

CSS Tutorial Part 2:

Borders, Margins, Padding, Background Images

Adding a border and border styles:

Add a border:

You can modify a border's style, width, and color. You can also specify that a tag's style only has a border on one, two, or three sides. Try adding a border around your h1 elements:

```
h1 {  
    border-style: solid;  
    border-width: 4px;  
    border-color: green;  
}
```

Save the css file and look at the html file in the browser. You should see a green border around your h1 elements that is 4 pixels wide and solid.

Other border **styles** include:

- solid,
- dotted,
- dashed,
- double,
- groove,
- ridge,
- inset,
- outset.

Border width is specified in pixels, and can be anything you like. You can also use preset widths, but I almost always use pixel widths (e.g., border-width: 3px; (note there's no space between the 3 and the px)):

- thin
- medium
- thick

Border color can be any of the standard colors, or you can specify the color using hex values or rgb values (which we will discuss later).

Adjusting a border on one side:

You can also add a border or set border properties on individual sides. So, for instance, you could say:

```
h2 {  
    border-bottom-style: dashed;  
    border-bottom-width: 2px;
```

```
border-bottom-color: purple;
}
```

You could also say:

```
h3 {
    border-top-style:dotted;
    border-right-style:solid;
    border-bottom-style:dotted;
    border-left-style:solid;
}
```

Feel free to try this and see how it looks.

Adding Padding and Margins:

Padding and margins are different. To clarify the difference:

- Padding is the space between the text and the border (inside the element).
- Margin is the space between the border and the other elements on the page (outside the element)

You can adjust both separately, and again, you can set the padding and margin for the top, left, bottom, and right separately.

```
h1 { border-style: solid;
      border-width: 4px;
      border-color: green;

      padding-left: 10px;
      padding-right: 10px;
      padding-bottom: 10px;
      padding-top: 40px;
      margin: 0px;
}
```

With this style, you should see padding inside the border between the border and the text, and you should see no margins between the border and other elements.

Special Note: Margins: auto; for centering

Sometimes you want to center an element. For instance, you may create a header or a special paragraph that you want centered on the page. To center an element (not just text, but an entire element) you can set the margins to auto. This will automatically adjust the margins on both sides to be equal, so that the element stays centered even

when you resize your browser. To try this, first set the width of an element to be a specific size (in pixels). To do this you'd use:

```
width: 500px;
```

Include this in a style you create for some element (I'll use h2):

```
h2 {  width: 500px;  
      border-style: solid;  
      border-width: 5px;  
      border-color: green;  
  
      padding: 15px;  
      margin: auto;  
}
```

Try including this in your css stylesheet. Load your html page into a browser and see what your h2 elements look like. Resize the browser. See how the h2 elements stay centered?

Adding background color and image:

Add a background color:

You can also add a background color to individual elements by using the style: background-color.

```
h1 {  border-style: solid;  
      border-width: 4px;  
      border-color: green;  
      padding: 10px;  
      margin: 0px;  
      width: 800px;  
      background-color: #F39642;  
}
```

Now the whole h1 should have a background color

Add a background image:

Color is cool, but images are cooler. You can add a background image to the style of a tag. To do this, go find a good background image on the web. Make sure you place the image in the same folder as the css file you're working on (or follow the rules for getting the browser to locate the image. Now add it to your element:

```
h1 {  border-style: solid;  
      border-width: 4px;  
      border-color: green;  
      padding: 10px;  
      width: 500px;  
      margin: auto;  
      background-color:#F39642;  
      background-image: url(savannahbg.jpg);  
}
```

The h1 elements should now have a background image.

The default is for the background image to “tile” or repeat again and again across and down in the background (like tiles on your bathroom wall). If you use a small picture as your background image, you’ll see this.

Background-repeat:

If you want a background image (that other elements float on top of), but you don’t want it to tile, or you only want it to tile in one direction, you can set the background-repeat property.

If you only want the background image to show up once, you’d specify that you don’t want it to repeat using no-repeat:

background-repeat: no-repeat;

If you specify a repeat, you might want to set the background image’s position using background-position:

background-position: left top;

You can use the following to set the background image’s position:

- left top
- left center
- left bottom
- right top
- right center
- right bottom
- center top
- center center
- center bottom

And you can set the background image’s position using x% y% (the top left is 0% 0% and the bottom right is 100% 100%

background-position: 20% 40%

Or if you want to specify using pixels:

background-position: 50px 100px;

If you wish to have the background image tile (repeat), but only in one direction, you can use:

background-repeat: repeat-y;

or

background-repeat: repeat-x;

You can use background-position to specify the position for the repeat-x and repeat-y as well.

Adding default style to the entire page:

Modifying the body’s style:

If you want your entire web page to have a default background color, specific font, font color, etc. you can style the body tag. For example you’d add to your css style sheet the following style:

```
body {
```

```
        background-color: brown;
        font-size: small;
        font-family: arial, helvetica, sans-serif;
    }
```

Now the default for the entire web page is to have a brown background with a small font that's arial. You can override this default by styling specific elements.

Div:

So far you've added style to preexisting html tags, such as paragraphs (<p></p>), headers (<h1></h1>), etc. You can also create your own elements to be styled.

Specifically, what if you want to set a style for all the elements within one section of a web page (e.g., the header, the paragraphs, the lists, the links, etc. in a side panel on a web page). You can do that using "div" tags.

NOTE: every id MUST BE UNIQUE on your web page. A class can exist many times throughout the web page.

Div tags allow you to section off parts of your html. You place div tags around the area in your html page you want to style. So first, you must edit the html page.

In your html file, add a div tag around a section you want to style:

```
<div id = "sidebar">
  <h2>Find out more about giraffes!
</h2>
  <p> this is where I'd put a lot of info about giraffes </p>
  <h2> Relevant links </h2>
  <p><a href = "http://www.sandiegozoo.org/animalbytes/t-giraffe.html">
    San Diego Zoo: Giraffe</a><br>
</p>
</div>
```

Save your html file. Now you can give the "sidebar" div style in your css stylesheet.

In your.css file, add a style for the sidebar div. To do this, you should add the following:

```
#sidebar{
    background-color:#FFFF66;
    width: 295px;
    color: #5E2605;
}
```

Save the CSS file and reload the html file in the browser to see what you've got so far. To be safe, validate your css stylesheet by going to:

<http://jigsaw.w3.org/css-validator/>

and validating the stylesheet. If you don't get error messages, your page is valid.

Styling an element just within a div element

What if you want the paragraphs on your web page to look one way, but the paragraphs within the div to have a different look than those on the rest of the page? You can set styles for specific tags within a div by first specifying the div's id, and then specifying the element, e.g.,

```
#sidebar p {
    color: #5E2605;
    line-height: 170%;
    padding-top: 15px;
    padding-bottom: 5px;
    margin: 0px;
    width: 300px;
}
```

Save the css file and reload your html file. To be safe, validate your css stylesheet by going to:

<http://jigsaw.w3.org/css-validator/>