

01

Session 8.1

- Explore the uses of frames in a Web site
- Create a frameset consisting of rows and columns of frames
- Display a document within a frame
- Format the appearance of a frame

Session 8.2

- Create links targeted at frames
- Direct a link to a target outside of a frame layout
- Format the color and size of frame borders
- Create an inline frame

Designing a Web Site with frames

Using Frames to Organize a Web Site

Case | Cliff Hangers

One of the most popular climbing schools and touring agencies in Colorado is Cliff Hangers. Located in Boulder, Cliff Hangers specializes in teaching beginning through advanced climbing techniques. The school also sponsors several climbing tours, leading individuals on some of the most exciting climbs in North America.

Debbie Chen is the owner of the school and is always looking for ways to market her programs and improve the visibility of the school.

She knows that some Web sites use frames to display several Web pages in a single browser window and has asked you to help develop a frame-based Web site for Cliff Hangers.

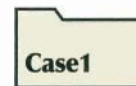
Starting Data Files



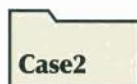
clifftxt.htm
linkstxt.htm
philosphtxt.htm
tourstxt.htm
+ 17 HTML files
+ 3 style sheets
+ 29 graphic files



lefttxt.htm
lessonstxt.htm
links1txt.htm
links2txt.htm
links3txt.htm
middletxt.htm
newlayouttxt.htm
righttxt.htm
+ 16 HTML files
+ 4 style sheets
+ 25 graphic files



maptxt.htm
nhpolytxt.htm
notestxt.htm
+ 13 HTML files
poli.css
+ 2 graphic files



browyer.css
listingtxt.htm
+ 17 graphic files



messtxt.htm
mxxtxt.htm
+ 9 HTML files
+ 2 style sheets
+ 22 graphic files



tempalstxt.htm -
tempa5s1txt.htm
tempest.jpg

Session 8.1

Introducing Frames

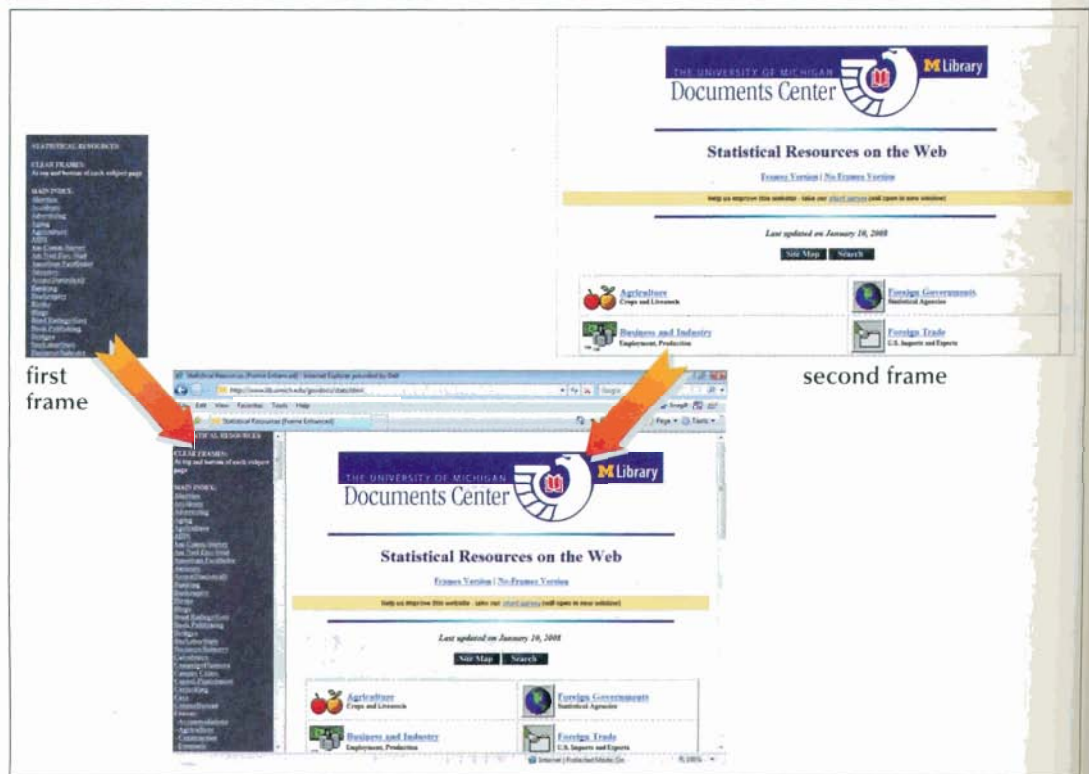
Web authors often dedicate individual Web pages to a particular topic or group of topics. One page might contain a list of links, another page might display contact information for the company or organization, and another page might describe the business philosophy. As more pages are added to the site, the designer often needs a way to display information from several pages at the same time—such as a list of links remaining on the page at the same time as the contact information is displayed.

One common solution is to duplicate that information (such as the list of links) across the Web site, but this strategy presents problems. It requires a great deal of time and effort to repeat (or copy and paste) the same information over and over again. Also, each time a change is required, the edit must be repeated on each page where the information appears—a process that could easily result in errors.

Such considerations contributed to the creation of frames. A **frame** is a section of a browser window capable of displaying the contents of an entire Web page. Figure 8-1 shows an example of a browser window containing two frames. The frame on the left displays the contents of a Web page containing a list of links for the University of Michigan Documents Center. The frame on the right displays the site's home page.

Figure 8-1

A framed Web site



This Web site illustrates a common use of frames: displaying a table of contents in one frame, while showing individual pages from the site in another frame. Figure 8-2 illustrates how a list of links can remain on the screen while the user navigates through the contents of the site. Using this layout, a designer can easily change the list of links without having to change every page on the site because the links are stored on only one page.

Planning Your Frames

Before you start creating your frames, you must plan their appearance and determine how you want to use them. There are several issues to consider:

- What information will be displayed in each frame?
- How do you want the frames placed on the Web page? What is the size of each frame?
- Which frames will be static—that is, always showing the same content?
- Which frames will change in response to links being clicked?
- What Web pages will users first see when they access the site?
- Should users be permitted to resize the frames to suit their needs?

As you progress with your design for the Cliff Hangers Web site, you'll consider each of these questions. Debbie has already created the Web pages for the site; your job is to create the frame layout and insert the correct files into the various frames. Figure 8-3 describes the different Web pages you'll work with in this project.

Figure 8-3

Web pages on the Cliff Hangers Web site

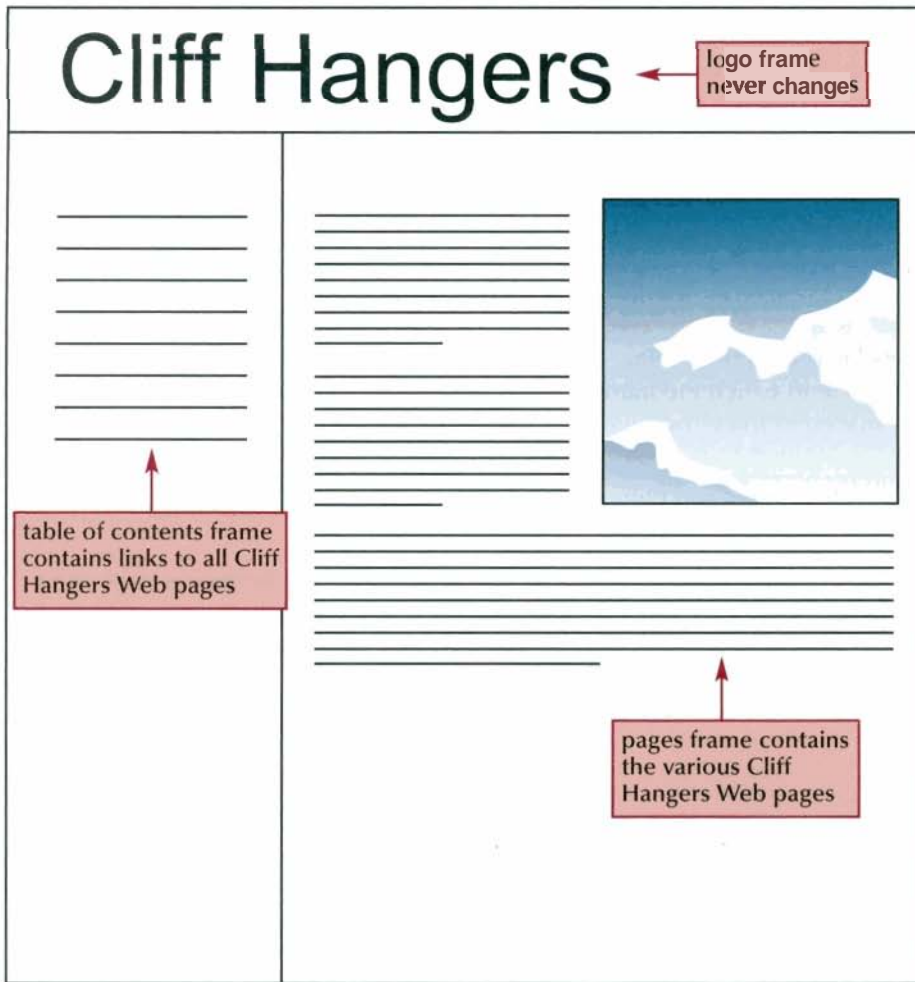
Topic	Filename	Content
Biographies	staff.htm	Links to biographical pages of Cliff Hangers staff
Home page	home.htm	The Cliff Hangers home page
Lessons	lessons.htm	Climbing lessons offered by Cliff Hangers
Logo	head.htm	A page containing the company logo
Philosophy	philosph.htm	Business philosophy of Cliff Hangers
Table of contents	links.htm	Links to Cliff Hangers Web pages
Tours	diamond.htm	Description of the Diamond climbing tour
Tours	eldorado.htm	Description of the Eldorado Canyon climbing tour
Tours	grepon.htm	Description of the Petit Grepon climbing tour
Tours	kieners.htm	Description of the Kiener's Route climbing tour
Tours	lumpy.htm	Description of the Lumpy Ridge climbing tour
Tours	nface.htm	Description of the North Face climbing tour

Debbie has organized the pages by topic, such as tour descriptions, climbing lessons, and company philosophy. Two of the files, `links.htm` and `staff.htm`, do not focus on a particular topic, but contain links to other Cliff Hangers Web pages.

Debbie has carefully considered how this material should be organized on the Web site and what information the user should see first. She has sketched a layout that illustrates how she would like the frames to be organized, as shown in Figure 8-4.

Debbie's proposed frame layout

Figure 8-4



As you can see in Figure 8-4, Debbie would like you to create three frames. She would like the school's logo (which will contain the phone and address information) to appear in the top frame, and she wants that frame to always display that information. She wants the frame on the left to display a list of the Web pages on the Cliff Hangers Web site. Finally, Debbie wants the frame on the lower right to display the contents of the page corresponding to the link that a user clicks from the left frame.

Your first task is to enter the HTML code for the frame layout that Debbie has described.

Creating a Frameset

Frames are organized into a **frameset**, which is HTML code that defines the layout and content of the frames within the browser window. The syntax for creating a frameset is

```
<html>
  <head>
    <title>title</title>
  </head>
  <frameset>
    frames
  </frameset>
</html>
```

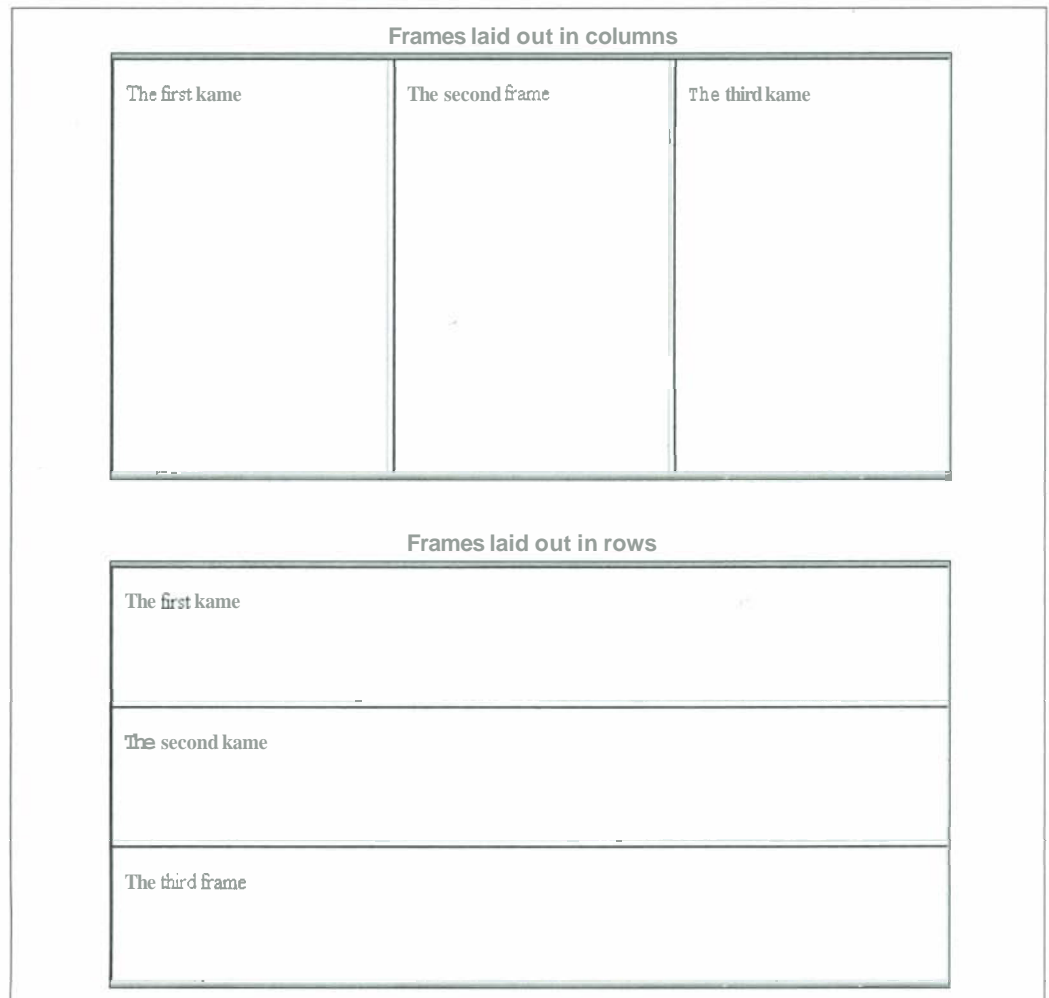
where frames are the individual frames within the frameset. You'll learn how to create these frames shortly. An HTML file can contain several framesets nested within one another.

