless of whether you are considering images, animation, multimedia, or dynamically generated content at your site. Does the content element:

- Add value to the site?
- Further the site's purpose?
- Enhance visitors' experiences at the site?

If you answer no to any of these questions, do not include the content element. The availability of cutting-edge technology alone is never a valid reason to use it.

You might use different types of value-added content on your Web site, including the elements briefly discussed here and covered in more detail in later chapters: text, images, video, audio, animation, multimedia, and dynamically generated content.

### Q&A

#### What are public domain materials?

The rights to these materials belong to the public at large. Examples of public domain material include material on which the copyright has expired and U.S. government work, such as publications or photographs that are not covered by copyright protection. Copyrights or patents do not protect public domain materials.

**TEXT** Remember, visitors typically scan Web page text for information rather than read the text word for word. Avoid long paragraphs, and break up text with images, links, and multimedia. When writing original text, follow the guidelines for writing for the Web introduced in Chapter 2. You can also follow similar guidelines to repurpose print publication text for the Web:

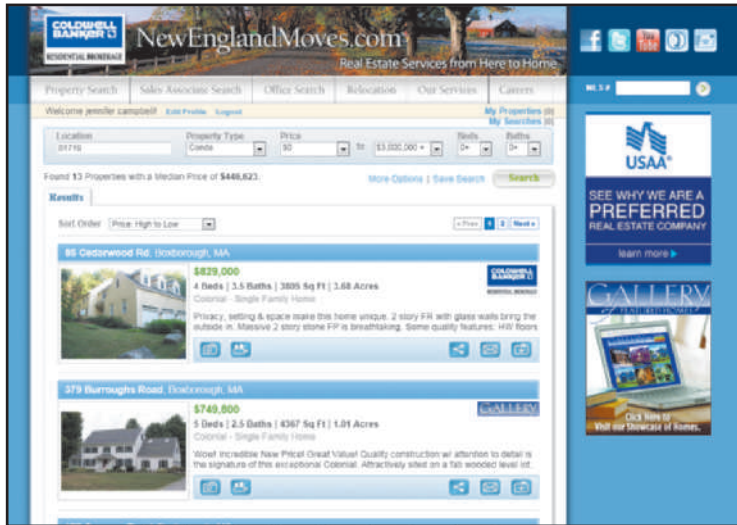
- Chunk text for scannability.
- Place explanatory or detailed information on linked, underlying pages.
- Use active voice and a friendly tone.
- Remove transitional words and phrases like *as stated previously*, *similarly*, and *as a result*, which might not be relevant for the chunked text.

### YOUR TURN

## Exploring How to Repurpose Text for the Web

1. Review the public domain Q&A and then visit the Web Design 4 Chapter 3 Student Online Companion Web page at [www.cengagebrain.com](http://www.cengagebrain.com) and click FTC in the Your Turn links.
2. Locate the Key Publications section on the FTC Identity Theft page and open a copy of a PDF publication on identity theft in your browser; print the publication.
3. Using the guidelines for repurposing text from print publications, repurpose at least four paragraphs from the printed publication for your own Web site. As an acknowledgment, cite the source of the repurposed text in a line below the text.
4. Submit your repurposed text to your instructor. Be prepared to compare your repurposed text with the original printed publication text in class.

**IMAGES** Images, which are files including graphic elements such as clip art, illustrations, diagrams, and photographs, are the most commonly used content element on Web pages, after text. Photographs on a Web page can familiarize the unknown and aid in decision making. For example, imagine that you want to buy a house in a new city. Visiting Web sites that display photographs of available houses in your price range (Figure 3-8) shows you options in your price range, enabling you to narrow your list before you contact a realtor.



**Figure 3-8** Web site images can familiarize the unknown.

You can deliver a message and/or prompt an action beyond the capabilities of text alone using images, such as clip art or photographs. Suppose you are an avid rock climber and need to lease a four-wheel drive vehicle that can handle difficult terrain. Before you visit a dealership, you decide to shop online and visit the Jeep Web site. As you click through to view the photos of different Jeep models, the photo of the sporty new yellow Jeep Wrangler poised atop a snowy mountain (Figure 3-9) captures your interest. The image prompts you to read the vehicle specifications on the Web site, determine that it fits your needs, and contact your local dealership to set up a test drive.



**Figure 3-9** Powerful imagery can contribute to a site visitor purchasing or inquiring about your products.



**DESIGN  
TIP**

Web page images can powerfully communicate and motivate. Select relevant, high-quality images that can support the Web site's purpose.

You can draw your own illustrations and diagrams using illustration software or you can shoot your own photographs using a digital camera. Alternatively, you can find free or low-cost **stock images** — clip art and photographs — from a variety of online sources. In Chapter 5, you learn more about Web page images and the tools you can use to create and/or edit them.

Whether you create your own images or acquire them from another source, preselecting high-quality, relevant images that add value to your Web site is part of the Web site planning process. In our ongoing scenario, the team asks you to research appropriate photographs to accompany articles in the reusable and recycled goods Web site.

**DESIGN  
TIP**

Remember to ensure that content elements you use at your Web site are free of copyright restrictions.

**YOUR  
TURN****Exploring Stock Photographs**

1. Search the Web using keywords similar to *stock photos* or *stock images* to locate at least six sources of stock photographs. Include sources of royalty-free and low-royalty photographs as well as those for which you must pay a standard licensing or royalty fee.
2. Research the selected sources' offerings for eco-friendly or recycling-related images and identify four photographs in total from the six sources suitable for the reusable and recycled goods Web site in our ongoing scenario.
3. Create a report containing a table that compares all stock photograph sources. Include the following columns of information in the table: source name, type of photographs offered, and typical cost. Add a second table that lists the four photographs selected for the reusable and recycled goods Web site. Include the photograph name or other identifying reference, description, source name, and cost.
4. Submit your report to your instructor. Be prepared to discuss the results of your research in class.

