Frames

The Web page elements known as *frames* are both alluring and confusing. They're alluring because they can display multiple Web pages in a single browser window—one independent Web page per frame. Clicking a link may change the page in one frame, while leaving the contents of all the other frames untouched.

Frames offer an easy way to compartmentalize different elements within a single browser window. For instance, you can create separate pages for navigation, banners, and articles. Each can appear in its own frame, with its own scroll bars (see Figure C-1).

At the same time, frames can be confusing to build, since they require a multitude of Web pages—including a special master page called a *frameset*—in order to work. People who create Web pages by typing pure HTML code into a text editor soon discover that building frames-based Web sites can be a frustrating exercise in file management. Dreamweaver, on the other hand, reduces much of this complexity by providing special Frames tools in the Insert bar's Frames tab and letting you preview exactly how the finished frames will look and work.

The Frame Page

What your Web page visitor cares about is what's *in* the frames: the text and graphics. But for you, the biggest challenge is creating the special Web page—the *frameset* page—that gives the frames their structure. The frameset page itself usually doesn't contain text or graphics; it just describes the number, size, and placement of the frames.

This page tells a browser which Web page should load into each frame, whether the frame has borders or scroll bars, and whether the visitor is allowed to resize the frame by dragging its border.

Figure C-1:
Frames let you keep one or more elements in place—the banner and navigation bars shown here at www.mnh.si.edu/africanvoices/, for example—while other contents of the Web page change. This way, the banner and navigation bar remain visible in one frame, even as your reader scrolls to read a long page full of text or even reloads the page in another frame.
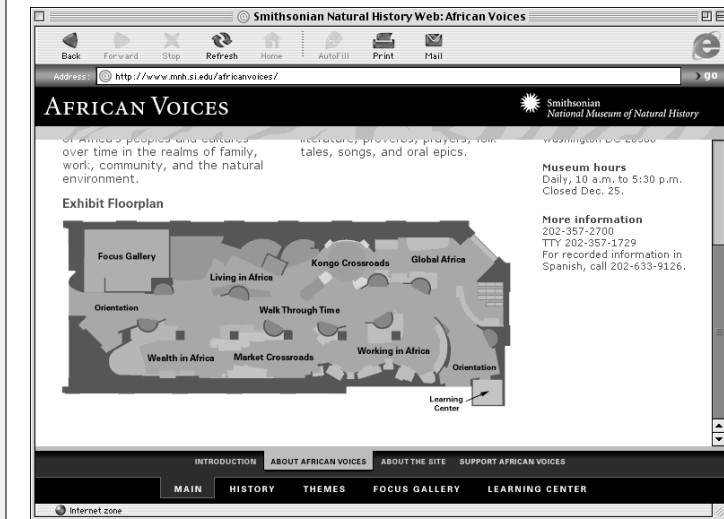
Note: You may have heard of another frame technology called *iframes*. The <iframe> tag lets you embed one Web page *within* another Web page. This way, you avoid having to use a frameset page, while preserving the main benefits of frames.

Unfortunately, although the latest browsers can handle iframes, Dreamweaver doesn't provide any WYSI-WYG tools for adding them to a page. Of course, if your HTML chops are sharp, you can jump into the document's Code view and write the <iframe> tags yourself. See the chapter "Under the Hood: HTML" for more on working with raw HTML code.

For a gentle introduction to iframes, check out this Web page: *http://hotwired.lycos.com/webmonkey/96/37/index2a.html?tw=authoring*.

The frameset page accomplishes all this with the help of two HTML tags: the <frameset> and <frame> tags. A <frameset> tag provides the superstructure of the layout: the number and size of frame rows and columns, as well as the overall border properties of all of the frames. Nested inside the <frameset> tag, a <frame> tag identifies the specifics for each frame: which page loads into the frame and what visual elements—such as scroll bars—appear within the frame.

When your visitor's Web browser loads a Web page that contains frames, it first loads the frameset page and determines the number, size, and appearance of the frames, as described in the frameset. It then draws each of the frames in the browser window, and, finally, it downloads the Web pages that appear in each frame.

UP TO SPEED

When Frames Aren't the Best Solution

Frames are useful for banner logos, navigation bars, and so on. But if you look around, you'll notice that not many big-time Web sites use them. The reason: frames have serious drawbacks.

First, bookmarks and favorites don't always work with frames. When you click a link inside a frame, a new page loads inside it; if you click a link on that page, yet another page will load. While it looks as if you're on a different page, the URL in the Address bar remains unchanged. That's because a Web browser uses the address of the frameset page.

In other words, suppose you follow several links within a single frame and then use your browser's Add Bookmark or Add to Favorites command. Later, when you select the bookmark or favorite, you'll see the frameset page and the original pages inside it—you won't see the page you wound up on.

Printing a Web page with frames can be tricky, too. Since a frames-based page is composed of multiple Web pages, the browser doesn't know which page you want to print. Different browsers handle this dilemma differently, much to the confusion of novice Web surfers who don't understand the frames concept. For example, if you're using the Mac version of Internet Explorer 5 to view the bottom page in Figure C-2, and you click one of the navigation buttons in the top frame, Internet Explorer thinks you've selected that frame. If you then choose File → Print, you'll print only that top frame—a useless row of buttons!

Still, used in moderation and in good taste (see Figure C-2), frames can be an excellent addition to your bag of Web tricks. Small sites, where users aren't likely to print or bookmark the pages, can make good use of frames. And you needn't use frames everywhere on a site. You can effectively create small presentations within a site—such as an online portfolio—that benefit creatively from frames.

Tip: Since a frameset page is just an empty structure, you must also create Web pages for each frame you wish to display. So, if you add three frames to a page, you're actually creating *four* different Web pages: the frameset page, plus a page for each of the three frames. Because frames create more Web site files for you to manage, you may save yourself some headaches by keeping the number of frames in your site to a minimum.
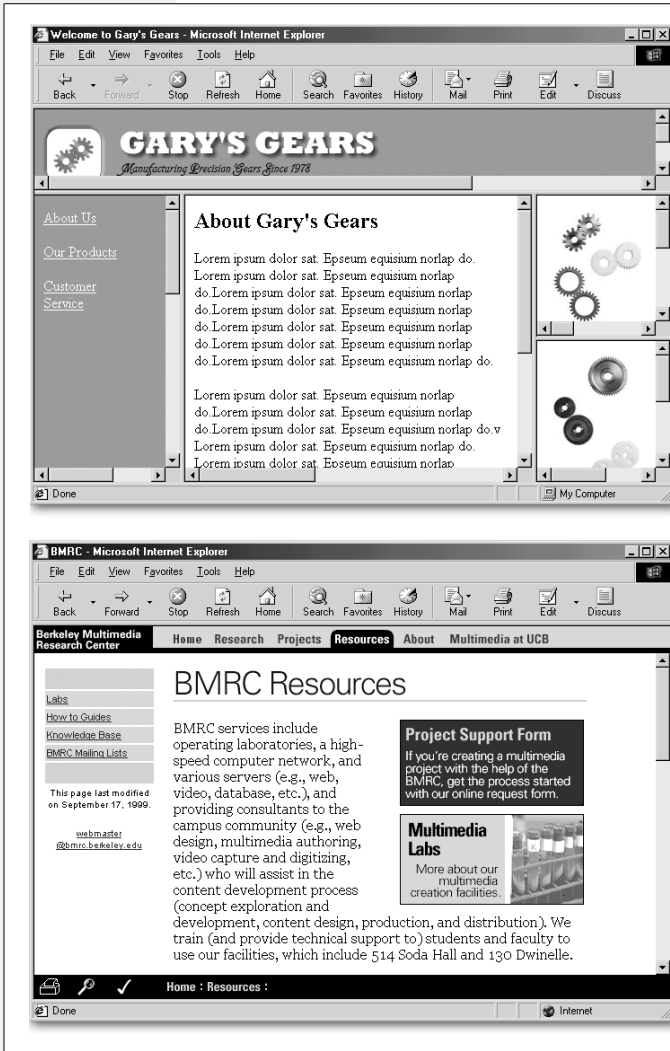