Note that the frameset element replaces the body element in this HTML document. Because this HTML file displays the contents of other Web pages, it is not technically a Web page and thus does not include a page body. Later in the tutorial, you'll explore situations in which you would include a body element to support browsers that do not display frames. For now, you'll concentrate on defining the appearance and content of the frames.

Specifying Frame Size and Orientation

Framesets lay out frames in either rows or columns, but not both. Figure 8-5 shows two framesets: one in which the frames are laid out in three columns, and another in which they are placed in three rows.

Figure 8-5 Frame layouts in rows and columns



To lay out the frames in rows, you add the rows attribute

```
<frameset rows="row1,row2,row3,..."> ... </frameset>
```

Reference Window | Creating a Frameset

- To create a frameset, enter the frameset element


```
<frameset>
  frames
</frameset>
```

 where *frames* are the individual frames within the frameset.
- The frames of a frameset must be laid out in rows or columns. To lay out the frames in rows, add the attribute


```
rows="row1, row2, row3, ..."
```

 to the opening `<frameset>` tag, where *row1*, *row2*, *row3*, etc. are the heights of the rows in pixels or percentages. To allow a row to fill the browser window space not specified for other rows, use the value `*`.
- To lay out the frames in columns, add the attribute


```
cols="col1, col2, col3, ..."
```

 to the opening `<frameset>` tag, where *col1*, *col2*, *col3*, etc. are the widths of the columns in pixels or percentages.

The first frameset you'll create for the Cliff Hangers Web site has two rows. The top row will display the company logo. You'll set the height of the row to 85 pixels. The rest of the Web site will be displayed in the second row, and you'll set that row's height to occupy the rest of the browser window.

To create a frameset:

1. Use your text editor to open the **cliff.txt.htm**, **linkstxt.htm**, **philosph.txt.htm**, and **tourstxt.htm** files from the tutorial.08\tutorial folder included with your Data Files. Enter your *name* and *the date* in the comment section of each file and save them as **cliff.htm**, **links.htm**, **philosph.htm**, and **tours.htm**, respectively, in the same folder.
2. Return to the **cliff.htm** file in your text editor.
3. Insert the following frameset directly after the closing `</head>` tag, as shown in Figure 8-7:

```
<frameset rows="85,*">
</frameset>
```

Inserting a frameset

```
<title>Cliff Hangers Climbing School</title>
</head>
<frameset rows="85,*">
</frameset>
</html>
```

frameset consists of the first row at 85 pixels high and the second row occupying the remainder of the browser window

The initial frameset is now defined. Next you must specify the content of the frameset.

Creating a Frame

The first row of the frameset will contain a frame displaying the company logo. To create a frame, you use the frame element

```
<frame src="url" />
```

where *url* is the URL of the document displayed within the frame.

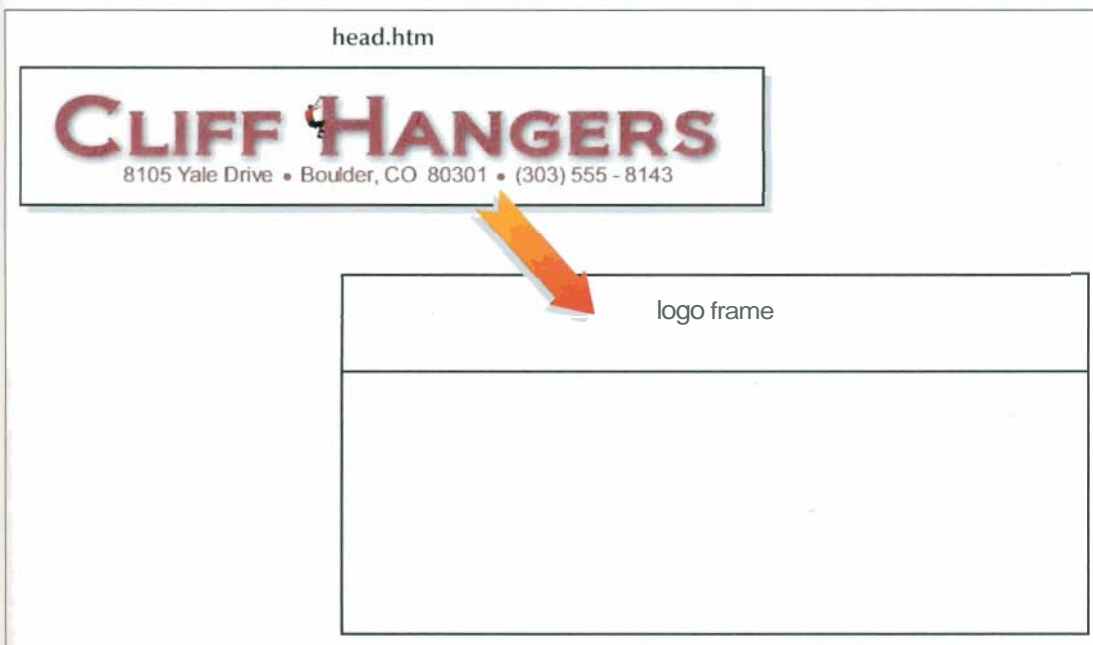
Debbie saved the page containing the company logo and address as `head.htm`. You'll place this document in the first frame of the frameset, as shown in Figure 8-8.

Tip

The frame source does not need to be an HTML file. You can insert graphics files within frames as well. However, frames must always be nested within a frameset.

Placing the head.htm file

Figure 8-8



Create a Frame

Reference Window

- To create a frame, use the element `<frame src="url" />` where *url* is the URL of the document displayed in the frame.

To set the source of the first frame:

- After the opening `<frameset>` tag, insert the following frame element, as shown in Figure 8-9.

```
<!-- Company Logo -->
```

```
<frame src="head.htm" />
```

Tip

Add comments to your `<frame />` tags so that it's clear what content will be displayed within each frame.

Figure 8-9

Inserting the frame element

```
<frameset rows="85,*">
  <!-- Company Logo -->
  <frame src="head.htm" />
</frameset>
</html>
```

file displayed within the frame

2. Save your changes to the file.

You have successfully specified the source for the first row of the frameset. In the second row you'll insert another frameset.

Nesting Framesets

As noted earlier, a frameset places frames in either rows or columns, but not both. Therefore, to create a layout containing frames in both rows and columns, you must nest one frameset within another. Debbie wants the second row of the current frame layout to contain two columns: the first column will display a table of contents, and the second column will display the Web pages for the various lessons and tours that Cliff Hangers offers. You'll specify a width of 140 pixels for the first column, and whatever remains in the display area will be allotted to the second column.

To nest a frameset:

1. Directly below the `<frame />` tag you just entered, insert the following lines of code, as shown in Figure 8-10:

```
<!-- Nested Frameset -->
<frameset cols="140,*">
</frameset>
```

Figure 8-10

Nesting a frameset

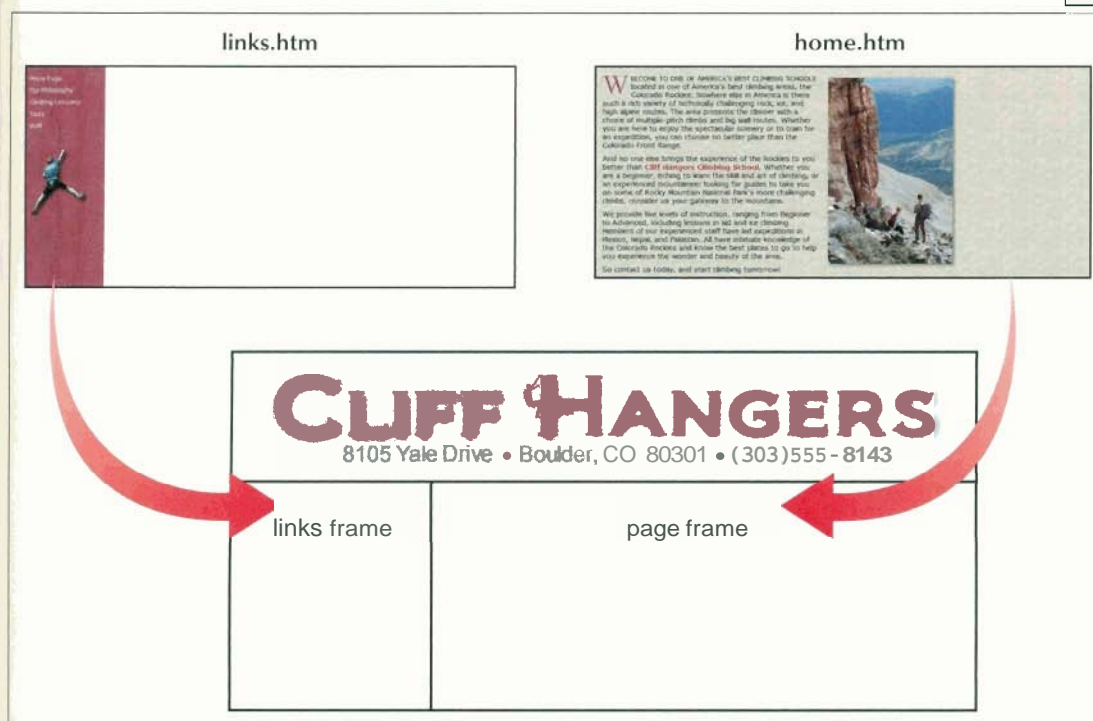
```
<frameset rows="85,*">
  <!-- Company Logo -->
  <frame src="head.htm" />
  <!-- Nested Frameset -->
  <frameset cols="140,*">
  </frameset>
</frameset>
```

2. Save your changes to the file.

Next, you'll specify the sources for the two frames in the nested frameset. The frame in the first column should display the `links.htm` file, which is Debbie's table of contents. The Cliff Hangers home page, `home.htm`, should be displayed in the second frame. Figure 8-11 shows the contents of these two pages and their locations in the frameset.

Placing the links.htm and home.htm files in the frame layout

Figure 8-11



To insert the two frames of the nested frameset:

1. Directly below the opening `<frameset>` tag of the nested frameset, insert the following code, as shown in Figure 8-12.

```
<!-- List of Links -->
```

```
<frame src="links.htm" />
```

```
<!-- Cliff Hangers Web Pages -->
```

```
<frame src="home.htm" />
```

Inserting the frame columns

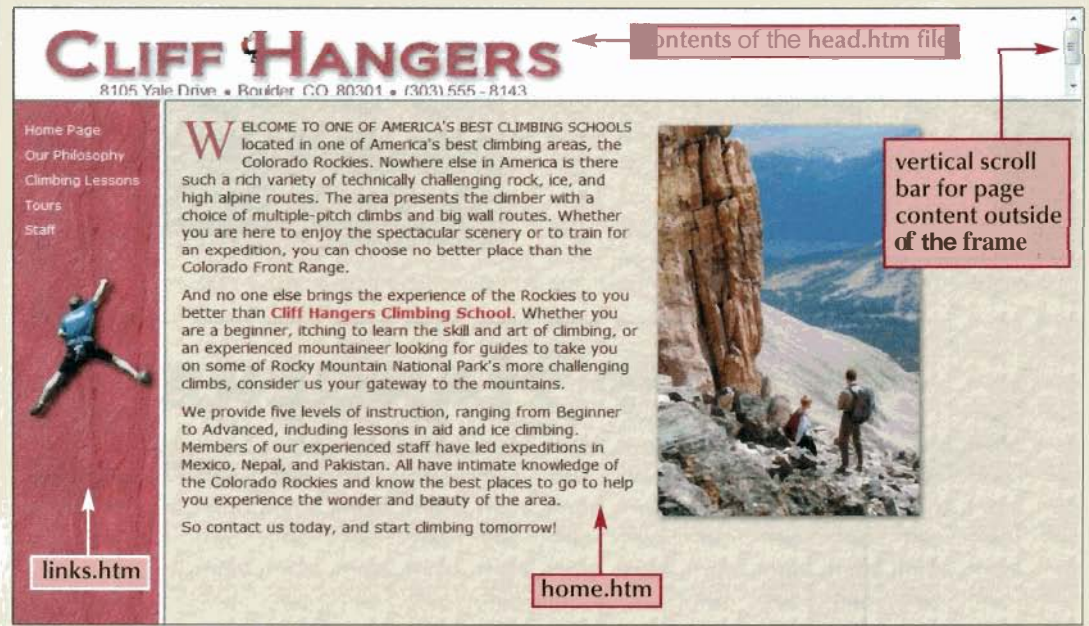
Figure 8-12

```
<frameset rows="85,*">
  <!-- Company Logo -->
  <frame src="head.htm" />
  <!-- Nested Frameset -->
  <frameset cols="140,*">
    <!-- List of Links -->
    <frame src="links.htm" />
    <!-- Cliff Hangers Web Pages -->
    <frame src="home.htm" />
  </frameset>
</frameset>
```

2. Save your changes to the file.
3. Open the **cliff.htm** file in your Web browser. As shown in Figure 8-13, the browser lays out the contents of the three Web pages within frames in the browser window.

Figure 8-13

Initial frame layout of the Cliff Hangers Web site



Although the browser window displays the three Web pages from the Cliff Hangers Web site, the design of the frame layout could use some refinement. Part of the logo has been cut off in the head frame. Whenever page content does not entirely fit within the frame borders, the browser displays horizontal and vertical scroll bars to allow the user to scroll through the rest of the page content within the frame. Scroll bars do not appear in the two other frames because all of the page content from the `links.htm` and `home.htm` files fits within their frames. Debbie doesn't want the scroll bars to appear, so you need to format the frame so that it displays all of the company logo.

Formatting a Frame

You can control three attributes of a frame: the appearance of scroll bars, the size of the margin between the source document and the frame border, and whether or not users are allowed to change the frame size. The first attribute you'll work with is the scrolling attribute.

Hiding and Displaying Scroll Bars

By default, a scroll bar is displayed when the content of the source page does not fit within a frame. You can override this setting using the scrolling attribute. The syntax for this attribute is

```
scrolling="type"
```

where *type* can be either `yes` (to always display a scroll bar) or `no` (to never display a scroll bar). If you don't specify a setting for the scrolling attribute, the browser displays a scroll bar when the page content doesn't fit in the frame.

Debbie thinks that a scroll bar is inappropriate for the logo frame, and she wants to ensure that a scroll bar is never displayed for that frame. Therefore, you need to add the

```
scrolling="no"
```

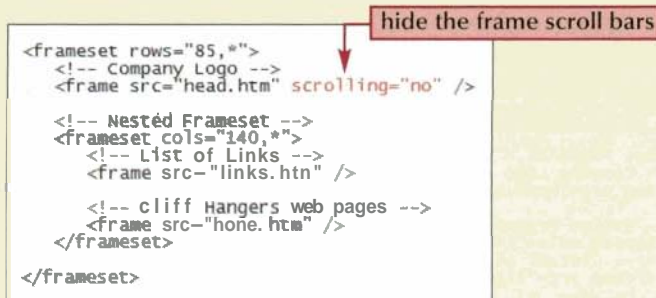
attribute to the frame element. However, Debbie does want scroll bars for the other two frames, as needed, so the default value for those frames is sufficient.