**AUDIO AND VIDEO** **Audio**, or sound, is frequently used as an extremely effective, low-bandwidth alternative to video. Audio can vary in both form and intensity — from a child's whisper to the president's State of the Union address, or from a heavy metal band to the U.S. Navy Choir. Audio can persuade, inspire, personalize, motivate, or soothe.

Audio also enhances recall. Does a lyric that keeps playing in your head remind you of a significant life event? Does a stirring speech bring to mind images of the time in which the powerful words were spoken? Think of the ways that audio — with its capability of evoking emotion, prompting action, and triggering memory — can benefit your Web site. Imagine, for example, the persuasive effect of a glowing testimonial about your product from a satisfied customer, or recall the possibilities of a catchy jingle.



Inform visitors when a site link launches an audio file so that they can use a headset or turn off their speakers so as not to disturb those around them. Repetitive sounds can be irritating to frequent site visitors, so use sound sparingly.

## DESIGN TIP

Typically, **video clips**, or moving imagery, incorporate the powerful components of movement and sound to express and communicate ideas. Delivering quality video over the Web efficiently can present challenges. The primary problem is the extremely large size of video files, resulting from the enormous amounts of data required to depict the audio and video. When presenting video, Web designers must decide whether to limit the size of downloadable video files or to generate streaming video. As you learned in Chapter 1, streaming media, such as audio or video, begins to play as soon as the data begins to stream, or transfer, to the browser. **Downloadable media**, on the other hand, must be downloaded in its entirety to the user's computer before it can be heard or seen.

Consider how your target audience will be accessing your site when adding video clips to your site. Most Internet connections can present video without causing delays or problems, but if a large portion of your audience uses lower bandwidth connection methods, think about reducing the size or number of video files.

## DESIGN TIP

**ANIMATION AND MULTIMEDIA** **Animated images** are often used by Web sites to attract attention and enliven Web pages. A popular format is the **animated GIF** format, which adds movement to otherwise static images. Another type of popular animation, called **Flash animation**, is an animated movie created using Adobe Flash CS5 software. If your site uses Flash movies, visitors must download the free Flash player plug-in if their browser does not already have it.

Animated GIFs and Flash movies can add interest and appeal to your Web pages; however, you must use them sparingly and only in support of your Web site's purpose and only when doing so meets your target audience's expectations for content at your site. For example, a topical Web site promoting sports activities to a young target audience might benefit from the use of animated GIFs or Flash movies that encourage them to participate. However, the target audience for a B2B e-commerce site offering consulting services might find animated GIFs and Flash movies distracting and annoying.

Simple animated GIFs and Flash movies are not difficult to create, as you will learn in Chapter 6. Additionally, many online vendors offer free or low-cost animated GIFs and Flash movies. As with any element, excessive use of animation at your site can shift your audience's focus away from the other content and mask your site's purpose. Overuse of rotating objects, scrolling text, animated advertising banners, or Flash movies could annoy site visitors to the extent that they might exit your site and not return.

## Q&A

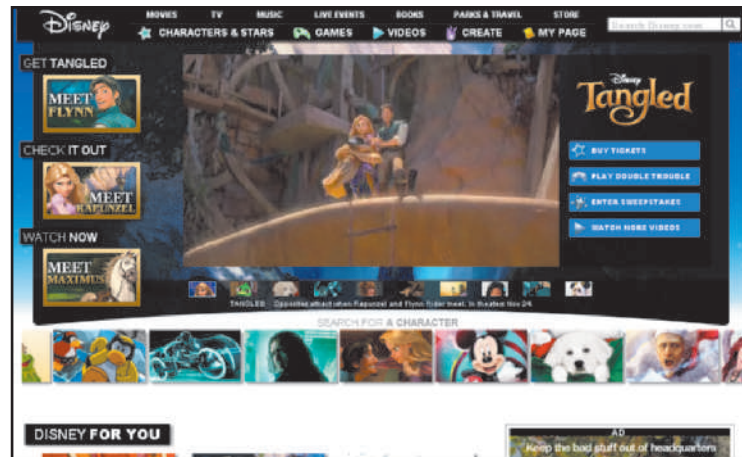
### Can multimedia elements play in all Web browsers?

Multimedia elements might require that your visitors install Web browser plug-ins, software that allows multimedia elements to play in the visitors' Web browsers. Adobe's Flash media player, Apple's QuickTime media player, and RealNetwork's RealPlayer media player are popular, free Web browser plug-ins. Many, if not most, of your site visitors will have already downloaded and installed browser media players.

**Multimedia**

For information about images, multimedia, and Web accessibility, visit the Web Design 4 Chapter 3 Student Online Companion Web page at [www.cengagebrain.com](http://www.cengagebrain.com) and then click Multimedia in the @Source links.

Although definitions vary, **multimedia** is typically regarded as any combination of text, images, animation, audio, or video. Multimedia elements are popular because they can add action, excitement, and interactivity to Web pages. Web page multimedia elements can also be interactive; the Web site visitor participates as the multimedia plays instead of simply watching it. For example, the Disney Web site (Figure 3-10) offers its visitors both a multimedia and an **interactive multimedia** experience. Multimedia elements such as animation, video, and music invite visitors to play at the site by entering a product sweepstakes, listen to music from popular performers, check out cool fashions, play games and more — all while promoting the Disney brand.



