

Website Development

This chapter introduces the overall process of developing a website. The purpose, audience, navigation structure, and content of a website is discussed, as well as implementing design concepts in the web page layout.

Website Development

Website development is the process of planning and creating a website. Planning includes determining the website's purpose, audience, navigation structure, content, and page layout. Dreamweaver is then used to set up the website and create the web pages. Website development can be divided into two stages, planning and implementation:

Planning

1. Define the purpose and target audience.
2. Determine the web pages that will be in the website by sketching the navigation structure. Review and revise the sketches as needed.
3. Determine the content for each web page.
4. Design the web pages by sketching the page layouts. Review and revise the sketches, keeping in mind the four design concepts: appropriateness, placement, consistency, and usability.

Implementation

5. Using Dreamweaver, define the website and organize the files and folders.
6. Create the web pages using Dreamweaver.
7. Review the website in a browser and review a printed copy of each web page.
8. Make changes or corrections.
9. Repeat steps 7 and 8 until complete.

Most of the development process is repetitious: start with something, review it, revise it, review it again, and so on. With experience, you may only need to revise once or twice.

Information Architect

An information architect creates a vision of what a website will look like and defines how it will work. The job involves all aspects of planning the website and may include assisting with implementation. Careers are discussed in Chapter 1.

Defining the Purpose and Target Audience

purpose

The first step in planning a website is to define the purpose and target audience. The *purpose* is the intent of the website. For example, the purpose of a restaurant's website could be to provide the phone number, location, hours of operation, and menus. Clearly defining the purpose helps to make decisions about the website navigation structure and the content for each web page. Most websites have more than one purpose, so it is best to list as many as possible:

Purposes for a fast-food restaurant's website:

- provide location and contact information
- provide the hours of operation
- provide a fun page for kids
- describe the menus
- provide information about specials and promotions

Purposes for a children's theater website:

- list rehearsal and show times
- describe the theater production company
- provide location and contact information

target audience

Once the purpose is identified, the target audience of the website needs to be defined. The *target audience* is composed of the individuals that are intended to use the website. The content of the website is tailored to the target audience. To define the target audience, describe the intended users. Ask questions such as how old are they, where do they live, what are their interests, and what is their level of education. Answers to these and other questions related to the site can be listed as characteristics which define the target audience, as in the following examples:

Target audience characteristics for a fast-food restaurant website:

- adults, local residents, and travelers
- children who already know and like the restaurant
- people looking for the particular foods offered at the restaurant
- people in a hurry
- people on a budget

Target audience characteristics for a children's theater website:

- parents of children interested in attending or participating in a production
- children interested in attending or participating in a production

Practice: Pasta Restaurant – part 1 of 7

Write your answers on paper.

① DETERMINE THE PURPOSE AND TARGET AUDIENCE FOR A PASTA RESTAURANT

You have been asked to develop a website for a pasta restaurant. The owners want to include the address, hours, phone number, lunch and dinner menus, and a few recipes. The restaurant is unique because the pasta and sauces are made fresh daily. The restaurant is family-owned and is popular with tourists as well as local residents.

- What are the purposes of the website? List as many as possible.
- Who is the target audience for the website? List characteristics of the audience.

② DETERMINE THE PURPOSE AND TARGET AUDIENCE FOR A BICYCLING CLUB

You have been asked to develop a website for a local bicycling club. The club meets once a month for a breakfast meeting followed by a group ride. They want to have the club president's contact information and a schedule of events on the home page, and other pages with photos and reviews of past rides.

- What are the purposes of the website? List as many as possible.
- Who is the target audience for the website? List characteristics of the audience.

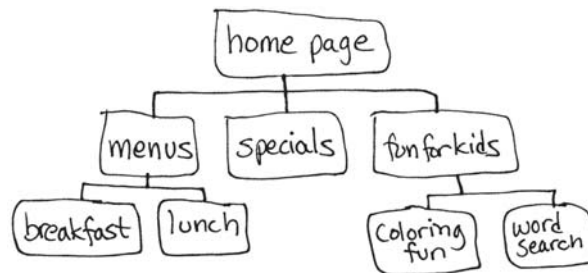
Determining the Web Pages and Navigation Structure

navigation structure

Sticky Notes as a Design Tool

Sticky notes are useful for working on a navigation structure. Using a sticky note for each web page, the notes can be arranged on a table or wall in a hierarchy like a navigation structure sketch. The notes can be rearranged many times to find the best structure.

The web pages in a website are determined from the purpose and target audience. The home page typically contains links to web pages of specific topics. The organization of the pages in a website is called its *navigation structure*. Using rectangles and lines to represent web pages and their relationships, the navigation structure should be sketched during the planning stage of website development. A sketch usually goes through several revisions before being finalized. This sketch represents the navigation structure of a restaurant's website:



The arrangement of the pages in a navigation structure should be from general to specific. For example, the menus page is more general than the specific pages for breakfast and lunch. The hierarchy should not be too deep or too shallow and each page should be about one topic.

top-level page

same-level page

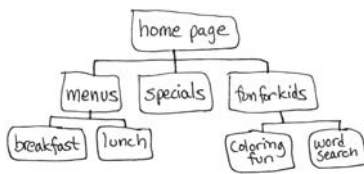
The home page is referred to as a *top-level page* because it is at the highest level in the structure. At the second level in the example sketch there are three pages, which are *same-level pages*. This sketch also has web pages at a third level. These third-level pages, such as breakfast and lunch, are also same-level pages with respect to each other.

parent page
child page

In a navigation structure, web pages may also be described in terms of parent and child pages. A *parent page* has at least one page below it, called a *child page*. In the example sketch, the home page is a parent page and pages below it are child pages. The menu page is both a parent page and a child page.

Determining the Content

The *content* of a web page is the text, images, and other objects such as Flash movies that are presented to the user. Content is determined using the navigation structure of a website as a guideline, and then the text and objects for each page are listed on paper. For example, the content of the web pages for a fast-food restaurant's website may be:



- **Home page** Location, hours of operation, contact information, and a brief introduction about what this website offers. Objects include the restaurant's logo and a picture of the restaurant.
- **Menu page** The hours for breakfast and lunch and links to the breakfast and lunch pages. Objects include the restaurant's logo and pictures of food.
- **Specials page** A listing of the current specials. Objects include the restaurant's logo.
- **Fun for kids page** A brief description of the kids web pages and links to the coloring fun page and word search page. Objects include the restaurant's logo and perhaps a cartoon.
- **Breakfast page** The breakfast menu. Objects include the restaurant's logo and pictures of breakfast menu items.
- **Lunch page** The lunch menu. Objects include the restaurant's logo and pictures of lunch menu items.
- **Coloring fun page** An image that kids can color on a printout of the web page. Objects include the restaurant's logo and the coloring image.
- **Word search page** An image of a word search puzzle that kids can complete on a printout of the web page. Objects include the restaurant's logo and the word search image.

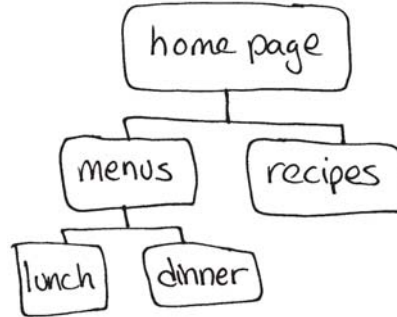
Practice: Pasta Restaurant – part 2 of 7

Write your answers on paper.

① SKETCH THE NAVIGATION STRUCTURE OF THE PASTA RESTAURANT SITE

- Draw a rectangle and label the rectangle "home page." The home page is at the top level.
- Below the home page, draw two rectangles in a row and label them "menus" and "recipes" to represent the pages on the second level.
- Below the menu page, draw two rectangles in a row and label them "lunch" and "dinner" to represent pages on the third level.

Check—Your sketch should look similar to:



② DETERMINE THE PAGE CONTENT OF THE PASTA RESTAURANT SITE

- List each of the web pages from the navigation structure created in step 1.
- Write down the information each web page should present.
- List possible images for each page. Refer to the previous section “Determining the Content” for examples.

Defining Navigation Bars

A *navigation bar* is a set of hyperlinks that give users a way to display the different pages in a website. A website can contain several types of navigation bars and usually contains more than one type for better usability. For example, this web page includes navigation bars and a breadcrumb trail:

top global navigation bar

breadcrumb trail

local navigation bar

bottom global navigation bar

Lunch Menu - Served Every Day		
Soup - Cup \$3.50, Bowl \$5.50 all served with oyster crackers	Sides - 50¢ Roll or Breadstick Saltines, 3 packs Croutons	Beverages - \$1 Lowfat Plain or Chocolate Milk Bottled Water Soda and Iced Tea in Cans
Vegetarian Bean		
Chicken Noodle		
Tomato		
New England Clam Chowder		
Split Pea and Ham		
Borscht		
Soup of the Day		

top global navigation bar

The *top global navigation bar* typically contains a link to each page on the first and second levels of the website's navigation structure. The links can be text or images. A top global navigation bar should be placed near the top of each page and should not contain too many links. Eight links is usually the maximum.

bottom global navigation bar

The *bottom global navigation bar* should appear near the bottom of the page and is often centered. This navigation bar should only use text links, in a small size, and should contain links to all of the pages in the website if possible.

the | symbol

Each link in the global navigation bars should be clearly separated. The pipe symbol (|) is often used as a separator when needed. The pipe symbol is created with the | key above the Enter key.

local navigation bar

A *local navigation bar* can be positioned below the top global navigation bar or vertically along the left side of a page. A local navigation bar typically contains links to the child pages of the current page. It may also contain links to pages at the current level of the navigation structure or to locations on the current page. The local navigation bar may not be needed on websites that contain only a few pages.

breadcrumb trail

A *breadcrumb trail*, also called the *path*, is a navigation bar that displays the page names in order of level, from the home page to the current page, based on the navigation structure. Each of the page names, except for the current page name, is a link to the appropriate page. This path gives the user a point of reference and allows the user to navigate by backtracking through the site. Each page name in the path should be separated by a symbol, most commonly the "greater than" sign (>). A breadcrumb trail does not appear on the home page.

the > symbol

links to the home page

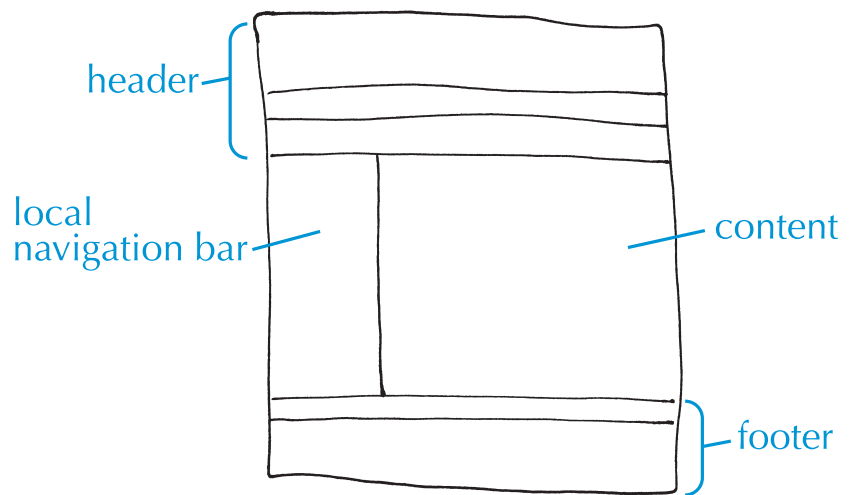
There should always be at least one link on each web page to the home page. Users may be directed to a web page in the website by a link at a search engine, and therefore need a way to find the home page. Home page links are always included in the breadcrumb trail and in the bottom global navigation bar. A logo at the top of a web page is also typically a link to the home page.

