

Tutorial: Using Background Images

The CSS *background-image* property is the secret weapon of modern web design. It can turn a ho-hum, text-heavy web page into a dazzling swirl of imagery (see Figure 8-23). Since you can use it to add an image to the background of any HTML tag, the designs you can create are limited only by your imagination. The drop shadow example in the previous tutorial is just one example of creative background image use. Other common background image frills include applying a page background and adding custom bullets to unordered lists. You'll explore some of these common tasks in this tutorial.

Adding an Image to the Page Background

Whether it's an intricate pattern, a logo, or a full-screen photograph, images appear in the background of many web pages. In fact, adding an image to the background of a page is probably the most common application of the background-image property.

1. In your text editor, open the file *bg_ex*→*bg_images.html*.

This page is a basic two-column layout: a very simple page, with some text formatted on a white background (Figure 8-23, left). To start, you'll add a linear gradient to the page. The page has an external style sheet with the basic formatting. You'll use that style sheet to add new styles.

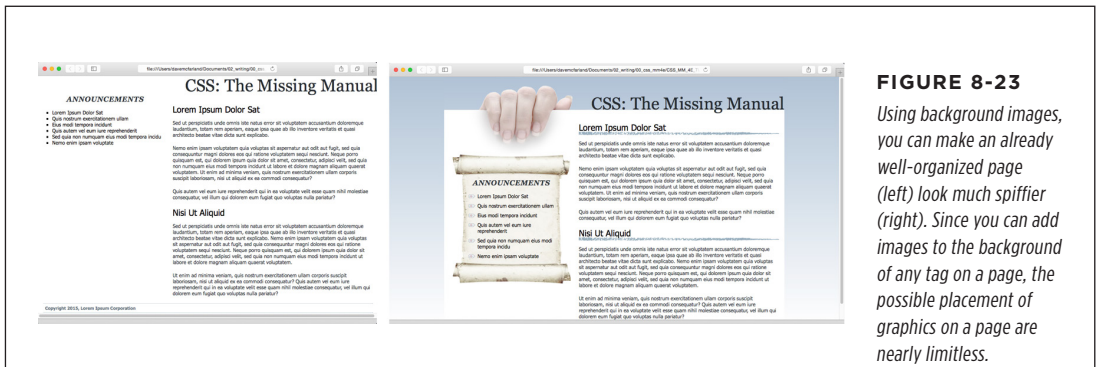


FIGURE 8-23

Using background images, you can make an already well-organized page (left) look much spiffier (right). Since you can add images to the background of any tag on a page, the possible placement of graphics on a page are nearly limitless.

2. Open the *styles.css* file. At the bottom of the page, add the following style:

```
html {  
    background-image: linear-gradient(to bottom, rgb(176,194,213), white  
    700px);  
}
```

This code adds a linear gradient (page 252) that transitions from a blue color at the top of the browser window to white 700px from the top.

3. Save the CSS file and preview the *bg_images.html* file in a web browser.

Something weird is happening here. The gradient runs from blue to white, then repeats again, blue to white, which is not what you want. To prevent the image from tiling, you can tell the browser to make the HTML tag fill the browser window by setting its height to 100%.

4. In the *styles.css* file add one more property (addition in bold):

```
html {  
    height: 100%;  
    background-image: linear-gradient(to bottom, rgb(176,194,213), white  
700px);  
}
```

Now, if you save the CSS file and preview the *bg_images.html* file, the background graphic's blue gradient drips down the page but doesn't repeat. Not bad looking, but the blue also appears in the text's background. You can make the text pop by giving its background a different color.

5. Return to your text editor and the *style.css* file. Add another style for the <div> containing the content of the page:

```
.wrapper {  
    background-color: #FFF;  
}
```

The wrapper div is a fixed width, centered in the middle of the page, containing all of the page's text. This style gives it a white background, but with the help of an image, you can do better than that.

6. Edit the style you created in step 5 by adding a background image:

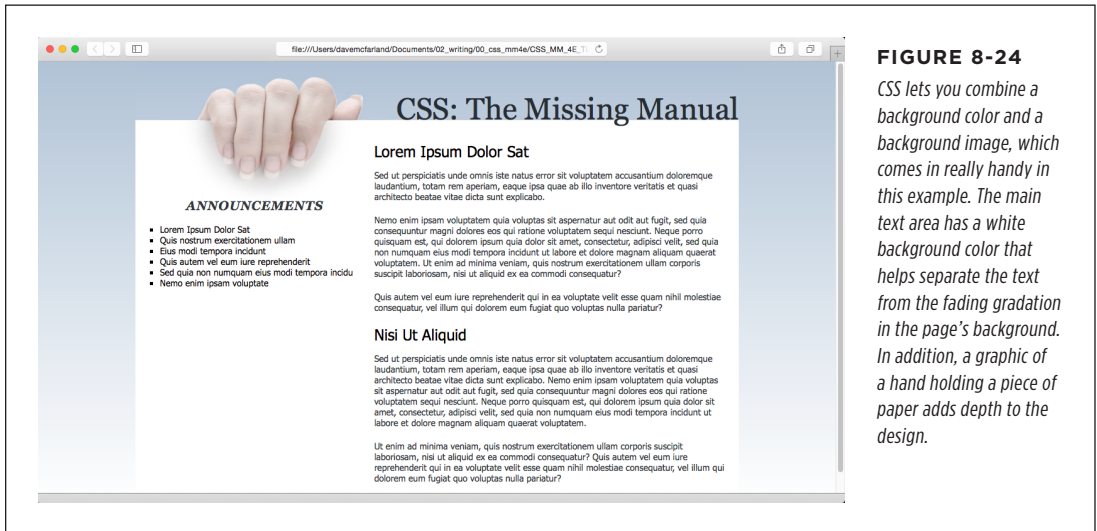
```
.wrapper {  
    background-color: #FFF;  
    background-image: url(images/bg_main.jpg);  
    background-position: left top;  
    background-repeat: no-repeat;  
}
```