**Figure 3-10** Multimedia elements can add action, excitement, and interactivity to a Web site.

**DESIGN  
TIP**

Limit the use of animation and multimedia on your Web pages. Animation and multimedia elements should be used only when doing so supports your site's purpose and satisfies your target audience's expectations for content at your site.

Although viewers might find your site's multimedia elements intriguing and entertaining, developing multimedia elements for your Web site internally can require considerable expertise, time, and money. Therefore, it might be more cost effective to purchase appropriate multimedia elements from a professional multimedia developer.

Additionally, like animated GIFs and Flash movies, you should use multimedia elements *only* in support of a site's purpose and *only* when such elements enhance visitors' experiences at the site.

**DESIGN  
TIP**

Web designers without the necessary programming resources and expertise can purchase ready-made multimedia elements from professional multimedia developers.

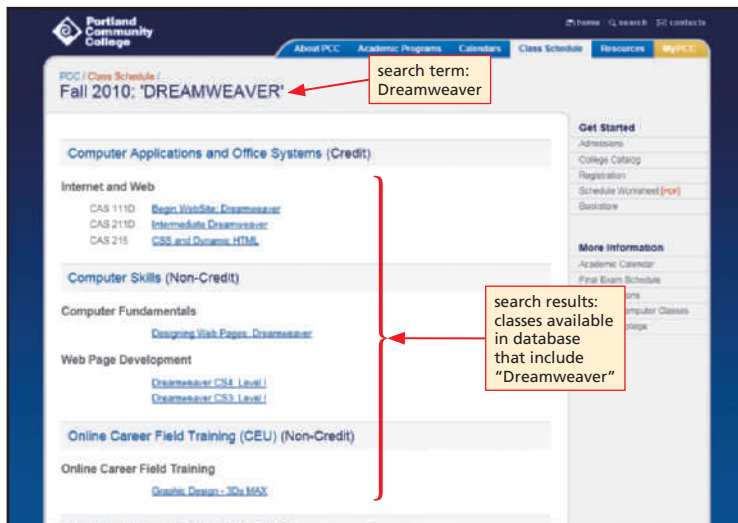
## Exploring Web Page Animation and Multimedia

### YOUR TURN

1. Visit the Web Design 4 Chapter 3 Student Online Companion Web page at [www.cengagebrain.com](http://www.cengagebrain.com) and click Disney, Wendy's, Warner Bros. Studios, and Extreme Sports Channel in the Your Turn links to review the home page and three of the underlying pages at each site.
2. Evaluate each site to determine how, in your opinion, the:
  - a. Home page content makes clear the site's purpose
  - b. Home page content satisfactorily answers the Who?, What?, and Where? visitor questions
  - c. Animation or multimedia elements on the home and underlying pages support the site's purpose and meet target audience needs and expectations
3. Write a report for your instructor that identifies each site and its purpose and describes the animation and/or multimedia elements used. Discuss whether these elements contribute to the site's purpose and enhance visitors' experiences at the sites. Be prepared to discuss your report in class.

## Dynamically Generated Content

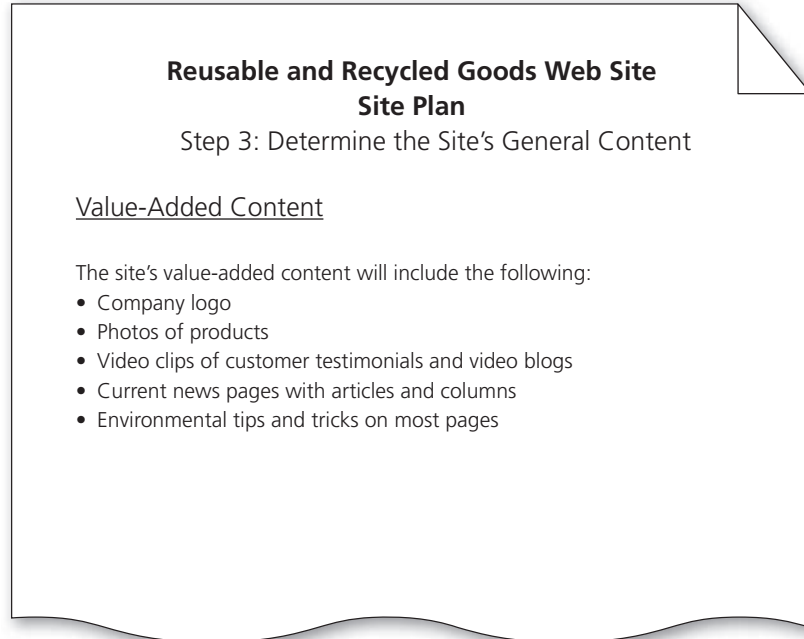
**Dynamically generated content**, unlike static information, updates periodically and can appear on a site's pages when triggered by a specific event, such as the time of day or by visitor request. Web pages that display dynamically generated content typically acquire the information from a database. A **database** is a file that stores data, such as a store's inventory or a library's card catalog, so that the contents are searchable and easily updated. Sites that use databases to generate dynamic content are called **database-driven Web sites**. Figure 3-11 illustrates the result of a request for dynamically generated content — course and schedule information — from a Portland Community College database.



