

# Introduction to CSS Training

## Styling Tables with CSS

## Lesson 1, Activity 2: A Review of HTML Table Syntax

The following code sample shows a basic unstyled table:

### Code Sample:

---

[StylingTables/Demos/TableHomeRuns.html](#)

```
<!DOCTYPE HTML>
<html>
<head>
<meta charset="UTF-8">
<title>Home Run Hitters</title>
</head>
<body>
<table summary="This table shows the all-time home run leaders in major league baseball.">
  <caption>All-time Home Run Leaders</caption>
  <thead>
    <tr>
      <th>Player</th>
      <th>Home Runs</th>
      <th>Team</th>
    </tr>
  </thead>
  <tfoot>
    <tr>
      <td colspan="3">*Alleged steroid user</td>
    </tr>
  </tfoot>
  <tbody>
    <tr>
      <td>Barry Bonds*</td>
      <td>762</td>
      <td>Giants</td>
    </tr>
    <tr>
      <td>Hank Aaron</td>
      <td>755</td>
      <td>Braves</td>
    </tr>
    <tr>
      <td>Babe Ruth</td>
      <td>714</td>
      <td>Yankees</td>
    </tr>
  </tbody>
</table>
</body>
</html>
```

The following table shows the structural and informational attributes used in HTML tables:

## Table Structural and Informational Attributes

Attribute	Tags
summary	table
colspan	th, td
rowspan	th, td

Most other attributes are for formatting and can be replaced with CSS.

The following table shows the formatting attributes used in HTML tables and their CSS replacements:

### CSS for Tables

Attribute	CSS Replacement	Tags
cellspacing	border-collapse and border-spacing	table
cellpadding	padding (applied to cells)	table
border	border	table
background	background-image	table, th, td
bgcolor	background-color	all
width	width	table, th, td
height	height	table, tr, th, td
align	text-align	tr, th, td
valign	vertical-align	tr, th, td

Some of the CSS replacements shown in the table above can be used in other table tags. For example:

- The `border` property can be applied to `td` and `th` as well as the `table` tag.
- The `text-align` property can be applied to `table`, `thead`, `tbody`, and `tfoot` as well as the `tr`, `th` and `td` tags.

We'll only discuss the `cellpadding`, `cellspacing`, and `border` replacements in this lesson as the other properties are all general formatting properties that have no specific behavior unique to tables.

### border-spacing

The `border-spacing` property is used to specify the space between adjacent borders and the content surrounding the table.

## Code Sample:

---

### StylingTables/Demos/border-spacing.html

```

<!DOCTYPE HTML>
<html>
<head>
<meta charset="UTF-8">
<style type="text/css">
#spacing-0 {
    border-spacing:0px;
}

#spacing-10 {
    border-spacing:10px;
}

#spacing-20 {
    border-spacing:20px;
}

td {
    border:10px solid black;
    padding:20px;
}

caption {
    font-weight:bold;
}
</style>
<title>border-collapse</title>
</head>

<body>
<table id="spacing-0">
    <caption>border-spacing: 0px</caption>
    <tr>
        <td>1</td>
        <td>2</td>
    </tr>
</table>
<hr>
<table id="spacing-10">
    <caption>border-spacing: 10px</caption>
    <tr>
        <td>1</td>
        <td>2</td>
    </tr>
</table>
<hr>
<table id="spacing-20">
    <caption>border-spacing: 20px</caption>
    <tr>
        <td>1</td>

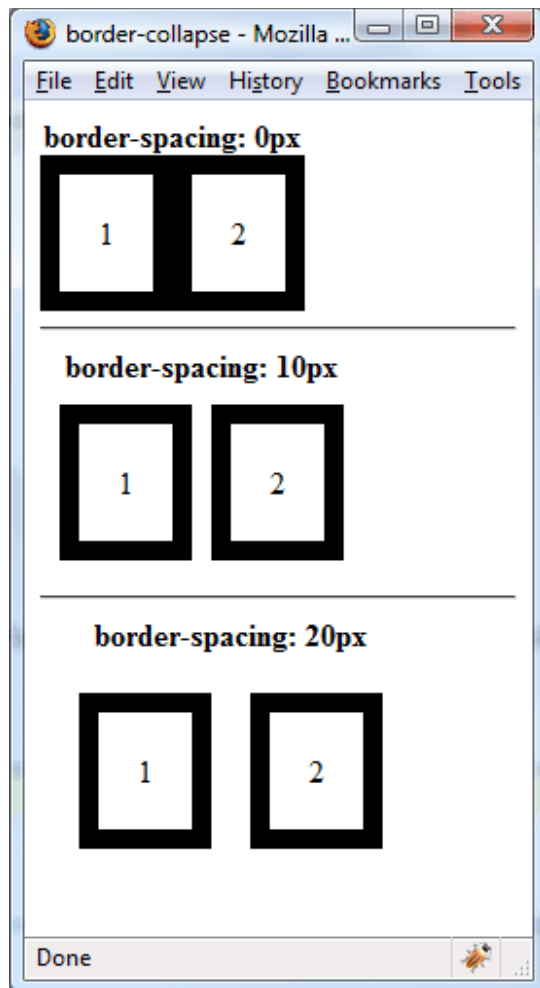
```

```

<td>2</td>
</tr>
</table>
</body>
</html>