Figure C-2:
Frames can be obvious and ugly, or subtle and effective.

Top: This fictional Web page has five frames. Notice the thick border between the frames and the unnecessary scroll bars that appear in the banner and sidebar.

Bottom: This page (http://bmrc.berkeley. edu/resources/) has three frames, but since the borders are turned off, the frames merge into a unified presentation. Only a single scroll bar appears in the content area (middle frame) of the page. This is your only clue that this page uses frames. In this example, the advantage of using frames is that the site logo and navigation buttons (top frame) and the site tools (bottom frame) always remain visible, even if you scroll to read the text contained in the middle frame.

Creating Frames

Before you begin creating frames, think about how they might best serve your Web site's structure. For instance, if you want a banner with the Web site's logo or name to appear at the top of each page, you could create a frame at the top to hold

it. Or, to help your visitors get around, you might include a navigation bar in a frame on the left side of the page consisting of a list of links to the site's main sections.

To create frames:

1. **Open or create a Web page.**

   This may be a new, blank page or a page you've already created. This is the page you want to appear *within* a frame—for example, a page with a banner or a row of navigation buttons. Next, you'll create a frameset page around the current page.

   This may seem backward—you'd think you'd *start* with the frameset and then put pages into each frame. But you'll quickly get used to Dreamweaver's ways.

2. **Choose View → Visual Aids → Frame Borders.**

   You can also turn on the Frame Borders from the View Options menu in the document toolbar, as shown in Figure C-3. A thick border appears around the edges of the document window, indicating that you're now working with frames.
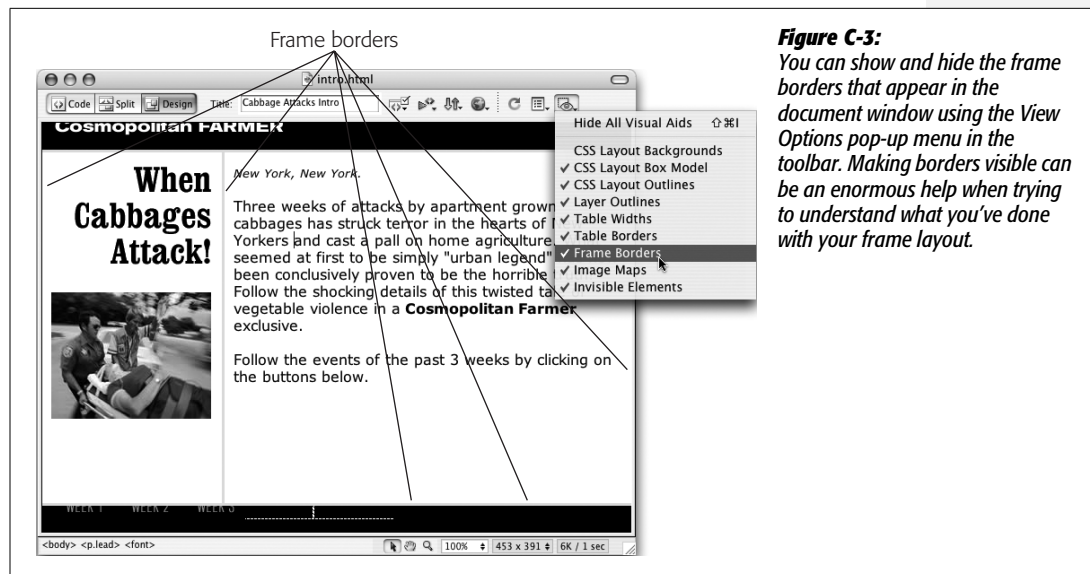

Figure C-3:
You can show and hide the frame borders that appear in the document window using the View Options pop-up menu in the toolbar. Making borders visible can be an enormous help when trying to understand what you've done with your frame layout.

3. **Create your frames within the window.**

   You can do so in any of three ways.

   First, you can drag one of the frame borders that now sit at the edges of the document window (Figure C-4). To create a frame at the left edge of your page, for example, drag the left border inward toward the page center. To add a frame on top, drag the top border down.

Tip: You can create four frames at once—at the top, bottom, and both sides of the current page—by dragging one of the border corners.
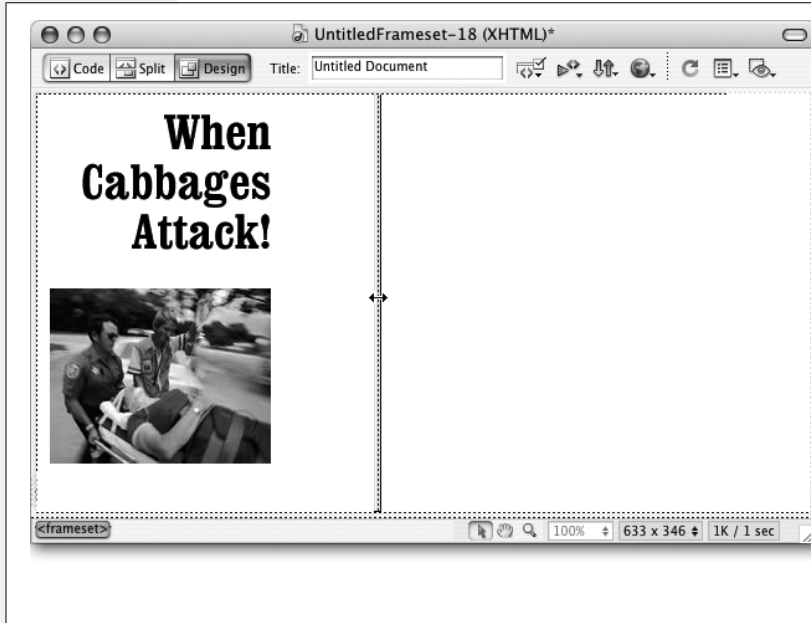

Figure C-4:
Dragging one of the frame borders around the outer edge of a document is a quick way to create frames. When the cursor is correctly positioned to begin dragging, it changes shape (as shown here). To create additional frames within the page, Alt-drag (Option-drag) one of the inner frame borders. As you might have guessed, you can resize your frames by simply dragging the borders. But for greater precision, and to avoid some potential problems, see "Frame Size" on page 13.