To remove the scroll bars from the logo frame:

1. Return to the **cliff.htm** file in your text editor.
2. Within the frame element for the logo frame, insert the following attribute, as shown in Figure 8-14:
scrolling="no"

Removing the scroll bars from the logo frame

Figure 8-14



```
<frameset rows="85,*">
  <!-- Company Logo -->
  <frame src="head.htm" scrolling="no" />

  <!-- Nested Frameset -->
  <frameset cols="140,*">
    <!-- List of Links -->
    <frame src="links.htm" />

    <!-- Cliff Hangers web pages -->
    <frame src="hone.htm" />
  </frameset>
</frameset>
```

3. Save your changes to the file and then reload **cliff.htm** in your Web browser. Verify that the scroll bars have been removed from the logo frame.

Although the scroll bar for the logo frame has been removed, depending on your screen size, the logo contained in the **head.htm** file might still be cut off.

When working with frames, keep in mind that you should remove scroll bars from a frame only when you are convinced that the entire Web page will be visible in the frame. To do this, you should view your Web page using several different monitor settings. Few things are more irritating to Web site visitors than to discover that some content is missing from a frame with no scroll bars available to reveal the missing content. To ensure that the **head.htm** file will fit in the logo frame, you need to modify the frame margins.

Setting Frame Margins

When your browser displays a Web page in a frame, it places a margin between the Web page and the frame borders. If the margin is too large, part of the Web page might not fit within the frame. This is what occurred with the logo frame. Generally, you want the margin to be big enough to keep the source's text or images from running into the frame's borders. However, you do not want the margin to take up too much space, either.

You've already noted that the margin height for the logo frame is too large, and this has shifted some of the text beyond the border of the frame. To fix this problem, you need to specify a smaller margin for the frame so that the logo can move up and allow all of the text to be displayed in the frame.

The attribute for specifying margin sizes for a frame is

```
marginheight="value" marginwidth="value"
```

where the **marginheight** value specifies the amount of space, in pixels, above and below the frame source, and the **marginwidth** value specifies the amount of space to the left and right of the frame source. You do not have to specify both the margin height and

Tip

To view changes in the frame layout or for frame properties in some older browsers, you might have to reload rather than simply refresh the Web site.

width. However, if you specify only one, the browser assumes that you want to use the same value for both. Setting margin values is a process of trial and error as you determine what combination of margin sizes looks best.

To correct the problem with the logo frame, you'll decrease its margin size to 0 pixels. This setting will allow the entire logo to be displayed within the frame. You don't need to change the margins of the other frames.

To set the size of the internal frame margins:

1. Return to the **cliff.htm** file in your text editor.
2. Within the frame element for the logo frame, insert the following attribute, as shown in Figure 8-15:

marginheight="0"

Figure 8-15

Set the frame margin height

```
<frameset rows="85,*">
  <!-- Company Logo -->
  <frame src="head.htm" scrolling="no" marginheight="0" />

  <!-- Nested Frameset -->
  <frameset cols="140,*">
    <!-- List of Links -->
    <frame src="links.htm" />

    <!-- Cliff Hangers web Pages -->
    <frame src="home.htm" />
  </frameset>
</frameset>
```

the margin above and below the head.htm file will be 0 pixels

3. Save your changes to the file and then reload **cliff.htm** in your Web browser. As shown in Figure 8-16, the entire logo should now be visible within the frame with no scroll bars showing.

Figure 8-16

Revised frame layout

CLIFF HANGERS
8105 Yale Drive • Boulder, CO 80301 • (303) 555-8143

Home Page
Our Philosophy
Climbing Lessons
Tours
Staff

WELCOME TO ONE OF AMERICA'S BEST CLIMBING SCHOOLS located in one of America's best climbing areas, the Colorado Rockies. Nowhere else in America is there such a rich variety of technically challenging rock, ice, and high alpine routes. The area presents the climber with a choice of multiple-pitch climbs and big wall routes. Whether you are here to enjoy the spectacular scenery or to train for an expedition, you can choose no better place than the Colorado Front Range.

And no one else brings the experience of the Rockies to you better than **Cliff Hangers Climbing School**. Whether you are a beginner, itching to learn the skills and art of climbing, or an experienced mountaineer looking for guides to take you on some of Rocky Mountain National Park's more challenging climbs, consider us your gateway to the mountains.

We provide five levels of instruction, ranging from Beginner to Advanced, including lessons in alpine and ice climbing. Members of our experienced staff have led expeditions in Mexico, Nepal, and Pakistan. All have intimate knowledge of the Colorado Rockies and know the best places to go to help you experience the wonder and beauty of the area.

So contact us today, and start climbing tomorrow!

the entire Cliff Hangers logo appears within the frame

Formatting a Frame

| Reference Window

- To **control** whether a frame contains a scroll bar, add the attribute `scrolling="type"` to the frame element, where `type` is either `yes` (scroll bar) or `no` (no scroll bar). If you do not specify the `scrolling` attribute, a scroll bar appears only when the content of the frame source **cannot** fit within the boundaries of the `h a`.
- To control the amount of **space between the frame source** and the **frame boundary**, add the attribute `marginwidth="value" marginheight="value"` to the frame element, where the width and height **values** are expressed in pixels. The margin width is the **space to the left and right of the frame source**. The margin height is the space **above and below the frame source**. **If you do not specify** a margin height or width, the **browser assigns dimensions based on the content of the frame source**. To keep **users from resizing frames**, add the **following attribute** to the frame element: `noresize="noresize"`

Debbie is satisfied with the changes you've made to the Web page. Your next task is to prevent users from resizing the frames.

Controlling Frame Resizing

By default, users can **resize** frame borders in the browser by simply clicking and dragging a frame border with their mouse. However, some Web designers prefer to freeze, or lock, frames so that users cannot resize them. This ensures that the Web site appears as the designer intended. Debbie would like you to do this for the Cliff Hangers Web site. The attribute for controlling frame resizing is

```
noresize="noresize"
```

Many browsers also allow you to insert this attribute as simply

```
noresize
```

without an attribute value. However, this form is not supported by XHTML because XHTML requires all attributes to have attribute values. You'll follow this principle in the code we create for Debbie's Web site.

To prevent users from resizing the frames on the Cliff Hangers site:

- ▶ 1. Return to the `cliff.htm` file in your text editor.
- ▶ 2. Within each of the three `<frame />` tags in the file, add the attribute `noresize="noresize"`
- ▶ 3. Save your changes to the file and then reload `cliff.htm` in your Web browser.
- ▶ 4. Verify that the frames are now locked in and cannot be **resized** by the user.
- ▶ 5. If you want to take a break before starting the next session, you can close any open files and programs now.

Debbie is pleased with the progress you've made on the Cliff Hangers site. In the next session you'll modify the properties of the links in the table of contents frame so that all links open with the page frame.

1. What are frames, and why are they useful in displaying and designing a Web site?
2. Why is the `<body>` tag unnecessary for pages that contain frames?
3. What HTML code do you use to create three rows of frames with the height of the first row set to 200 pixels, the height of the second row set to 50% of the display area, and the height of the third row set to occupy the remaining space?
4. What HTML code do you use to specify `home.htm` as a source for a frame?
5. What HTML code do you use to remove the scroll bars from the frame for `home.htm`?
6. What HTML code do you use to set the size of the margin above and below the contents of the `home.htm` frame to 3 pixels?
7. What is the size of the margins to the right and left of the frame in Question 6?
8. What code would you use to prevent users from moving the frame borders in `home.htm`?

Session 8.2

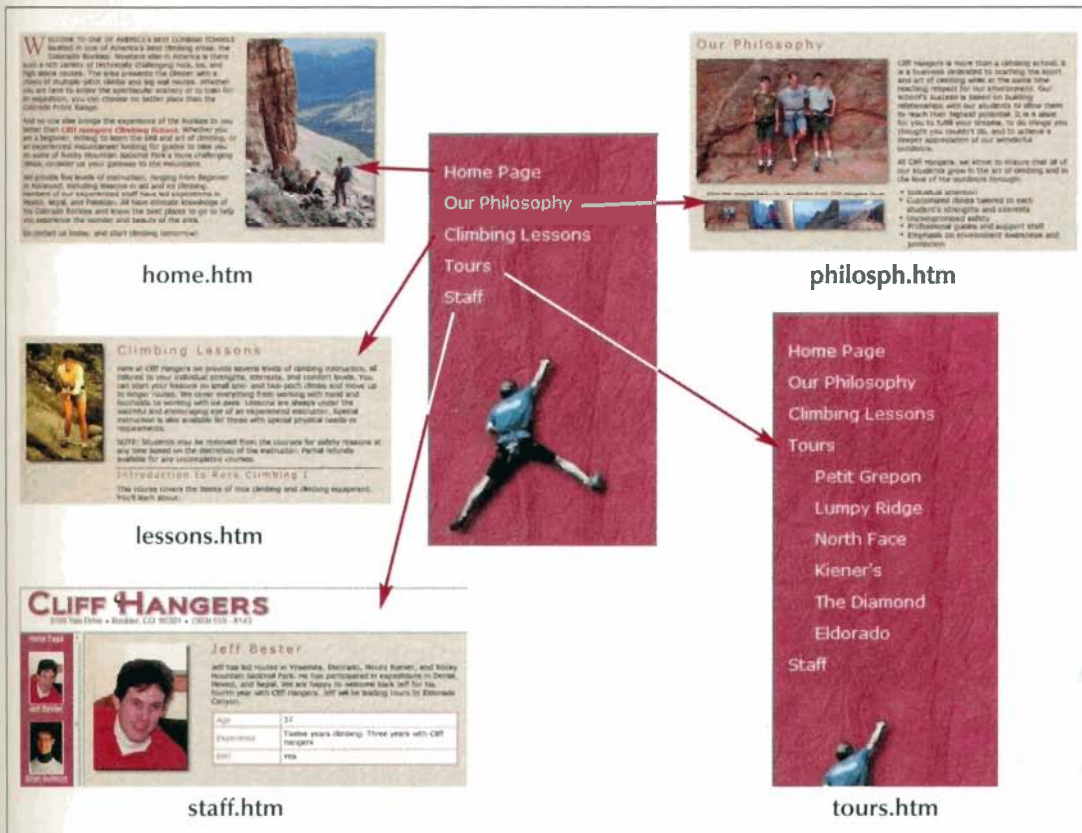
Working with Frames and Links

Now that you've created frames for the Cliff Hangers Web site, you're ready to work on formatting the links for the Web page. The links page contains five links, which point to the pages as shown in Figure 8-17:

- The Home Page link points to `home.htm`.
- The Our Philosophy link points to `philosph.htm`.
- The Climbing Lessons link points to `lessons.htm`.
- The Tours link points to `tours.htm`.
- The Staff link points to a frameset stored in the `staff.htm` file.

Links within the table of contents frame

Figure 8-17



By default, clicking a link within a frame opens the linked file inside the same frame. However, this is not the way Debbie wants each of the links to work. She wants the links to work as follows:

- The Home, Our Philosophy, and Climbing Lessons pages should appear in the lower-right frame.
- The Tours page should appear in the table of contents frame.
- The frameset from the staff.htm file should occupy the entire browser window.

To specify the location in which to open a hypertext link, you must first assign each frame a name. This is done by adding the attribute

`name="name"`

to the frame element, where name is the name assigned to the frame. Case is important in assigning names. The frame name "information" differs from the frame name "INFORMATION." Also, frame names cannot contain spaces. For the Cliff Hangers frameset, you'll name the three frames logo, links, and pages.

Reference Window | Directing a Link to a Frame

- First, assign a name to a frame by adding the name attribute `name="name"` to the `<frame>` tag, where name is the name of the frame.
- To point the target of a link to a named frame, add the following attribute to the hyper-text link:
`target="name"`
- To point all links in a document to the same target, add the following element to the head section of the document:
`<base target="name" />`

You need to name the frames in the Cliff Hanger site so that you can specify where Debbie's various pages will open when users click the links in the left frame.

To assign frame names:

- ▶ 1. Return to the `cliff.htm` file in your text editor.
- ▶ 2. Within the first `<frame />` tag, insert the following attribute:
`name="logo"`
- ▶ 3. Within the second `<frame />` tag, insert the following attribute:
`name="links"`
- ▶ 4. Within the last `<frame />` tag, insert the following attribute:
`name="pages"`

Figure 8-18 highlights the revised code in the file.

Figure 8-18

Setting the frame names

```
<frameset rows="85,*">
  <!-- Company Logo -->
  <frame src="head.htm" scrolling="no" marginheight="0" noresize="noresize" name="logo"
  <!-- Nested Frameset -->
  <frameset cols="140,*">
    <!-- List of Links -->
    <frame src="links.htm" noresize="noresize" name="links" />
    <!-- cliff hangers web Pages -->
    <frame src="home.htm" noresize="noresize" name="pages" />
  </frameset>
</frameset>
```

- ▶ 5. Save your changes to the file.

Now that you've named the frames, the next task is to specify the pages frame as the target for the Home Page, Our Philosophy, and Climbing Lessons links—so that clicking each of these links opens the corresponding file in the pages frame. In Tutorial 2, you learned how the target attribute can be used to open a hypertext link in a new browser window. You can also use the target attribute to open a linked target in a frame. To point the link to a specific frame, add the attribute

```
target="name"
```


to the `<a>` tag for the hypertext link, where *name* is the name you've assigned to a frame on your Web page. For the links to `home.htm`, `philosph.htm`, and `lesson.htm`, the *name* value is `pages` because all of these links should open within the `pages` frame of the Cliff Hangers frameset. Add these target names to the hypertext links within the `links.htm` file.