**Figure 3-11** Dynamic content is generated when requested from a database.

**Q&A** **What is a gadget?**  
 A *gadget* or *widget* is a fragment of code that creates dynamic content. Examples of gadgets include dynamic calendars, live weather, clocks, “to-do” lists, interactive games, virtual animals, and more. Some sites allow you to copy gadget code and then paste the code into your Web page to add the gadget. Most WYSIWYG editors include widgets or gadgets.

Continuing with the Regifting scenario, you and the team agree that the value-added content for your site will include text articles and tips, appropriate photos and a logo image, product information, and video clips of client testimonials. Animated GIFs and multimedia are not appropriate for the site’s purpose and target audience expectations, but dynamically generated content is necessary to populate the product catalog. Figure 3-12 illustrates further development of the planning document for the reusable and recycled goods Web site.



**Figure 3-12** Value-added content for the reusable and recycled goods Web site includes text, images, video clips, and dynamically generated content.

## Organizing Web Site Files

As you develop your Web site, you should organize the resulting files, including HTML, image, animation, and multimedia files, to make it easier to maintain them and to ultimately publish your site. If your Web site is small — fewer than 5–10 total files — consider creating a single folder on your computer’s local drive for all the files. If your Web site will exceed 10 files, consider creating separate, logical subfolders; for example, include subfolders for HTML code, photographs, audio, video, animation, and multimedia files. Remember that a single Web page can comprise many files, because each graphical element and article or document is its own file. For both small and large Web sites, create a subfolder in which you can place original files, such as word-processing files or image files that you later will convert into Web-usable formats.

To protect the system of folders and subfolders that you create, you should regularly back up your files and store the backups at a location separate from your local hard drive. For example, back up to a removable flash drive or online file storage service.

Plan an organized file system for your Web site files. You will work more effectively, minimize the risk of losing or misplacing content elements, and facilitate the publishing of your Web site if you are organized. Back up your files on a regular basis.

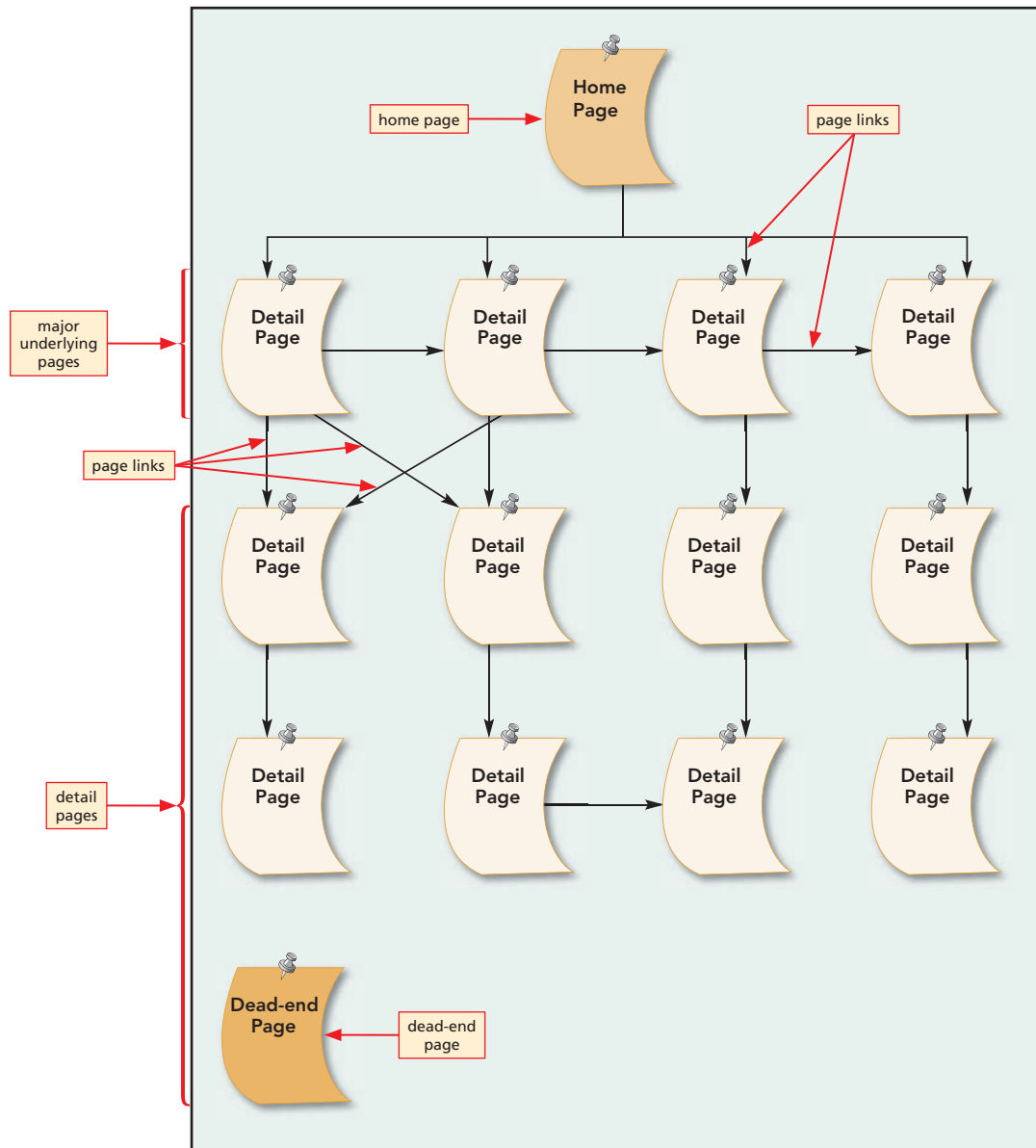
**DESIGN  
TIP**

## Step 4: Select the Site's Structure

After you define a site's purpose and identify its target audience, you are ready to plan the structure of the Web site — the linked arrangement of the site's pages from the home page. The Web site's structure should support the site's purpose and make it easy for visitors to find what they want at the site in as few clicks as possible. Planning the site's structure before you begin creating its pages has several benefits, such as the ability to do the following:

- Visualize the organization of the site's pages and linking relationships.
- Organize the pages by level of detail.
- Follow the links between pages to make certain visitors can quickly click through the site to find useful information — fewer clicks mean satisfied site visitors.
- Detect **dead-end pages**, pages that currently do not fit into the linking arrangement.
- Rearrange pages and revise linking relationships, and then visualize the changes before you create the site.