Second, you can choose Modify → Frameset → Split Frame Left, Right, Up, or Down. This command may seem confusing at first, but it's worth learning if you want to make more complicated frame designs such as nested frames (page 7). Just remember to make your choice based upon where you want the current page to end up. If you want the *current* page to appear in the left frame, choose Left. If you'd like it to appear at the bottom, choose Down.

Finally, you may prefer to use one of Dreamweaver's one-click, canned frame designs. These options appear on the Layout tab of the Insert bar, as shown in Figure C-5. (You can also get to them from the Insert menu; choose Insert → HTML → Frames. The submenu lists the framesets available from the Frames tab, plus four other options: Frameset, Frame, Floating Frame, and NoFrames. These last four choices, are available only when you're working in Code view. To add NoFrames content while working in Design view, see the box "Don't Leave Anyone Out" on page 9.)
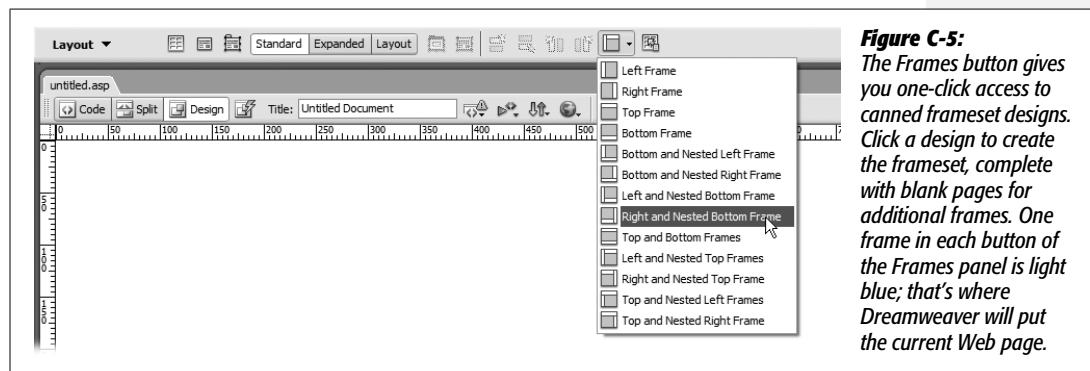
When you finish splitting or dragging, borders appear around the frames you've just created. Behind the scenes, some strange things have just happened. First, Dreamweaver has created a frameset page—a new, untitled Web page that describes how a Web browser should draw the frames and which Web pages load into these frames—*around* the Web page you started with.

Second, Dreamweaver creates new, untitled documents for each frame you added to the page. For example, in Figure C-4, the current page was split into two frames, side by side. In the process, Dreamweaver created two new documents: a blank document for the right-side frame and a blank document for the left-side frame. You wind up with three pages (counting the frameset page).

For proof, try this experiment: Click a visible portion of the original Web page you opened in step 1; note that the title bar of your window identifies its original name. Now, if you click inside one of the blank areas around your original document (that is, one of the other frames), the title bar changes to say *Untitled Document*. That's because you haven't yet saved or named the new Web pages that make up the new frames. You'll do so in a later step (see page 10).

To eliminate a frame, just drag its border back to the closest edge of the document window.

Note: If you use XHTML for your Web pages and you want to use frames, you have a little extra work in store. Even if you've set Dreamweaver to use XHTML for all pages, this feature doesn't work for framesets (see this book's Introduction for more on XHTML). As soon as you create one, Dreamweaver switches to regular HTML for both the frameset and any frames within it. You can convert these pages to XHTML, but it's a bit time-consuming: you have to select each page (including the frameset and all other frames) in turn and choose Edit → Convert → XHTML. (See page 10 to learn how to select frames and framesets.)

Figure C-5:
The Frames button gives you one-click access to canned frameset designs. Click a design to create the frameset, complete with blank pages for additional frames. One frame in each button of the Frames panel is light blue; that's where Dreamweaver will put the current Web page.

Nested Framesets

Although there's no limit to the number of frames you can have in a single frameset page, there are some restrictions on how you can arrange them. You can't, for instance, merge one frame into another, setting up a single frame that spans multiple columns or rows. In other words, a design like the one pictured in Figure C-6 is impossible using just a single frameset: the sidebar navigation spans the entire left side of the window, while the right side has two horizontal frames.

To overcome this limitation, you can insert a frameset *inside* of a frame. Nesting framesets like this gives you much greater flexibility in your designs.
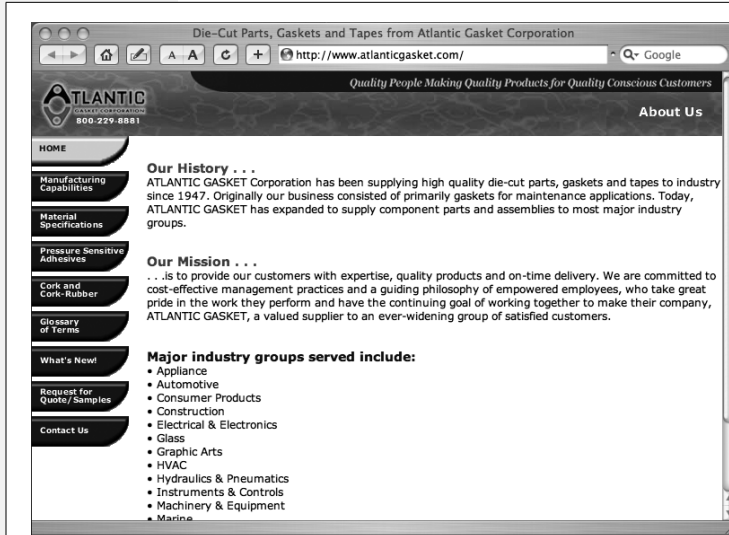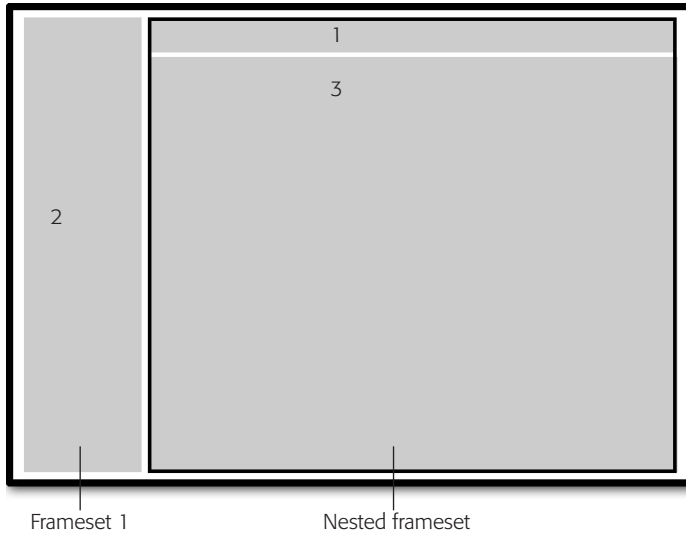

Figure C-6:
Here, frames keep the site identity (top banner) and navigation (left sidebar) visible. This site is made of three frames (numbered) and two framesets. To create this design, start with a frameset divided into two horizontal rows. Click the bottom frame; choose Modify → Frameset → Split Frame Left.