To specify the target for the hypertext links:

- ▶ 1. Open the `links.htm` file from the `tutorial.08\tutorial` folder with your text editor.
- ▶ 2. Within the `<a>` tags for the Home Page, Our Philosophy, and Climbing Lessons links, enter the following attribute, as shown in Figure 8-19:

```
target="pages"
```

Assigning a target to a link

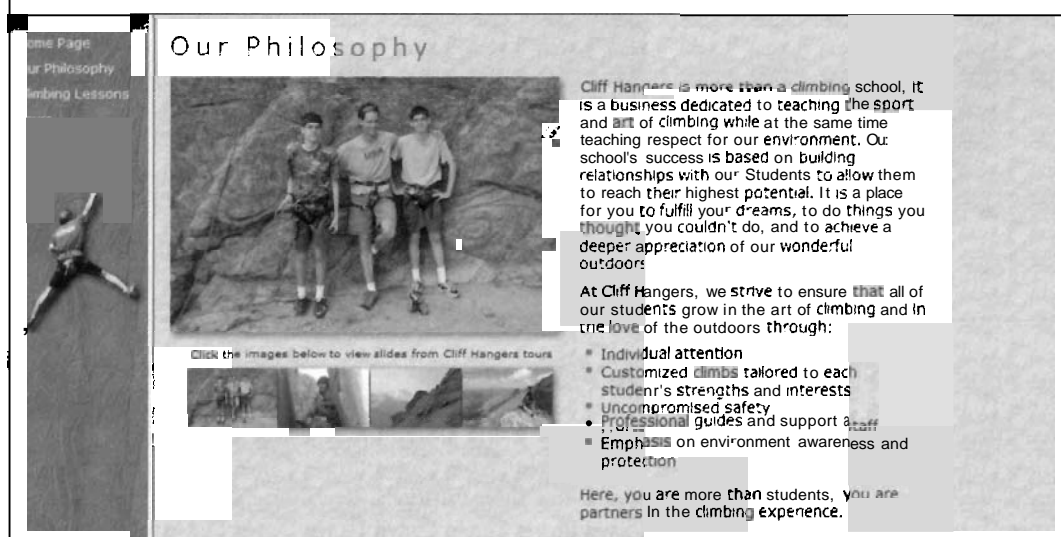
Figure 8-19

```
<ul>
<li><a href="home.htm" target="pages">Home Page</a></li>
<li><a href="philosph.htm" target="pages">Our Philosophy</a></li>
<li><a href="lessons.htm" target="pages">Climbing Lessons</a></li>
<li><a href="tours.htm">Tours</a></li>
<li><a href="staff.htm">Staff</a></li>
</ul>
```

- ▶ 3. Save your changes to the file.
- ▶ 4. Reload the `cliff.htm` file in your Web browser.
- ▶ 5. Click the **Our Philosophy** link in the links frame. Verify that the Our Philosophy page opens in the `pages` frame, as shown in Figure 8-20.

Viewing the philosophy page

Figure 8-20



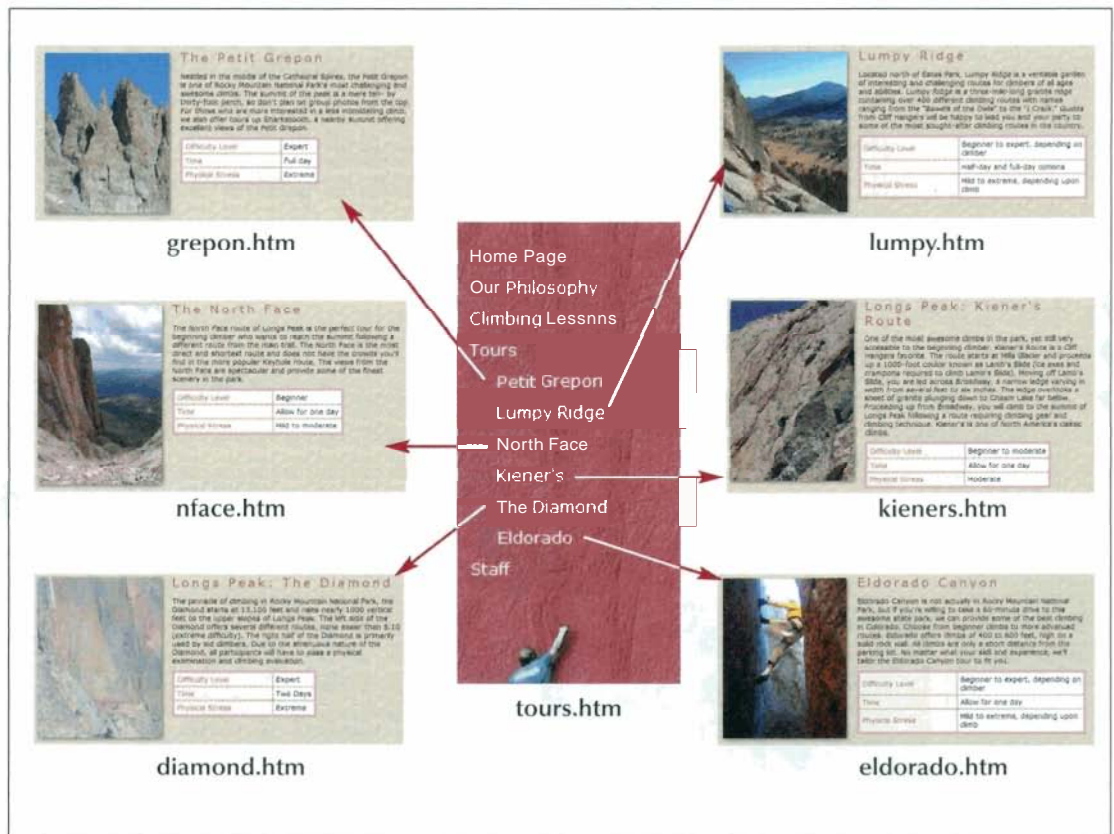
- ▶ 6. Click the links for the **Home Page** and the **Climbing Lessons** links and verify that both pages are also displayed within the `pages` frame.

Trouble? If you click one of the other links in the frame, the browser will open the file in the `links` frame. Reload or refresh the `cliff.htm` file to restore the frameset to its original appearance.

Using Reserved Target Names

The remaining two tags in the list of links point to a list of the tours offered by Cliff Hangers, stored in the tours.htm file, and to a staff information page, stored in the staff.htm file. The tours.htm file does not contain information about individual tours; instead, it is an expanded table of contents of pages on the Cliff Hangers Web site. The purpose of the tours.htm page is to replace the links.htm page when a user clicks the Tours link. The links frame will then display the table of contents shown in Figure 8-21. A user can click on an individual tour name to open a page about that tour,

Figure 8-21 Links to the tour pages



To have tours.htm appear in the links frame when a user clicks the Tours link, you can specify links (the name of the frame) as the target. However, you can also do this using reserved target names. A **reserved target name** is a special name that can be used in place of a frame name as a target. This is useful when the name of the frame is unavailable, when you want the page to appear in a new window, or when you want the page to replace the current browser window. Figure 8-22 describes the reserved target names.

Reserved target names

Figure 8-22

Reserved Target Name	Function in a Frameset
blank	Loads the target document into a new browser window
<code>_self</code>	Loads the target document into the frame containing the link
<code>-parent</code>	Loads the target document into the parent of the frame containing the link
	Loads the document into the full display area, replacing the current frameset

All reserved target names begin with the underscore character (`_`) to distinguish them from other target names. Note that reserved target names are case-sensitive, so you must enter them in lowercase letters. Debbie wants the contents of the `tours.htm` file to be displayed in the links frame. You can specify this behavior by adding the target

```
_self
```

to the hypertext link for the `tours.htm` file.

To add the `_self` reserved target name to the Tours link:

1. Return to `links.htm` in your text editor
2. Within the hypertext link for the `tours.htm` file, insert the following attribute, as shown in Figure 8-23:

```
target="_self"
```

Using the `_self` target

Figure 8-23

```
<ul>
<li><a href="home.htm" target="pages">Home Page</a></li>
<li><a href="philosph.htm" target="pages">Our Philosophy</a></li>
<li><a href="lessons.htm" target="pages">Climbing Lessons</a></li>
<li><a href="tours.htm" target="_self">Tours</a></li>
<li><a href="staff.htm">Staff</a></li>
</ul>
```

3. Save your changes to the file.
4. Reload `cliff.htm` in your Web browser and verify that when you click the Tours link, the `tours.htm` file opens in the links frame.

Next you'll work with the links in the `tours.htm` file. Debbie wants each tour page that is linked to the `tours.htm` page to appear in the pages frame when a user clicks its respective link. When a Web site contains many links that should all open in the same frame, instead of inserting the same target attributes for each link, you can instead specify the target by inserting the base element

```
<base target="name" />
```

in the head section of the document. This way, hypertext links will by default open in the target specified by name. You decide to use the base element in the `tours.htm` file, setting the default target for all hypertext links to the pages frame. The `tours.htm` file also contains a link that takes the user back to the `links.htm` file when the user clicks the Tours link again. So, when a user clicks the Tours link the first time, the browser loads the `tours.htm` file (the expanded table of contents); and when a user clicks the Tours link again, the browser returns to the `links.htm` file. You'll specify `_self` as the target for this particular link.

To modify the targets for the tours.htm file:

1. Use your text editor to open the **tours.htm** file from the tutorial.08\tutorial folder included with your Data Files.
2. Insert the following tag directly above the `</head>` closing tag:

```
<base target="pages" />
```

3. Add the attribute

```
target="_self"
```

to the hypertext link in the links.htm file. Figure 8-24 highlights the revised code in the tours.htm file.

Figure 8-24

Adding targets to the tours page

```
<base target="pages" />
</head>
<body style="background: url(wall3.jpg) repeat-y">
  <ul>
    <li><a href="home.htm">Home Page</a></li>
    <li><a href="philosph.htm">Our Philosophy</a></li>
    <li><a href="lessons.htm">Climbing Lessons</a></li>
    <li><a href="links.htm" target="_self">Tours</a></li>
  </ul>
  <ul>
    <li><a href="grepon.htm">Petit Grepon</a></li>
    <li><a href="lumpy.htm">Lumpy Ridge</a></li>
    <li><a href="nface.htm">North Face</a></li>
    <li><a href="kieners.htm">Kiener's</a></li>
    <li><a href="diamond.htm">The Diamond</a></li>
    <li><a href="eldorado.htm">Eldorado</a></li>
  </ul>
  <li><a href="staff.htm">Staff</a></li>
</ul>
```

by default, all links will open in the page frame

4. Save your changes to the file and then reload **cliff.htm** in your Web browser.
5. Verify that the Tours link works as you intended. When you click the link, the table of contents list should alternately collapse and expand.
6. Click some of the links to the individual tour pages to verify that they appear correctly in the pages frame, as shown in Figure 8-25.


Figure 8-25

Viewing the Lumpy Ridge tour page

CLIFF HANGERS

8105 Yale Drive • Boulder, CO 80301 • (303) 555-8143


- Home Page
- Our Philosophy
- Climbing Lessons
- Tours
 - Petit Grepon
 - Lumpy Ridge
 - Worth Face
 - Kiener's
 - The Diamond
 - Eldorado
- Staff



Lumpy Ridge

Located north of Estes Park, Lumpy Ridge is a veritable garden of interesting and challenging routes for climbers of all ages and abilities. Lumpy Ridge is a three-mile-long granite ridge containing over 400 different climbing routes with names ranging from the "Bowels of the Owls" to the "J Crack." Guides from Cliff Hangers will be happy to lead you and your party to some of the most sought-after climbing routes in the country.

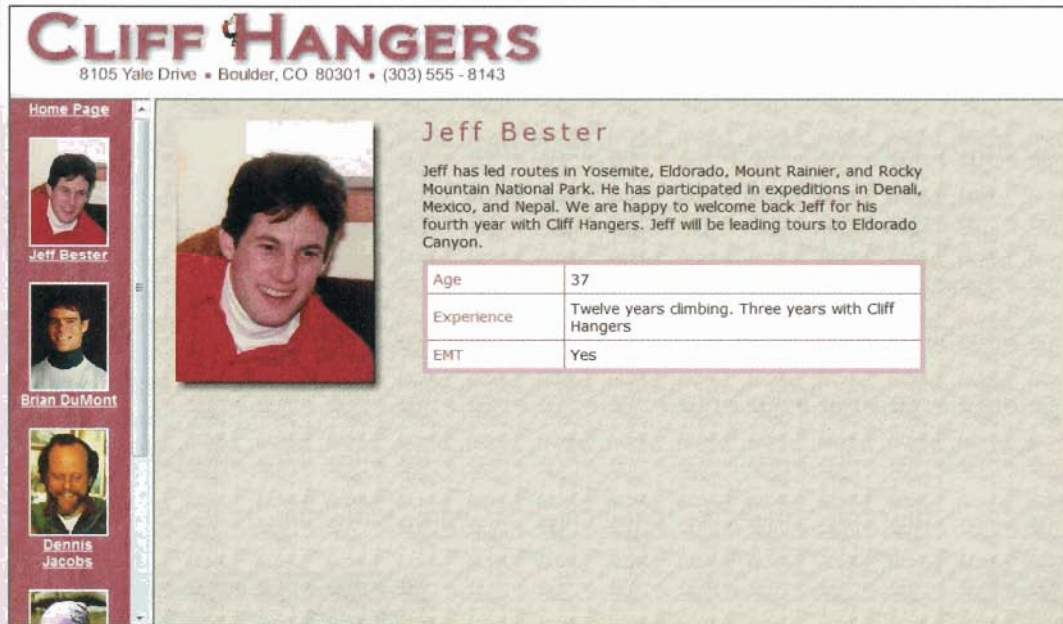
Difficulty Level	Beginner to expert, depending on climber
Time	Half-day and full-day options
Physical Stress	Mild to extreme, depending upon climb



As you can see, clicking the Tours link gives the effect that the list is expanding and contracting; but in reality, one table of contents file is simply being replaced by another.

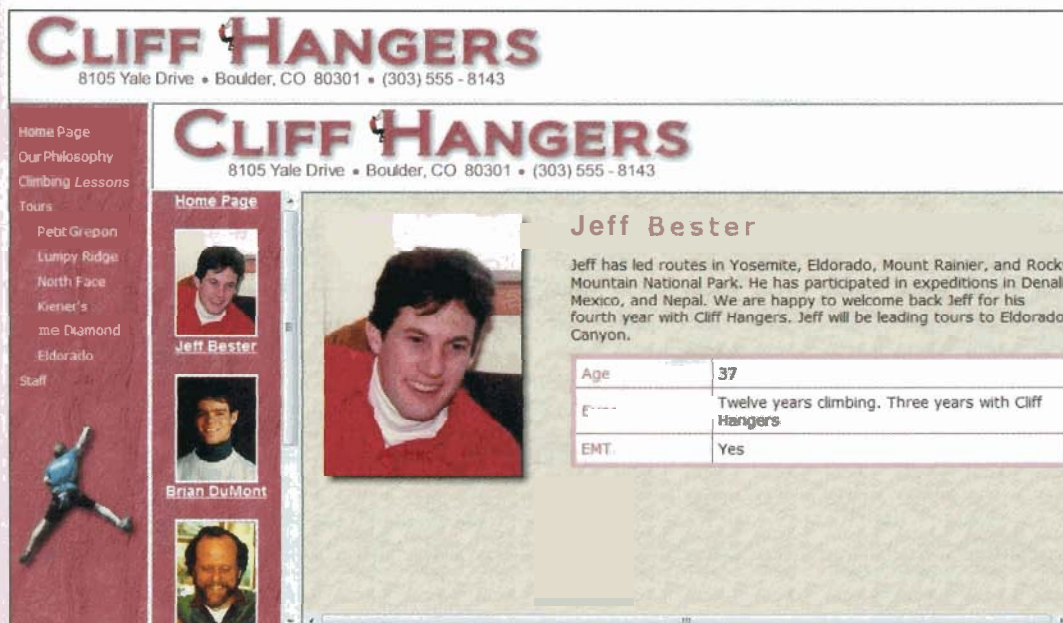
The final link you must create points to a Web page of staff biographies. Debbie asked another employee to produce the contents of this Web page, and the results are shown in Figure 8-26.

