
HTML Tables

FSDI 103

Basic Structure

tables are made up cells, arranged into rows. The bare minimum tags for describing a table are <table>, <tr>, and <td>.

```
<TABLE>
<TR>
  <TD>cell 1</TD><TD>cell 2</TD>
</TR>
<TR>
  <TD>cell 3</TD><TD>cell 4</TD>
</TR>
</TABLE>
```

Row	cell 1	cell 2
Row	cell 3	cell 4

```
<TABLE>
<TR>
  <TD> </TD>  <TD> </TD>  </TR>
<TR>
  <TD> </TD>  <TD> </TD>  </TR>
</TABLE>
```

Table headings

The `<th>` tag defines a header cell in an HTML table.

An HTML table has two kinds of cells:

Header cells - contains header information (created with the `<th>` element)

Standard cells - contains data (created with the `<td>` element)

The text in `<th>` elements are bold and centered by default.

The text in `<td>` elements are regular and left-aligned by default.

Spanning cells and rows

Cells in a table can occupy the space of more than one cell in a row or column. This behavior is set within the `<th>` or `<td>` tags using the `colspan` and `rowspan` attributes.

Column span

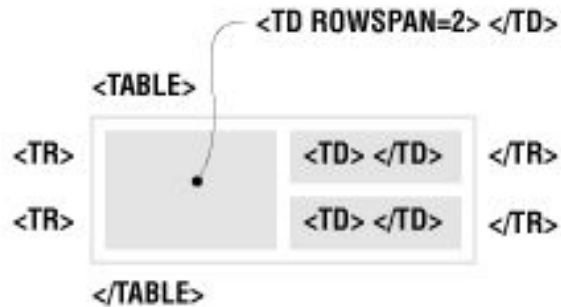
`<td colspan=2>` tells the browser to make "cell 1" occupy the same horizontal space as two cells ("span" over two columns). Note that the row containing the spanned cell now only has one set of `<td>` tags instead of two.

```
<TABLE>  
<TR>  
  <TD COLSPAN=2> </TD>  
</TR>  
<TR>  
  <TD> </TD>  <TD> </TD>  
</TR>  
</TABLE>
```

```
<TABLE>  
<TR>  
  <TD COLSPAN=2>cell 1</TD>  
</TR>  
<TR>  
  <TD>cell 3</TD><TD>cell 4</TD>  
</TR>  
</TABLE>
```

Row span

Similar to colspan, the rowspan attribute stretches a cell to occupy the space of cells in rows below. Include the rowspan attribute in the row where you want the cell to begin and set its value equal to the number of rows you want it to span.



```
<TABLE>
<TR>
<TD rowspan=2>cell 1</TD>
<TD>cell12</TD>
</TR>
<TR>
<TD>cell 4</TD>
</TR>
</TABLE>
```

Long tables

If your table is fairly big, it's best to divide it into several parts:

- the header (at the top): is defined with the tags `<thead></thead>`;
- the body (in the center): is defined with the tags `<tbody></tbody>`;
- the table footer (at the bottom): is defined with the tags `<tfoot></tfoot>`.

What should you put in the table footer? If it's a long table, you'll usually copy the header cells. This allows you to see what each column refers to, even at the bottom of the table.

table header	Name	Age	Country	<thead>
	Carmen	33 years old	Spain	
	Michelle	26 years old	United States	
table body	Francois	43 years old	France	<tbody>
	Martine	34 years old	France	
	Jonathan	13 years old	Australia	
	Xu	19 years old	China	
table footer	Name	Age	Country	<tfoot>

Width and spacing

The width attribute specifies the width of a table.

If the width attribute is not set, a table takes up the space it needs to display the table data.

Month	Savings
January	\$100
February	\$80

```
<table width="400">
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
  <tr>
    <td>February</td>
    <td>$80</td>
  </tr>
</table>
```

Value	Description
<i>pixels</i>	Sets the width in pixels (example: width="50")
<i>%</i>	Sets the width in percent of the surrounding element (example: width="50%")

Borders and background

The bgcolor attribute of <table> is not supported in HTML5. Use CSS instead.

