- The h1 element is configured to have a light-blue background, 20 pixels of padding (the space between the content and the border), and a black, 1 pixel border.
- The empty space where the white web page background shows through is the margin. When two vertical margins meet (such as between the h1 element and the div element), the browser collapses the margin size to be the larger of the two margin values instead of applying both margins.
- The div element has a medium-blue background; the browser default padding (which is no padding); and a black, 5 pixel border.

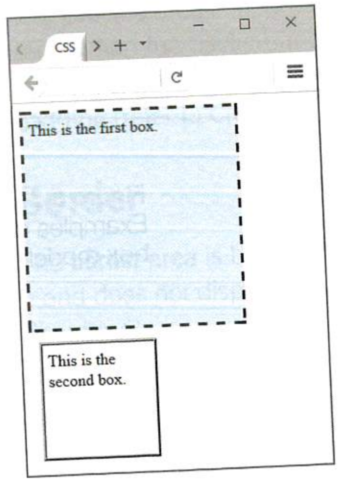
You will get more practice using the box model in this chapter. Feel free to experiment with the box model and the chapter6/box.html file.

6.2 Normal Flow

Browsers render your web page code line by line in the order it appears in the .html document. This processing is called normal flow. **Normal flow** displays the elements on the page in the order they appear in the web page source code.

Figures 6.3 and 6.4 each display two div elements that contain text content. Let's take a closer look. Figure 6.3 shows a screenshot of two div elements placed one after another on a web page. In Figure 6.4, the boxes are nested inside each other. In both cases, the browser used normal flow (the default) and displayed the elements in the order that they appeared in the source code. As you've worked through the exercises in the previous chapters, you created web pages that the browser has rendered using normal flow.

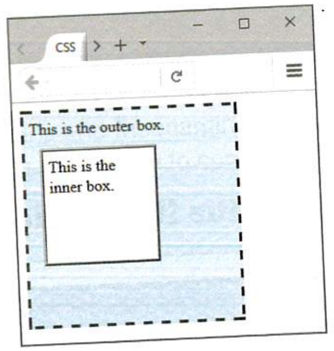
You'll practice this a bit more in the next Hands-On Practice. Then, later in the chapter, you'll experiment with CSS positioning and float to configure the flow, or placement, of elements on a web page.



This is the first box.

This is the second box.

Figure 6.3 Two div elements



This is the outer box.

This is the inner box.

Figure 6.4 Nested div elements

Hands-On Practice 6.1

You will explore the box model and normal flow in this Hands-On Practice as you work with the web pages shown in Figure 6.3 and Figure 6.4.

Practice with Normal Flow

Launch a text editor and open chapter6/starter1.html in the student files. Save the file with the name box1.html. Edit the body of the web page and add the following code to configure two div elements:

```
<div class="div1">
This is the first box.
</div>
<div class="div2">
This is the second box.
</div>
```

Now let's add embedded CSS in the head section to configure the "boxes." Add a new style rule for a class named `div1` to configure a light-blue background, dashed border, width of 200 pixels, height of 200 pixels, and 5 pixels of padding. The code is

```
.div1 { width: 200px;
        height: 200px;
        background-color: #D1ECFF;
        border: 3px dashed #000000;
        padding: 5px; }
```

Create a style rule for a class named `div2` to configure a width and height of 100 pixels, white background color, ridged border, 10 pixel margin, and 5 pixels of padding. The code is

```
.div2 { width: 100px;
        height: 100px;
        background-color: #FFFFFF;
        border: 3px ridge #000000;
        margin: 10px;
        padding: 5px; }
```

Save the file. Launch a browser and test your page. It should look similar to the one shown in Figure 6.3. The student files contain a sample solution (see chapter6/6.1/box1.html).

Practice with Normal Flow and Nested Elements

Launch a text editor and open your box1.html file. Save the file as box2.html.

Edit the code. Delete the content from the body section of the web page. Add the following code to configure two div elements—one nested inside the other.

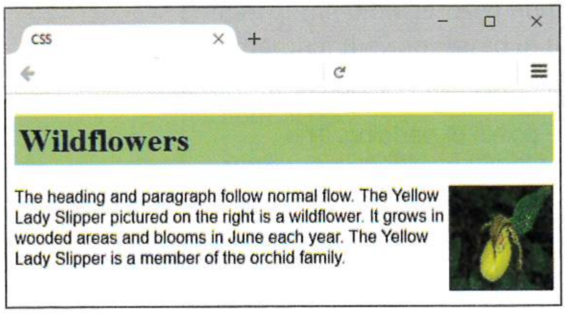
```
<div class="div1">
This is the outer box.
  <div class="div2">
  This is the inner box.
  </div>
</div>
```

Save the file. Launch a browser and test your page. It should look similar to the one shown in Figure 6.4. Notice how the browser renders the nested div elements: The second box is nested inside the first box because it is coded inside the first div element in the web page source code. This is an example of normal flow. The student files contain a sample solution (see chapter6/6.1/box2.html). The examples in this Hands-On Practice happened to use two div elements. However, the box model applies to block display HTML elements in general, not just to div elements. You will get more practice using the box model in this chapter.

6.3 CSS Float

Elements that seem to float on the right or left side of either the browser window or another element are often configured using the **float property**. The browser renders these elements using normal flow and then shifts them to either the right or left as far as possible within their container (usually either the browser viewport or a div element).

- Use `float: right;` to float the element on the right side of the container.
- Use `float: left;` to float the element on the left side of the container.
- Specify a width for a floated element unless the element already has an implicit width, such as an img element.
- Other elements and web page content will flow around the floated element.



Wildflowers

The heading and paragraph follow normal flow. The Yellow Lady Slipper pictured on the right is a wildflower. It grows in wooded areas and blooms in June each year. The Yellow Lady Slipper is a member of the orchid family.

Figure 6.5 The image is configured to float

Figure 6.5 shows a web page with an image configured with `float: right;` to float on the right side of the browser viewport (see chapter6/float.html in the student files). When floating an image, the margin property is useful to configure empty space between the image and text on the page.

View Figure 6.5 and notice how the image stays on the right side of the browser viewport. An id called `yls` was created that applies the `float`, `margin`, and `border` properties. The attribute `id="yls"` was placed on the image tag. The CSS is

```
h1 { background-color: #A8C682;
     padding: 5px;
     color: #000000; }
p { font-family: Arial, sans-serif; }
#yls { float: right;
        margin: 0 0 5px 5px;
        border: 1px solid #000000; }
```

The HTML source code is

```
<h1>Wildflowers</h1>
<img  id="yls"  src="yls.jpg" alt="Yellow Lady Slipper" height="100"
width="100">
    <p>The heading and paragraph follow normal flow. The Yellow Lady
    Slipper pictured on the right is a wildflower. It grows in wooded
    areas and blooms in June each year. The Yellow Lady Slipper is a
    member of the orchid family.</p>
```