The Cliff Hangers staff page **Figure 8-26**



As you can see, this Web page also uses frames. If you specify the pages frame as the target for the staff.htm page, the result is a series of nested framesets, as shown in Figure 8-27.

Nesting one frameset within another **Figure 8-27**



This is not what Debbie wants. She wants the Staff Web page to load into the full display area, replacing the frame layout with its own layout. To target a link to the full display area, you use the `_top` reserved target name. The `_top` target is often used when one frameset is accessed from another frameset.

You should also use the `_top` target when you are linking to pages outside of your Web site. For example, if Debbie wanted to add a link to the Colorado Tourism Board Web site, she wouldn't want that Web site to appear within a frame on the Cliff Hangers Web site. Having the Tourism Board Web site appear within the Cliff Hangers frameset could easily confuse users, making it appear as if the Colorado Tourism Board is a component of the Cliff Hangers Climbing School.

Tip

In a frame layout, always have Web pages that lie outside of your Web site open in a new Window or tab to avoid making external pages appear to be part of your frameset.

To apply the `_top` target to the staff link:

- ▶ 1. Return to the **links.htm** file in your text editor.
- ▶ 2. Enter the attribute

```
target="_top"
```

to the `<a>` tag for the Staff link, as shown in Figure 8-28.

Figure 8-28

Setting the target of the Staff link

```
<ul>
<li><a href="home.htm" target="pages">Home Page</a></li>
<li><a href="philosph.htm" target="pages">our Philosophy</a></li>
<li><a href="lessons.htm" target="pages">Climbing Lessons</a></li>
<li><a href="tours.htm" target="_self">Tours</a></li>
<li><a href="staff.htm" target="_top">Staff</a></li>
</ul>
```

the **staff.htm** page will occupy the complete browser window

- ▶ 3. Save your changes to the file.
- ▶ 4. Return to the **tours.htm** file in your text editor, and repeat Step 2 to ensure that the Staff link on that page also opens in the full browser window. Save your changes to the file.
- ▶ 5. Reload **cliff.htm** in your Web browser. Verify that clicking the **Staff** link displays the full frameset for the Staff pages within the browser window.
- ▶ 6. Click the **Home Page** Link at the top of the links frame to return to the **cliff.htm** file in your browser.

Debbie has viewed all the links on the Cliff Hangers Web site and is quite satisfied with the results. However, she wonders what would happen if a user accesses her site with a browser that does not display frames. Although most browsers do display frames, she also must consider the needs of people who access the Cliff Hangers Web site with screen readers and other nonvisual browsers. If possible, she wants to accommodate browsers that don't support frames.

Using the **noframes** Element

You can use the `noframes` element to make your Web site viewable with browsers that do not support frames (known as frame-blind browsers). The `noframes` element marks a

section of your HTML file as code that browsers incapable of displaying frames can use. The `noframes` element is nested within the `frameset` element and uses the syntax

```
<html>
<head>
  <title>title</title>
</head>
<frameset>
  frames
  <noframes>
    <body>
      page content
    </body>
  </noframes>
</frameset>
</html>
```

where `page content` is the content that you want the browser to display in place of the frames. There can be only one `noframes` element in the document. When a browser that supports frames processes this code, it ignores everything within the `noframes` element and concentrates solely on the code to create the frames. When a browser that doesn't support frames processes this HTML code, it ignores the `frameset` and `frame` elements and renders whatever appears within the `<body>` tags. This way, both types of browsers are supported within a single HTML file.

Cliff Hangers has been using the nonframed Web site displayed in Figure 8-29 for several years.

Frameless version of the Cliff Hangers home page

Figure 8-29

CLIFF HANGERS

8105 Yale Drive • Boulder, CO 80301 • (303) 555 - 8143

- Home Page
- Our Philosophy
- Climbing Lessons
- Tours
 - Petit Grepon
 - Lumpy Ridge
 - North Face
 - Kiener's
 - The Diamond
 - Eldorado
- Staff

WELCOME TO ONE OF AMERICA'S best climbing schools located in one of America's best climbing areas, the Colorado Rockies. Nowhere else in America is there such a rich variety of technically challenging rock, ice, and high alpine routes. The area presents the climber with a choice of multiple-pitch climbs and big wall routes. Whether you are here to enjoy the spectacular scenery or to train for an expedition, you can choose no better place than the Colorado Front Range.

And no one else brings the experience of the Rockies to you better than **Cliff Hangers Climbing School**. Whether you are a beginner, itching to learn the skill and art of climbing, or an experienced mountaineer looking for guides to take you on some of Rocky Mountain National Park's more challenging climbs, consider us your gateway to the mountains.

We provide five levels of instruction, ranging from Beginner to Advanced, including lessons in aid and ice climbing. Members of our experienced staff have led expeditions in Mexico, Nepal, and Pakistan. All have intimate knowledge of the Colorado Rockies and know the best places to go to help you experience the wonder and beauty of the area.

So contact us today, and start climbing tomorrow!

Reference Window | Supporting Frame-Blind Browsers

- To provide content for browsers that do not support frames, add the code

```
<noframes>
<body>
  page content
</body>
</noframes>
```

to the document, where *page content* is the content that will appear on the Web page.

To display this page for frame-blind browsers, while still making your framed version available as the default, you decide to copy the HTML code from the nonframed Web page and place it within a pair of `<noframes>` tags in the `cliff.htm` file.

To insert the noframes code:

- ▶ 1. Return to the **cliff.htm** file in your text editor.
First you must create a link to the `noframes.css` style sheet, which contains the style declarations for the elements in the `noframes` version of the Web page.
- ▶ 2. Directly above the closing `</head>` tag, insert the following link to the `noframes.css` style sheet:

```
<link href="noframes.css" rel="stylesheet" type="text/css" />
```
- ▶ 3. Scroll down the file and directly after the closing `</frameset>` tag near the middle of the file, insert the following:

```
*!– Noframes version of this page –>
<noframes>

</noframes>
```
- ▶ 4. Save your changes to the file.
Now copy the body content from the `noframes.htm` file into the `cliff.htm` file.
- ▶ 5. Open the **noframes.htm** file in the `tutorial.08\tutorial.folder` included with your Data Files.
- ▶ 6. Copy the HTML code for the page content, including both the opening and the closing `<body>` tags in the selection.
- ▶ 7. Return to the **cliff.htm** file in your text editor and paste the copied code within the `noframes` element you inserted in Step 3. Figure 8-30 shows the revised code in the `cliff.htm` file.

Inserting the **noframes** version of the Cliff Hangers home page

Figure 8-30

```

<title>Cliff Hangers Climbing School</title>
<link href="noframes.css" rel="stylesheet" type="text/css" />
</head>
<frameset rows="85,*">
  <!-- Company Logo -->
  <frame src="head.htm" scrolling="no" marginheight="0" noresize="noresize" name="logo" />

  <!-- Nested Frameset -->
  <frameset cols="140,*">
    <!-- List of Links -->
    <frame src="links.htm" mesize="wsize" name="links" />

    <!-- Cliff Hangers Web Pages -->
    <frame src="home.htm" noresize="notesize" name="pages" />
  </frameset>
</frameset>
<!-- Noframes version of this page -->
<noframes>
  <body>
    <div id="head"></div>

    <div id="pagecontent">
      <div id="leftcol">
        <p>we provide five levels of instruction, ranging from Beginner to Advanced,
        including lessons in aid and ice climbing. Members of our experienced staff
        have led expeditions in Mexico, Nepal, and Pakistan. All have intimate
        knowledge of the Colorado Rockies and know the best places to go
        to help you experience the wonder and beauty of the area.</p>
        <p>So contact us today, and start climbing tomorrow!</p>
      </div>
    </div>
  </body>
</noframes>
</frameset>

```

- ▶ 8. Save your changes to the file and then reload **cliff.htm** in your Web browser. Browsers that support frames should not look any different because the **noframes** version will be rendered only by frame-blind browsers.

Of the major browsers, only Opera allows the user to disable frames to test the **noframes** element. To disable frames in Opera, click Preferences from the Tools menu to open the Preferences dialog box, click Content from the Advanced tab, and then click the Style options button. Deselect the Enable frames check box to turn off support for frames.

Tip

You can also support frame-blind browsers by creating two versions of your Web site: one using frames and the other without frames. Provide your users with an opening splash screen to let them pick which version to load.

By their nature, frames are not friendly to search engines because they don't have any page content for the search engines to index. However, there are a few things you can do to make your frames more accessible. One is to add `<meta />` tags to the head section of the document with keywords that the search engines can use in creating their search indices. However, `<meta />` tags are only a partial solution because not all search engines use them.

For a more complete solution, always include page content within a `<noframes>` element. The page content should be extensive enough to describe your site's purpose and contents, providing enough information for search engines to create a proper index for your site. Search engines also take into account that most Web sites cover multiple pages. Therefore, part of the indexing process undertaken by a search engine is to navigate through all of the links within a Web site, creating a list of important keywords as it goes. This means that you should also include any navigation links within the `<noframes>` section of your file so that the search engines will be able to see those links and act upon them.

By using `<meta />` tags and enclosing important page content within the `<noframes>` tag, you can make your site much more accessible to search engines, removing one of the drawbacks often associated with frames.

Working with Frame Borders

Some browsers support additional attributes that you can use to change border size and appearance. For example, you can remove borders from your frames to free up more space for text and images, or you can change the color of the frame borders so that they match or complement the color scheme for your Web site.

Setting the Frame Border Color

To change the color of a frame's border, many browsers support the `bordercolor` attribute. The syntax for this attribute is

```
bordercolor="color"
```

where *color* is either a color name or a hexadecimal color value. The attribute can be applied either to an entire set of frames, by applying it to the `frameset` element, or to individual frame elements within the `frameset`. The `bordercolor` attribute is not part of the official specifications for HTML and XHTML, so you should not rely on it for your frame design.

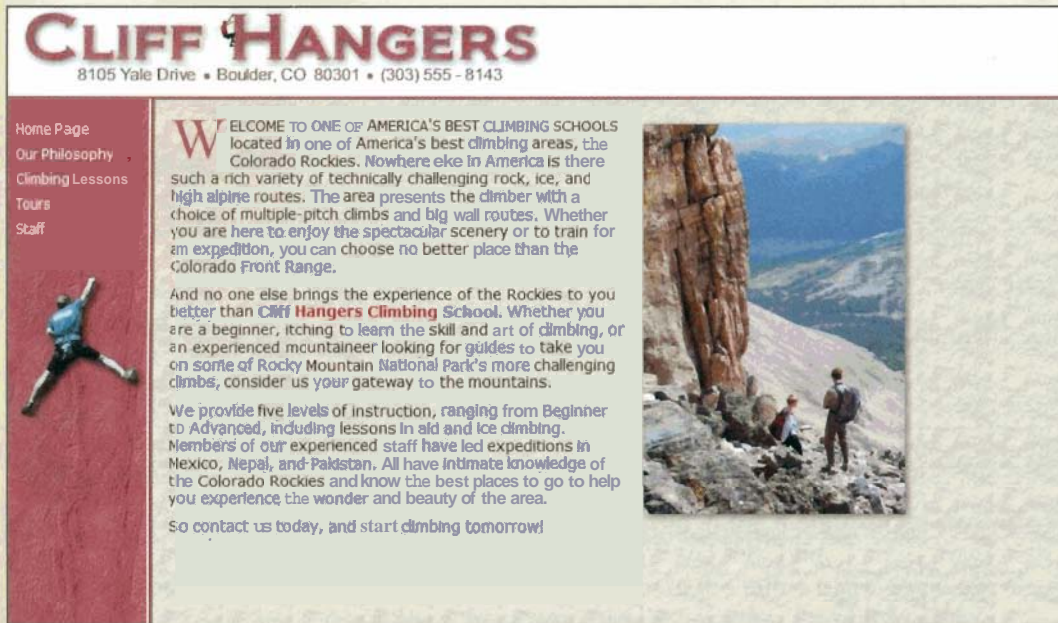
Debbie wonders how the Cliff Hangers Web site would look with brown frame borders. You'll use the `bordercolor` attribute to experiment with this.

To set the frame border color:

- ▶ 1. Return to the **cliff.htm** file.
- ▶ 2. In the opening `<frameset>` tag, enter the following attribute:
bordercolor="brown"
- ▶ 3. Save your changes to the file and then reload **cliff.htm** in your Web browser. If your Web browser supports the `bordercolor` attribute for frames and framesets, your Web site should look like Figure 8-31.

Setting the frame border color to brown

Figure 8-31



Setting the Frame Border Width

You can also remove the frame borders entirely by applying the `frameborder` attribute

```
<frame frameborder="value" />
```

to the `frame` element, where a `frameborder` value of 0 removes the frame border and a value of 1 displays the border. Different browsers respond in different ways to this attribute, and some browsers do not support the attribute at all. Other browsers require you to apply the `border` attribute

```
<frameset border="value"> ... </frameset>
```

to the `frameset` element to remove frame borders, where `value` is the size of the border in pixels. Note that the `border` attribute is applied to the `frameset` element, while the `frameborder` attribute is applied only to the `frame` element. Like `bordercolor`, the `border` attribute is not part of the specifications for HTML and is not supported by XHTML.

Hiding a Frame Border

Reference Window

- To specify whether a `frame` border is displayed, add the attribute `frameborder="value"` to the `<frame>` tag, where `value` is 0 to hide the border and 1 to display it.

Debbie decides that although the brown borders look fine, the page might look cleaner without any borders at all. To ensure compatibility with the greatest number of browsers, you'll use both the `frameborder` and the `border` attributes in your HTML code.

To remove the frame borders:

- ▶ 1. Return to the **cliff.htm** file in your Web browser.
- ▶ 2. Delete the bordercolor attribute that you added to the opening `<frameset>` tag in the previous set of steps. You don't need this attribute because you're going to remove the frame borders entirely.
- ▶ 3. Insert the attribute
border="0"
within the opening `<frameset>` tag.
- ▶ 4. Insert the attribute
frameborder="0"
within each of the three `<frame>` tags. Figure 8-32 highlights the revised code.