The Web Page Layout

A *web page layout* refers to the arrangement of the elements on the page. *Elements* can be in the form of text, images, Flash movies, or other media and include navigation bars, a logo or heading, copyright information, and content. A web page layout should be based on usability standards, which dictate the placement of navigation bars and other elements:

Widths of the Navigation Bar

To control the layout of a table with a percentage width, the cells in the left column are commonly formatted with a fixed width in pixels. This left column often contains the local navigation rail of links to other pages in the website. By specifying a width, the layout of these links remains constant as the user resizes the browser window.



header The top area of a web page is called the *header* and includes a logo or heading, top global navigation bar, and possibly a breadcrumb trail. The

footer bottom area of the page is called the *footer* and includes a bottom global navigation bar and other information such as a copyright notice, the date of the last update, and a link to contact the author.

sketch the layout A page layout should be sketched for each page of a website. The sketches should show the general placement of the content elements. The links in the navigation bars can be listed separately or written on the sketch where the links will appear.

Page layout should be similar for each page. By consistently placing elements in the same location, the user quickly becomes familiar with the website and can navigate easily. Because the home page acts as the starting point of a website, it should have a slightly different layout than the other web pages to quickly identify it as the home page.

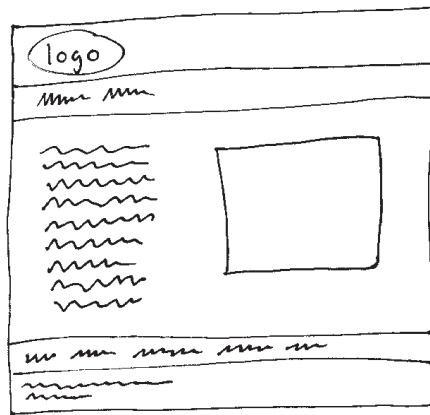
Practice: Pasta Restaurant – part 3 of 7

Refer to the navigation structure created in the previous practice to complete this practice. Write your answers on paper.

① SKETCH THE HOME PAGE AND DETERMINE THE NAVIGATION BARS

- Sketch the home page. The header includes a logo and a top global navigation bar and the footer includes a bottom global navigation bar and copyright notice. Content includes text and a picture.
- List the links for the top global navigation bar, which are links to the second level pages.
- List the links for the bottom global navigation bar, which are links to the all the pages.

Check—Your sketch should look similar to:



top global navigation bar links:

Menus
Recipes

bottom global navigation bar links:

Home
Menus
Lunch Menu
Dinner Menu
Recipes

② SKETCH THE MENU PAGE AND DETERMINE THE NAVIGATION BARS

- Sketch the menu page. The header includes a logo, top global navigation bar, and a breadcrumb trail. The footer includes a bottom global navigation bar and copyright notice. Content includes text and three pictures.
- List the links for the top global navigation bar, which are links to the other pages on the second level of the website and the home page.
- List the links for the bottom global navigation bar, which are links to all the pages.
- The breadcrumb trail should display Home > Menus, with Home as a link to the home page. Write this information down on your sketch.

③ SKETCH THE REMAINING PAGES AND DETERMINE THEIR NAVIGATION BARS

Refer to “The Web Page Layout” section and steps ① and ② in this practice to sketch the recipes, lunch menu, and dinner menu pages. For each web page sketch, list appropriate links for the navigation bars.

Using Metaphors in a Website

Metaphors can help the user understand concepts in a website. For example, e-commerce websites use a shopping cart metaphor by providing links such as “add to cart” and “view cart” so that users feel as if they were shopping in a retail store. However, metaphors only work if they are obvious to the majority of users. If there is a slight possibility that a user may not understand it, then do not use a metaphor.

Concepts of Design

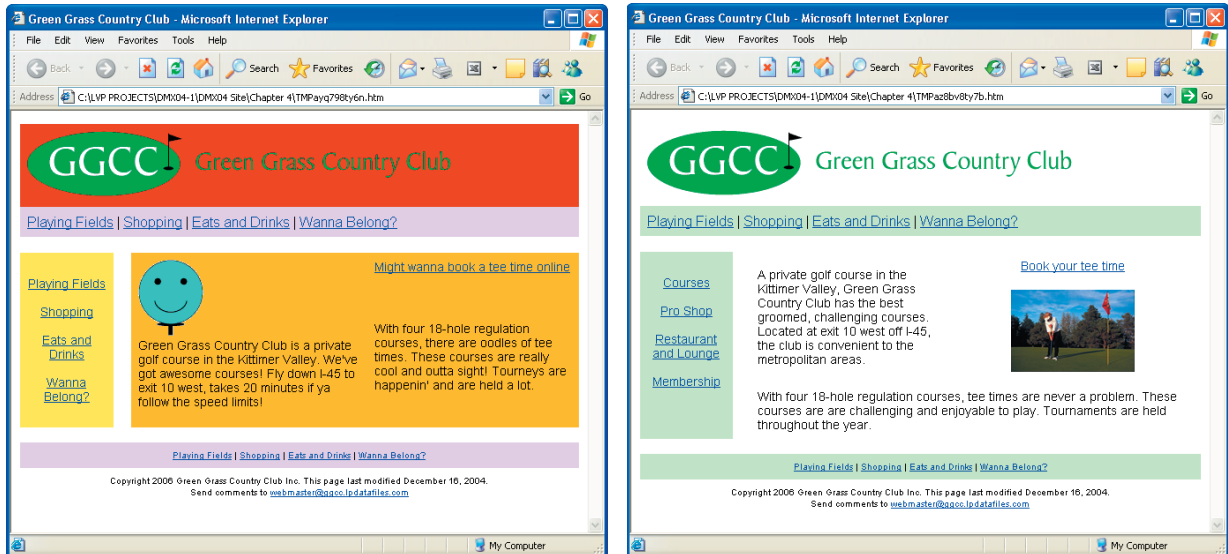
There are four basic concepts to consider when designing a web page: appropriateness, placement, consistency, and usability. Web page design includes the web page’s layout and the content elements.

There are no absolute rules for website design, only guidelines that come from design concepts. Although the concepts discussed in this chapter are used frequently to create successful website designs, there are times when they may not yield the best design. With experience, the better choices will become obvious. Keep in mind that a website goes through many changes before it is finished, and good designs result from numerous revisions.

Design Concepts: Appropriateness

The *appropriateness* of a design is how well the elements in the website match the purpose and target audience. Is the text appropriate for the audience? Do the images fit the purpose of the website? Are they appropriate for the audience? What other content would the audience expect to find at this website?

Examine the differences in these two home pages:



Two different designs of the same home page

Websites are Always Under Construction

The nature of the World Wide Web is change. The content of web pages is always changing and being updated. Adding an “under construction” notation or a construction image is not considered good design and could imply that the content on the page is incomplete or false.

The home page on the left conveys immaturity because of inappropriate wording, wild colors, confusing text hyperlinks, and a childish smiling golf ball image. For example, compare the link in the page on the left that reads Might wanna book a tee time online with the same link in the other page Book your tee time. The wording “Might wanna” is too casual and inappropriate for the target audience of a country club. The page on the right has quiet colors and appropriate wording in the text and links. This page invokes a calm, sophisticated feeling, more appropriate for a country club and golfers.

Design Concepts: Placement

The *placement* or arrangement of web page elements should follow generally accepted standards, with a header, a footer, and content in between. These standards are based on user expectations.

user expectations

The expectations continue as the user browses the website. After clicking a link, the user expects to see a web page with similar design but different content. If the design suddenly changes, the links are moved, or the placement is different, they may click away from the website in frustration or confusion.

Within the content are additional elements that require careful placement. The most important elements are those that the user should see first. These elements should be near enough to the top of a web page so

above the fold

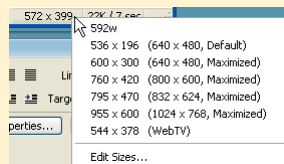
that they are visible right away, and do not require the user to scroll. This placement is called *above the fold*, which originally referred to the headlines placed on the top half of a newspaper's front page, above where it is folded in half. News items in this location were sure to be seen first. On a web page, any elements that can be viewed without scrolling are seen first and can influence whether the user clicks on a link to another page in the site or leaves the site.

white space

Another factor in the placement of elements is white space. *White space* is any blank area on a page, regardless of the color. Jamming a page full of elements with little space between them causes visual noise and frustrated users may click away, as illustrated in this web page:

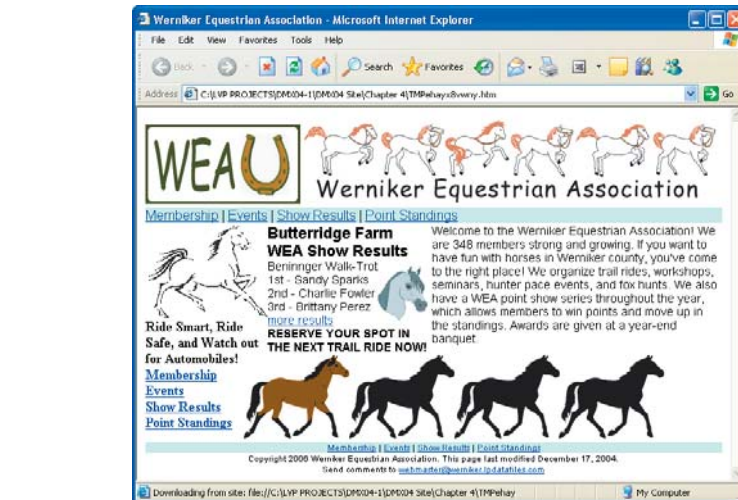
Testing Window Size

The appearance of the web page's layout on different monitors can be checked by using the Window Size button. In Design view, when the Document window is not maximized, click the Window Size button in the status bar to display a menu:



The menu choices correspond to the inside dimensions of a browser window viewed on a monitor of the size given in parentheses. Selecting a size modifies the Document window to reflect how a web page will look when viewed on that monitor.

visual cue



The shape of white space can emphasize elements and influence the direction that the user's eye travels around the page. Although white space is blank, it is just as important as other elements in the layout of a web page.

Design Concepts: Consistency

Consistency is achieved by repeating the placement and use of elements in web pages. Repetition in the placement of elements creates and maintains expectations for the user. For example, a breadcrumb trail is repeated on every page except the home page. After viewing a couple of pages, the user expects this as a point of reference. The user also subconsciously uses it as a visual cue to know which pages are not the home page. A *visual cue* is a pattern or object that the user sees and identifies quickly after repeated use.

The importance of consistency increases with the number of pages in a website. In a one-page website, consistent visual cues are not needed. In a website with fifteen pages, consistent visual cues help the user navigate and provide a point of reference.

Design Concepts: Usability

Although all of the design concepts are important, if a website isn't usable, it won't get used. The object is to keep users at a website long enough to find information that is useful to them. The *usability* is indicated by how easily the user navigates through the web pages to find the information. Navigation bars makes the site easier to explore. A breadcrumb trail also helps the user understand the current page location in relation to the rest of the website.