An outline of a Web site's structure can serve as a blueprint and illustrate how visitors can follow links from page to page. Some designers use a text outline to plan a site's structure, whereas others follow the storyboard process to create a visual representation of the site's structure. A **storyboard** is a series of pages originally developed to graphically present scenes for a movie or television program. To create a simple Web site storyboard, arrange sticky notes or index cards — each note or card representing a Web page — on a wall or corkboard to visualize a site's proposed structure. Figure 3-13 is an example of a storyboard used to plan a Web site's structure.



**Figure 3-13** A storyboard is a useful tool for planning a site's structure and defining the links between pages.

#### Q&A Can I use Microsoft Office® to create a flowchart?

Yes. Microsoft Word, Microsoft Excel, and Microsoft PowerPoint provide SmartArt objects, which allow you to create hierarchical or graphical representations of linked pages.

A **flowchart** is a diagram that shows steps or processes; flowcharts are another useful way to outline a site's structures. To create a flowchart, draw an arrangement of shapes and lines where each shape indicates a page and each line indicates a link from page to page. You can manually draw the structure flowchart, use the SmartArt objects available in Microsoft Word, Excel, or PowerPoint, or use drawing software, such as Microsoft Office Visio Professional 2010®.

As a Web designer, you should choose the method that you find most flexible to outline your site's structure. Regardless of the tool you use, your site's structure will likely follow one of three structural themes: linear/tutorial, random, or hierarchical.



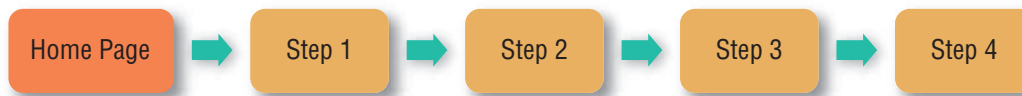
## Exploring Tools for Planning Site Structure

1. Search the Web to identify at least four software tools you can use to create a formal outline or plan for a Web site's structure.
2. Create a report for your instructor that uses a table to summarize your research. Include the following columns in your table: vendor name, software name, brief description of software features, and cost. Include a discussion of which tool you would prefer to use to create the formal plan for your site's structure and why it is your software tool of choice. Be prepared to discuss your research in class.

**YOUR  
TURN**

## Linear/Tutorial Structure

A **linear/tutorial site structure** organizes and presents Web pages in a specific order, as shown in Figure 3-14. A training Web site could use this structure to ensure that steps will not be missed or performed out of sequence. For example, a Web site that illustrates how to serve a tennis ball properly would use this structure to demonstrate the necessary range of motions in the correct order. The linear/tutorial structure controls the navigation of users by progressing them from one Web page to the next. Linear/tutorial structure is also appropriate for information that needs to be viewed in a historical or chronological order; for example, a Web site that details the explosive growth of e-commerce might benefit from this structure.



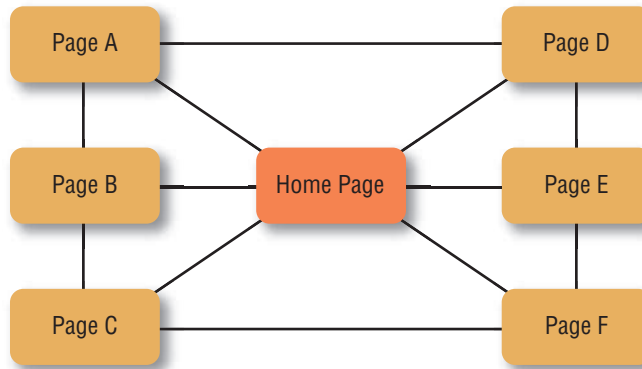
**Figure 3-14** A linear/tutorial site structure organizes Web pages in a specific order.

## Random Structure

A **random site structure**, also called a **webbed site structure**, does not arrange its pages in a specific order. From the home page of a site organized around a random structure, visitors can choose any other Web page according to their interests or inclinations. Figure 3-15 illustrates a random site structure and shows how a visitor to this type of Web site could navigate to different Web pages as he or she sees fit. The random structure might be appropriate for a simple Web site with few pages. However, visitors to a larger, complex Web site organized in this manner might be confused and frustrated trying to find useful information.

### Q&A Do all Web sites have multiple pages?

No. A current trend is to create one-page Web sites, where information is presented in one scrollable page, or all of the information is presented within a standard screen view. This is not appropriate for any content-heavy sites such as e-commerce or news sites, but can be effective to provide information about an event, or for a musician or artist wanting to provide links to a blog or to his or her work on other sites, such as Flickr or YouTube.