Figure 8-32**Removing frame borders**



```
<frameset rows="85,*" border="0">
  <!-- Company Logo -->
  <frame src="head.htm" scrolling="no" marginheight="0" noresize="noresize" name="logo" frameborder="0" />
  <!-- Nested Frameset -->
  <frameset cols="140,*">
    <!-- List of Links -->
    <frame src="links.htm" noresize="noresize" name="links" frameborder="0" />
    <!-- Cliff Hangers web Pages -->
    <frame src="home.htm" noresize="noresize" name="pages" frameborder="0" />
  </frameset>
</frameset>
```

- ▶ 5. You've finished your edits on this file. Close the **cliff.htm** file, saving your changes.
- ▶ 6. Reload **cliff.htm** in your Web browser. As shown in Figure 8-33, the borders are removed from the frames in the frame layout.

Final frame layout

CLIFF HANGERS

8105 Yale Drive • Boulder, CO 80301 • (303) 555-8143

<ul style="list-style-type: none"> Home Page Our Philosophy Climbing Lessons Tours Staff 	<p>WELCOME TO ONE OF AMERICA'S BEST CLIMBING SCHOOLS located in one of America's best climbing areas, the Colorado Rockies. Nowhere else in America is there such a rich variety of technically challenging rock, ice, and high alpine routes. The area presents the climber with a choice of multiple-pitch climbs and big wall routes. Whether you are here to enjoy the spectacular scenery or to train for an expedition, you can choose no better place than the Colorado Front Range.</p> <p>And no one else brings the experience of the Rockies to you better than Cliff Hangers Climbing School. Whether you are a beginner, itching to learn the skill and art of climbing, or an experienced mountaineer looking for guides to take you on some of Rocky Mountain National Park's more challenging climbs, consider us your gateway to the mountains.</p> <p>We provide five levels of instruction, ranging from Beginner to Advanced, including lessons in aid and ice climbing. Members of our experienced staff have led expeditions in Mexico, Nepal, and Pakistan. All have intimate knowledge of the Colorado Rockies and know the best places to go to help you experience the wonder and beauty of the area.</p> <p>So contact us today, and start climbing tomorrow!</p>	
---	--	---

By removing the borders, you've created more space for the text and images on each Web page. You've also created the impression of a seamless Web page, which some Web designers prefer in order to give the illusion of a single Web page rather than three separate ones. However, other Web designers believe that hiding frame borders can confuse as they navigate the Web site.

Creating Inline Frames

Another type of frame used on Web sites is an **inline frame** in which the frame appears not within a frameset but within the body of a Web page. Much like an inline image displays the contents of graphics file or an embedded object displays a video clip, an inline frame displays the contents of a Web page. Inline frames are created using the `iframe` element

```
<iframe src="url" width="value" height="value">
  alternate content
</iframe>
```

where *url* is the URL of the document you want displayed in the inline frame and *alternate content* is content displayed by browsers that don't support inline frames. The width and height attributes are required, and they set the size of the inline frame in pixels. For example, the following code displays the contents of the `jobs.htm` file within an inline frame that is 500 pixels wide x 200 pixels high; browsers that don't support inline frames will display a paragraph containing a link to the `jobs.htm` file:

```
<iframe src="jobs.htm" width="500" height="200">
  <p>
    View the online <a href="jobs.htm">jobs listings</a>.
  </p>
</iframe>
```

If the contents of the `jobs.htm` file cannot fit within the specified dimensions, the Web browser will automatically add the necessary horizontal and vertical scroll bars to enable the user to scroll through the contents of the file.

Inline frames support many of the same features as inline images. You can resize them, float them on the page margins, and specify the size of the margin around the frame. You can also use many of the attributes associated with frame elements. Figure 8-34 summarizes some of the attributes associated with inline frames. Note that some of the listed attributes have been deprecated by the World Wide Web Consortium (W3C). You can replace many of these attributes using CSS style sheets.

Tip

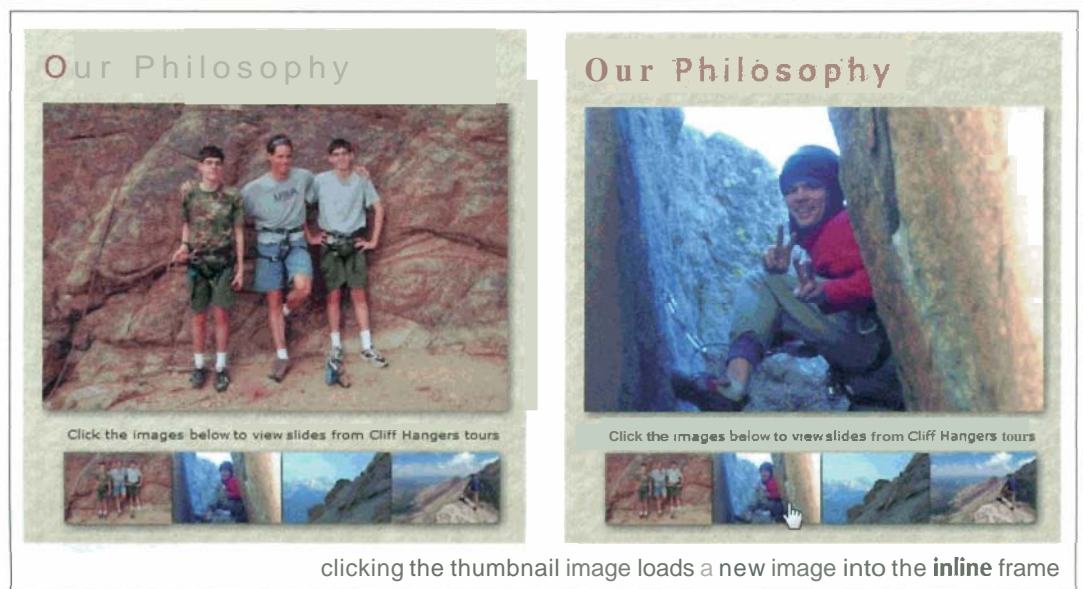
You can also use the `<object>` tag discussed in Tutorial 7 to display the contents of one Web page within another.

Figure 8-34 Attributes of inline frames

Attribute	Description
<code>align="position"</code>	Aligns the inline frame with the surrounding content (deprecated)
<code>border="value"</code>	Sets the size of the border wound the frame in pixels (deprecated)
<code>frameborder="1 0"</code>	Specifies whether to display the inline frame border (1 = display; 0 = no frame border)
<code>height="value"</code>	Sets the height of the frame in pixels
<code>hspace="value"</code>	Sets the horizontal margin around the frame in pixels (deprecated)
<code>marginheight="value"</code>	Sets the vertical margin within the frame in pixels
<code>marginwidth="value"</code>	Sets the horizontal margin within the frame in pixels
<code>name="text"</code>	Specifies the name of the frame
<code>scrolling="yes no"</code>	Specifies whether or not to display scroll bars around the frame
<code>src="url"</code>	Sets the source of the document within the inline frame
<code>style="styles"</code>	Provides inline styles to be applied to the frame
<code>vspace="value"</code>	Sets the vertical margin around the frame in pixels (deprecated)
<code>width="value"</code>	Sets the width of the frame in pixels

Debbie would like to use inline frames on the Cliff Hangers Philosophy page to create a slide show for users to view high-resolution images from Cliff Hangers tours and classes. As shown in Figure 8-35, Debbie wants to give users the option to click on thumbnail versions of the photo images that would then load the larger images onto the Web page.

Figure 8-35 Creating a slide show with inline frames



Like frames within framesets, inline frames support the name attribute. This attribute provides a way of targeting the inline frame for hypertext links. For example, if you set the name of an inline frame to docs, the hypertext link

```
View the online <a href="jobs.htm" target="docs">job listings</a>
```

will open the jobs.htm file within the docs inline frame.

Creating an Inline Frame

! Reference Window

- To create an **inline** frame within a Web page, add the code

```
<iframe src="url" width="value" height="value" >
  alternate content
</iframe>
```

where *url* is the *URL* of the document you want displayed in the inline frame and *alternate content* is content displayed by browsers that don't support inline frames. The width and height attributes **define** the size of the inline frame in pixels.

- To create a **link** to an inline frame, first add the name attribute

```
<iframe src="url" width="value" height="value" name="name" >
  alternate content
</iframe>
```

to the `<iframe>`, where *name* is the name of the inline frame. Then, add the name of the frame to the hypertext link as follows:

```
<a href="url" target="name" > text </a>
```

The linked document will then appear within the *name* inline frame.

To create the inline frame:

1. Open the **philosph.htm** file in your text editor.
2. Scroll down to the leftCol div container and locate the inline image for the philosoph1.jpg file.
7. Directly after the opening `<div id="leftCol">` tag, insert the following opening `<iframe>` tag:


```
<iframe src="philosph1.jpg" name="slide" width="380" height="260"
  scrolling="no" marginwidth="0" marginheight="0"
  frameborder="0">
```
4. Directly below the inline image for the philosoph1.jpg file, insert the closing `</iframe>` tag, as shown in Figure 8-36.

Tip

To replace an inline image with an inline frame, match the size of the frame to the size of the image and remove any internal margins and frame borders.

Creating an inline frame

Figure 8-36

frame-blind browsers will still display the inline image

```
<div id="leftCol">
  <iframe src="philosph1.jpg" name="slide" width="380" height="260"
    scrolling="no" marginwidth="0" marginheight="0" frameborder="0">
    
  </iframe>
  <p>Click the images below to view slides from Cliff Hangers tours<br />
  
</p>
```

the size and the source of the inline frame match the size and source of the inline image

5. Save your changes to the file and then reload the **cliff.htm** file in your Web browser. Click the **Our Philosophy** link from the links frame and verify that the Our Philosophy page still displays the philosoph1.jpg image.

Because you sized the inline frame to match the size of the inline image and removed the frame border and internal margins, you should not see any difference between the appearance of the inline frame and the appearance of the inline image. Note that you've given the inline image the name *slide*. Like the other frames in this tutorial, you must assign the inline frame name so that it can be a target for hypertext links in other documents.

Next you'll create an image map for the image containing the thumbnail versions of the high-resolution images. Recall from Tutorial 2 that image maps are created using the map and area elements. For the thumbnail images, each image map hot spot can be defined using a rectangular shape. Figure 8-37 shows the coordinates of the four rectangular hot spots.

Figure 8-37

Rectangular hot spots in the thumbnail images



The area elements corresponding to these four hot spots are:

```
<area shape="rect" coords="15,8,101,65" href="philosph1.jpg" />
<area shape="rect" coords="102,8,188,65" href="philosph2.jpg" />
<area shape="rect" coords="189,8,275,65" href="philosph3.jpg" />
<area shape="rect" coords="276,8,362,65" href="philosph4.jpg" />
```

To have each hot spot open the high-resolution jpeg image within the inline frame, you also must add the attribute

```
target="slide"
```

to the <area> tag because you named the inline frame with the slide target name. Debbie wants you to add the image map to the `philosph.htm` file using the hot spots listed above.

To create an image map for the thumbnail images:

1. Within the `philosph.htm` file, scroll down to the `slides.jpg` inline image and insert the following attributes:

```
usemap="#thumbmap" style="border-width: 0px"
```

2. Directly below the inline image, insert the following thumbmap image map:

```
<map name="thumbmap" id="thumbmap">
  <area shape="rect" coords="15,8,101,65" href="philosph1.jpg"
    target="slide" />
  <area shape="rect" coords="102,8,188,65" href="philosph2.jpg"
    target="slide" />
  <area shape="rect" coords="189,8,275,65" href="philosph3.jpg"
    target="slide" />
  <area shape="rect" coords="276,8,362,65" href="philosph4.jpg"
    target="slide" />
</map>
```

Figure 8-38 highlights the revised code for the file.

Adding the image map for the inline frame

Figure 8-38

```

<div id="leftcol">
  <iframe src="philosph1.jpg" name="slide" width="380" height="260"
    scrolling="no" marginwidth="0" marginheight="0" frameborder="0">

    
  </iframe>

  <p>Click the images below to view slides from cliff Hangers tours<br />
  

    <map name="thumbmap" id="thumbmap">
      <area shape="rect" coords="15,8,101,65" href="philosph1.jpg" target="slide" />
      <area shape="rect" coords="102,8,188,65" href="philosph2.jpg" target="slide" />
      <area shape="rect" coords="189,8,275,65" href="philosph3.jpg" target="slide" />
      <area shape="rect" coords="276,8,362,65" href="philosph4.jpg" target="slide" />
    </map>
</p>

```

- ▶ 3. Close the **philosph.htm** file, saving your changes.
- ▶ 4. Reload the **cliff.htm** file in your Web browser and click the Our **Philosophy** link.
- ▶ 5. Click each of the four thumbnail images and verify that the Web page displays the corresponding image in the inline frame above the row of thumbnails.
- ▶ 6. You can close any open files or programs now.

Keeping Pages Within Their Frames

InSight

In a frame-based layout, ideally you want all of your Web pages to be accessed only within the context of the frameset. However, with Web search engines such as Google and Yahoo!, this might not always be the case. For example, a user might enter your Web site not from the home page containing the frameset but from another page, thereby bypassing the frame layout you created for all the pages in your Web site. Accessing the Web page outside of its frame context can make it difficult for the user to navigate through the rest of your Web site, especially if you've placed all of your hypertext links on another page.

One way to avoid this problem is to force browsers to always access your Web site through the frameset. You can do this by running a short JavaScript program. JavaScript is a programming language developed for use with HTML and Web browsers. Use the code

```

<script type="text/javascript">
  if (top.location == self.location) top.location = "frame.htm";
</script>

```

in the head section of any document within the site, where *frame.htm* is the file containing the frameset. When the browser attempts to open the page outside of the frameset, this code will force the browser to open the *frame.htm* file instead. This code can also be used with documents that should only appear within an inline frame. In that case, *frame.htm* is the Web page containing the inline frame and the code prevents documents from appearing outside of the inline frame.

You've completed your work for Debbie and the Cliff Hangers Climbing School. Using frames, you've created an interesting presentation that is both attractive and easy to navigate. Debbie is pleased and will get back to you if she needs any additional work done.

Review | Session 8.2 Quick Check

1. When you click a link inside a frame, in what frame does the target Web page appear by default?
2. What attribute would you use to assign the name Address to a frame?
3. What attribute would you add to a link to direct it to a frame named News?
4. What attribute would you use to point a link to the document sales.htm, with the result that the sales.htm file is displayed in the entire browser window?
5. What tag would you use to direct all links in a document to the News target?
6. Describe what you would do to make your Web page readable both by browsers that support frames and by those that do not.
7. How would you set the frame border width to 5 pixels?
8. Specify the code to create an inline frame that is 300 pixels wide x 200 pixels high and contains the Web page glossary.htm.