Frameset 1   Nested frameset

To nest one frameset inside another, just click inside the frame where you wish to insert a new frameset. Then choose Modify → Frameset → Split Frame Up, Down, Left, or Right.

Or, if you'd rather, you can use the Insert menu to insert frames. Choose Insert → HTML → Frames and select the location (for example, left or top) where you wish the new frame to go. (You can't drag frame borders to create a nested frameset.)

Tip: Dreamweaver offers some common, canned frame designs that you can apply with a click of the mouse. They're on the Layout tab of the Insert bar (Figure C-5). Some of these designs include complex, nested framesets.

The new frameset appears inside the original frame. (Because the borders of a nested frame look just like regular frame borders, use the Frames panel, as shown in Figure C-7, to keep track of what you're doing.)
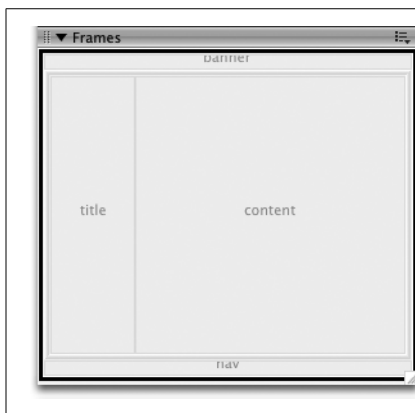

Figure C-7:
The Frames panel shows a thumbnail diagram of the current document's frames. Thick 3-D borders represent a frameset, while thin gray lines represent the borders of frames. The thick black border—the outer frameset in this example—indicates a selected frameset, while a thin black border represents a selected frame. A name appears inside each frame to identify it, so that you'll know how to target links to the frame.

WORKAROUND WORKSHOP

Don't Leave Anyone Out

Some very old Web browsers can't display frames at all. For the unlucky people who use these browsers, a Web site with frames is rather useless. In fact, a browser that doesn't understand frames simply displays a blank page when it loads a frameset.

You don't have to leave these visitors in the lurch, however. The <noframes> tag lets you add Web page content that's especially for, and can be viewed by, these old browsers; frames-capable browsers simply ignore the <noframes> content. Choose Modify → Frameset → Edit NoFrames Content. The document window changes to an empty window, where you can add text, images, and other HTML.

Remember, what you put here is only for people who can't view frames, so don't feel you have to duplicate your entire Web site. One simple approach is to include a short message—"This site requires a frames-capable browser"—with a link to the Firefox, Microsoft, or Opera Web page, so the person can download a newer browser.

Alternatively, you could link to a non-frames version of your Web site. Of course, in that case, you'd have to do the extra work of building an entire frame-free version of the site.

If you're looking for publicity for your site, there's one other advantage to the <noframes> material. Many search-engine "spiders" search and index the non-frames page information. In other words, you could add a detailed description, complete with juicy keywords, to the <noframes> tag for the sole purpose of letting search engines know what the page offers the world.

When you're finished adding content for the <noframes> page, choose Modify → Frameset → Edit NoFrames Content again to return to the document window.

Selecting Frames and Framesets

Think of a frame as a mini document window; each frame contains a separate Web page. When you click inside the frame, you can add images, text, and other elements to the page. Click inside another frame to edit *that* frame's Web page.

However, since framesets aren't *visible* elements of a Web page, Dreamweaver provides a special window—the Frames panel—that displays a simple visual overview of frames and framesets, making it easier for you to select and modify them. To open it, choose Window → Frames or press Shift-F2 (see Figure C-7).

Selecting a frameset lets you save it and modify its properties, such as frame size and whether or not there are borders, as described on page 12. There are several ways to select a frameset:

- Click the thick border around the edges of the frames in the Frames panel. The border becomes a solid black line to indicate the frameset is selected.

- Move the cursor over a frame border in the document window, slowly if necessary, until it changes to a double-headed arrow; then click to select the border. (This maneuver works only if frame borders are visible on the page: choose View → Visual Aids → Frame Borders, or use the View Options menu in the document window's toolbar.) The gray frame borders acquire dashes to show that the entire frameset is selected.

- The <frameset> tag also appears in the tag selector, providing yet another way to select a frameset. (Make sure you've first inserted the cursor, or selected text or graphics, inside a frame page.)

Selecting a frame lets you save it and modify its properties, including margins and scroll bars, as described on page 10. To select a frame, do one of the following:

- Click a frame in the Frames panel.

- Alt-click (Shift-Option-click) a frame in the document window.

Saving Framesets and Frames

It's always a good idea to save Web pages as soon as you create them. Furthermore, you probably do some of your most important formatting, such as choosing a background color, right at the beginning, and you don't want to lose that in a crash or power failure. Finally, you need to save your frameset and all pages contained in it before you can even preview the frameset.

To save a frameset, select it using any of the methods described on page 10. Then choose File → Save Frameset (or, to "spin off" a copy of the one you've opened, choose Save Frameset As). The first time you save a frameset, the Save dialog box opens. Name the frameset page and save it in your Web site folder. Although frameset pages have special properties, they're still just Web pages, and they still end in the appropriate extension (.html or .htm for regular Web pages, or one of

the extensions—.asp, .php, and so on—used for the dynamic pages described in Part Six of this book). You can save them anywhere in your site folder (see the chapter "Introducing Site Management" for some filing tips).

Saving a component page *inside* of a frame works just like saving regular documents: Click the frame in the document window and then choose File → Save Frame, or press Ctrl+S (⌘-S). You can also save all of your frames at once, as described next.

Saving Multiple Frames

One of the complexities of working with frames and framesets is the fact that you're dealing with many different Web pages at once and, consequently, many different files. As you modify your frames and framesets and make changes to the pages in those frames, you'll be saving multiple files.

Fortunately, you don't have to plod through the document window, clicking inside each frame and saving it independently. To save all the pages in a frameset in one step, choose File → Save All.

Of course, just after you've created a frameset and frames, Dreamweaver doesn't yet know the component pages' names or folder locations. It therefore shows you the Save As dialog box (see Figure C-8) *over and over again*, once for each component frame page, so that you can name and file each one.
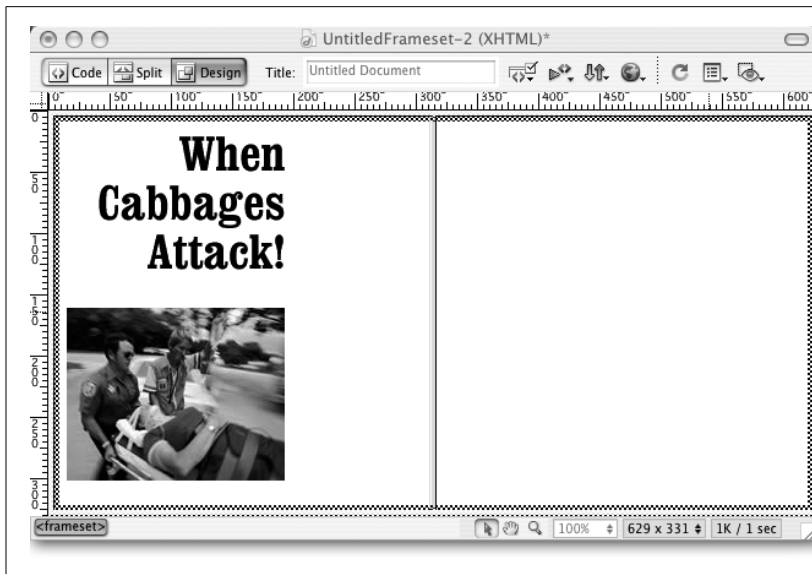

Figure C-8:
The File → Save All command is a powerful shortcut for quickly saving a frameset and all its pages. The first time you save the frameset and frame pages, Dreamweaver places a fat, crosshatched border around the frame you're about to save, so you can name each page individually.