Text content on web pages should be limited to only necessary words and paragraphs. The less text there is for users to scan, the faster they will be able to find what they need. Information should be carefully edited to convey a message clearly but without wordiness.

printer-friendly version

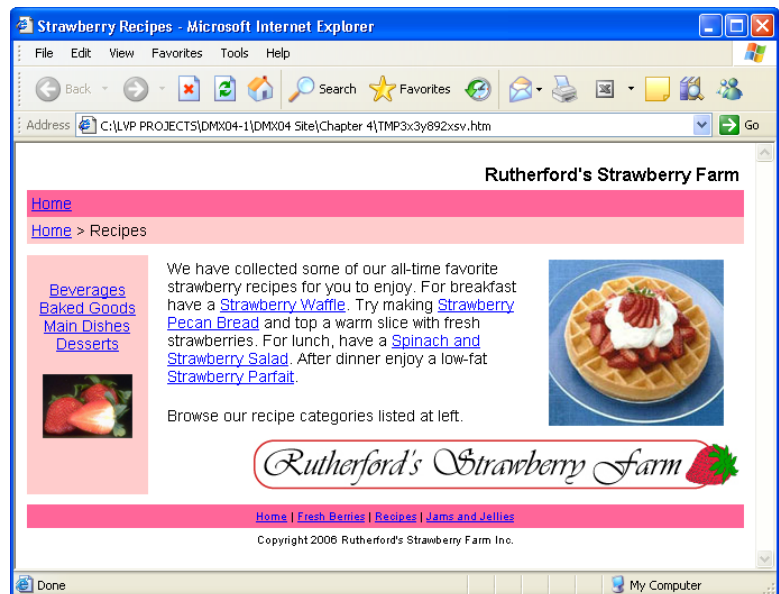
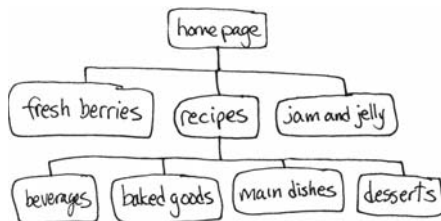
Will the user be likely to print out the web page? If so, a link to a *printer-friendly version* of the page may be needed. If a web page looks great in the browser but does not look great printed, the user can click the link to display another web page with the same content set up for printing.

Practice: Pasta Restaurant – part 4 of 7

Refer to the content determined in the previous practice. Write your answers on paper.

① ANALYZE THE DESIGN OF A WEB PAGE

Based on the navigation structure shown, analyze the design of the recipes web page in a strawberry farm's website:



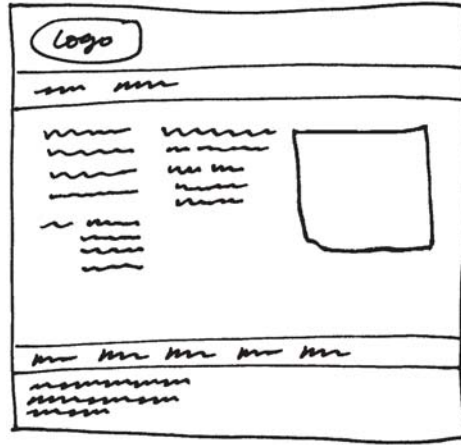
- Describe the usability and consistency of the top and bottom global navigation bars.
- Are the links in the local navigation bar appropriate? Explain why or why not.
- Where is the logo? Where is a more appropriate location for the logo? Why?
- Describe the appropriateness of the paragraph in the content area.
- Describe the appropriateness and usability of the links in the content area.
- How could the footer be improved?

② DESIGN THE PASTA RESTAURANT WEBSITE HOME PAGE

Refine the content layout of the home page for the pasta restaurant. The content of the home page should include:


- a brief statement about the pasta restaurant
- an image related to the restaurant
- the restaurant address, phone number, and hours of business

Check—Your sketch could look similar to:



Organizing Files and Folders

root folder

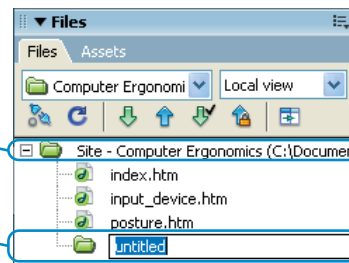
Once the planning stage for a new website is complete, the website can be defined in Dreamweaver as discussed in Chapter 3. The Files panel is then used to organize files and folders for the website. The *root folder* is created during site definition for storing files and folders. To add a new folder to the website, select the root folder in the Files panel and then select  → File → New Folder in the Files panel group. After adding the new folder, it can be renamed:

Folder Structure

Large websites may use several folders to organize the files. Use as many folders as needed to maintain organization.

root folder

new folder

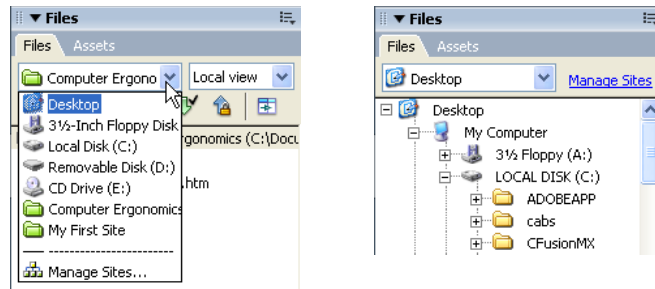


Folders are used to organize files. Web page documents have many elements, including images. For better organization, all the image files for a website should be stored together in a folder named images.

existing files

An existing file is added to a site by copying it to a folder in the website's root folder. Select Desktop from the pop-up menu in the Files panel to display a list of files:

TIP In the Files panel, website folders are green (📁) and other folders are yellow.



Select Desktop from the pop-up menu to display a list of files

Navigate to the existing file and select it, then select **⌘** → Edit → Copy. A copy of the file is placed in the computer's memory. Select a website from the Files panel pop-up list to display the site's files and folders in the Files panel, and then select **⌘** → Edit → Paste to copy the file to the website.

copy several files To select several files at once, hold down the Ctrl key while selecting each file. The Copy and Paste commands can then be used to copy or paste all the selected files.

Practice: Pasta Restaurant – part 5 of 7

① START DREAMWEAVER

② DEFINE A NEW SITE


- a. Select Site → Manage Sites. A dialog box is displayed.
- b. Select New, and then select Site. A Site Definition dialog box is displayed.
- c. Select the Basic tab if those options are not already displayed.
- d. In the What would you like to name your site? box, type: Pasta Restaurant
- e. Select Next. More options are displayed.
- f. Select the No, I do not want to use a server technology option and select Next. More options are displayed.
- g. Select the Edit local copies on my machine, then upload to server when ready option.
- h. Click the folder icon (📁). A dialog box is displayed for browsing the local disk.
 1. Navigate to the appropriate location where a folder can be created to store the website files.
 2. Click the Create New Folder button (📁). A new folder is created.
 3. Type Pasta Restaurant to replace the New Folder name and press Enter.
 4. Select Open. The Pasta Restaurant folder appears in the Select list.
 5. Select Select to choose the new folder as the website folder.
- i. Select Next. More options are displayed.
- j. In the How do you connect to your remote server? list, select None and then select Next. A summary is displayed.
- k. Select Done.
- l. Select Done to create the site. The Site folder is displayed in the Files panel.

③ CREATE THE HOME PAGE


- a. Select File → New. A dialog box is displayed.
 1. Click the General tab to display those options.

2. In the Category list, select Basic page.
 3. In the Basic page list, select HTML.
 4. Select Create. A web page document is displayed in a Document window.
- b. Select File → Save. A dialog box is displayed.
1. Use the Save in list to navigate to the Pasta Restaurant folder if it is not already displayed.
 2. In the File name box, replace the existing text with: index.htm
 3. Select Save.
- c. On the Document toolbar, in the Title box, replace the text Untitled Document with Pasta Restaurant Home Page and press Enter.

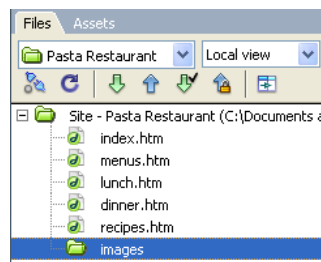
④ CREATE MORE WEB PAGE DOCUMENTS

- a. In the Files panel group, select  → File → New File. A new document is created.
- b. Type menus.htm and press Enter to replace the untitled.htm file name.
- c. Create three more web page documents naming them: lunch.htm, dinner.htm, and recipes.htm

⑤ CREATE A FOLDER IN THE WEBSITE

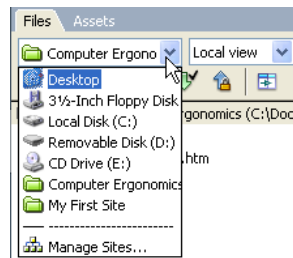
- a. In the Files panel, click the Site root folder to select it.
- b. In the Files panel group, select  → File → New Folder. A new folder is added.
- c. Type images to replace the untitled folder name and press Enter. This folder will be used to store the images for the website.

Check—Your Files panel should look similar to:




⑥ ADD IMAGE FILES TO THE IMAGES FOLDER

- a. In the Files panel, select Desktop from the pop-up menu:



A list of files is displayed.

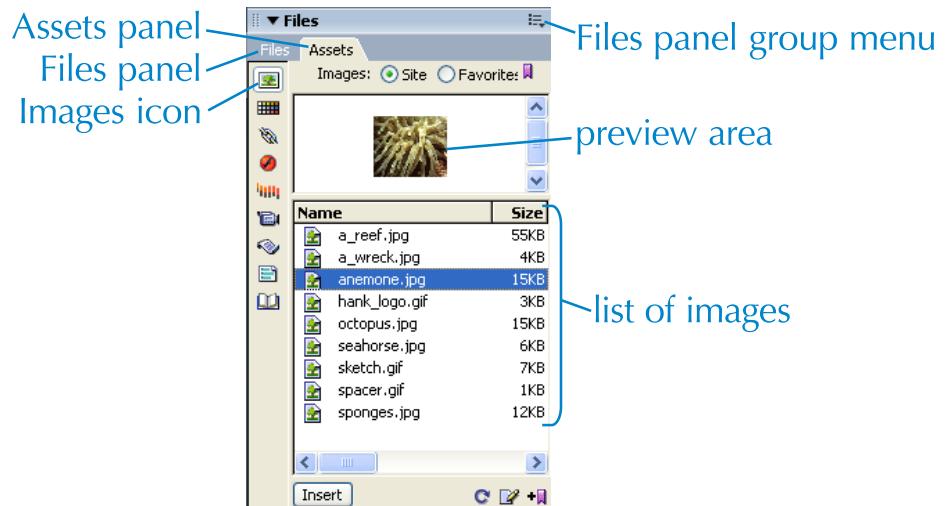
- b. In the list of files, navigate to the folder that contains data files for this text.
- c. Click the pasta_drawing.gif file to select it.
- d. Hold down the Ctrl key and click the pasta_logo.gif file. Two files are selected.
- e. In the Files panel group, select  → Edit → Copy.

- f. In the Files panel, select Pasta Restaurant from the pop-up menu.
- g. In the Files panel, click the images folder in the Pasta Restaurant site to select it.
- h. In the Files panel group, select  → Edit → Paste. Two image files are added to the images folder.

Maintaining Consistency in a Website


Assets panel

Dreamweaver includes the *Assets panel* to help maintain consistency in the content throughout a website. The Assets panel, located in the Files panel group, helps website development by listing images and other objects available in the site:





Click the Images icon () to display the Images category, which lists all the image files in the site. The selected image, anemone.jpg in the example above, is displayed in the preview area. It may be necessary to select  → Refresh Site List in the Files panel group to update the list of images.

