

## Creating tables

During the initial years of websites, tables were the only HTML element capable of producing a simple to complex layout. These days are slowly fading with the use of CSS layouts. However, when you need the ability to display tabular data (such as an Excel spreadsheet) or creating a stable and useable form, they are still a practical choice to use. In this article, we will examine basic table markup and structure, along with ways to style tables with CSS. Finally, we'll see how to create a simple layout using a table with CSS.

Finished Page

[http://midwestwebdesign.net/tutorials/tables/table\\_finished.html](http://midwestwebdesign.net/tutorials/tables/table_finished.html)

Project Zip

<http://midwestwebdesign.net/tutorials/tables/tables.zip>

### Create the page

In your text editor, create a new file and name it **table.html** and add the following code:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<title>My Table</title>
</head>

<body>

<table>

<tr>

<td>Pet Breed</td>

<td>Pet Name</td>

</tr>

</table>

</body>

</html>
```

If you read [Creating an HTML web page](#) then you should be familiar with the structure, but we will review briefly:

- `<table>`
  - Starts a table
- `<tr>`
  - Creates and starts a new row
- `<td>`
  - Creates and starts a table cell
- `</td>`
  - Closes a table cell
- `</tr>`
  - Closes a table row
- `</table>`
  - Closes a table

From the example above, Pet Breed and Pet Name are our table contents. Save your file and preview the file.

<http://midwestwebdesign.net/tutorials/tables/table1.html>

Even though our cell contents don't appear to be within a table, they are.

### **Adding a border, cell padding and cell spacing**

In order to make our two cell contents to look like they reside inside a table, we need to create a border, which will surround our table. While we're at it, we'll add a little breathing room between our table cells and table border, along with spacing between individual cells. Add the following code:

```
<table border="1" cellpadding="8" cellspacing="2">
<tr>
<td>Pet Breed</td>
<td>Pet Name</td>
</tr>
</table>
```

Let's examine the code in greater detail:

- Border
  - Set to a value of 1, which creates a thin outline around our table
- Cell padding
  - Set to a value of 8, which provides space between table cells and our table border
- Cell spacing
  - Set to a value of 2, which provides spacing between individual cells

Save your file and preview the results.

<http://midwestwebdesign.net/tutorials/tables/table2.html>

## Adding table rows and centering the table

Next, let's add two additional columns, which will hold Pet Name and age and then add the corresponding rows and cells to fill our table, along with centering our table in the browser:

```
<table border="1" cellpadding="8" cellspacing="2" align="center">
<tr>
<td>Pet Breed</td>
<td>Pet Name</td>
<td>Pet Age</td>
</tr>
<tr>
<td>Mutt</td>
<td>Spike</td>
<td>9</td>
</tr>
<tr>
<td>Cocker Spaniel</td>
<td>Comet</td>
<td>4</td>
</tr>
</table>
```

We add **align="center"** which centers our table in the browser window. We also added the necessary table rows and cells. Save your file and preview the results.

<http://midwestwebdesign.net/tutorials/tables/table3.html>

## Centering cell contents

To make our table look a bit better visually, let's center our cell contents:

```
<table border="1" cellpadding="8" cellspacing="2" align="center">
<tr align="center">
<td>Pet Breed</td>
<td>Pet Name</td>
<td>Pet Age</td>
</tr>
<tr align="center">
<td>Mutt</td>
<td>Spike</td>
<td>9</td>
</tr>
<tr align="center">
<td>Cocker Spaniel</td>
<td>Comet</td>
<td>4</td>
</tr>
</table>
```

We set **align="center"** for each row. We could have completed this by setting **align="center"** for each table cell, but this method is far easier.

<http://midwestwebdesign.net/tutorials/tables/table4.html>

### Adding a width

Currently, our table is conforming to the width of its content. Let's make our table a bit larger by setting a specific fixed width measurement:

```
<table width="400" border="1" cellpadding="8" cellspacing="2"
align="center">
...
</table>
```

We set **width=400** inside the opening table tag.

<http://midwestwebdesign.net/tutorials/tables/table5.html>

### Background color for our table rows

In order to set a background color for each table row, we have two choices:

- Set a background color on each table row using bgcolor
- Set a background color on each table row using an applied CSS class

We'll use a CSS class, which make future revisions far easier to manage. Add the following CSS between the opening and closing <head> tags:

```
<head>
<style type="text/css" media="screen">
<!--
table#animals tr.first{
background-color:#3333ff;
}
table#animals tr.second{
background-color:#ff0000;
}
table#animals tr.third{
background-color:#093;
}
-->
</style>
</head>
```

We create three ID's with CSS classes, appropriately named for which row they affect. Next, inside our table, apply the ID inside the opening table tag:

```
<table width="400" border="1" cellpadding="8" cellspacing="2"
align="center" id="animals">
```

Finally, apply the classes as follows:

First row:

```
<tr align="center" class="first">
```

Second row:

```
<tr align="center" class="second">
```

Third row:

```
<tr align="center" class="third">
```

The CSS rules do this when read by the browser: *“Look for table cells which have a class of first, second or third which reside inside a table with an ID of animals and apply the following styles.”* Save your file and preview the results.

<http://midwestwebdesign.net/tutorials/tables/table6.html>

### Changing Fonts and Colors

To make our text inside our cells a bit easier to read, we add the following code:

```
table#animals tr.first{
background-color:#14314f;
font-family:Verdana, Helvetica, sans-serif;
color:#c90;
font-weight:bold;
}

table#animals tr.second{

background-color:#ff0000;

font-family:Verdana, Helvetica, sans-serif;

color:#333;

font-weight:bold;

}

table#animals tr.third{

background-color:#093;

font-family:Verdana, Helvetica, sans-serif;

color:#030;

font-weight:bold;

}
```

We picked arbitrary colors which blend well. Do note we did not the HTML code. The beauty of CSS!

<http://midwestwebdesign.net/tutorials/tables/table7.html>

### Nested tables

A nested table is in fact, a table inside another table. For example, we want to insert a new table inside the original, thus we add the following code:

```
<table width="400" border="1" cellpadding="8" cellspacing="2"
align="center" id="animals">
<tr align="center" class="first">
<td>Pet Breed</td>
<td>Pet Name</td>
<td>Pet Age</td>
</tr>
<tr align="center" class="second">
<td>Mutt
<table border="1" width="50" cellpadding="5" cellspacing="0">
<tr>
<td>Putt</td>
</tr>
</table>
</td>
<td>Spike</td>
<td>9</td>
</tr>
<tr align="center" class="third">
<td>Cocker Spaniel</td>
<td>Comet</td>
<td>4</td>
</tr>
</table>
```

Let's examine the code in greater detail:

- Before closing the table cell which contains Mutt, we insert another new table
- This new table has the same structure and formatting abilities of our original table
- The only difference is it's nested inside our original table
- To end our nested table, we place the closing table tag right before the closing td tag which contains Mutt.

Save your file and preview the results.

<http://midwestwebdesign.net/tutorials/tables/table8.html>

### Colspans

Using a colspan in a table does exactly what it says; it allows a cell to span multiple columns. For example, we can do the following:

```
<head>

<style type="text/css">

<!--
table#animals tr.fourth{
background-color:#963;
font-family:Verdana, Helvetica, sans-serif;
color:#660000;
font-weight:bold;
}
</style>

</head>

<body>

...

<tr align="center" class="fourth">

<td colspan="3">Dogs are awesome!</td>

</tr>

...
```

Let's examine the code in greater detail:

- First, we add a new CSS rule which will format our new fourth row
- We add an additional row before our closing table tag

Save your file and preview the results.

<http://midwestwebdesign.net/tutorials/tables/table9.html>

## **Rowspan**

Using a rowspan in a table does exactly what it says; it allows a cell to span multiple rows. For example, we can do the following:

```
<tr align="center" class="first">
<td>Pet Breed</td>
<td>Pet Name</td>
<td>Pet Age</td>
<td rowspan="4">My rowspan of 4</td>
</tr>
```

We add an additional table cell, set **rowspan** to four and enter appropriate content. Do note, since we have four rows, you need to set **rowspan** to a value of four.

<http://midwestwebdesign.net/tutorials/tables/table10.html>

### Simple table layout

In order to be fair and show you it's possible to produce a simple layout with a table, open **tablelayout.html** in your text editor. This table uses CSS to set many properties as indicated below:

- body
  - Sets default margin, padding, font family and size
- table#layout
  - Sets default width
  - Sets top and bottom margins to 10 pixels, left and right margins to auto which centers our table
  - Sets a border on our table to a color of black
- table#header
  - Sets property-values for our header
- table#layout td#leftcontent
  - Sets width on the left content navigation panel
- table#layout td#rightcontent
  - Set width on the right content panel
- table#layout td#footer
  - Sets property-values for our footer

The rest of the CSS should be explanatory, but if you have questions, feel free to contact me.

### Summary

In this article we introduced tables. You also learned a little bit about:

- Creating a table, table row and cell
- Setting a border, padding and spacing to improve the visual appearance of a table
- Setting a width and centering our table in the browser
- Using CSS to apply formatting changes
- Nesting a table inside an original table
- Making a cell span multiple columns

- Making a cell span multiple rows
- Creating a simple table layout using CSS

Take the knowledge gained here and produce any table of your imagination!

If you have questions, please follow the link below.

<http://midwestwebdesign.net/tutorials/contact.aspx>