Clearly, you need to know which frame you're saving each time the Save As dialog box appears. To help you, Dreamweaver provides a visual cue: a thick, cross-hatched border appears around the frame you're about to save (see Figure C-8). Type a name for that page and press Enter (Save), repeating the process for all pages.

The same crosshatched border appears around the *entire* document window when you're saving the frameset itself.

Frame and Frameset Properties

After creating a frameset, it's time to take charge of the size, look, and contents of its frames. Dreamweaver treats framesets and frames as separate objects, each with its own set of properties. When you select a frameset or frame, using any of the methods described on page 10, you can view and modify its properties in the Property inspector (see Figure C-9).

Tip: In general, it's better to set a *frameset's* properties before fine-tuning its *frames*, since some frameset properties affect the properties of individual frames.
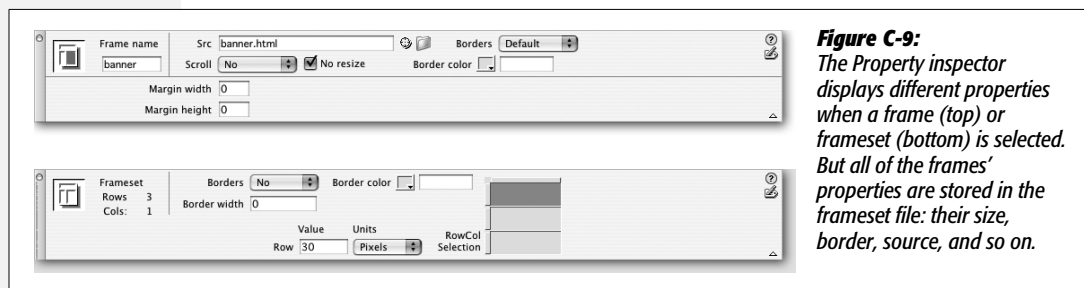

Figure C-9:
The Property inspector displays different properties when a frame (top) or frameset (bottom) is selected. But all of the frames' properties are stored in the frameset file: their size, border, source, and so on.

Frameset Borders

Borders are intended to visually separate one frame from another, but professional Web designers generally shun their amateurish 3-D appearance and the boxy designs they create (Figure C-2, top).

If you're a professional Web designer (or just want to come across as one), consider eliminating frame borders entirely. Not only does this free up a few precious pixels of screen real estate, it also lets you create seamless frame designs, so that all your frames appear to be a single, unified Web page.

To control frameset borders, start by selecting the frameset itself (see page 10 for selection techniques). Now consult the Property inspector, where you'll find these options:

- **Borders pop-up menu.** Use this pop-up menu to indicate the visibility status of the borders. To turn off borders, choose No—a good idea, if for tastefulness' sake alone. If you must use borders, select Yes. (The Default setting has the same effect as selecting Yes on most browsers.)

- **Border Width.** Specify the thickness of your border by typing a number (in pixels) into the field. Type *0* if you want to completely eliminate any borders. (You might think that choosing No Borders would automatically eliminate any space between frames, but that's not the case. If you don't also set the Border Width to 0, a small gap will appear between frames on the page.)

- **Border Color.** Use this pop-up palette to choose a color for the border. Of course, if you've turned off borders, you can leave this option blank.

The next time you save your document, Dreamweaver stores all of the new settings (Figure C-9) into the frameset file.

Note: Nested framesets have their own border settings, but you don't have to specify them, since nested framesets inherit the border settings of the frameset they're in. For example, suppose you created a frameset and turned off the borders, and then you inserted another frameset into one of those frames (see page 7). The borders in the nested frameset are automatically turned off, having inherited the settings of the outer frameset. You can, however, assign completely different border settings for the nested frameset, overriding any settings inherited from the outer frameset.

Frame Size

You can make your frames bigger or smaller simply by dragging the frame borders in the document window. But for more precise, numerical measurement, you'll need the Property inspector.

Start by selecting the frameset containing the frame in question (see page 10). Now consult the Property inspector's controls, which include:

- **Row/Column.** Dreamweaver thinks of a frameset as something like a table, with rows and columns. For example, if your frameset has two frames, one on top of the other, Dreamweaver thinks you have *two rows* of frames consisting of one "cell" each. Dreamweaver thinks of a frameset composed of three side-by-side frames as *three columns*. (Beyond this similarity, however, framesets are totally distinct from tables.)

  Use this control (or the thumbnail diagram next to it) to specify the row or column you want to work with. Figure C-10 shows the details.

- **Value.** Here's where you specify the height or width of the row or column. You can choose either a pixel value or a percentage, whichever you specify using the pop-up menu next to the Value field.

If you set a row height or column width to a *percentage* value, its size will be a percentage of the browser window (or the parent frame, if the frameset is nested inside a frame). That's a handy design safeguard against the fact that every visitor to your Web page may be using a different-sized monitor. You might set up your left-side frame so that it always consumes, say, 25 percent of the window, no matter how big or small the window is.
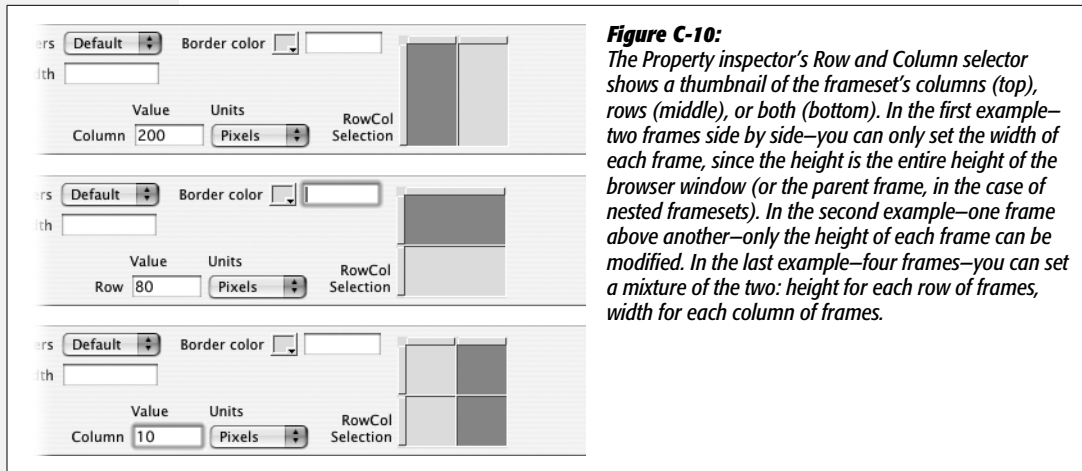

Figure C-10:
The Property inspector's Row and Column selector shows a thumbnail of the frameset's columns (top), rows (middle), or both (bottom). In the first example–two frames side by side–you can only set the width of each frame, since the height is the entire height of the browser window (or the parent frame, in the case of nested framesets). In the second example–one frame above another–only the height of each frame can be modified. In the last example–four frames–you can set a mixture of the two: height for each row of frames, width for each column of frames.