These three lines of code add a background image to the top-left of the <div>; the no-repeat option for the background-repeat property means the image only appears a single time. If you save the file and preview it in a web browser, you'll now see the picture of a hand acting like it's holding the page. Very cool. The only problem is the text is too far up, covering up the image. You'll next push down the top headline and the left sidebar.

7. Add two more styles to the style sheet:

```
.banner {  
  margin-top: 48px;  
}  
.announcement {  
  margin-top: 115px;  
}
```

The first line just adds a bit of padding, pushing down the banner containing the headline until it just touches the top of the white page, while the second style moves the left sidebar down enough to clear the picture of the hand. The page should now look like Figure 8-24.



Replacing Borders with Graphics

The border property is a useful tool in your design arsenal, but the limited number of border styles CSS offers can get boring. A hand-drawn line with a little texture would catch your visitors' attention better than a plain, straight one. You can skip the border property and add any kind of line you want as a background image—easy as pie. In this part of the tutorial, you'll replace the underline below each <h2> tag in the main text area with a custom graphic that looks like a hand-drawn line.

1. **Return to your text editor and the `styles.css` file. Add a style for the `<h2>` tags inside the main `<div>` tag:**

```
.main h2 {  
  background-image: url(images/underline.png);  
  background-repeat: no-repeat;  
}
```

The `background-image` property specifies which graphic to use in the background of `<h2>` tags inside any tag with a class of `main`, whereas the `no-repeat` value makes sure the graphic only appears a single time.

If you preview the file now, you'll see that the underline doesn't exactly line up. In fact, it isn't *under* at all. It's above the headlines!

2. **Add the following style declaration to the `.main h2` style below the `background-repeat` property:**

```
background-position: left bottom;
```

You've changed the graphic's starting location so it appears at the left edge and bottom of the `<h2>` tags. If you preview the page now, though, you may not notice much improvement. The underline runs *into* the headline text.

But there's an easy fix. Since the `bottom` value used here puts the graphic at the bottom of the block created by the `<h2>` tag, you need only to increase the overall height of the block to move the line down a bit. You'll do this with a little bottom padding.

3. **Edit the `.main h2` style one last time, so that it looks like this:**

```
.main h2 {  
  background-image: url(images/underline.png);  
  background-repeat: no-repeat;  
  background-position: left bottom;  
  padding-bottom: 7px;  
}
```

Padding, as you'll recall from page 187, is the space between the border (the edge of the background as well) and the content. It also increases the overall height of the box—in this case, by adding 7 pixels of bottom padding. Now, the line graphic is placed at the bottom of the `h2` block, but in the empty space created by the bottom padding.

4. **Save the style sheet and preview the `bg_images.html` file in a web browser.**

Each `<h2>` tag has the hand-drawn underline. Next you'll tackle the sidebar box, making it look a little less boxy and jazzing up the bulleted lists.

Using Graphics for Bulleted Lists

The average bullet used for unordered lists is a black dot—not very inspiring. But you can use the `background-image` property to replace those drab bullets with any image you want. The first step is to hide the bullets that normally appear beside list items.

1. Return to your text editor and the *styles.css* file. Add a style for formatting the list items in the left sidebar.

```
.announcement li {  
    list-style: none;  
}
```

The bulleted list is inside a `<div>` with a class of `announcement`, so this descendant selector targets just the list items (`` tags) inside that div. The style removes the bullet. Now add the graphic.

NOTE Applying `list-style: none;` to a style affecting the `` or `` tags will also remove all of the bullets (or numbers) from list items.

2. Add the following two properties to the `.announcement li` style:

```
background-image: url(images/bullet.png);  
background-repeat: no-repeat;
```

You’ve seen these two properties before. They add an image to the background and turn off repeating so that the graphic appears only once.

If you preview the page, you’ll see that the bullets currently overlap the list text and the list items are a little jammed together (Figure 8-25, top). A little padding and margin will fix this.

3. Add two more properties to the `.announcement li` style:

```
padding-left: 25px;  
margin-bottom: 10px;
```

The left padding adds empty space, effectively moving the text out of the way in order to display the new bullet icon. The bottom margin adds just a bit of breathing room between each list item (Figure 8-25, middle).