```

The above code renders as follows in Firefox 3:

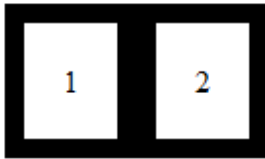


In Internet Explorer 7 and earlier, `border-spacing` is not supported.

## border-collapse

The `border-collapse` property takes the values `separate` and `collapse`. It is used to indicate whether adjacent borders should be merged (`collapse`) or not (`separate`). The default behavior is to keep the borders separate. For example, if two adjacent borders have 5px borders, a 10px border would appear between them.

The screenshot below illustrates this:

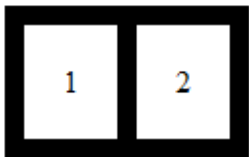


Notice the border between cells 1 and 2 is twice the width of the edge borders. The rule used to achieve this effect is shown below:

```
table {
  border-spacing: 0px;
  border-collapse: separate;
}
```

As `separate` is the default, the `border-collapse` declaration could be left out.

The screenshot below shows how the border changes when `border-collapse` is set to `collapse`:



Notice the dividing border is now the same width as the edge borders.

Some things to note about `border-collapse`:

- When `border-collapse` is set to `collapse`, `border-spacing` becomes moot.
- When collapsing borders, if two adjacent cells have different border widths, the wider of the two borders will be used.
- In Internet Explorer 7 and earlier, `border-collapse` does not override the `cellspacing` attribute which defaults to 2. For it to work, you must either include the `cellspacing` attribute with a value of 0 or use a more advanced CSS hack.

## border

The deprecated `border` attribute of the `table` tag affects all the borders of the table. It is not possible to have borders on some rows or cells but not others. Likewise, it is not possible to have vertical borders without horizontal borders. It's all or nothing.

CSS gives you much more control. It allows you to control the borders of each side of the table and each side of each cell independently.

For example, to apply a 2px solid dark blue border to the top and bottom of the table, but not to the left and right, you could use the following CSS:

```
table {
  border-collapse: collapse;
  border-top: 2px solid darkblue;
  border-bottom: 2px solid darkblue;
}
```

You might then wish to add light blue horizontal borders within the table:

```
td, th {
  border-top: 2px solid lightblue;
  border-bottom: 2px solid lightblue;
}
```

The result of adding code differs between browsers. In Firefox and Safari, the cell borders take precedence over the table border, so the dark blue borders defined for the table will be replaced by the light blue borders. Not so in Internet Explorer, which gives precedence to the table border.