Review | Tutorial Summary

In this tutorial, you learned how to create and use frames. In the first session, you learned how to create a frameset and arrange the frames in rows or columns within a set. You also learned how to specify which document appears within each frame. The first session concluded with a discussion of some of the frame attributes used to control the frame's appearance. The second session explored how to direct a link's target to a specific frame. In addition, you learned some of the other attributes that can be used to format a frame's appearance. The session also showed how to support browsers that don't recognize frames. The tutorial concluded by demonstrating how to create inline frames.

Key Terms

frame (Web design)
frameset
inline frame
reserved target name

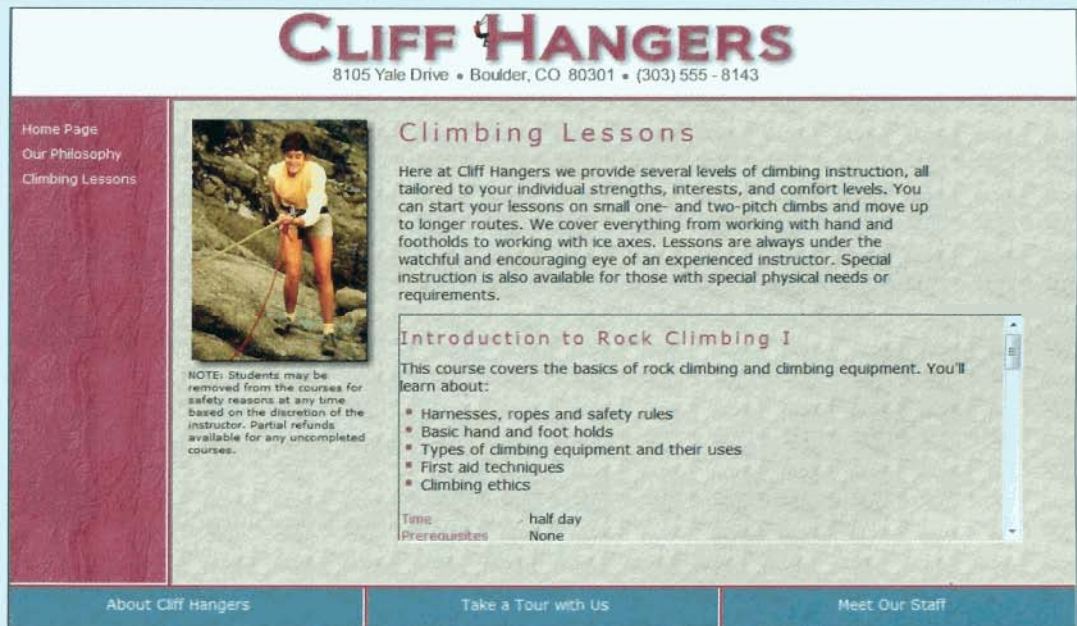
Practice | Review Assignments

Practice the skills you learned in the tutorial using the same case scenario.

Data Files needed for the Review Assignments: [lefttxt.htm](#), [lessonstxt.htm](#), [links1txt.htm](#), [links2txt.htm](#), [links3txt.htm](#), [middletxt.htm](#), [newlayouttxt.htm](#), [righttxt.htm](#), 16 HTML files, 4 external style sheets, and 25 graphic files

Debbie has asked you to revise the layout for the Cliff Hangers Web site. She would like the links to appear in separate frames so that users can always click a link for a specific page or collection of pages no matter where they are on the Web site. Figure 8-39 shows a preview of the new frame layout you'll create for her Web site.

Figure 8-39



This is a large Web site containing 53 files; however, you'll only have to create the following files in order to complete the frame layout for the site:

- [left.htm](#) a file containing a link to a list of Web pages describing Cliff Hangers
- [lessons.htm](#) a file describing the lessons offered by Cliff Hangers
- [links1.htm](#) a file containing the list of Web pages describing Cliff Hangers
- [links2.htm](#) a file containing the list of tours offered by Cliff Hangers
- [links3.htm](#) a file containing the list of Cliff Hangers staff members
- [middle.htm](#) a file containing a link to the list of tours offered by Cliff Hangers
- [newlayout.htm](#) a frame layout for the Cliff Hangers Web site
- [right.htm](#) a file containing a link to the list of Cliff Hangers staff members

Complete the following:

1. Use your text editor to open the [lefttxt.htm](#), [lessonstxt.htm](#), [links1txt.htm](#), [links2txt.htm](#), [links3txt.htm](#), [middletxt.htm](#), [newlayouttxt.htm](#), and [righttxt.htm](#) from the tutorial.08\review folder included with your Data Files. Enter *your* name and *the date* in the comment section of each file and save them as [left.htm](#), [lessons.htm](#), [links1.htm](#), [links2.htm](#), [links3.htm](#), [middle.htm](#), [newlayout.htm](#), and [right.htm](#), respectively, in the same folder.

2. Go to the **newlayout.htm** file in your text editor. This file will contain the frame layout for the Cliff Hangers Web site. Create a frameset consisting of three rows. Set the height of the first row to 85 pixels, set the height of the third row to 40 pixels, and let the second row occupy the remaining space between the first and third rows. Set the border color of the frameset to brown.
3. Within the frameset, insert a frame and nest two more framesets. Name the frame top and display the **head.htm** file within it. Set the margin height of the frame to 0 pixels. Set the first frameset to display two columns, with the first column 150 pixels wide and the second column occupying the remaining space. Set the second frameset to display three columns of equal width.
4. Within the first nested frameset, insert two frames named links and docs. Set the margin width of both frames to 0 pixels. Display the **links1.htm** file in the first frame and the **home.htm** file in the second frame.
5. Within the second nested frameset, insert three frames containing the files **left.htm**, **middle.htm**, and **right.htm**. Name the frames left, middle, and right. Set the margin width of all frames to 0 pixels.
6. Within the head section of the file, insert a link to the **noframes.css** style sheet.
7. For browsers incapable of displaying frames, have the file display page contents copied from the **noframes.htm** file. Remember to include the opening and closing `<body>` tags.
8. Close the file, saving your changes to the file.
9. Go to the **links1.htm** file in your text editor. Set the default target for all links in the file to the docs frame. Close the file, saving your changes.
10. Repeat Step 9 for the **links2.htm** and **links3.htm** files.
11. Go to the **left.htm** file in your text editor. Set the target of the hypertext link in the file to the links frame. Close the file, saving your changes.
12. Repeat Step 11 for the **middle.htm** and **right.htm** files.
13. Go to the **lessons.htm** file in your text editor. Deb wants to insert an inline frame within this file, displaying a list of lessons offered by Cliff Hangers. At the bottom of the page, insert an inline frame in which to display the **lessonlist.htm** file. Set the width of the inline frame to 600 pixels wide x 220 pixels high.
14. For browsers that do not support inline frames, have the browsers display a hypertext link pointing to the **lessonslist.htm** file.
15. Close the **lessons.htm** file, saving your changes.
16. Open the **newlayout.htm** file in your Web browser. Verify that you can view all of the Web pages from the Cliff Hangers site within the appropriate frames.
17. Go to the **Climbing Lessons** page on the Web site and verify that the list of climbing lessons appears within an inline frame with a vertical scroll bar.
18. Submit your completed files to your instructor.

Apply

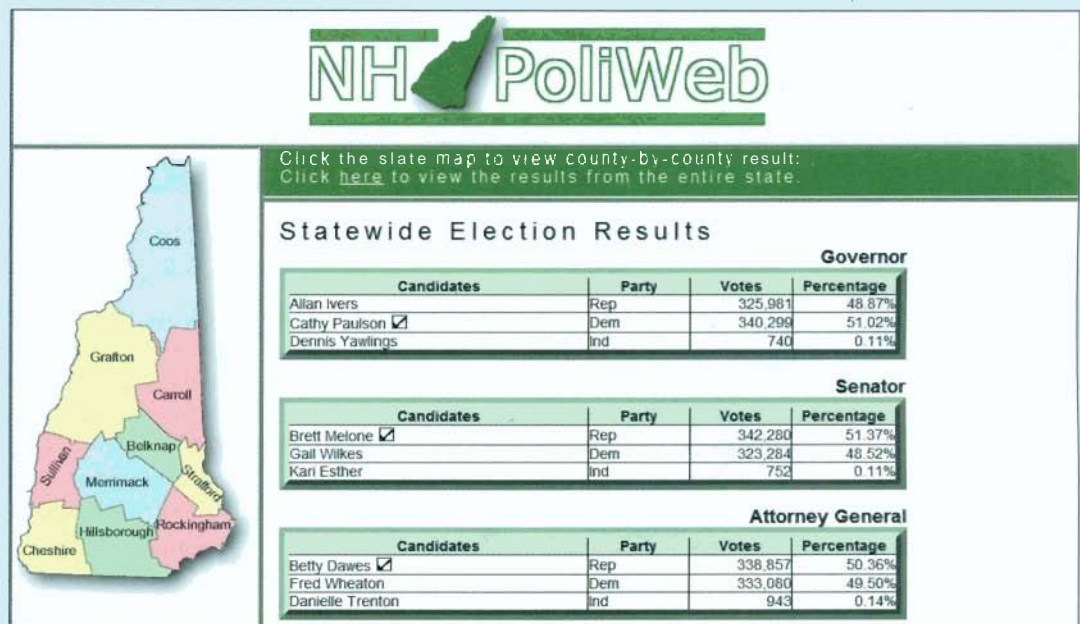
Case Problem 1

Apply your knowledge of frames to create a politics Web site.

Data Files needed for this Case Problem: [belknap.htm](#), [carroll.htm](#), [cheshire.htm](#), [coos.htm](#), [elections.htm](#), [graffton.htm](#), [hillsborough.htm](#), [maptxt.htm](#), [merrimack.htm](#), [nhmap.jpg](#), [nhplogo.jpg](#), [nhpolytxt.htm](#), [notestxt.htm](#), [poli.css](#), [rockingham.htm](#), [statewide.htm](#), [strafford.htm](#), [sullivan.htm](#), and [title.htm](#)

NH PoliWeb Kevin Unger runs a Web site in New Hampshire called NH PoliWeb, which provides articles and news on New Hampshire politics. On part of his Web site, Kevin wants to post recent election results for statewide offices broken down by county. He's decided to use a frame layout with an image map of the New Hampshire counties in one frame and the election results in another. He's asked for your help in creating the frame design. Figure 8-40 shows a preview of the Web site you'll create for Kevin.

Figure 8-40



NH PoliWeb

Click the state map to view county-by-county results.
Click [here](#) to view the results from the entire state.

Statewide Election Results

Governor			
Candidates	Party	Votes	Percentage
Allan Ivers	Rep	325,981	48.87%
Cathy Paulson <input checked="" type="checkbox"/>	Dem	340,299	51.02%
Dennis Yawlings	Ind	740	0.11%

Senator			
Candidates	Party	Votes	Percentage
Brett Melone <input checked="" type="checkbox"/>	Rep	342,280	51.37%
Gail Wilkes	Dem	323,284	48.52%
Kari Esther	Ind	752	0.11%

Attorney General			
Candidates	Party	Votes	Percentage
Betty Dawes <input checked="" type="checkbox"/>	Rep	338,857	50.36%
Fred Wheaton	Dem	333,080	49.50%
Danielle Trenton	Ind	943	0.14%

Complete the following:

- Use your text editor to open [maptxt.htm](#), [nhpolytxt.htm](#), and [notestxt.htm](#) from the `tutorial.08\case1` folder included with your Data Files. Enter your name and **the date** in the comment section of each file. Save the files as [map.htm](#), [nhpoly.htm](#), and [notes.htm](#), respectively, in the same folder.
- Go to the [nhpoly.htm](#) file in your text editor. Create a frameset that consists of two rows, with the top row set at 130 pixels and the bottom row occupying the remaining space in the browser window. Set the frame border color to green.
- Display the [title.htm](#) file in the first frame of the frameset. Set the margin width of the frame to 0 pixels and name the frame top.
- Nest a second frameset within the first frameset consisting of two columns, with the left column set at 235 pixels wide and the right column occupying the remaining space in the browser window.
- Display the [map.htm](#) file in the first frame of the nested frameset. Name the frame links and set the margin width to 0 pixels.

6. Nest a third frameset within the main frameset, consisting of two rows. Set the width of the first row to 50 pixels and the second row to whatever space is left in the browser window.
7. Display the `notes.htm` file in the first frame. Name the frame `notes` and set the margin width to 0 pixels. Name the second frame `documents` and display the `statewide.htm` file in it. Set the margin width to 0.
8. For browsers that don't support frames, display the page content copied from the `elections.htm` file.
9. Save your changes to the `nhpoly.htm` file.
10. Return to the `map.htm` file in your text editor. Set the default target of all hypertext links in the file to the `documents` frame. Save your changes to the file.
11. Return to the `notes.htm` file in your text editor. Set the target of the hypertext link in the file to the `documents` frame. Save your changes to the file.
12. Open `nhpoly.htm` in your Web browser. Verify that the frame layout resembles that shown in Figure 8-40. Also verify that all the links open in the `documents` frame.
13. Submit your completed files to your instructor.

Apply

| Case Problem 2

Apply your knowledge of frames to create *inline* frames for photos on a realty Web site.

Data Files needed for this Case Problem: `back.jpg`, `brlogo.jpg`, `browyer.css`, `img01.jpg` - `img13.jpg`, `120481.jpg`, `listingtxt.htm`, and `pback.jpg`

Browyer Realty Linda Browyer is the owner of Browyer Realty, a real estate company in Owatonna, Minnesota. She's asked you to help her design a Web page for her current listings. Linda envisions a Web page that displays basic information about a listing, including the owner's description. She would like to have several photos of the listing on the page; but rather than cluttering up the layout with several images, she would like users to be able to view different images by clicking a link on the page. Linda wants the images to open within the listing page, not on a separate Web page. Figure 8-41 shows a preview of the page you'll create for Linda.

Figure 8-41

home page	residential	business	properties	rentals	appraisals	contact us
---------------------------	-----------------------------	--------------------------	----------------------------	-------------------------	----------------------------	----------------------------





Listing 20481 414 Mandel Road Owatonna, MN 55060	LP \$528,500
	SqFt 3,300
	Bdrm 3
	Bath 2 1/2

Paradise found! This custom-built brand new home sits proudly on a 6.8-acre high wooded site overlooking a 300-acre nature conservancy. The setting is exceptional, and the home is every bit as exciting! A bright, open layout is enhanced by vaulted ceilings, hardwood and tumbled, ceramic flooring, custom maple cabinetry, upgraded fixtures, numerous windows, and incredible views.