There’s just one final flaw. The bullet image is a tad too high on the line, causing the tip of the icon to stick out too far above the text. But you can easily fix that with the `background-position` property.

4. Finish this style by adding `background-position: 0px 4px;`. The completed style should look like this:

```
.announcement li {  
  list-style: none;  
  background-image: url(images/bullet.png);  
  background-repeat: no-repeat;  
  background-position: 0 4px;  
  padding-left: 25px;  
  margin-bottom: 10px;  
}
```

This last style declaration positions the bullet icon to the far left (that's the 0) and 4 pixels from the top (4px) of the list item. It moves the icon down just a smidgen, enough to make the bullet look perfect.

NOTE

As discussed on page 171, this kind of exact positioning is precisely why you should use the `background` property instead of the `list-style-image` property for adding graphic bullets to your lists.

5. Save the file and preview the page in your browser.

The list should now have 3D tabs with red exclamation marks instead of dreary black circles (Figure 8-25, bottom).

ANNOUNCEMENTS

Ⓛ Lorem Ipsum Dolor Sat
Ⓛ Quis nostrum exercitationem ullam
Ⓛ Eius modi tempora incidunt
Ⓛ Quis autem vel eum iure reprehenderit
Ⓛ Sed quia non numquam eius modi tempora incidu
Ⓛ Nemo enim ipsam voluptate

ANNOUNCEMENTS

Ⓛ Lore Lore Ipsum Dolor Sat
Ⓛ Quis nostrum exercitationem ullam
Ⓛ Eius modi tempora incidunt
Ⓛ Quis autem vel eum iure reprehenderit
Ⓛ Sed quia non numquam eius modi tempora
incidu
Ⓛ Nemo enim ipsam voluptate

ANNOUNCEMENTS

Ⓛ Lore Lore Ipsum Dolor Sat
Ⓛ Quis nostrum exercitationem ullam
Ⓛ Eius modi tempora incidunt
Ⓛ Quis autem vel eum iure reprehenderit
Ⓛ Sed quia non numquam eius modi tempora
incidu
Ⓛ Nemo enim ipsam voluptate

FIGURE 8-25

Replacing regular black bullets with your own graphics is easy. Just a few extra steps ensure the bullets and text are placed in the correct location.

Giving the Sidebar Personality

At this point, the sidebar looks pretty good. The text is nicely formatted, and the bullets look great, but the sidebar gets a little lost in the sea of white. Adding a background image can make the sidebar stand out in a whimsical way. You could use a single image—the scroll image pictured in the right image of Figure 8-23—in the background of the `<div>` tag, but in order to make sure the text fits exactly on the scroll, you'd have to limit the amount of content you put in the sidebar. Too much text and it won't fit on top of the single image (like at top-left, back in Figure 8-12); too little, and there will be too much empty space on the graphic.

A more flexible approach would let the image grow as the sidebar acquires more content (bottom-right in Figure 8-12). Fortunately, since CSS allows multiple background images, this trick is easy to pull off.

1. **Return to your text editor and the `styles.css` file. Locate the `.announcement` style you added in Step 7 on page 272 and add one additional property:**

```
.announcement {  
    background: url(images/scroll_top.jpg) no-repeat center top,  
               url(images/scroll_bottom.jpg) no-repeat center bottom,  
               url(images/scroll_middle.jpg) repeat-y center top;  
    margin-top: 115px;  
}
```

Yes, that's only one property—the background property—but it has three different images. The order in which you list these images is important, since they stack on top of each other. In this case, the first image is the top of the scroll; it only appears once (`no-repeat`) at the top and center. The second image is the bottom of the scroll; it also only appears once, but at the bottom of the div. Finally, the middle part of the scroll—`scroll_middle.jpg`—will be layered underneath the other two images (since it appears last in the list), and it's repeated along the y-axis (up and down), so if the `<div>` gets taller, the image simply tiles to fill the space.

If you preview the page, you'll see a few problems. First, the text appears on top of the rolled up top and bottom parts of the scroll. A little padding will fix that.

2. **Update the `.announcement` style to add top and bottom padding. Make the changes listed in bold below:**

```
.announcement {  
    background: url(images/scroll_top.jpg) no-repeat center top,  
               url(images/scroll_bottom.jpg) no-repeat center bottom,  
               url(images/scroll_middle.jpg) repeat-y center top;  
    padding: 70px 0 60px 0;  
    margin-top: 115px;  
}
```

Another problem is that the bulleted list sticks out on both the left and right sides of the sidebar image. To make the bulleted list fit on the scroll, you need to add some left and right margin.

3. Locate the `.announcement li` style you created earlier and add two properties to the end so it looks like this:

```
.announcement li {  
  list-style: none;  
  background-image: url(images/bullet.png);  
  background-repeat: no-repeat;  
  background-position: 0 4px;  
  padding-left: 25px;  
  margin-bottom: 10px;  
  margin-left: 30px;  
  margin-right: 40px;  
}
```

These properties move both the left and right edges of each bulleted item in enough to clear the edges of the background image.

4. Save the file and preview it in a web browser.

The page should look like the right image in Figure 8-23. With just a few images and some CSS magic it's easy to bring boring web pages to life.