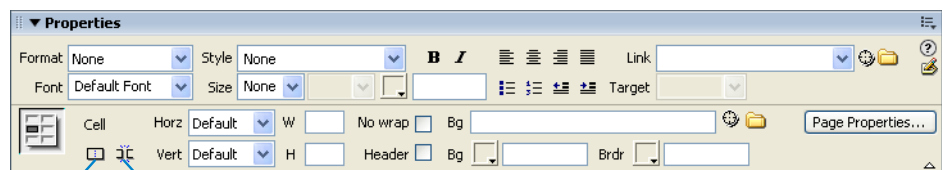
place an image

Drag the image from the Assets panel to an open web page document to place the image, or click  at the bottom of the Assets panel to place the selected image at the insertion point. (*ver.8:* If the Image Tag Accessibility Attributes dialog box appears when an image is placed, select Cancel to place the image.)

Version 8 Dreamweaver 8 differences are indicated with parentheses (*ver.8:*).

Merging and Splitting Cells

Cells in a table may be merged into one cell or split into separate cells. The Merge cells button () and the Split cell button () in the Property inspector are used to modify selected cells in a table:

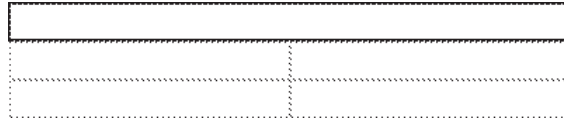


Merge cells Split cell

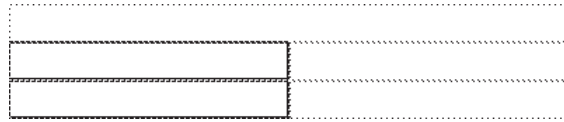
To merge several cells into one, while leaving the rest of the table as is, select the cells:



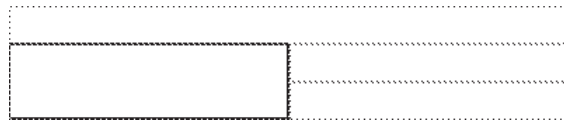
and then click the Merge cells button ():



Cells selected vertically can also be merged:




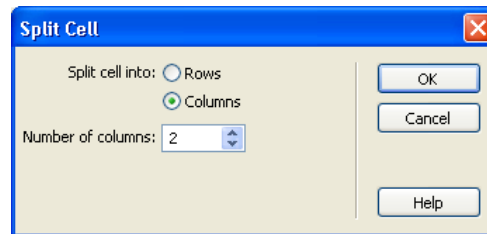
Two cells selected



Click the Merge cells button to combine the cells

split a cell

A cell can be split into more cells, in a specified number of rows or columns. Place the insertion point in a cell, for example in the lower-right cell of the example above, and click the Split cell button () in the Property inspector. A dialog box is displayed:



Select Rows or Columns and then specify the number of rows or columns to split the cell into, for example 2 columns in the dialog box shown above. Select OK to divide the cell:



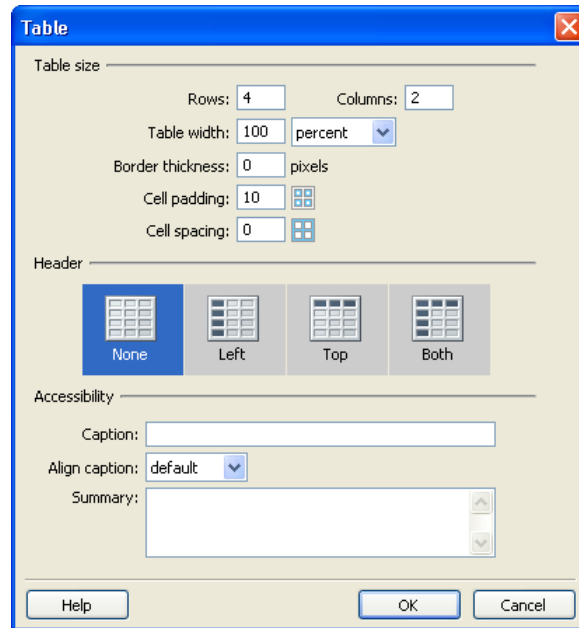
The bottom-right cell is split into two cells arranged in a column

Practice: Pasta Restaurant – part 6 of 7

Dreamweaver should be started and the Pasta Restaurant website should be the working site. Dreamweaver 8 differences are indicated with parentheses (*ver.8*).


① ADD A TABLE TO THE HOME PAGE

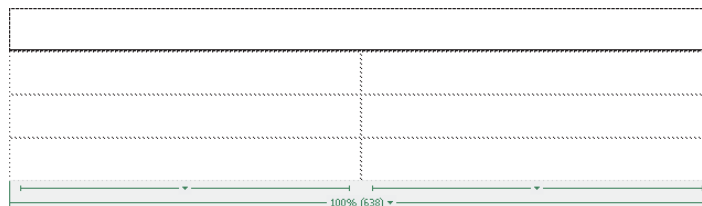
- Display the index.htm web page document.
- Insert a table with the following specifications:




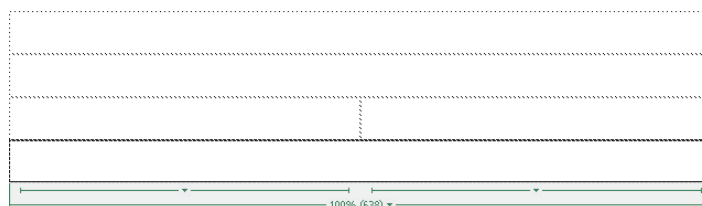
- Save the modified index.htm.

② MERGE CELLS


- Select the two cells in the top row by placing the insertion point in one cell and dragging to the other cell.
- In the Property inspector, click the Merge cells button (). The two cells are combined:

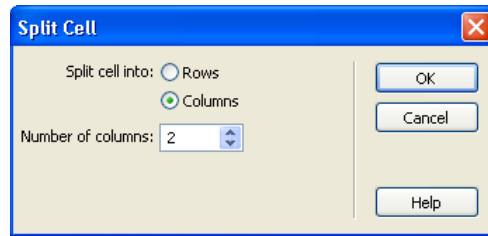



- Select the two cells in the second row.
- In the Property inspector, click the Merge cells button ().
- Merge the two cells in the bottom row. The table should now look similar to:

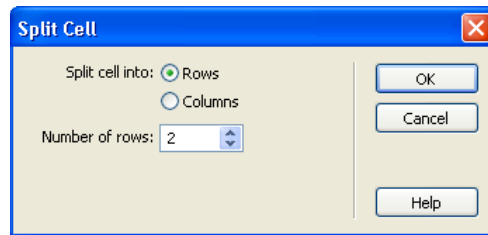


③ SPLIT CELLS

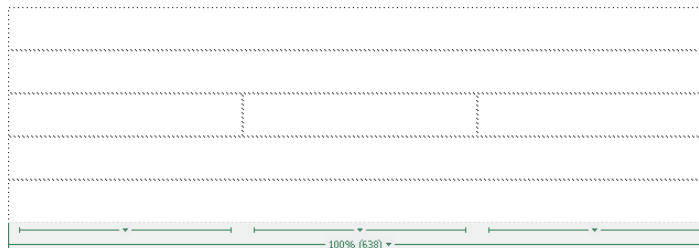
- Place the insertion point in the second cell in the third row (the far-right cell).
- In the Property inspector, click the Split cell button (). A dialog box is displayed.
- In the dialog box, set the options to:




- Select OK. The cell is split into two, and the row now contains three cells.
- Place the insertion point in the bottom cell of the table.
- In the Property inspector, click the Split cell button (). A dialog box is displayed.
- In the dialog box, set the options to:



- Select OK. The cell is split into two cells:

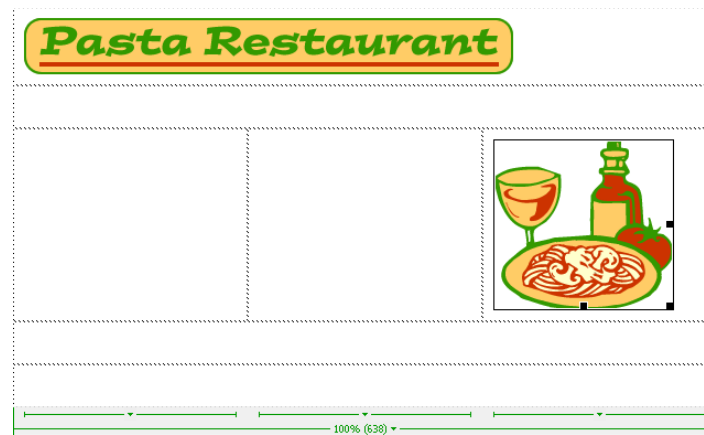


④ VIEW THE ASSETS PANEL

- In the Files panel group, click Assets. The Assets panel is displayed.
- In the Assets panel, click the Images icon () if it is not already selected. The images in the site are displayed. If no files are displayed, select  → Refresh Site List from the Files panel group.
- In the Assets panel, click the pasta_logo.gif file to select it. The image is displayed in the preview area.

⑤ USE THE ASSETS PANEL TO INSERT IMAGES

- Drag the pasta_logo.gif file name from the Assets panel to the top cell in the table. (*ver.8:* If the Image Tag Accessibility Attributes dialog box appears, select Cancel.) The logo now appears in the table.
- Drag the pasta_drawing.gif file name from the Assets panel to the far-right cell in the third row in the table. (*ver.8:* If the Image Tag Accessibility Attributes dialog box appears, select Cancel.) The drawing appears in the table:



⑥ SAVE, PRINT, AND CLOSE THE INDEX.HTM WEB PAGE DOCUMENT



- Save the modified index.htm.
- Press F12. The document is displayed in a browser window.
- Print a copy of the document.
- Close the browser window. Dreamweaver is displayed.
- Close the index.htm document window.


Creating and Editing Library Items

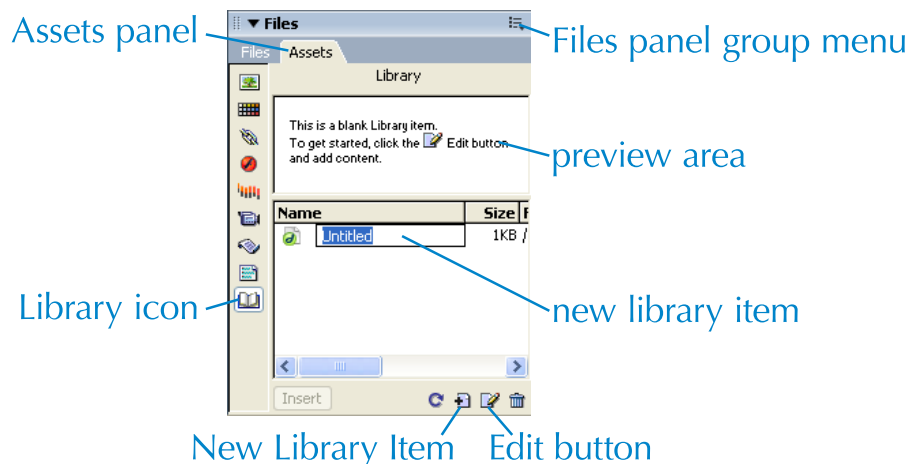
library item

The Library category in the Assets panel lists the library items that are available in the open website. A *library item* is content in a separate file, with a descriptive name, that is used repeatedly in the website. Using library items helps maintain consistency in a website. For example, a library item that consists of a copyright notice could be created and named copyright. Instead of typing the copyright notice on every web page, this library item can be added to each web page. When the copyright notice needs to be changed, only the library item needs to be edited, and then the occurrences of the library item in the web pages can be updated all at once.