- [Front View](#)
- [Rear View](#)
- [Side View](#)
- [Dining Room](#)
- [Kitchen](#)
- [Living Room](#)
- [Bedroom 1](#)
- [Bedroom 2](#)
- [Bedroom 3](#)
- [Basement](#)
- [Storage Bldg](#)
- [Laundry Room](#)
- [View](#)



There is much more. The property includes a 40x54 storage building - perfect for a large boat and machinery. An exposed walkout on lower level leads down to a beautiful wooded area.

An extra bathroom, bedroom, and family room can be added to the unfinished basement for more living space.

More Details	Map	Request a Showing	Other Listings
------------------------------	---------------------	-----------------------------------	--------------------------------

Complete the following:

- Use your text editor to open **listingtxt.htm** from the tutorial.08\case2 folder included with your Data Files. Enter **your name** and **the date** in the comment section of the file and save it as **listing.htm**.
- Locate the inline image for the **img01.jpg** file (it's floated off the left side of the second paragraph). Use this image as the alternate content for an inline frame, enclosing the image within an inline frame with the following attributes:
 - The source of the frame is the **img01.jpg** file.
 - The name of the frame is **slide**.
 - The frame is 300 pixels wide and 225 pixels high.
 - The frame's internal margin width and height are 0 pixels.
 - Do not display scroll bars around the frame.
- Insert a comment above the floating frame indicating its purpose on the Web page.
- Change each of the 13 entries in the list of photos to a link. Direct the first entry to **img01.jpg**, the second entry to **img02.jpg**, and so forth.
- Direct the 13 links you created in the previous step to the inline frame (named **slide** in Step 2).
- Save your changes to the file.
- Using your Web browser, open **listing.htm**. Verify that each link displays a different photo on the Web page and that the rest of the page remains unchan
- Submit your completed files to your instructor.

Challenge | Case Problem 3

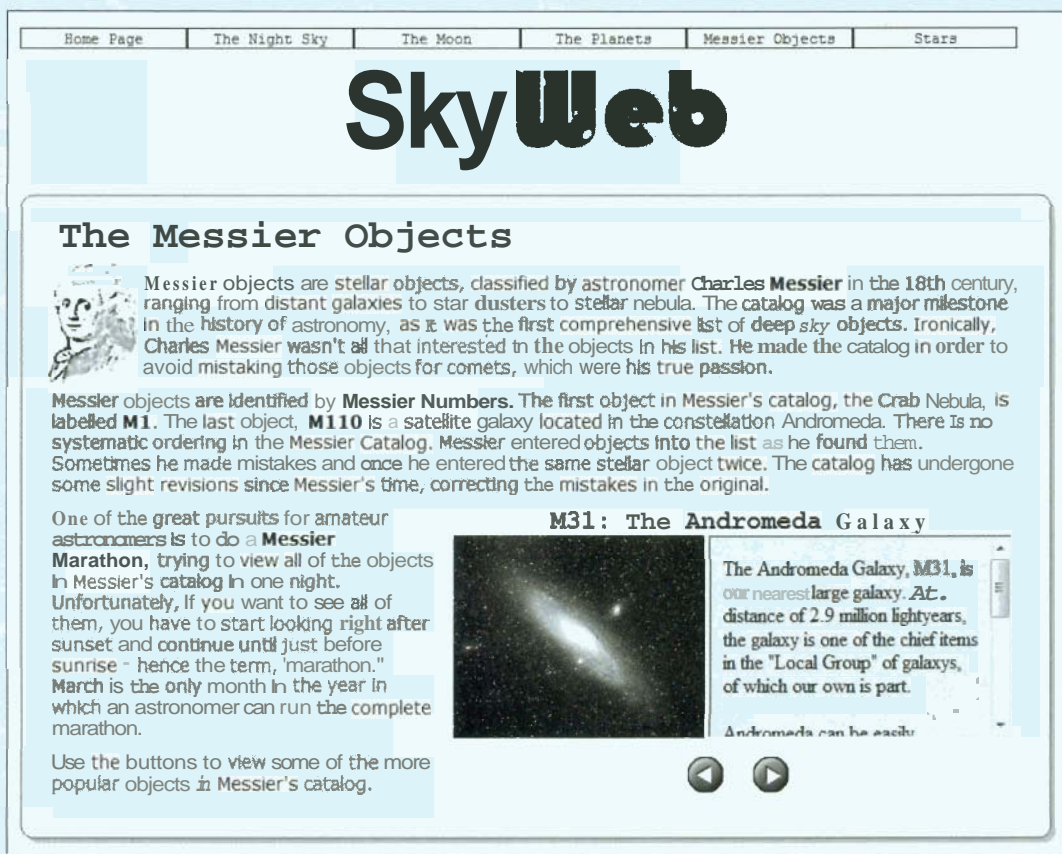
Explore how to nest inline frames to create an interactive slide show for an astronomy Web site.

Data Files needed for this Case Problem: messtxt.htm, mxxtxt.htm, 9 HTML files, 2 external style sheets, and 22 graphic files

SkyWeb Astronomy Dr. Andrew Weiss of Central Ohio University maintains an astronomy page called SkyWeb for his students. On his Web site, he discusses many aspects of astronomy and observing. One of the pages he wants your help with involves the Messier catalog, which is a list of deep sky objects of particular interest to astronomers and amateur observers.

Dr. Weiss wants his page to contain a slide show of various Messier objects, displaying both a photo of the object and a text box describing the object's history and features. He wants his users to be able to click a forward or backward button to move through the slide show, and he wants the rest of the Web page to remain unchanged as users view the presentation. Figure 8-42 shows a preview of the page that Dr. Weiss wants to create.

Figure 8-42



To create a presentation like this, you can nest one inline frame inside of another. Dr. Weiss has created the text you need for the Web site. Your job is to create the frames needed to complete the Web page.

Complete the following:

1. Using your text editor, open **mxxtxt.htm** from the tutorial.08\case3 folder included with your Data Files. This file will act as a model for pages that display descriptions and images of the Messier objects. You'll start by using this file to create the page for Messier object M01. Enter *your name* and *the date* in the comment section of this file and save the file as **m01.htm** in the same folder.
2. Replace the text of the page title and the h1 heading with M01: The Crab Nebula.
3. Replace the inline image mxx.jpg with the image file **m01.jpg**.
4. Replace the inline image mxxdesc.jpg with an inline frame with the same id name and dimensions. Set the source of the inline frame to the **m01desc.htm** file.
5. Copy the page content (excluding the opening and closing <body> tags) from the **m01desc.htm** file and paste that content within the inline frame to provide alternate text for browsers that don't support inline frames.
6. Point the hypertext link for the Previous button to the file **m57.htm**. (You'll create this file shortly.)
7. Point the hypertext link for the Next button to the file **m13.htm**. (This is another file you'll create shortly.)

EXPLORE

8. Close the file, saving your changes.
9. Using your work on the m01.htm file as a guide, use your text editor with the **mxxtxt.htm** file to create similar Web pages for the other eight Messier objects. Save the files as **m13.htm**, **m16.htm**, **m20.htm**, **m27.htm**, **m31.htm**, **m42.htm**, **m51.htm**, and **m57.htm**. Be sure to enter *your name* and *the date* in the comment section of each file. The titles for these pages are:
 - M13: Hercules Globular Cluster
 - M16: The Eagle Nebula
 - M20: The Trifid Nebula
 - M27: The Dumbbell Nebula
 - M31: The Andromeda Galaxy
 - M42: The Orion Nebula
 - M51: The Whirlpool Galaxy
 - M57: The Ring Nebula

The inline frame for each page should point to the file containing descriptive text on the Messier object. For example, the floating frame for the m13.htm file should display the m13desc.htm file, and so forth.

The Previous and Next buttons on each page should point to the previous and next Messier object files. For example, the buttons in m27.htm should point to m20.htm and m31.htm. The Next button for m57.htm should point to m01.htm. Save your changes to all the files, and then close them.

10. Use your text editor to open the **messtxt.htm** file. Enter *your name* and *the date* in the comment section of the file. Save the file as **messier.htm**.
11. Scroll down to the div container with the slide show id. Within the id, insert an inline frame with the following properties:
 - Set the source of the frame to the **m01.htm** file.
 - Set the frame dimensions to 460 pixels wide x 240 pixels high.
 - Set the internal margins to 0 pixels.
 - Set the width of the frame border to 0 pixels.
 - For browsers that don't display inline frames, display a text message indicating that they need inline frames to view the slide show and include a hypertext link to the **m01.htm** file.

EXPLORE

12. Save your changes to the file, and then open **messier.htm** in your Web browser. Click the Previous and Next buttons and verify that you can navigate through the list of Messier objects without disturbing the rest of the Web page. Verify that you can use the scroll bars around the description box to view descriptions of each object.

EXPLORE

13. Return to the **m01.htm** file in your text editor. Add code to the head section of the document to force the file to always appear within the inline frame of the **messier.htm** file.

14. Repeat Step 13 for **m13.htm**, **m16.htm**, **m20.htm**, **m27.htm**, **m31.htm**, **m42.htm**, **m51.htm**, and **m57.htm**.

EXPLORE

15. Attempt to open the **m01.htm** file in your Web browser. Verify that when you attempt to load the file, the browser automatically opens the **messier.htm** file (with the **m01.htm** file showing) instead, preventing users from seeing the **m01.htm** file outside the contents of the rest of the Web site.

16. Submit your completed files to your instructor.

Create

Case Problem 4

Test your knowledge of frames by creating a frame layout for a Shakespeare play.

Data Files needed for this Case Problem: **tempa1s1txt.htm**, **tempa1s2txt.htm**, **tempa2s1txt.htm**, **tempa2s2txt.htm**, **tempa3s1txt.htm**, **tempa3s2txt.htm**, **tempa3s3txt.htm**, **tempa4s1txt.htm**, **tempa5s1txt.htm**, and **tempest.jpg**

Mansfield Classic Theatre Steve Karls, the director of Mansfield Classic Theatre in Mansfield, Ohio, has come back to you for help on his Web site listing the great plays of classic theatre. He has decided to place the entire text of Shakespeare's *The Tempest* on his Web site. He would like to use a frame layout, with the dialog from the scenes displayed in one frame and a list of links to each scene in the play displayed in another frame. He wants a third frame that displays the logo for the company's production of *The Tempest* and a fourth frame that contains links to sites on the Web containing commentary on William Shakespeare and *The Tempest*. He has already created the HTML files for nine scenes from the play and has created a graphics file containing the logo. He needs your help in creating the frame layout.

Complete the following:

1. Open the **tempa1s1txt.htm** through **tempa5s1txt.htm** files from the tutorial.08\case4 folder in your text editor. Within each file, insert a comment section containing **your name** and **the date**. Save the files as **tempa1s1.htm** through **tempa5s1.htm**, respectively, in the same folder.
2. You are free to design the pages with any styles or content you think will enhance the site. Save any styles in an external style sheet named **ws.css** in the tutorial.08\case4 folder.
3. Use your text editor to create an HTML file named **tempest.htm** that will contain the frame layout for the Web site. Save the file in the tutorial.08\case4 folder included with your Data Files. Enter **your name** and **the date** in a comment section of the file. Include any other comments you think will aptly document the purpose and content of the file.
4. Use your text editor to create an HTML file named **scenelist.htm** that will contain a list of links to the nine scenes from the five acts of *The Tempest*. Save the file in the tutorial.08\case4 folder. Enter **your name** and **the date** in a comment section of the file.

5. Use your text editor to create an HTML file named **weblinks.htm** that will contain a list of links to five sites you locate on the Web containing commentary or articles on The Tempest or Shakespeare. Save the file in the tutorial.08\case4 folder. Enter **your name** and **the date** in a comment section of the file.
6. In the **tempest.htm** file, create a frameset layout containing the following four frames:
 - A frame displaying the dialog from a scene in the play
 - A frame displaying the **scenelist.htm** file
 - A frame displaying the logo for the production of The Tempest (use the file **tempest.jpg**)
 - A frame containing the **weblinks.htm** file
7. The layout of the frameset is up to you, but it should be designed so that links to each scene from the play open in the frame displaying the scene dialogue, and links to external Web sites open in the entire browser window, replacing the frameset.
8. For sites that do not support frames, have them display a Web page with the name of the play in an h1 heading and the text "Read an online version of Shakespeare's The Tempest from the Mansfield Classic Theatre."
9. Add JavaScript code to the head section of each page on the Web site so that if a user attempts to open the file in a browser, the browser will load the entire frameset from **tempest.htm**.
10. Open **tempest.htm** in your Web browser and verify that all of the pages are readable within the frame layout and all of the hypertext links open in the correct frame or browser window.
11. Open the individual files in your Web browser and verify that the frameset contained within the **tempest.htm** file opens instead.
12. Submit your completed files to your instructor.

EXPLORE

EXPLORE

Review

Quick Check Answers

Session 8.1

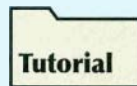
1. A frame is a section of a browser window capable of displaying the contents of an entire Web page. Frames do not require the same information (such as a list of links) to be repeated on multiple pages of a Web site. They also enable a Web designer to update content in one place in order to affect an entire Web site.
2. Because there is no page body in a frame document. The frame document displays the content of other pages.
3. `<frameset rows="200,50%,*"> ... </frameset>`
4. `<frame src="home.htm" />`
5. `<frame src="home.htm" scrolling="no" />`
6. `<frame src="home.htm" marginheight="3" />`
7. 3 pixels
8. `<frame src="home.htm" noresize="noresize" />`

Session 8.2

1. The frame containing the link
2. `name="Address"`
3. `target="News"`
4. `target=""-top"`

5. Place the tag `<base target="News" />` in the head element of the document.
6. Create a section starting with the `<noframes>` tag. After the `<noframes>` tag, enter a `<body>` tag to identify the text and images you want frame-blind browsers to display. Complete this section with a `</body>` tag followed by a `</noframes>` tag.
7. `<frameset border="5">`
8. `<iframe src="glossary.htm" width="300" height="200"></iframe>`

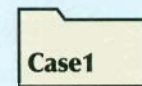
Ending Data Files



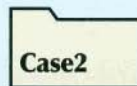
cliff.htm
links.htm
philosph.htm
tours.htm
+ 17 HTML files
+ 3 style sheets
+ 29 graphic files



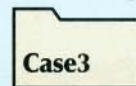
left.htm
lessons.htm
links1.htm
links2.htm
links3.htm
middle.htm
newlayout.htm
right.htm
+ 16 HTML files
+ 4 style sheets
+ 25 graphic files



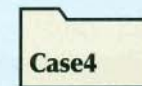
map.htm
nhpoly.htm
notes.htm
poli.css
+ 13 HTML files
+ 2 graphic files



browyer.css
listing.htm
+ 17 graphic files



messier.htm
+ 9 HTML files
+ 2 style sheets
+ 21 graphic files



scenelist.htm
tempal s1.htm - tempa5s1.htm
tempest.htm
tempest.jpg
weblinks.htm
ws.css