

### 3.3 Case Study: Traveler Times Revisited

In the last chapter we created Traveler Times, a web page about Jessica's travels to various countries. We finished the page, but it could be improved by adding CSS to it to affect its appearance. In this section we'll come up with a look for the page and implement it using CSS. Let's recreate the appearance shown in Figure 3.2, which uses a variety of colors, fonts, and other styles.


## Traveler Times Newspaper

### Latin America

#### Puerto Escondido: Sun, Surf, and Sand

Puerto Escondido is known for one of the world's best surfing beaches, Playa Zicatela. It has a beautiful yellow sand beach and huge world-class surfing waves (but be careful if you go swimming...the current is very strong!).

Here is a picture of a surfer at Puerto Escondido... ¡Qué onda!



#### Tikal: Mayan Ruins in the Guatemalan Jungle

Tikal is the largest of the ancient ruined cities of the Mayan civilization. It is a really awesome, magical place. If you go to Tikal, you have three main lodging options:

- **Tikal National Park:** Fancier hotels.
- **El Remate** (~30km away): Hotels or hostels.
- **Flores** (~50km away): Hotels or hostels.

### Europe

#### Drunk in Dublin

Throwin' back pints with the locals in Dublin this past summer made me really appreciate the pub culture. The top three bars in Dublin for good "craic" (i.e. good fun) in order of my preference are:

- I. Davy Byrne's
- II. Kehoe's
- III. Long Hall

*The price of a pint of beer is about €5. Although I would recommend the cider (around €8 a pint).*

Figure 3.2 Traveler Times desired page appearance

### 3.3.1 Fonts and Colors

A good goal to set when doing CSS is that we should not have to radically alter the page's HTML content in order to style it. If we've chosen the right tags that properly represent the semantics and meaning of the content, we should just need to add CSS rules to target those tags. We will need to make a few changes to the HTML, though, so let's examine those in this section. First of all, we'll add a `link` tag in the page's `head` section to include a style sheet named [traveler.css](#):

```
<link href="traveler.css" type="text/css" rel="stylesheet" />
```

Now let's look at the fonts and colors used in the desired appearance. The main font used is a common one called Verdana, at size 12pt. Since Macs may not have this font, let's fall back to the Mac font Geneva for those machines. If neither font is available, we should fall back to any sans-serif font available on the system. To apply this style to the entire page, we can use the following CSS rule:

```
body {
  font-family: "Verdana", "Geneva", sans-serif;
  font-size: 12pt;
}
```

Most of the page's text is black and its background is white, but those are the default for most users, so we don't need to explicitly specify those colors.

Several items on the page use colors. The level-1 heading has a black background and white text. The level-1 heading is larger than usual, being shown at size 2em. Level-2 and level-3 headings use a blue background of #336699 with white text. You may wonder how to get the background coloring to extend all the way to the left and right edges of the page behind the heading. But you don't need to do anything special to do this; just setting the heading's background will achieve the desired effect.

Note that we group the `h2` and `h3` into a single rule below to prevent redundancy:

```
h1 {
  background-color: black;
  color: white;
  font-size: 2em;
}

h2, h3 {
  background-color: #336699;
  color: white;
}
```

Links on the page are drawn in bold with a navy blue color of #151B54. The bulleted and numbered lists have a light gray background of #cccccc. The following rules represent these styles, again using a single rule to select both ordered (`ol`) and unordered (`ul`) lists:

```
a {
  color: #151B54;
  font-weight: bold;
}

ol, ul {
  background-color: #cccccc;
}
```

The only remaining font style we haven't handled is the italic text in the last paragraph. Let's set that aside for a moment and handle it later.

### 3.3.2 Text and List Properties

There are a few more subtle properties of the text that we have not yet handled. Notice how the text of all paragraphs stretches to fill every line fully. This is a justified text alignment. We can set paragraphs to appear this way by setting their **text-align** property to **justify**. Also notice how paragraphs begin with a bit (2em) of indentation on their first lines. This is done with the **text-indent** property. The following style formats the paragraphs in the desired way:

```
p {  
  text-align: justify;  
  text-indent: 2em;  
}
```

The level-1 heading is centered, which isn't the default appearance. We can achieve this by setting **text-align** to **center** on the **h1** tag.

```
h1 {  
  background-color: black;  
  color: white;  
  font-size: 2em;  
  text-align: center;  
}
```

The links on the page should not be underlined. The default is to underline them. To change this, we can set the **text-decoration** property of links to be **none**.

```
a {  
  color: #151B54;  
  font-weight: bold;  
  text-decoration: none;  
}
```

The ordered list on the page uses uppercase Roman numerals. This can be achieved by setting its **list-style-type** property to **upper-roman**. Note that we can't add this to our existing rule for ordered lists, because that rule also targets unordered lists. So we'll make another rule that targets only **ol** tags and sets their list style type.

```
ol {  
  list-style-type: upper-roman;  
}
```