- **Units.** Using this pop-up menu, you can choose Pixels, Percentage, or Relative.

Relative is a special unit of measurement that you'll probably want to use for at least one column or row per frameset. To understand its use, imagine this setup: Three frames appear one on top of another. The top frame is a banner containing the Web site's name, the middle frame is the main text, and the bottom frame holds a navigation bar. If the heights of the top and bottom frames are 30 pixels, and the middle frame is 300 pixels, the page will look just fine if it's viewed in a browser window that's exactly 360 pixels tall (as shown at top in Figure C-11).

However, if the visitor's browser is much taller, the top and bottom frames won't be the height you wanted (see Figure C-11, bottom). You've told the browser that the total height of the frameset should be 360 pixels (30 + 300 + 30), but the window is actually much bigger—on the order of 900 pixels. In an effort to make the best of a bad situation, the browser just divides the remaining space among the three frames, adding height to each of the three frames.

A *relative* measurement, therefore, lets you give a frame a flexible size. It will grow and shrink to accommodate changes in the browser window. In addition, it lets you assign *absolute* (fixed) sizes to certain frames—banners and navigation bars, for example—that always remain fixed in size.

Tip: If the notion of freely reflowing Web page contents doesn't sit well with your design sense, and you'd like a bit more control over your visitors' browsers, see the chapter "Dreamweaver Behaviors" for details on how to make browser windows open to the exact height and width you want.

Figure C-11:
You'll usually want to assign a relative width or height to one frame in each frameset. The relative frame grows or shrinks as the browser window is resized. Otherwise, as seen here (before the window is resized, top, and after, bottom), all of the frames resize, creating distorted banners and bottom navigation bars. Better: Give the top and bottom frames a set height—say, 30 pixels—and assign a relative height to the middle frame.

Frame Properties

Once you've set the border properties and frame sizes in the *frameset*, you can modify the properties of each *frame*. Select the frame and use the tools in the Property inspector, as shown in Figure C-9, top.

Name

Each frame can have its own name, but this isn't the name of the file (or the title of the Web page) that loads *into* the frame. A frame's name exists solely for identification purposes when working with links or JavaScript scripts—specifically, when you want to use a Dreamweaver Behavior (see the chapter "Dreamweaver Behaviors") or target a link from one frame to another. You'll need frame names, for example, when you wish to use a navigation bar to load pages into another frame (see "Targeting Links," on page 18). Otherwise, frame names are optional.

Tip: If you create frames using the Frames tab of the Insert bar or the Insert → Frame command, Dreamweaver supplies generic names for the frames it creates. But if you use any of the other methods for creating frames, such as dragging frame borders from the edges of the window, you have to supply frame names yourself.

To set the name of a frame, select the frame by clicking it in the Frames window, and then type a name in the "Frame name" field of the Property inspector.

Src

When you set a frame's *source* (Src) property, you're simply specifying the path to the Web page file that loads into that particular frame. You can change the path—and the Web page that appears in that frame—by clicking the folder icon and selecting a file from your site folder.

You can, if you like, link to a page that's on somebody else's site; just type the absolute URL here, beginning with *http://*. You won't, however, be able to see the other person's page within Dreamweaver. Instead, inside the frame you'll see only the words "Remote File," plus the URL. You have to preview the frameset in a browser connected to the Internet to see the remote file actually appear within the page. (If you do display someone else's Web page inside a frameset on your site, it's proper etiquette to ask for permission first. In fact, sites have been sued by companies whose pages have been "framed" in this way.)

Note: Be careful using the Src property. One common mistake is to add the frameset page itself to one of the frames. In other words, it's possible to click the folder icon next to the Src field, and then select the current frameset page, thus creating a reference to itself.

When you then preview the frameset, the browser loads the page—but when it attempts to load pages into each frame, it's trapped: it loads the frameset, which in turn has a frame, which loads the frameset again, which has a frame that loads the frameset again, and so on, and so on. This hall of mirrors continues until the browser crashes and your site's visitors curse your name!

Scroll

To create scroll bars for a frame—or hide them—use the Scroll property. You'll see four options in the Scroll menu in the Property inspector:

- **Yes** adds horizontal and vertical scroll bars to the frame, even if the frame doesn't contain enough material to require them.

- **No** prevents scroll bars from being added to a frame, even if that means some of its contents become inaccessible.

- **Auto** lets the browser determine whether to display scroll bars. If the contents don't fit inside the frame, the browser adds the appropriate scroll bar.

- **Default** works like Auto in most browsers. Since the effect of the Default option can vary from browser to browser, choose Auto instead.

In general, use the Auto option if you know your frame might require some scrolling, or No if not. For example, a frame containing a Web page with a lot of text will probably need a scroll bar, whereas a frame that simply contains the site's logo won't.

No Resize

Usually, your Web site visitors can resize the frames you've created just by dragging their borders right in the Web browser. But if you don't want people monkeying around with your designs, turn on the frame's No Resize checkbox in the Property inspector.

Tip: The No Resize option applies only to manual frame-edge dragging. In other words, even with No Resize turned on, your frames may still change size when the *browser window* is resized. If you want to prevent even that layout shift, see page 13.

POWER USERS' CLINIC

Frames from the Inside Out

The Src property provides an alternative method for building a frames-based design, preferred by some designers who learned to build frames-based pages before WYSIWYG programs like Dreamweaver came on the scene.

Imagine that you want to build a page with two frames: top and bottom. First you create a new page, add text and graphics, and then save it as, say, *top.html*. Then you create a second page, called *bottom.html*, and save it for use as the bottom frame.

Finally, you need a third page, one that will serve to hold the first two; split this third page into two frames. Set the source (the Src property) for the top frame to *top.html,* set it to *bottom.html* for the bottom frame, and save the frameset using any name you like (like *frameset.html*, or if it will be the home page to the site, *index.html*).

Using this technique, you make and save the frame pages first and then create and save the frameset page: two frames, three files.

Margin Width and Margin Height

You can adjust the top and left margins of a frame by setting its Margin Width and Margin Height properties. These settings control the position of the upper-left corner of a page in a frame, and they work exactly as page margins in a standard Web page do. (In fact, you can set both page *and* frame margins. Your margins will then be the sum of the two. For example, a 10-pixel top page margin and a 10-pixel frame margin height will create a 20-pixel margin at the top of the frame.)