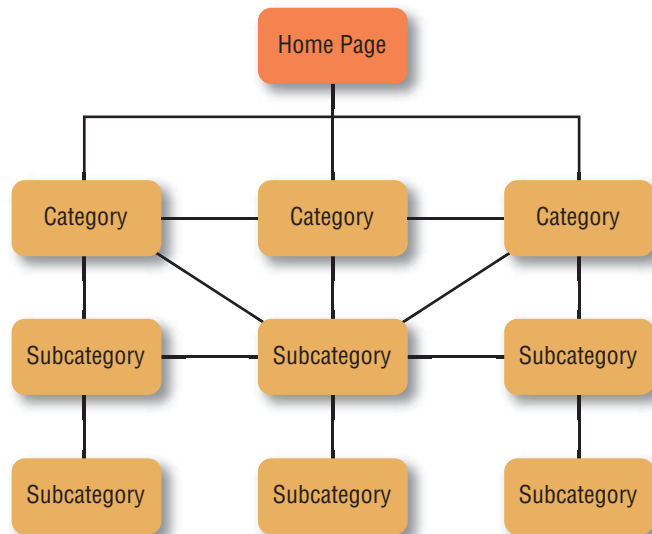


**Figure 3-15** A random site structure does not arrange its pages in a specific order.

## Hierarchical Structure

A **hierarchical site structure** organizes Web pages into categories and subcategories by an increasing level of detail, as shown in Figure 3-13 (the storyboard illustration) and in Figure 3-16. Organizational and topical Web sites are usually well suited to a hierarchical structure. A university Web site, for example, might structure its Web pages in three categories with multiple subcategories:

- Academics category with majors and departments subcategories
- Athletics category with teams and schedules subcategories
- Students category with current and prospective students and alumni subcategories

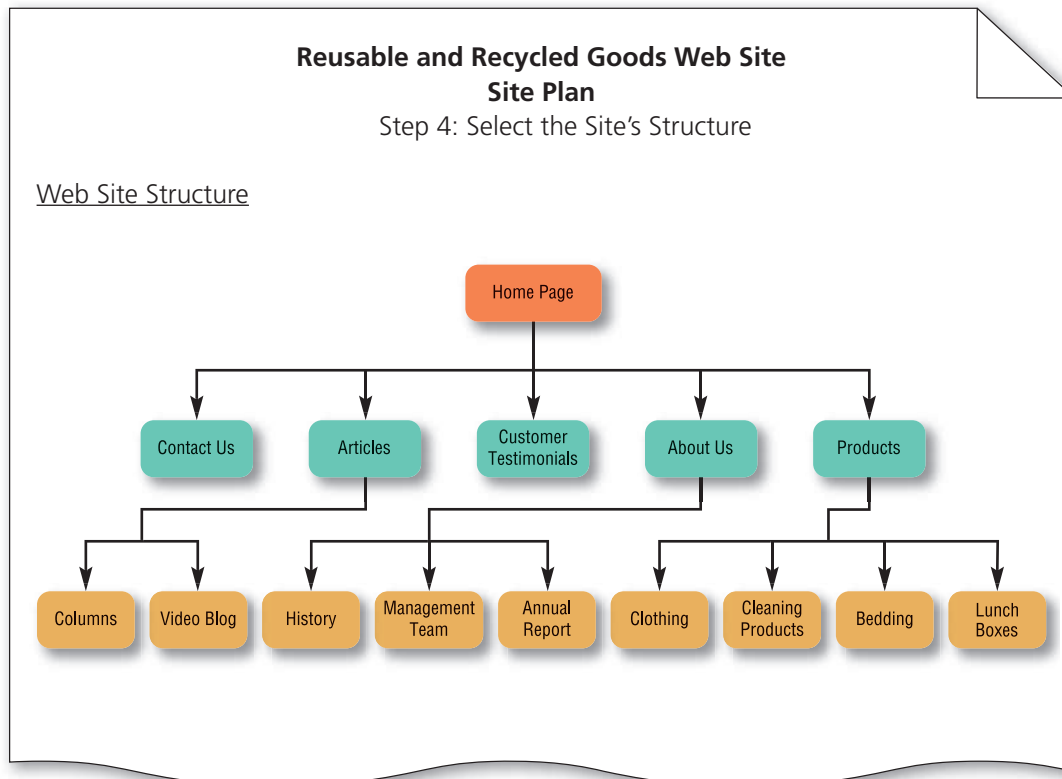


**Figure 3-16** A hierarchical structure organizes Web pages into categories and subcategories by increasing level of detail.

**@SOURCE** **Site Structure**  
For more information about planning Web site structure, visit the Web Design 4 Chapter 3 Student Online Companion Web page at [www.cengagebrain.com](http://www.cengagebrain.com) and then click Site Structure in the @Source links.

Web sites with many pages and multiple objectives, such as an e-commerce site, might use a combination of the three primary Web site structures rather than adhering to a single site structure to organize its pages. Returning to the reusable and recycled goods Web

site scenario, you and your team agree on a site structure that combines the hierarchical and linear structures. Figure 3-17 illustrates the update to the design plan to include the structure flowchart.



**Figure 3-17** The reusable and recycled goods Web site's structure combines the hierarchical and linear structures.

Plan the structure of your Web site to support the site's purpose and make it easy for visitors to meet their needs and expectations at the site. Formalize the structure plan using a text outline, storyboard, or flowchart.