### 3.3.3 Targeting Elements with IDs and Classes

There are just two things left to fix on the page. First is that the last paragraph about beer and cider should be italic. The second is that the paragraph containing the image should be centered. For the italicized paragraph, you may be tempted to go back to the HTML and place that paragraph's text into an **em** tag, since **em** shows up as italic by default. This would produce the correct appearance, but semantically it is not ideal. It's not that the paragraph contents are to be emphasized, or else we would have put it in an **em** tag to begin with in Chapter 2; we just want an italic font. We suggest instead giving that paragraph an **id** element and targeting that ID with a suitable CSS rule. The start of the paragraph in the HTML must be changed to:

```
<p id="dublinbeer">The price of a pint of beer is about €5.  
  Although I would recommend the cider (around €8 a pint).</p>
```

A CSS rule that targets only this paragraph and italicizes it would be the following:

```
#dublinbeer {  
  font-style: italic;  
}
```

The second loose end, the centered figure, can be solved in a similar way. But rather than an `id`, let's use a `class` here. It's likely that we will have more figures in the page if the site grows and features more stories of Jessica's various travels, and we'll probably want to center all of them. When we want to potentially target multiple elements, a class is much better than an ID. We're unlikely to have another beer info paragraph, so an ID works fine there. The following change to the HTML sets a class on the paragraph with the figure image:

```
<p class="figure">  
  Here is a picture of a surfer at Puerto Escondido...  
  &excl;Qu&eacute; onda! <br /> </p>
```

We're setting the class on the surrounding paragraph, not the image or text inside it, because a block element is the kind of element that can have its text alignment set. The following rule targets elements with the `figure` class and centers them:

```
.figure {  
  text-align: center;  
}
```

### 3.3.4 Final File Contents

After all the changes in the preceding sections, we end up with one HTML file and one CSS file. The new, only-slightly-modified version of [traveler.html](#) is shown in Example 3.39. It's a sign of good style that we only had to minimally modify the page's contents in order to style it. Adding extra HTML tags in order to facilitate styling is often a sign that you chose the wrong tags to begin with, or that you're choosing a poor way to try to style the page.

The complete [traveler.css](#) file is shown in Example 3.40. The file contains a header comment, always a good practice. We don't comment each individual rule, except that we've chosen to comment the ones that contain a class or ID explaining what elements are being targeted for clarity. The rules (and the properties within each rule) are listed in alphabetical order, which is optional but a good practice so that you can more quickly find a rule in a larger CSS file.

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
    "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <title>Traveler Times</title>
    <meta http-equiv="content-type" content="text/html; charset=utf-8" />
    <meta name="description" content="Page of Jessica's many travels." />
    <link rel="stylesheet" type="text/css" href="traveler.css" />
  </head>

  <body>
    <h1>Traveler Times Newspaper</h1>
    <h2>Latin America</h2>
    <h3>Puerto Escondido: Sun, Surf, and Sand</h3>
    <p>Puerto Escondido is known for one of the world's best surfing
      beaches, Playa Zicatela. It has a beautiful yellow sand beach
      and huge world-class surfing waves (but be careful if you go
      swimming...the current is <em>very</em> strong!).</p>

    <p class="figure">
      Here is a picture of a surfer at Puerto Escondido...
      &iexcl;Qu&eacute; onda! <br /> </p>

    <h3>Tikal: Mayan Ruins in the Guatemalan Jungle</h3>
    <p>Tikal is the largest of the ancient ruined cities of the Mayan
      civilization. It is a really awesome, magical place.
      If you go to Tikal, you have three main lodging options:</p>
    <ul>
      <li><a href="http://www.tikalpark.com/tikalhotels.htm">Tikal
        National Park</a>: Fancier hotels.</li>
      <li><a href="http://www.passplanet.com/Guatemala/el_remate.htm">
        El Remate</a> (~30km away): Hotels or hostels.</li>
      <li><a href="http://wikitravel.org/en/Flores_(Guatemala)">
        Flores</a> (~50km away): Hotels or hostels.</li>
    </ul>

    <h2>Europe</h2>
    <h3>Drunk in Dublin</h3>
    <p>Throwin' back pints with the locals in Dublin this past summer
      made me really appreciate the pub culture. The top three bars in
      Dublin for good <q>craic</q> (i.e. good fun) in order of my
      preference are:</p>
    <ol>
      <li>Davy Byrne's</li>
      <li>Kehoe's</li>
      <li>Long Hall</li>
    </ol>

    <p id="dublinbeer">The price of a pint of beer is about &#8364;5.
      Although I would recommend the cider (around &#8364;8 a pint).</p>
  </body>
</html>

```

**Example 3.39** Traveler Times page code `traveler.html`

```
/* Traveler Times style sheet, by Jessica Miller */

a {
  color: #151B54;
  font-weight: bold;
  text-decoration: none;
}

body {
  font-family: "Verdana", "Geneva", sans-serif;
  font-size: 12pt;
}

/* a particular paragraph with information about beer prices */
#dublinbeer {
  font-style: italic;
}

/* paragraphs that contain figure images in them */
.figure {
  text-align: center;
}

h1 {
  background-color: black;
  color: white;
  font-size: 1.8em;
  text-align: center;
}

h2, h3 {
  background-color: #336699;
  color: white;
}

ol {
  list-style-type: upper-roman;
}

ol, ul {
  background-color: #cccccc;
}

p {
  text-align: justify;
  text-indent: 2em;
}
```

**Example 3.40 Traveler times styles traveler.css**