Margin *width* is the amount of space between the left edge of the frame's border and the left edge of the Web page; margin *height* is the space between the frame's top border and the top of the Web page. These margin settings apply to every page that loads into the affected frame.

Border and Border Color

Using these controls, you can assign a border and border color to each individual frame—giving one important frame a sky-blue border, say, but leaving all other frames borderless.

Unfortunately, Internet Explorer, Netscape Navigator, and Opera all handle this property differently, so you can't assume that it will work for all of your visitors. Furthermore, this option has no effect if you've turned off borders in the frameset (page 12).

Targeting Links

Normally, when you click a link, the Web browser replaces the current page with a new Web page, so that the entire browser window changes. But a browser treats each *frame* as an independent window, which offers some interesting and unique possibilities for linking. Clicking a link on a page merely replaces the contents of *that frame*, leaving the other frames in place.

Using the *Target* property of a link, you can choose, or target, which frame you wish the linked Web page to load in. This option is extremely handy when you use one frame as a navigation bar whose links load pages into *other* frames.

To make a link open in a different frame, create the link as described in the chapter "Links," making sure that the link is highlighted. Then, in the Property inspector, choose the name of the frame where you'll want the page to appear, using the pop-up menu next to the Target field.

When you click the link on the finished Web page, the source Web page opens into the frame you just chose.

Tip: Dreamweaver's Go To URL behavior lets you have a single link target multiple frames at once. Imagine loading four different Web pages with a single click! See the chapter "Dreamweaver Behaviors" for more information on this powerful feature.

Inserting a Navigation Bar

One of the best reasons to use frames is to keep a *navigation bar* visible on the screen at all times. A navigation bar (called a *nav bar* in the trade) is a set of interactive buttons that let visitors jump to different pages or load pages into different frames. To make your life easier, Dreamweaver's Navigation Bar object makes quick work of adding complex interactive navigation bars to your frames.

Like the Rollover object described in the "Images" chapter, nav bar buttons use Dreamweaver Behaviors—JavaScript programs—to dynamically swap graphics files. Nav bar buttons also offer two additional styles that help your visitors know where they are in your site (see Figure C-12).

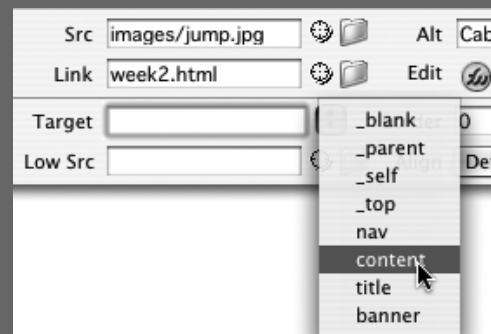**FREQUENTLY ASKED QUESTION**

The Underscore Targets

What are the four choices in the Target menu that begin with the "_" character?

If you're working on a frameset page, the link target menu lists all named frames. But even when working in another kind of page, this pop-up menu always offers these four options for a link you've highlighted:

- **_blank** opens a new, second browser window when the link is clicked; the new window loads the linked page. The original window–the one containing the link–remains open. This feature lets you link to another site, for example, leaving your own Web site available in an open window. (To open a new browser window to an exact size, see the chapter "Dreamweaver Behaviors.")

- **_self** loads the linked page into the same window or frame, replacing the current page. Of course, this is how links work normally, so there's little point in choosing this option unless you're trying to get extra exercise.

- **_top** offers a specialized, but very useful feature. Suppose your Web page contains frames–and one of them contains a link to someone else's Web site. If a visitor clicks the link, the "foreign" Web site will appear trapped within one of your frames. This odd-looking effect is widely considered bad form.

To avoid this HTML social gaffe, choose the *_top* option for your link. This option forces your visitor's browser to load the linked page into the entire browser window, which overrides all frames and framesets, and avoids imprisoning someone else's Web site within your own.

- **_parent** replaces the current frameset page with the linked page, exactly as the *_top* target does. The difference is visible only when the frameset page is itself loaded into a frame in another frameset page. In that case, this option will replace only the first frameset. (Beware: Netscape Navigator's support for this feature is notoriously flaky.)

Src	images/jump.jpg Alt Cab
Link	week2.html Edit
Target	_blank 0
Low Src	_parent Det
	_self
	_top
	nav
	content
	title
	banner

To create a navigation bar:

1. **Create graphics for the buttons in your navigation bar.**

   You'll need to create multiple graphic files for each button, using a graphics program like Fireworks or Adobe ImageReady. Since a navigation button can have multiple appearances—states—depending on how the user interacts with it (Figure C-12), you need a separate graphic file for each state. And, as with rollover images, make sure that each button graphic is *exactly* the same size. Otherwise, you'll get distortion (see the chapter "Images").
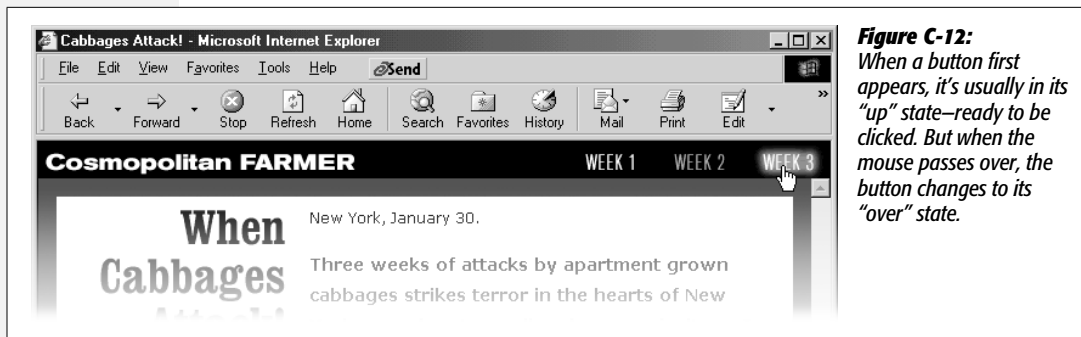

Figure C-12:
When a button first appears, it's usually in its "up" state–ready to be clicked. But when the mouse passes over, the button changes to its "over" state.

2. **Place the cursor in the frame where you'd like to add a navigation bar.**

   It's usually a sidebar, header, or footer.

3. **Choose Insert → Interactive Images → Navigation Bar.**

   Alternatively, from the Common tab of the Insert bar, click the Navigation Bar object.

   Either way, the Insert Navigation Bar window opens (see Figure C-13). Don't be overwhelmed. There are a lot of options in this window, but they're straightforward.

   Just remember that a navigation bar is simply a collection of buttons. You add one button at a time to create a complete navigation system. Each button has a name, up to four different images, and a link.

   The window starts out with a single element called *unnamed*.

4. **Type a name for the first button in the "Element name" field.**

   This name is just for behind-the-scenes use in the Web page. It won't appear on the button or anywhere on the screen. If you like, you can even skip this step and use Dreamweaver's default names: *unnamed1, unnamed2,* and so on.

5. **Click the Browser button next to the "Up image" field to select a graphics file for the "up" state of the button.**

   This is the image you created in step 1.