Assets panel

Click the Library icon () in the Assets panel to display the Library. Click the New Library Item button () at the bottom of the Assets panel to create a new, empty library item:

TIP Select  → New Library Item to create a new, empty library item.



LBI

A library item file is an LBI file. The extension .lbi is automatically added to the file name.

Library folder

create a library item from existing content

place a library item


yellow background


delete a library item


edit a library item


TIP To open the linked library item, right-click a placed library item and select Open Library Item.


break a library item link

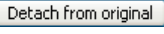
Type a new name for the library item to replace the selected Untitled text. To add content, click the Edit button () at the bottom of the Assets panel or double-click the library item. A window is opened and the title bar displays the text <<Library Item>> and the library item name. After adding content in the window, select File → Save to save the changes, then close the window by clicking the Close button. The content of a selected library item appears in the preview area of the Library in the Assets panel. Dreamweaver automatically adds a Library folder to the website root folder when the first library item is created.

A library item may also be created from existing content in a web page document. Select the content and then click the New Library Item button (). After the new library item is named, the selected content in the web page has a yellow background to indicate that it is a library item.

Drag a library item from the Library to an open web page document to place it, or click  at the bottom of the Assets panel to place the selected library item at the insertion point. In a web page document, a library item appears with a yellow background. Its does not appear with a yellow background in a browser.


Click the Delete button () at the bottom of the Assets panel or press the Delete key to delete the selected library item.

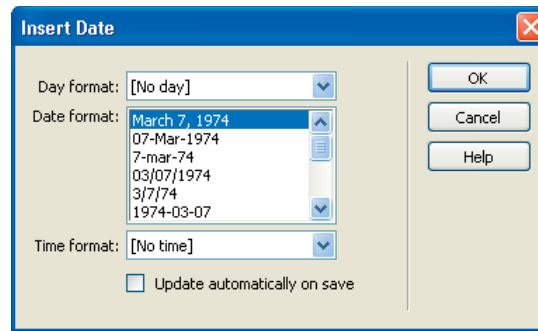
To edit an existing library item, select the library item in the Library and then click the Edit button (), which opens the item in a window. When changes are saved, a dialog box is displayed that lists all of the web page documents that contain the library item. Click Update to update all of the occurrences of the library item in the website.

A library item in a web page document cannot be edited unless the link between it and the Library is broken. To break the link, select the library item in the web page document and then click  in the Property inspector. In the web page document, the selected library item will no longer have a yellow background and can now be edited in that web page document. Once the link has been broken, the content that was a library item in the web page document will not be updated if the library item in the Library is changed.

Inserting a Date

time stamp

The footer of a web page should contain a date indicating when the web page was last updated to indicate how current the information is to the users. Instead of typing a new date every time the web page is edited, the date can be in the form of a *time stamp* that changes automatically when a page is modified. Select Insert → Date or click the Date button () in the Common category in the Insert bar to display the Insert Date dialog box:



Use the Day format, Date format, and Time format lists to select the format of the date that will appear at the insertion point. The Update automatically on save check box must be selected if the date is to be automatically updated each time the web page document is saved. Select OK to place the time stamp in the web page document at the insertion point.

Outlook Express

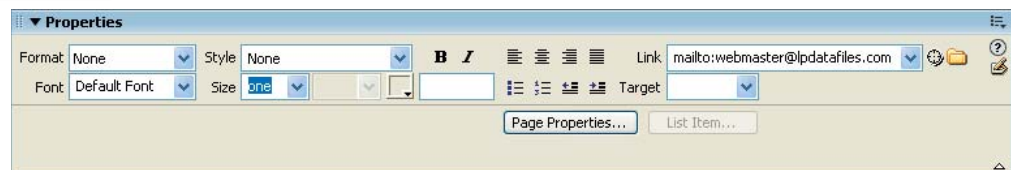
Outlook Express is an e-mail software package that is accessible from Internet Explorer. Outlook Express is discussed in Chapter 1.

E-mail Hyperlinks

An *e-mail hyperlink* is a link that allows the user to create and send an e-mail message. When the user clicks an e-mail hyperlink, a new e-mail message window is displayed with the To: address that was specified when the hyperlink was created. After composing the message, the user clicks the Send button to send the message.

An e-mail link to the webmaster is usually included in the footer of a web page. This gives the user a chance to provide feedback about the website, so that improvements and corrections can be made to better meet the needs of the website's users.

To create an e-mail hyperlink, select the text that will be the link in the Document window and then type mailto: followed by the e-mail address in the Link box in the Property inspector:



An e-mail hyperlink can be tested in a browser window.

Webmaster

A webmaster is a person who maintains a website. Webmaster and other careers are discussed in Chapter 1.

Copyright Information

Certificate of Copyright

A publication, such as a website, can be submitted to the United States Copyright Office to receive an official certificate of copyright. Although not required, this certificate can be used in cases of copyright infringement.

All forms of published work, including a website you may create, are entitled to copyright protection. A web page should include copyright information with a *copyright notice* that contains the text Copyright followed by the year of publication. In addition to a copyright notice, copyright information may also include other statements regarding the use of the website's material and an e-mail hyperlink for sending a request for permission to use the material.




TIP The © symbol may be used in place of the word Copyright.

Published work that displays a copyright notice, in this case a website, is protected work and not intended for the public domain. Copyrighted material can be reproduced only with written permission from the owner. However, a website that does not contain a copyright notice is still entitled to copyright protection. Published work should be treated as copyright protected unless explicitly stated as material for the public domain.



Practice: Pasta Restaurant – part 7 of 7

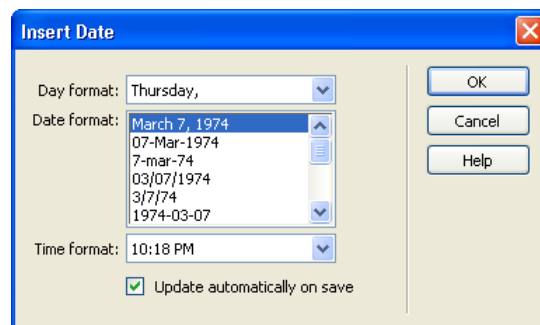
Dreamweaver should be started and the Pasta Restaurant website should be the working site.

① CREATE A LIBRARY ITEM

- a. Close any open Document windows.
- b. In the Files panel group, click Assets if the Assets panel is not already displayed.
- c. In the Assets panel, click the Library icon (). The list is empty because no library items exist yet.
- d. At the bottom of the Assets panel, click the New Library Item button (). A new item is added to the list.
- e. Replace the selected library item name with footer and press Enter.
- f. At the bottom of the Assets panel, click the Edit button (). A window is opened.
- g. Type the text: Send comments to the webmaster. Last modified
- h. Insert a line break after the word “modified” and then type the text:
Copyright 2006 Pasta Restaurant.
- i. Select File → Save. In the Assets panel, the content of the saved selected library item appears in the preview area.
- j. Close the library item window.

② EDIT THE FOOTER LIBRARY ITEM

- a. In the Assets panel, select the footer library item and click the Edit button () at the bottom of the Assets panel. The library item is displayed in a window.
- b. Select the text: webmaster
- c. In the Property inspector, in the Link box type:
mailto:webmaster@pasta.lpdatafiles.com
- d. Press Enter. The text webmaster is now an e-mail hyperlink.
- e. Place the insertion point at the end of the word modified and type a space.
- f. In the Common category in the Insert bar, click the Date button (). A dialog box is displayed.
- g. In the dialog box, set the options to:



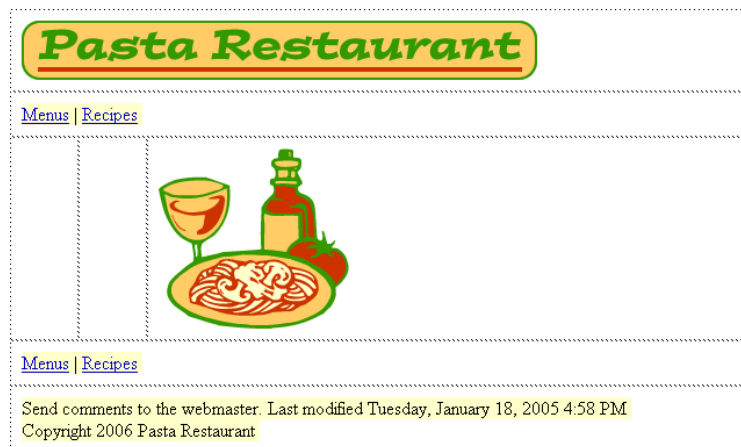
- h. Select OK. A time stamp is placed at the insertion point.
- i. Select File → Save. The library item is saved.
- j. Close the library item window.

③ CREATE ANOTHER LIBRARY ITEM

- a. At the bottom of the Assets panel, click the New Library Item button (📁). A new item is added to the list.
- b. Replace the selected library item name with navbar and press Enter.
- c. At the bottom of the Assets panel, click the Edit button (✎). A new window is opened.
- d. Type the following text, using the | key above the Enter key to create the “pipe” symbol:
Menus | Recipes
- e. In the Files panel group, click Files. The list of files in the website is displayed.
- f. Link the text Menus to the menus.htm web page document.
- g. Link the text Recipes to the recipes.htm web page document.
- h. Select File → Save. The library item is saved.
- i. In the Files panel group, click Assets. In the Assets panel, the content of the saved library item appears in the preview area.
- j. Close the library item window.

④ PLACE LIBRARY ITEMS

- a. In the Files panel group, click Files. The list of files in the website is displayed.
- b. Double-click the index.htm file name. The web page document is opened.
- c. In the Files panel group, click Assets. The Assets panel is displayed.
- d. From the Assets panel Library category, drag the navbar library item to the cell in the second row in the table. The Menus and Recipes links in the library item now appear in the cell. Click in a cell to deselect the library item. Note the yellow background behind the links to indicate a library item.
- e. From the Assets panel Library category, drag the navbar library item to the cell in the fourth row in the table. The Menus and Recipes links in the library item now appear in the cell.
- f. Click in the bottom cell of the table to place the insertion point.
- g. In the Assets panel, click the footer library item to select it and then click Insert at the bottom of the Assets panel to place the library item at the insertion point. The footer appears, with a yellow background, below the table:



⑤ EDIT A LIBRARY ITEM

- a. In the fourth row, click the Menus and Recipes links library item to select it.
- b. In the Property inspector, click `Detach from original`. Select OK in the warning dialog box. The yellow background no longer appears and the text can be edited.
- c. Place the insertion point to the right of Menus and then type:
| Lunch Menu | Dinner Menu |

Make sure the navigation items are all separated by a pipe symbol (|) with a space on each side.
- d. Link the text Lunch Menu to the lunch.htm web page document.
- e. Link the text Dinner Menu to the dinner.htm web page document.

⑥ SAVE, PRINT, AND CLOSE THE INDEX.HTM WEB PAGE DOCUMENT

- a. Save the modified index.htm.
- b. Press F12. The document is displayed in a browser window.
- c. Print a copy.
- d. Close the browser window. Dreamweaver is displayed.
- e. Close the index.htm document window.
- f. Quit Dreamweaver.

Chapter Summary

Website development can be divided into two stages, planning and implementation. Planning includes defining the purpose and target audience, determining the web pages in the site, and sketches of the navigation structure and page layouts. Implementation includes creating the website using Dreamweaver, and then reviewing and revising the web pages.