Now let's add silver vertical borders within the table by adding a couple of declarations to the `td, th` rule:

```
td, th {
  border-top: 2px solid lightblue;
  border-bottom: 2px solid lightblue;
  border-left: 2px solid silver;
  border-right: 2px solid silver;
}
```

We now have a table that looks something like this (FF and Safari on the left, IE on the right):

Player	Home Runs	Team
Barry Bonds*	762	Giants
Hank Aaron	755	Braves
Babe Ruth	714	Yankees
*Alleged steroid user		

Player	Home Runs	Team
Barry Bonds*	762	Giants
Hank Aaron	755	Braves
Babe Ruth	714	Yankees
*Alleged steroid user		

One fix for the different approach to border precedence would be to apply a dark blue border to the top border of cells in the top row and to the bottom border of cells in the bottom row of the table. But let's instead get rid of the outer table border entirely. That should be easy enough to do - just get rid of the

`border-top` and `border-bottom` declarations for the `table` tag. It's not as simple as that though, because the top and bottom rows have borders and so do all the left-most and right-most cells. Here's the trick:

```
table {
  border-collapse: collapse;
  border: 2px solid #fff; /*for IE 6 and 7*/
  border-style: hidden;
}
```

As you can see from the comments, we need to add two declarations: one for IE and another for Firefox and Safari. But it gets the job done:

All-time Home Run Leaders		
Player	Home Runs	Team
Barry Bonds*	762	Giants
Hank Aaron	755	Braves
Babe Ruth	714	Yankees

\*Alleged steroid user

## padding

The `padding` property should be applied to table cells (e.g, `th` and `td`) to create a buffer between their content and the cell borders. For example, to add space around the content in the cells in the table header, you could do this:

```
thead th {
  padding: 5px;
}
```

You might also want to push down the content in the footer of the table some:

```
tfoot td {
  padding-top: 10px;
}
```

As you can imagine, with all this control, you have the ability to design some pretty slick tables, a lot slicker anyway than you could with plain old HTML. By adding colors and modifying other properties, we have improved our table's appearance:



## All-time Home Run Leaders

Player	Home Runs	Team
Barry Bonds*	762	Giants
Hank Aaron	755	Braves
Babe Ruth	714	Yankees

*\*Alleged steroid user*

The code for this page is in <StylingTables/Demos/borders.html>.

## Lesson 1, Activity 4: Styling a Table

Duration: 30 to 40 minutes.

In this exercise you will style an employee timecard. The HTML already exists and there are some CSS settings for the page, but you must write all the CSS for the table itself.

1. Open [StylingTables/Exercises/Timecard.html](#) in your editor.
2. Add CSS to make the table appear like the one below:

Employee Timecard			
Day	Regular	Overtime	Total
Monday	8	0	8
Tuesday	8	2.5	10.5
Wednesday	8	0	8
Thursday	8	0	8
Friday	8	0	8
Saturday	0	5	5
Sunday	0	1	1
Total weekly hours:	40	8.5	48.5

3. The colors used are listed below:
  1. Darker orange (caption background and horizontal borders): #f79646
  2. Lighter orange (background of thead and tbody even rows): #fde9d9
  3. Darker gray (tfoot background): #687886
  4. Lighter gray (vertical borders): #ccc
  5. White (font color in caption and tfoot): #fff

### Solution:

#### [StylingTables/Solutions/Timecard.html](#)

```

---- C O D E   O M I T T E D ----
<style type="text/css">
body {
  background-color:#f6f6ff;
  font-family:Calibri, Myriad;
}

#main {
  width:780px;
  padding:20px;
  margin:auto;
}

```

```

table.timecard {
  margin:auto;
  width:600px;
  border-collapse:collapse;
  border:1px solid #fff; /*for IE 6 and 7*/
  border-style:hidden;
}

```

```

table.timecard caption {
  background-color:#f79646;
  color:#fff;
  font-size:x-large;
  font-weight:bold;
  letter-spacing:.3em;
}

```

```

table.timecard thead th {
  padding:8px;
  background-color: #fde9d9;
  font-size:large;
}

```

```

#thDay {
  width:40%;
}

```

```

#thRegular, #thOvertime, #thTotal {
  width:20%;
}

```

```

table.timecard th, table.timecard td {
  padding:3px;
  border-width: 1px;
  border-style: solid;
  border-color: #f79646 #ccc;
}

```

```

table.timecard td {
  text-align:right;
}

```

```

table.timecard tbody th {
  text-align:left;
  font-weight: normal;
}

```

```

table.timecard tfoot {
  font-weight:bold;
  font-size:large;
  background-color: #687886;
  color:#fff;
}

```

```

table.timecard tr.even {

```

```
background-color: #fde9d9;  
}  
</style>  
---- C O D E    O M I T T E D ----
```