## Chapter Review

Creating a Web site demands a considerable investment of time and other important resources. To ensure a Web site's success, a detailed site plan is essential. Planning Step 1 defines the purpose of the Web site, which entails determining goals and objectives. Planning Step 2 identifies the site's target audience, including developing a target audience profile and needs assessment. Planning Step 3 identifies the general content of the site, including Web page selection and types of value-added content to be used. Content types include text, images, video, audio, animation, multimedia, and dynamically generated content. As you develop a Web site, having an organized electronic filing system for files and folders will help you work more effectively, minimize the risk of losing or misplacing elements, and smooth the process of publishing your Web site. Finally, Planning Step 4 involves planning the site's structure: linear/tutorial, random, or hierarchical.

**TERMS TO KNOW**

After reading the chapter, you should know each of these key terms.

- |                                     |                                    |
|-------------------------------------|------------------------------------|
| animated GIF (83)                   | needs assessment (74)              |
| animated images (83)                | objectives (71)                    |
| audio (82)                          | psychographic characteristics (73) |
| database (85)                       | purpose statement (71)             |
| database-driven Web sites (85)      | random site structure (89)         |
| dead-end pages (87)                 | repurpose (80)                     |
| demographic characteristics (73)    | search feature (76)                |
| design plan (70)                    | site plan (70)                     |
| downloadable media (83)             | splash page (79)                   |
| dynamically generated content (85)  | stock images (82)                  |
| Flash animation (83)                | storyboard (87)                    |
| flowchart (88)                      | target audience (73)               |
| goals (71)                          | target audience profile (73)       |
| hierarchical site structure (90)    | underlying pages (76)              |
| interactive multimedia (84)         | value-added content (79)           |
| linear/tutorial site structure (89) | video (83)                         |
| multimedia (84)                     | webbed site structure (89)         |

**TEST YOUR KNOWLEDGE**

Complete the Test Your Knowledge exercises to solidify what you have learned in the chapter.

**Matching Terms**

Match each term with the best description.

- |                                       |  |
|---------------------------------------|--|
| ___ 1. site plan                      | a. A site that delivers content from a collection of data based on user input, such as a library card catalog.   |
| ___ 2. widget                         | b. A page that appears before the home page is visible.  |
| ___ 3. interactive multimedia         | c. Web pages organized by categories and subcategories.  |
| ___ 4. database-driven Web site       | d. Social group affiliations, lifestyle choices, purchasing preferences, political affiliations, and other characteristics that explain why visitors might want to access your site. |
| ___ 5. purpose statement              | e. A page that currently does not fit into the linking arrangement.  |
| ___ 6. linear/tutorial site structure | f. A format that adds movement to otherwise static images.   |
| ___ 7. psychographic characteristics  | g. Software that allows certain content to function in a browser window.   |
| ___ 8. plug-in                        | h. Web pages organized in no specific order.   |
| ___ 9. random site structure          | i. An experience involving a combination of media, such as images, audio, video, and animations, in which the viewer participates.   |
| ___ 10. splash page                   | j. A fragment of code that creates dynamic content.  |
| ___ 11. dead-end page                 | k. A formal written explanation of a Web site's overall goals and the specific objectives related to those goals.  |
| ___ 12. animated GIF                  | l. A formal document that states a Web site's purpose, goals, objectives, general content, and structure.  |
| ___ 13. hierarchical site structure   | m. Web pages that must be viewed in a specific order.  |

## Short Answer Questions

Write a brief answer to each question.

1. Differentiate between goals and objectives when planning a site. Describe a purpose statement.
2. Identify the first four steps in developing the site plan for a Web site.
3. Discuss how to develop a target audience profile and target audience needs assessment.
4. Define the three primary questions visitors want answered by home page content and identify the types of content on a commercial Web site's home page that can answer visitors' questions.
5. Define demographic characteristics and explain their role in creating a target audience profile.
6. Discuss the functions of a home page, splash page, and underlying pages.
7. What is value-added content? Discuss how the following content types can add value to a Web site: text, images, animation, Flash movies, video and audio, multimedia, and dynamically generated content.
8. Explain what a database-driven Web site is, and give two examples of such sites.
9. Define the term, storyboard, and explain its importance in the Web site development process.
10. Describe three basic Web site structures and give examples that illustrate when each type of structure is appropriate.

Test your knowledge of chapter content and key terms.

**Instructions:** To complete the Learn It Online exercises, start your browser, click the Address bar, and then visit the Web Design 4 Chapter 3 Student Online Companion Web page at [www.cengagebrain.com](http://www.cengagebrain.com). When the Web Design Learn It Online page is displayed, click the link for the exercise you want to complete and then read the instructions.

**LEARN IT  
ONLINE**

### Chapter Reinforcement TF, MC, and SA

A series of true/false, multiple-choice, and short-answer questions that test your knowledge of the chapter content.

### Who Wants To Be a Computer Genius?

An interactive game that challenges your knowledge of chapter content in the style of a television quiz show.

### Flash Cards

An interactive learning environment where you identify chapter key terms associated with displayed definitions.

### Wheel of Terms

An interactive game that challenges your knowledge of chapter key terms in the style of the television show *Wheel of Fortune*.

### Practice Test

A series of multiple-choice questions that test your knowledge of chapter content and key terms.

### Crossword Puzzle Challenge

A crossword puzzle that challenges your knowledge of key terms presented in the chapter.

**TRENDS**

Investigate current Web design developments with the Trends exercises.

Write a brief essay about each of the following trends, using the Web as your research tool. For each trend, identify at least one Web page URL used as a research source. Be prepared to discuss your findings in class.

### 1 | Carousels, Slide Shows, and Tabbed Windows

Find examples of carousels, slide shows, and tabbed windows. What navigation or user control features do they have in common? How many screens does each show? How do they add value to the Web page?