The content of a web page are the elements such as text, images, and navigation bars. Navigation bars help the user navigate through the web pages in a site. Types of navigation bars include the top global navigation bar, bottom global navigation bar, local navigation bar, and breadcrumb trail. A web page layout refers to the placement of the elements on the web page.

There are four basic concepts to consider when designing a web page: appropriateness, placement, consistency, and usability. The appropriateness of a design is how well the elements in the website match the purpose and target audience. The placement of web page elements should follow generally accepted standards, with a header, a footer, and content in between. These standards are based on user expectations. Consistency in placement and use of elements upholds the user's expectations. The usability is indicated by how easily the user navigates through the web pages to find the information.

In Dreamweaver, the Files panel is used to organize files and folders for the website. The root folder is created during site definition and additional folders can be added, such as an images folder. The Assets panel helps website development by listing images and other objects available in the

site. The Library category in the Assets panel lists the library items that are available in the open website. A library item is content in a separate file, with a descriptive name, that is used repeatedly in the website.

Cells in a table may be merged into one cell or split into separate cells using buttons in the Property inspector.

A date can be added in the form of a time stamp that changes automatically when a web page is modified.

An e-mail hyperlink is a link that allows the user to create and send an e-mail message. An e-mail link to the webmaster is usually included in the footer of a web page.

All forms of published work, including a website you may create, are entitled to copyright protection. A web page should include copyright information with a copyright notice that contains the text Copyright followed by the year of publication. However, a website that does not contain a copyright notice is still entitled to copyright protection.

Vocabulary

Above the fold The placement of the most important elements near the top of a web page so that they are visible without requiring the user to scroll.

Appropriateness A design concept that refers to how well the elements in the website match the purpose and target audience.

Assets panel A panel that helps in website development by gathering a list of objects, such as images, that are available in the site.

Bottom global navigation bar A navigation bar, positioned near the bottom of a web page, that contains links to every page of a website.

Breadcrumb trail A navigation bar that displays the page names in order of level, from the home page to the current page, based on the navigation structure.

Child page A web page that has at least one page above it in the navigation structure of a website.

Consistency A design concept that refers to repetition in the placement and use of elements.

Content The text, images, and other objects presented to the user on a web page.

Copyright notice The text Copyright followed by the year of publication.

Elements Text, images, or other media. Elements on a web page include navigation bars, a logo or heading, copyright information, and content.

E-mail hyperlink A link that allows the user to create and send an e-mail message.

Footer The bottom area of a web page that includes a global navigation bar and other information such as copyright, the date of the last update, and a link to contact the author.

Header The top area of a web page that includes a logo or heading, global navigation bar, and possibly a breadcrumb trail.

Library item Content placed in a separate file, with a descriptive name, that is used repeatedly in a website.

Local navigation bar A navigation bar that typically contains links to the child pages of the current page.

Navigation bar A set of hyperlinks that give users a way to display the different pages in a website.

Navigation structure The organization of the pages in a website.

Parent page A web page that has at least one page below it in the navigation structure of a website.

Path *See* Breadcrumb trail.

Placement A design concept that refers to the arrangement of web page elements.

Printer-friendly version A web page with the same content as another web page, except this page is set up to print.

Purpose The intent of the website.

Root folder The folder created during site definition for storing files and folders.

Same-level page Web pages at the same level in the navigation structure of a website.

Target audience The individuals that are intended to use the website.

Time stamp A date or time that changes automatically when a page is modified.

Top global navigation bar A navigation bar, positioned near the top of a web page, that contains links to the first and second level pages of a website.

Top-level page A web page at the highest level in the navigation structure of a website, usually the home page.

Usability A design concept that refers to how easily the user can navigate through the pages of a website to find information.

Visual cue A pattern or object that the user sees and identifies quickly after repeated use.

Web page design The web page's layout and the content elements.


Web page layout The arrangement of the elements on the page.


Website development The process of planning and creating a website.


White space Any blank area on a page, regardless of the color.


Dreamweaver Commands and Buttons


Copy command Places a copy of the selected file in the computer's memory. Found in  → Edit → Copy.

 **Date command** Inserts a time stamp in a web page document. Found in the Insert menu. The Date button in the Common tab in the Insert bar can be used instead of the command.


 **Delete button** Removes the selected library item from the Library. Found in the Library category in the Assets panel.

 **button** Breaks the link from the selected library item in a web page document to the library item in the Library. Found in the Property inspector.

 **Edit button** Opens a window that contains the selected library item. Found in the Library category in the Assets panel.

 **Images icon** Displays the Images category in the Assets panel, with a list of all the images in the site. Found in the Assets panel.


 **button** Places the selected image or library item at the insertion point. Found in the Assets panel.


 **Library icon** Displays the Library category in the Assets panel, with a list of all the library items in the site. Found in the Assets panel.

 **Merge cells button** Combines selected cells into one cell. Found in the Property inspector.

New File command Creates a new web page document file and adds it to the list of files in the Files panel. Found in the Files panel group menu.

New Folder command Creates a new folder and adds it to the list of files and folders in the Files panel. Found in the Files panel group menu.

 **New Library Item button** Creates a new library item. Found in the Library category in the Assets panel.

Paste command Places a copy of the file in the computer's memory in the selected folder. Found in  → Edit → Paste.

Refresh Site List command Updates the list of images in the Assets panel. Found in the Files panel group menu.

 **Split cell button** Displays a dialog box used to divide the selected cell into rows or columns. Found in the Property inspector.

Review Questions

- List four steps involved in the planning stage of website development.
 - List five steps involved in the implementation stage of website development.
- Consider a website for a high school soccer team:
 - List three purposes for the website.
 - List three characteristics of the target audience for the website.
- Sketch the navigation structure for an ice cream store's website that contains the following web pages:
 - a home page
 - two second-level pages, one for flavors and one for store hours and other information
 - two child pages of the flavors page, one for ice cream flavors and one for frozen yogurt flavors
- What is used as a guide when determining web page content?
- List three types of navigation bars used on a web page.
 - Where should global navigation bars be placed?
 - How is a breadcrumb trail helpful to the user?
- List three places on a web page that may have a link to the home page.
- What does web page layout refer to?
- List three elements that can be found in the header of a web page.
 - List three elements that can be found in the footer of a web page.
- List the four basic concepts of design to consider when developing a web page.
- Would a photograph of a car be appropriate for a web page about gardening? Why or why not?
- Where do elements need to be placed on a web page in order to be above the fold?
- What is white space?
 - Why is white space important in the design of a web page?
- How is consistency in a website achieved?
 - What is a visual cue?
- What is usability?
 - List two ways to increase the usability of a website.
- When is the root folder created?
- List the steps required to create a new folder named photos.
 - List the steps required to add a file named puppies.gif from a folder on your computer's Desktop to the photos folder of a website.
- List the steps required to display a list of the images contained in a website.
 - What can be done if there are images contained in a website but they are not displayed in the Images category in the Assets panel?
- List the steps required to place an image in a web page document from the Assets panel.
- List the steps required to merge two cells in a table into one cell.
 - List the steps required to split a cell into three rows.
- List the steps required to create a new library item named homephone that contains the text 883-555-0303.
 - What does Dreamweaver automatically add to the root folder after the first library item is created?
- List the steps required to place a library item in a web page document from the Assets panel.
 - List the steps required to edit a library item in a web page document.
- Why should a time stamp be used in a web page document instead of typing the date?

23. a) What happens when the user clicks an e-mail hyperlink?
b) List the steps required to create an e-mail hyperlink with the e-mail address testing@lpdatafiles.com.
24. If a web page does not contain a copyright notice, is the information on the web page entitled to copyright protection?

True/False

25. Determine if each of the following are true or false. If false, explain why.
 - a) The navigation structure should be sketched before the purpose and target audience are determined.
 - b) Copyright information is typically included in the local navigation bar.
 - c) A printer-friendly version of a web page is created in the Assets panel.
 - d) If web page elements are above the fold on your computer, they will be above the fold on all computers.
 - e) Each web page in a website should contain a link to the home page.
 - f) A parent page always has a child page.
 - g) Images should be stored in the root folder of a website.
 - h) The top area of a web page is called a footer.
 - i) Page layout should be different on each page of a website.
 - j) The importance of consistency decreases with the number of pages in a website.
 - k) Files and folders are organized in the Assets panel.
 - l) A library item is edited in the preview area in the Assets panel.
 - m) Copyright material can be reproduced only with written permission from the owner.
 - n) In a web page document, a library item has a yellow background.

Exercise 1 Hockey League

Create a new website for a local hockey league by completing the following steps:

- a) Define a new site named Hockey League in a folder named Hockey League. The purpose of the website is to provide information about the Holyoke Hockey League Association, rules, and a game schedule. The target audience is current and prospective league members and hockey fans of all ages.
- b) Add three web page documents to the website, naming them `index.htm`, `rules.htm`, and `schedule.htm`.
- c) In the website root folder, create a folder named `images`. Into the `images` folder, copy the following image files from the data files for this text:
 - `hh_logo.gif`
 - `hh_map.gif`
 - `hh_player.gif`
- d) Modify the `index.htm` web page document as follows:
 1. Change the page title to: Holyoke Hockey League Association
 2. Insert a table with 6 rows, 1 column, a width of 100%, no border, a cell padding of 6, and no cell spacing.
 3. In the top cell, insert the `hh_logo.gif` image.
 4. Split the cell in the third row into 2 columns.
 5. Split the cell in the fourth row into 2 columns.
 6. In the left cell of the third row, insert the `hh_player.gif` image.
 7. In the right cell of the third row, type the following text. Allow the text to wrap and replace Name with your name:

Name organized the Holyoke Hockey League Association in 1973 to accommodate the growing interest in the sport of ice hockey. Leagues are organized by age, ranging from the Tom Thumb League (5 to 6 years) to the Men's League (35+). For more information, call (561) 555-GOAL.
 8. In the right cell of the fourth row, insert the `hh_map.gif` image.
 9. In the left cell of the fourth row, type the following text. Allow the text to wrap:

The hockey arena was built in 1972 through a joint effort of the city and private fund raising. It is a state-of-the-art facility with two Olympic-size sheets of ice. Services include ice time rentals, open skating, open hockey, and a pro shop with skate rental, skate sharpening, and hockey supplies.
- e) Create a new library item named `navbar` that looks similar to:

Home | Rules | Schedule

Link the text Home to `index.htm`, the text Rules to `rules.htm`, and the text Schedule to `schedule.htm`.

- f) Create a new library item named footer that is similar to the following text. The date should be a time stamp that will automatically update when the web page document is saved:

Copyright 2007 Holyoke Hockey League Association. Send comments to the webmaster. Last modified Monday, March 7, 2007 10:18 AM

Link the text webmaster to the e-mail address webmaster@lpdatafiles.com.

- g) Modify the index.htm web page document as follows:

1. In the second row, place the navbar library item. Break the link to the library item and delete the text Home |
2. In the fifth row, place the navbar library item. Break the link to the library item and delete the text Home |
3. In the last row, place the footer library item.

- h) Modify the rules.htm web page document as follows:

1. Change the page title to: HHA - Rules
2. Insert a table with 5 rows, 1 column, a width of 100%, no border, a cell padding of 6, and no cell spacing.
3. In the top cell, insert the hh_logo.gif image.
4. In the second row, place the navbar library item. Break the link to the library item and remove the link from the text Rules.
5. In the third row, type the following text. Allow the text to wrap and replace Name with your name:

Rules are in dispute at this time. Please call Name at (561) 555-GOAL for more information.
6. In the fourth row, place the navbar library item. Break the link to the library item and remove the link from the text Rules.
7. In the last row, place the footer library item.