<table bgcolor="color_name | hex_number | rgb_number">

CSS example syntax: <table style="background-color:red">

Value	Description
color_name	Specifies the background color with a color name (like "red")
hex_number	Specifies the background color with a hex code (like "#ff0000")
rgb_number	Specifies the background color with an rgb code (like "rgb(255,0,0)")

```
<table bgcolor="#00FF00">
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
  <tr>
    <td>February</td>
    <td>$80</td>
  </tr>
</table>
```

Month	Savings
January	\$100
February	\$80

HTML5

```
<table style="background-color:#00FF00">
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
  <tr>
    <td>February</td>
    <td>$80</td>
  </tr>
</table>
```

Table properties in CSS

Border	The example below specifies a black border for <table>, <th>, and <td> elements:	<pre>table, th, td { border: 1px solid black; }</pre>	<table><tr><th>Firstname</th><th>Lastname</th></tr><tr><td>Peter</td><td>Griffin</td></tr><tr><td>Lois</td><td>Griffin</td></tr></table>	Firstname	Lastname	Peter	Griffin	Lois	Griffin						
Firstname	Lastname														
Peter	Griffin														
Lois	Griffin														
Width and Height	The example below sets the width of the table to 100%, and the height of the <th> elements to 50px	<pre>table { width: 100%; } th { height: 50px; }</pre>	<table><tr><th>Firstname</th><th>Lastname</th><th>Savings</th></tr><tr><td>Peter</td><td>Griffin</td><td>\$100</td></tr><tr><td>Lois</td><td>Griffin</td><td>\$150</td></tr><tr><td>Joe</td><td>Swanson</td><td>\$300</td></tr></table>	Firstname	Lastname	Savings	Peter	Griffin	\$100	Lois	Griffin	\$150	Joe	Swanson	\$300
Firstname	Lastname	Savings													
Peter	Griffin	\$100													
Lois	Griffin	\$150													
Joe	Swanson	\$300													
Horizontal Alignment	The text-align property sets the horizontal alignment (like left, right, or center) of the content in <th> or <td>.	<pre>th { text-align: left; }</pre>	<table><tr><th>Firstname</th><th>Lastname</th><th>Savings</th></tr><tr><td>Peter</td><td>Griffin</td><td>\$100</td></tr><tr><td>Lois</td><td>Griffin</td><td>\$150</td></tr><tr><td>Joe</td><td>Swanson</td><td>\$300</td></tr></table>	Firstname	Lastname	Savings	Peter	Griffin	\$100	Lois	Griffin	\$150	Joe	Swanson	\$300
Firstname	Lastname	Savings													
Peter	Griffin	\$100													
Lois	Griffin	\$150													
Joe	Swanson	\$300													
Vertical Alignment	The vertical-align property sets the vertical alignment (like top, bottom, or middle) of the content in <th> or <td>.	<pre>th, td { padding: 15px; text-align: left; }</pre>	<table><tr><th>Firstname</th><th>Lastname</th><th>Savings</th></tr><tr><td>Peter</td><td>Griffin</td><td>\$100</td></tr><tr><td>Lois</td><td>Griffin</td><td>\$150</td></tr><tr><td>Joe</td><td>Swanson</td><td>\$300</td></tr></table>	Firstname	Lastname	Savings	Peter	Griffin	\$100	Lois	Griffin	\$150	Joe	Swanson	\$300
Firstname	Lastname	Savings													
Peter	Griffin	\$100													
Lois	Griffin	\$150													
Joe	Swanson	\$300													

Table properties in CSS

Hover-able	Use the :hover selector on <tr> to highlight table rows on mouse over:	<pre>tr:hover {background-color: #f5f5f5;}</pre>	
Color	The background color and text color of <th> elements:	<pre>th { background-color: #4CAF50; color: white; }</pre>	

Empty Cells

The empty-cells property has two primary values:

show: display a border and background on an empty cell.

hide: does not display a border or background on an empty cell.

A good use case for empty-cells could be a situation where you may not know whether a table will or will not contain empty data points and you decide to hide them.

Empty Cells

```
.table-show {  
  empty-cells: show;  
}
```

```
.table-hide {  
  empty-cells: hide;  
}
```