6. **Choose graphics for one or more states for the button.**

   At a minimum, include an "over" image. But including images for the other two states of the button will add zing to your navigation bar.

   These different state images are good for helping your visitors understand where they are. For example, in Figure C-12, the frameset loads the first of three pages covering a story about killer cabbages. The Week 1 button in the right corner is in its "down" state, meaning that "You are at this spot in the story." The Week 2 button is in its "up" state, meaning that it's clickable, and the Week 3 button is highlighted in its "over" state, since the mouse is hovering over it. Because these buttons consist of ordinary graphics files, you can make their different states look like anything you want.

7. **Type a text description for this button in the "Alternate text" field.**

   This optional step can be a help to those viewing the page with graphics turned off or those who have vision impairments, as described in the chapter "Images."

8. **Using the "When clicked, Go to URL" field, specify the page you want the button link to open.**

   Since this is a *navigation* bar, clicking the button should take your visitor to another Web page. You can click the Browse button to select a file from your site, type in a path to a page in the site, or, to link to a page outside of the current site, type an absolute URL beginning with *http://*.

FREQUENTLY ASKED QUESTION

Nav Bars, No Frames

Can I use the Navigation Bar object without using frames?

Yes, but you'll lose most of the benefits of the Navigation Bar feature and add unnecessary code to the page.

One of the cool aspects of a Dreamweaver nav bar is its ability to indicate where the visitor is within the site, thanks to the button's "down" state.

Imagine this scenario. You've built two frames: a top frame for a nav bar and a bottom frame for the main content. The buttons in the nav bar are all in their "up" states. Moving your mouse over the first button causes it to glow, and clicking it loads a new page in the bottom frame.

At the same time, the button you just clicked changes to its "down" state, letting your visitor know what section of the site he's seeing. Only the page in the bottom frame changes, because the top frame with the nav bar simply uses a Dreamweaver behavior to swap the graphics used for the buttons.

Now imagine that you didn't use frames, so that you just inserted the navigation bar on the same page as the main content. When you click a button in the navigation bar, the browser loads a new page, completely replacing the page that had the navigation bar! You'd have to rebuild the navigation bar on every single page of your site.

Moreover, the "down" state of the button would never appear, because as soon as you click the button, a new page replaces it.

In other words, there's not much point to using the Navigation Bar object in Dreamweaver unless you're also using frames. If you want to create a frame-free site, it's probably best to just stick with Rollover objects (see the chapter "Images") for building navigation buttons.

---

9. **Select a Target from the pop-up menu.**

   Since you're including the navigation bar in a frame of its own, the linked Web page should load into another frame, leaving the nav bar exactly where it was. Select the name of the frame from the menu, as described on page 18. The Main Window option makes the Web browser replace the frameset and frames with the linked page.

   (The names of the other frames in a frameset appear *only* if the current frameset is open and you're adding the navigation bar to one of the pages in a frame. If, for example, you've opened the navigation bar page by itself, Dreamweaver doesn't know the page is part of a frameset, or what the other frames' names are.)

Note: Don't turn off the "Preload images" checkbox. Preloading images prevents a delay when a visitor moves the mouse over the navigation image.

---

10. **If you like, turn on "Show 'Down image' initially."**

    The "down" image can function like a "You are here" sign, letting visitors know their location in the site. You should select this option only for one button in the navigation bar, and only if that button links back to the original frameset.

    For instance, say your home page is a frameset, and one frame contains a navigation bar. Select this option for the Home button on the navigation bar. This way, when visitors peruse your page, that button is already highlighted—indicating where they are.

11. **Click the + button. Repeat steps 4–10 for each additional button in the navigation bar.**

    The minus sign (-) button deletes the highlighted button. The up and down arrow buttons let you rearrange your buttons by shuffling a highlighted button up or down in the list.

12. **Choose the orientation of the bar from the Insert menu.**

    Navigation bars can run horizontally—perfect for headers and footers—or vertically—the right choice for a sidebar.

Tip: To help control layout, turn on the "Use tables" checkbox. By containing your graphics within the cells of a table, this feature keeps your graphics together on a page and prevents them from moving around if someone resizes the browser window.

---

13. **Click OK to insert the navigation bar.**

    You can only insert one navigation bar per Web page. Once inserted, you can edit it only by choosing Modify → Navigation Bar. The Modify Navigation Bar

dialog box looks just like the one shown in Figure C-13, so that you can edit, delete, and rearrange your navigation buttons.

To modify a button, select it in the "Nav bar elements" list. You can then assign new images, settings, and links to it.

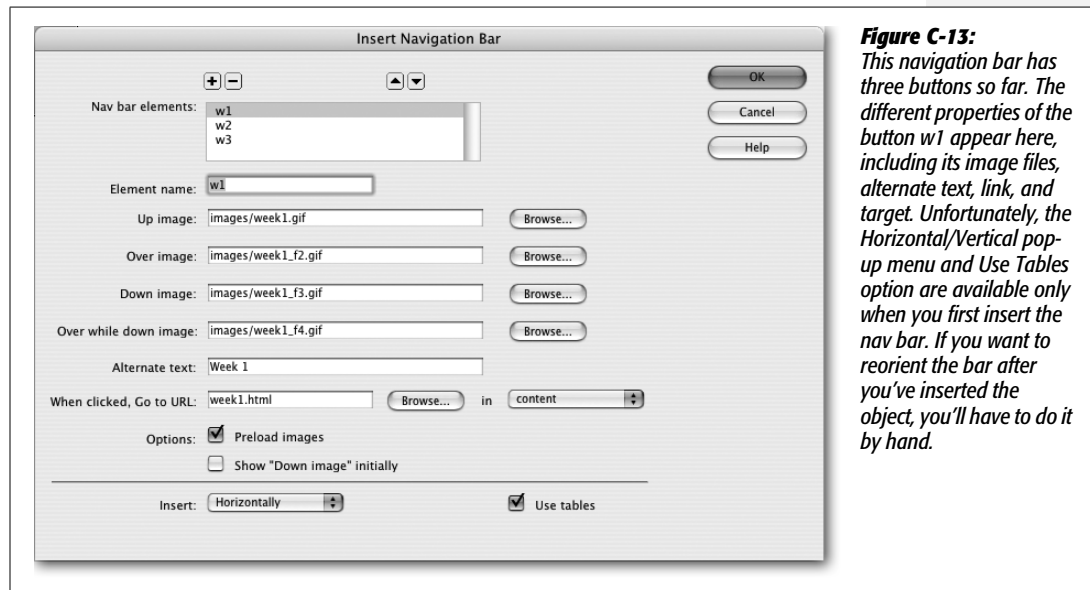*Tip:* For more advanced navigation-bar features, see the chapter "Dreamweaver Behaviors."

Figure C-13:
This navigation bar has three buttons so far. The different properties of the button w1 appear here, including its image files, alternate text, link, and target. Unfortunately, the Horizontal/Vertical pop-up menu and Use Tables option are available only when you first insert the nav bar. If you want to reorient the bar after you've inserted the object, you'll have to do it by hand.