- i) Modify the schedule.htm web page document as follows:

1. Change the page title to: HHA - Schedule
2. Insert a table with 5 rows, 1 column, a width of 100%, no border, a cell padding of 6, and no cell spacing.
3. In the top cell, insert the hh_logo.gif image.
4. In the second row, place the navbar library item. Break the link to the library item and remove the link from the text Schedule.
5. In the third row, type the following text. Allow the text to wrap and replace Name with your name:

The new season schedule will be posted any day now. Please call Name at (561) 555-GOAL for more information.
6. In the fourth row, place the navbar library item. Break the link to the library item and remove the link from the text Schedule.
7. In the last row, place the footer library item.

- j) Check the spelling in each of the web page documents.
- k) View each web page document in a browser window and test the hyperlinks.
- l) Print a copy of each web page document from the browser.

Exercise 2

Volcanoes

Create new website about volcanoes by completing the following steps:

- a) Define a new site named Volcanoes in a folder named Volcanoes.
- b) Add three web page documents to the website, naming them `index.htm`, `lava.htm`, and `vol_types.htm`.
- c) In the website root folder, create a folder named `images`. Into the `images` folder, copy the following image files from the data files for this text:
 - `vol_close.jpg`
 - `vol_gas.jpg`
 - `vol_logo.gif`
 - `vol_splash.jpg`
- d) Modify the `index.htm` web page document as follows:
 1. Change the page title to: About Volcanoes
 2. Insert a table with 5 rows, 1 column, a width of 100%, no border, a cell padding of 10, and no cell spacing.
 3. In the top cell, insert the `vol_logo.gif` image.
 4. Split the cell in the third row into 2 columns.
 5. In the right cell of the third row, insert the `vol_close.jpg` image.
 6. In the left cell of the third row, type the following text. Allow the text to wrap:

A volcano is a location on the surface of the Earth where magma has erupted out of the interior of the planet. Magma is molten rock, which has melted from the extreme heat and pressure inside the Earth. Molten rock on the Earth's surface is called lava. As lava cools, it builds up and forms mountains.

Volcanoes are classified as active or inactive. A volcano is active if it is currently erupting or expected to erupt eventually. Inactive volcanoes are older and have usually erupted many times.

A volcanic eruption occurs when lava, gasses, and other matter come out of a vent. Violent eruptions often include chunks of rock that were blown off the interior walls of the vent. Quiet eruptions consist of lava flowing out of vents.

Eventually, the volcano reaches the cooling stage. While the volcano cools, it reduces in size from erosion.

- e) Create a new library item named `navbar` that looks similar to:

Home | Lava Types | Volcano Types

Link the text Home to `index.htm`, the text Lava Types to `lava.htm`, and the text Volcano Types to `vol_types.htm`.

- f) Create a new library item named footer that is similar to the following text, replacing Name with your name. The date should be a time stamp that will automatically update when the web page document is saved:

Send your comments or suggestions to Name. Copyright 2007. Last modified Monday, March 7, 2007 10:20 AM

Link the text Name to the e-mail address webmaster@lpdatafiles.com.

- g) Modify the index.htm web page document as follows:

1. In the second row, place the navbar library item. Break the link to the library item and delete the text Home |
2. In the fourth row, place the navbar library item. Break the link to the library item and delete the text Home |
3. In the last row, place the footer library item.

- h) Modify the lava.htm web page document as follows:

1. Change the page title to: Types of Lava Rocks
2. Insert a table with 6 rows, 1 column, a width of 100%, no border, a cell padding of 10, and no cell spacing.
3. In the top cell, insert the vol_logo.gif image.
4. In the second row, place the navbar library item. Break the link to the library item and remove the link from the text Lava Types.
5. In the third row, insert the vol_splash.jpg image.
6. In the fourth row, type the following text. Allow the text to wrap:

Types of Lava Rocks: Basalt, Obsidian, Andesite

Basalt (pronounced buh-SALT) is rock composed of mostly feldspar and pyroxene. Dark in color, basalt is considered to be a fine-grained rock. Some varieties of basalt contain iron, silica, or aluminum.

Obsidian (pronounced ub-SID-ee-en) is semi-translucent glass that contains a large amount of silicon. Obsidian is usually black or dark gray in color and occasionally red or brown. Obsidian is formed when lava cools so quickly that it does not have time to crystallize.

Like basalt, andesite (pronounced AN-deh-site) is composed of feldspar and pyroxene and is a fine-grained rock. Andesite is usually light to medium gray in color. Andesite is one of the most common volcanic rocks.

7. In the fifth row, place the navbar library item. Break the link to the library item and remove the link from the text Lava Types.
8. In the last row, place the footer library item.

- i) Modify the vol_types.htm web page document as follows:

1. Change the page title to: Types of Volcanoes
2. Insert a table with 6 rows, 1 column, a width of 100%, no border, a cell padding of 10, and no cell spacing.
3. In the top cell, insert the vol_logo.gif image.

4. In the second row, place the navbar library item. Break the link to the library item and remove the link from the text Volcano Types.
5. In the third row, type the following text. Allow the text to wrap:

Types of Volcanoes: Cinder Cones, Shield Volcanoes, Composite Volcanoes

Cinder cone volcanoes are formed from explosive eruptions where materials are ejected high in the air and cool before they hit the ground. Fine-grained rocks are blown away by winds. Coarser rock fragments remain in a cone-shaped pile, which can be hundreds of meters tall.

Shield volcanoes are formed by frequent, quiet eruptions and are much larger in width than in height. As smooth lava flows build up, a dome shape is formed. Shield volcanoes usually change shape when eruptions become explosive late in the life of the volcano.

Composite volcanoes are very large and are formed from alternating explosive eruptions and quiet eruptions. This results in layers of ejected material covered by smooth lava flows. Composite volcanoes are usually symmetrical in shape and can be as high as several kilometers.

6. In the fourth row insert the vol_gas.jpg image.
 7. In the fifth row place the navbar library item. Break the link to the library item and remove the link from the text Volcano Types.
 8. In the last row place the footer library item.
- j) Check the spelling in each of the web page documents.
- k) View each web page document in a browser window and test the hyperlinks.
- l) Print a copy of each web page document from the browser.

Exercise 3 Lawn Care

Create new website for a lawn care service by completing the following steps:

- a) Define a new site named Lawn Care in a folder named Lawn Care.
- b) Add three web page documents to the website, naming them index.htm, services.htm, and clients.htm.
- c) In the website root folder, create a folder named images. Into the images folder, copy the following image files from the data files for this text:
 - lawn_happy.gif
 - lawn_logo.gif
 - lawn_mower.gif
 - lawn_wheel.gif
- d) Modify the index.htm web page document as follows:
 1. Change the page title to: Smiley's Lawn Care Service
 2. Insert a table with 5 rows, 1 column, a width of 100%, no border, a cell padding of 8, and no cell spacing.

3. In the top cell, insert the lawn_logo.gif image.
4. Split the cell in the third row into 2 columns.
5. In the left cell of the third row, type the following text. Allow the text to wrap:

Need lawn care services? Call me! Hi, I'm Smiley, and I have been working in lawn care for over 10 years. I offer many services to both commercial and residential clients. I have a long list of happy customers, and am quite adept at bringing brown lawns back to life.

Call Smiley at 903-555-7979 or e-mail any hour of the day.

6. In the right cell of the third row, insert the lawn_mower.gif image.
7. Link the text services to services.htm, the text happy customers to clients.htm, and the text e-mail to the e-mail address smiley@lpdatafiles.com.

- e) Create a new library item named navbar that looks similar to:

Home | Services | Clients

Link the text Home to index.htm, the text Services to services.htm, and the text Clients to clients.htm.

- f) Create a new library item named footer that is similar to the following text, replacing Name with your name. The date should be a time stamp that will automatically update when the web page document is saved:

Copyright 2007 Name. Send comments to Smiley. Last modified Monday, March 7, 2007 9:30 AM

Link the text Smiley to the e-mail address smiley@lpdatafiles.com.

- g) Modify the index.htm web page document as follows:

1. In the second row place the navbar library item. Break the link to the library item and delete the text Home |
2. In the fourth row place the navbar library item. Break the link to the library item and delete the text Home |
3. In the last row place the footer library item.

- h) Modify the clients.htm web page document as follows:

1. Change the page title to: Smiley's Lawn Care Service - Happy Clients
2. Insert a table with 5 rows, 1 column, a width of 100%, no border, a cell padding of 8, and no cell spacing.
3. In the top cell, insert the lawn_logo.gif image.
4. In the second row, place the navbar library item. Break the link to the library item and remove the link from the text Clients.
5. Split the cell in the third row into 2 columns.

6. In the left cell of the third row, type the following text. Insert a line break after each reference:

Happy customers include:

Jerry's Rib Shack
Lake Raton Apartments
Bushnell Condominiums
Featherton Shopping Plaza
Candlewick Mall
Renewal Funeral Home
Terry's Ice Cream
Residents in the Tall Oaks neighborhood
Residents in the Kendall Highlands neighborhood
Residents in the Boynton Ray neighborhood

7. In the right cell of the third row, insert the lawn_happy.gif image.
8. In the fourth row place the navbar library item. Break the link to the library item and remove the link from the text Clients.
9. In the last row place the footer library item.

i) Modify the services.htm web page document as follows:

1. Change the page title to: Smiley's Lawn Care - List of Services
2. Insert a table with 5 rows, 1 column, a width of 100%, no border, a cell padding of 8, and no cell spacing.
3. In the top cell, insert the lawn_logo.gif image.
4. In the second row, place the navbar library item. Break the link to the library item and remove the link from the text Services.
5. Split the cell in the third row into 2 columns.
6. In the left cell of the third row, type the following text. Insert a line break after each service name:

Services Offered

Lawn Mowing

Includes trimming, edging, and removal of clippings.

Tree and Shrub Trimming

Usually done every three to four months.

Weeding

Done by hand, no chemicals used. Includes weeds in plant beds and concrete cracks.

Mulching

Cedar or hardwood mulch applied, fertilizer treatment optional.

Turf Treatments

Aeration, fertilization, and iron and nitrogen treatments are available.

7. In the right cell of the third row, insert the lawn_wheel.gif image.

8. In the fourth row place the navbar library item. Break the link to the library item and remove the link from the text Services.
 9. In the last row place the footer library item.
- j) Check the spelling in each of the web page documents.
 - k) View each web page document in a browser window and test the hyperlinks.
 - l) Print a copy of each web page document from the browser.

Exercise 4

METEOROLOGY

Modify the METEOROLOGY website by completing the following steps:

- a) Open the METEOROLOGY website for editing, a website provided with the data files for this text.
- b) In the website root folder, create a folder named images. Into the images folder, copy the following image files from the data files for this text:
 - weather_clouds.gif
 - weather_logo.gif
 - weather_storms.gif
 - weather_wind.gif
- c) Modify the navigation library item to include the text Wind that is a link to wind.htm. The library item should be similar to:
Home | Clouds | Storms | Wind
Allow Dreamweaver to update all occurrences of the library item.
- d) Modify the footer library item as follows:
 1. Change the text Name to your name.
 2. After the text Last modified insert a time stamp that will automatically update when the web page document is saved. Use a format similar to Monday, March 7, 2007 10:20 AM.Allow Dreamweaver to update all occurrences of the library item.
- e) Modify the index.htm web page document as follows:
 1. Change the page title to: Meteorology Home Page
 2. In the top cell, insert the weather_logo.gif image.
 3. Break the link to the library items in the second row and the last row. Remove the link from the text Home in each of the two rows.
- f) Modify the clouds.htm web page document as follows:
 1. In the top cell, insert the weather_clouds.gif image.
 2. Break the link to the library items in the second row and the last row. Remove the link from the text Clouds in each of the two rows.