### 2 | One-Page Web Sites

The Web sites with which you are familiar typically consist of several linked pages with a clear organization and an easy-to-use navigation system. However, some Web sites consist of only one page. Research the trend of creating one-page Web sites. Find an article that reviews or advises how to use one-page Web sites. View a few one-page Web sites. Are they effective or too long? How much scrolling do you have to do to view the entire page? As a Web designer, what type of client would you advise to have a one-page Web site?

**AT ISSUE**

Challenge your perspective of Web design and surrounding technology with the @Issue exercises.

Write a brief essay in response to the following issues, using the Web as your research tool. For each issue, identify at least one Web page URL used as a research source. Be prepared to discuss your findings in class.

### 1 | Web Site Purpose Statements vs. Web Site Mission Statements

A commercial or noncommercial organization often develops an organizational mission statement to succinctly explain to its constituencies (members, customers, employees, business partners, government agencies, and so forth) why the organization exists. The use of succinctly worded Web site mission statements is an outgrowth of the use of these organizational mission statements. However, some business and Web critics consider formal organizational or Web site mission statements to be useless “bizspeak.” After researching the arguments for and against Web site mission statements, create a report that accomplishes the following:

- a. Compares Web site *purpose* statements as described in this chapter with examples of Web site *mission* statements. How are they alike? How are they different?
- b. Describes how, as a Web designer, you would advise a client on the inclusion of a Web site purpose and/or Web site mission statement at a B2B site.

### 2 | Using Multimedia

Find an example of video, animated GIFs, audio, or other multimedia elements that are used as value-added content where text could be used instead. Do you agree with the site designer’s choice? Alternatively, find a site that is text-heavy, and think about how multimedia could be used to enhance the site. In both instances, does the use of multimedia fit with your assumptions of the site’s target audience?



Use the World Wide Web to obtain more information about the concepts in the chapter with the Hands On exercises.

## HANDS ON

### 1 | Explore and Evaluate: Web Site Structure

Browse the Web to locate a variety of personal, organizational/topical, and commercial Web sites. Select four of these sites, and identify what you think the site's primary structure is. Can you find examples of all three structures discussed in the chapter? For one of these sites, draw a flow chart for the primary site pages. You may use paper or Microsoft Office SmartArt tools to create your flowchart.

### 2 | Search and Discover: Free or Inexpensive Animated Images

Use the Ask.com search tool to identify at least five sources of free or inexpensive animated images for use on Web pages. Then write a brief description identifying each source, the types of animated images offered, and, if not free, the typical cost. List any restrictions imposed on the use of free animated images. Select one animated image from each site and describe a situation in which you, as a Web designer, might include it on a Web page.

Work collaboratively to reinforce the concepts in the chapter with the Team Approach exercises.

## TEAM APPROACH

### 1 | Target Audience

Businesses and other large organizations spend considerable amounts of time and money determining the target audience of their site. Good Web design involves using value-added content that attracts, informs, and entices site visitors. Team up with two other students to identify characteristics of the following sites' target audiences and the design and content choices that the site owners made to meet the audience's expectations.

- a. Shutterfly
- b. Avon
- c. Cool Running
- d. food52
- e. Intuit

Create a report summarizing your research explaining how each site uses value-added content to maintain visual identity. Cite examples that support the teams' decision on how well each site uses value-added content in support of the site publisher's branding efforts.

### 2 | Web Site Goals, Objectives, and Purpose Statement

Join with two other classmates to create a team for this activity. Select two of the team members to form a Web design team. The third team member will assume the role of the client who hires the Web design team to develop his or her Web site.

- a. The client develops an idea for a B2C Web site of his or her choice, for example, a bike shop or a used CD store.
- b. The design team works with the client to develop a list of site goals and objectives, write a formal purpose statement, and develop the target audience profile and needs assessment for the site.

- c. As a team, search for two sites that are similar to the one you have planned. Create a presentation for the instructor and other classmates that compares the team's site plan with the sample sites. Include in the presentation an evaluation of how the sample sites met their objectives and what changes you would make to their site or your site plan after doing the comparison.

## CASE STUDY

Apply the chapter concepts to the ongoing development process in Web design with the Case Study.

The Case Study is an ongoing development process using the concepts, techniques, and Design Tips presented in each chapter.

### Background Information

The four steps described in this chapter covered a lot of material — from defining the Web site's goals and objectives to planning a site's structure. If you have carefully explored the information in each step and have worked your way through the end-of-chapter materials for this chapter, you are ready to tackle this chapter's assignment.

### Chapter 3 Assignment

In this assignment, you will begin to create your own formal Web site plan by defining the site's goals and objectives, writing a formal purpose statement, and creating a target audience profile and needs assessment. You will also plan its general content and structure.

1. Using the report you created in the Chapter 2 Case Study as your starting point, create a formal site plan.
  - a. Determine your site's goals and objectives and draft the site's purpose statement.
  - b. Identify your site's target audience(s) and determine the wants, needs, and likely expectations that your site's design and content can satisfy for that audience.
  - c. Identify the pages you initially plan to include at your site.
  - d. Add to your site plan a list of value-added content that will help achieve your Web site's purpose and satisfy target audience needs. Identify possible sources for the content, keeping in mind the copyright issues discussed in Chapter 2.
  - e. Determine which of the three Web site structures — linear/tutorial, random, or hierarchical (or a combination of structures) — will best meet your site's purpose. Use a text outline, or manually draw the structure, create a storyboard, or use flowcharting software to illustrate your site's structure as part of your design plan.
2. Submit your partial design plan to your instructor. Be prepared to discuss the elements of your partial design plan in class.