- g) Modify the storms.htm web page document as follows:
1. In the top cell, insert the weather_storms.gif image.
 2. Break the link to the library items in the second row and the last row. Remove the link from the text Storms in each of the two rows.
- h) Modify the wind.htm web page document as follows:
1. In the top cell, insert the weather_wind.gif image.
 2. Break the link to the library items in the second row and the last row. Remove the link from the text Wind in each of the two rows.
- i) Check the spelling in each of the web page documents.
- j) View each web page document in a browser window and test the hyperlinks.
- k) Print a copy of each web page document from the browser.

Exercise 5

SEVEN WONDERS

Modify the SEVEN WONDERS website by completing the following steps:

- a) Open the SEVEN WONDERS website for editing, a website provided with the data files for this text.
- b) In the website root folder, create a folder named images. Into the images folder, copy the following image files from the data files for this text:
- wonder_logo.gif
 - wonder_map.gif
- c) Modify the navbar library item by linking the last three items to the appropriate web page documents in the website. Save the library item, and allow Dreamweaver to update all occurrences of the library item.
- d) Modify the footer library item as follows:
1. Change the text Name to your name.
 2. After the text Last modified type a space and then insert a time stamp that will automatically update when the web page document is saved. Use a format similar to Monday, March 7, 2007 10:18 AM.
 3. Link the text webmaster to the e-mail address: webmaster@lpdatafiles.com

Allow Dreamweaver to update all occurrences of the library item.

- e) Modify the index.htm web page document as follows:
1. Change the page title to: The SEVEN WONDERS of the Ancient World
 2. Insert a table with 5 rows, 1 column, a width of 100%, no border, a cell padding of 10, and no cell spacing.
 3. In the top cell, insert the wonder_logo.gif image.
 4. In the second row place the navbar library item. Break the link to the library item and delete the text Home |

5. Split the cell in the third row into 2 columns.
6. In the left cell of the third row, insert the wonder_map.gif image.
7. In the right cell of the third row, type the following text. Insert a line break after each wonder:

The Seven Wonders of the Ancient World are architectural and sculptural accomplishments. Only one of the seven (the pyramids) survives today. The Seven Wonders of the Ancient World are:

Temple of Artemis (Diana) at Ephesus
 Mausoleum at Halicarnassus
 Colossus of Rhodes
 Hanging Gardens of Lawnlon
 Pyramids of Egypt
 Lighthouse of Alexandria
 Statue of Zeus (Jupiter) at Olympia

8. In the fourth row place the navbar library item. Break the link to the library item and delete the text Home |
 9. In the last row place the footer library item.
- f) In each of the other web page documents in the website, break the link to the library items in the second row and the last row, and remove the link from the appropriate text in both rows. Save the modified web page documents.
 - g) Check the spelling in the index.htm web page document.
 - h) View each web page document in a browser window and test the hyperlinks.
 - i) Print a copy of each web page document from the browser.

Exercise 6 Etiquette

Create new website about etiquette by completing the following steps:

- a) Define a new site named Etiquette in a folder named Etiquette.
- b) Add three web page documents to the website, naming them index.htm, written.htm, and voice.htm.
- c) In the website root folder, create a folder named images. Into the images folder, copy the following image files from the data files for this text:
 - eti_voice.gif
 - eti_write.gif
- d) Modify the index.htm web page document as follows:
 1. Change the page title to: Etiquette Home Page
 2. Insert a table with 5 rows, 1 column, a width of 100%, no border, a cell padding of 10, and no cell spacing.
 3. In the top cell, type: Etiquette
 4. Split the cell in the third row into 2 columns.

5. In the left cell of the third row, type the following text. Allow the text to wrap:

Using electronic communication devices requires following a certain etiquette.

6. In the right cell of the third row, type the following text. Press Enter at the end of each line:

Speaking

Writing

e) Create a new library item named navbar that looks similar to:

Home | Voice Etiquette | Written Etiquette

Link the text Home to index.htm, the text Speaking Etiquette to voice.htm, and the text Writing Etiquette to written.htm.

f) Create a new library item named footer that is similar to the following text, replacing Name with your name. The date should be a time stamp that will automatically update when the web page document is saved:

Send your comments or suggestions to Name. Copyright 2007. Last modified Monday, March 7, 2007 10:20 AM

Link the text Name to the e-mail address webmaster@lpdatafiles.com.

g) Modify the index.htm web page document as follows:

1. In the second row, place the navbar library item. Break the link to the library item and delete the text Home |
2. In the fourth row, place the navbar library item. Break the link to the library item and delete the text Home |
3. In the last row, place the footer library item.

h) Modify the written.htm web page document as follows:

1. Change the page title to: Written Etiquette
2. Insert a table with 5 rows, 1 column, a width of 100%, no border, a cell padding of 10, and no cell spacing.
3. In the top cell, type the text: Written Etiquette.
4. In the second row, place the navbar library item. Break the link to the library item and remove the link from the text Written Etiquette.
5. Split the cell in the third row into 2 columns.
6. In the left cell of the third row, insert the eti_write.gif image.
7. In the right cell of the third row, type the following text. Allow the text to wrap and insert line breaks after each title:

E-mail Messages
Use meaningful text in the subject line.

Text Messages
Keep the message short.

8. In the fourth row, place the navbar library item. Break the link to the library item and remove the link from the text Written Etiquette.
9. In the last row, place the footer library item.

i) Modify the voice.htm web page document as follows:

1. Change the page title to: Voice Etiquette
2. Insert a table with 5 rows, 1 column, a width of 100%, no border, a cell padding of 10, and no cell spacing.
3. In the top cell, type the text: Voice Etiquette.
4. In the second row, place the navbar library item. Break the link to the library item and remove the link from the text Voice Etiquette.
5. Split the cell in the third row into 2 columns.
6. In the left cell of the third row, insert the eti_voice.gif image.
7. In the right cell of the third row, type the following text. Allow the text to wrap and insert line breaks after each title:

Telephone Calls
Always state your name and the purpose of the call.

Cellular Phones
Refrain from talking on the phone while driving.

Speakerphone
Be sure there is no background noise

Voice mail
Speak slowly and clearly.

8. In the fourth row, place the navbar library item. Break the link to the library item and remove the link from the text Voice Etiquette.
9. In the last row, place the footer library item.

j) Brainstorm in small groups to generate additional etiquette rules.

k) Add the additional rules to the web page documents.

l) Check the spelling in each of the web page documents.

m) View each web page document in a browser window and test the hyperlinks.

n) Print a copy of each web page document from the browser.

Create new website about rubrics by completing the following steps:

- a) Define a new site named Rubrics in a folder named Rubrics.
- b) Add two web page documents to the website, naming them `index.htm` and `wpd_rubric.htm`.
- c) Create a new library item named footer that is similar to the following text, replacing Name with your name. The date should be a time stamp that will automatically update when the web page document is saved:

Send your comments or suggestions to Name. Copyright 2007. Last modified Monday, March 7, 2007 10:20 AM

Link the text Name to the e-mail address `webmaster@lpdatafiles.com`.
- d) Modify the `index.htm` web page document as follows:
 1. Change the page title to Name's Rubrics replacing Name with your name.
 2. Insert a table with 4 rows, 1 column, a width of 100%, no border, a cell padding of 10, and no cell spacing.
 3. In the top cell, type: Rubrics for Web Development
 4. In the second row, type the following text. Allow the text to wrap:
Rubrics are used to assess the quality of work. Most rubrics have a scale, criteria to measure, and parallel descriptors that describe what each level of the scale should look like. The criteria defines what will be assessed. It is important to review a rubric before starting a project so that the expectations of the project are clear.
 5. In the third row, type the following text:
Web Page Document Rubric
 6. Link the text Web Page Document Rubric to `wpd_rubric.htm`.
 7. In the last row, place the footer library item.
- e) Modify the `wpd_rubric.htm` web page document as follows:
 1. Change the page title to: Web Page Document Rubric
 2. Insert a table with 11 rows, 1 column, a width of 100%, a border of 1, a cell padding of 10, and no cell spacing.
 3. In the top cell, type the text: Web Page Document Rubric
 4. In the second row, type the following text. Allow the text to wrap:
This rubric can be used to assess the quality of a single web page document.

Instructions: Circle the appropriate number using the following scale:

1-Poor 2-Fair 3-Average 4-Good 5-Excellent
 5. In the third row, type the following criteria text:
 1. The content of the web page document is appropriate for the target audience.

6. Split the fourth row into five columns and format each cell with a width of 20%.
7. Type a number in each column, from 1 through 5:

1	2	3	4	5
---	---	---	---	---

8. In the fifth row, type the following criteria text:

2. The web page document contains appropriate links to related web page documents.

9. Split the sixth row into five columns, format each cell with a width of 20%, and type a number in each column from 1 through 5

10. In the seventh row, type the following criteria text:

3. The arrangement of web page elements follows generally accepted standards of a header, footer, and content in between.

11. Split the eighth row into five columns, format each cell with a width of 20%, and type a number in each column from 1 through 5.

12. In the ninth row, type the following text:

Additional Comments:

Overall Score: _____

13. In the tenth row, type the text Home and link the text to index.htm.

14. In the last row, place the footer library item.

- f) Brainstorm in small groups to generate two additional rubric criteria.
- g) Add the criteria to your rubric, adding rows and content as needed.
- h) Check the spelling in each of the web page documents.
- i) View each web page document in a browser window and test the hyperlinks.
- j) Print a copy of each web page document from the browser.
- k) In a browser window, view a web page document that a peer has created and print a copy. Use the rubric to evaluate the web page document.
- l) Reflect on the design of the rubric. Does it appropriately assess the web page document? Are there criteria that should be added or changed? Make any appropriate revisions and print a copy.

Exercise 8

Local Club

Develop a website that is for a local club, such as a bicycling club or a debate club. The website should include news about the club, club events, and appropriate topics for the club. Complete the following steps to finish the website development, writing the answers to parts a, b, c, and d on paper:

- a) Determine the purpose and target audience.
- b) Determine the web pages and then sketch the navigation structure.
- c) Determine the content and navigation links for each page.
- d) Sketch the design for each page. Include details about tables.
- e) Create the website naming it Local Club.
- f) Create web page documents, appropriately named, and add the content.
- g) Check the spelling in the web page documents.
- h) View each web page document in a browser window and test the hyperlinks.
- i) Print a copy of each web page document from the browser.

Exercise 9

Dentist

Develop a website that is for a dentist. The website should include office hours and location, information about the dentist, and educational information about dental hygiene. Complete the following steps to finish the website development, writing the answers to parts a, b, c, and d on paper:

- a) Determine the purpose and target audience.
- b) Determine the web pages and then sketch the navigation structure.
- c) Determine the content and navigation links for each page.
- d) Sketch the design for each page. Include details about tables.
- e) Create the website naming it Dentist.
- f) Create web page documents, appropriately named, and add the content.
- g) Check the spelling in the web page documents.
- h) View each web page document in a browser window and test the hyperlinks.
- i) Print a copy of each web page document from the browser.