

Using HTML Tables

Table Example

<u>CustomerID</u>	<u>CompanyName</u>	<u>ContactName</u>	<u>City</u>
ALFKI	Alfreds Futterkiste	Maria Anders	Berlin
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	México D.F.
ANTON	Antonio Moreno Taquería	Antonio Moreno	México D.F.
AROUT	Around the Horn	Thomas Hardy	London
BERGS	Berglunds snabbköp	Christina Berglund	Luleå
BLAUS	Blauer See Delikatessen	Hanna Moos	Mannheim
BLONP	Blondesddsl père et fils	Frédérique Citeaux	Strasbourg
BOLID	Bólido Comidas preparadas	Martín Sommer	Madrid
BONAP	Bon app'	Laurence Lebihan	Marseille
BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Tsawassen

Defining a Table Structure

- The first step to creating a table is to specify the table structure:
 - the number of rows and columns
 - the location of column headings
 - the placement of a table caption
- Once the table structure is in place, one can start entering data into the table.

The General Table Structure

<table>

<tr>

<td> First Cell </td>

<td> Second Cell </td>

</tr>

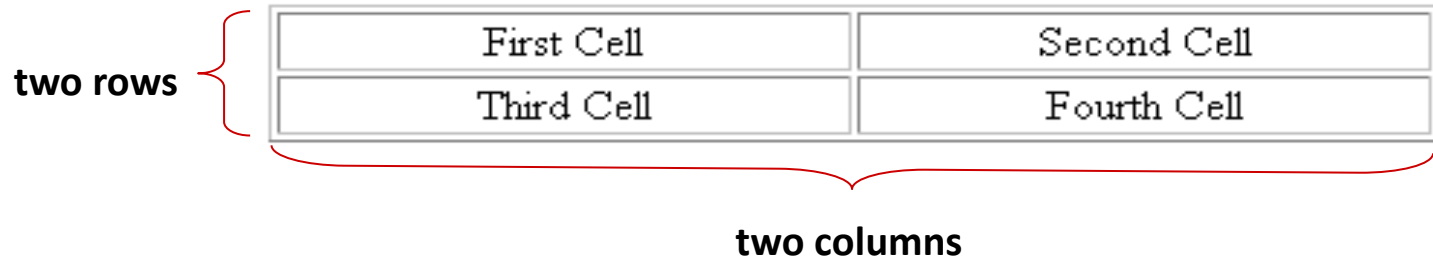
<tr>

<td> Third Cell </td>

<td> Fourth Cell </td>

</tr>

</table>



HTML Structure of a Table

beginning of the
table structure

first row of all in
the table

end of the table
structure

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

table cells

You do not need to indent the <td> tags or place them on separate lines, but you may find it easier to interpret your code if you do so.

After the table structure is in place, you're ready to add the text for each cell.

Adding Table Headings to the Table

Text in cells formatted with the `<th>` tag is bold and centered above each table column.

```
<table>
  <tr>
    <th>Group</th>
    <th>Runner</th>
    <th>Time</th>
    <th>Origin</th>
  </tr>
  <tr>
    <td>Men</td>
    <td>1. Peter Teagan</td>
    <td>2:12:34</td>
    <td>San Antonio, Texas</td>
  </tr>
```

table
headings

Group	Runner	Time	Origin
Men	1. Peter Teagan	2:12:34	San Antonio, Texas
Men	2. Kyle Wills	2:13:05	Billings, Montana
Men	3. Jason Wu	2:14:28	Cutler, Colorado
Women	1. Laura Blake	2:28:21	Park City, Colorado
Women	2. Kathy Lasker	2:30:11	Chicago, Illinois
Women	3. Lisa Peterson	2:31:14	Seattle, Washington

Using the <table>, <tr>, <td> and <th> Tags

- Graphical tables are enclosed within a two-sided **<table>** tag that identifies the start and ending of the table structure.
- Each row of the table is indicated using a two-sided **<tr>** (for table row).
- Within each table row, a two-sided **<td>** (for table data) tag indicates the presence of individual table cells.
- HTML provides the **<th>** tag for table headings.

Table Caption

```
<table>
  <caption align="top"><b>Race Results</b></caption>
  <tr>
    <th>Group</th>
    <th>Runner</th>
    <th>Time</th>
    <th>Origin</th>
  </tr>
```

caption text

caption will be
centered above
the table

Race Results			
Group	Runner	Time	Origin
Men	1. Peter Teagan	2:12:34	San Antonio, Texas
Men	2. Kyle Wills	2:13:05	Billings, Montana
Men	3. Jason Wu	2:14:28	Cutler, Colorado
Women	1. Laura Blake	2:28:21	Park City, Colorado
Women	2. Kathy Lasker	2:30:11	Chicago, Illinois
Women	3. Lisa Peterson	2:31:14	Seattle, Washington

Creating a Table Caption

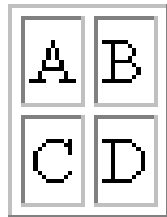
- HTML allows you to specify a caption for a table.
- The syntax for creating a caption is: **<caption align="alignment">caption text</caption>**
 - *alignment* indicates the caption placement
 - a value of “*bottom*” centers the caption below the table
 - a value of “*top*” or “*center*” centers the caption above the table
 - a value of “*left*” or “*right*” place the caption above the table to the left or right

Tables with Different Borders Values

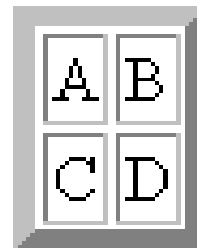
This figure shows the effect on a table's border when the border size is varied.

A	B
C	D

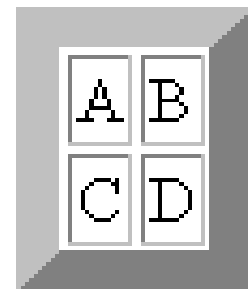
0 pixels



1 pixel



5 pixels



10 pixels

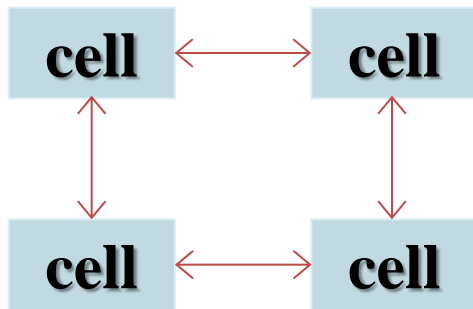
Adding a Table Border

- By default, browsers display tables without table borders.
- A table border can be added using the border attribute to the **<table>** tag.
- The syntax for creating a table border is: **<table border="value">**
 - *value* is the width of the border in pixels
- The **size** attribute is optional; if you don't specify a size, the browser creates a table border 1 pixel wide.

Cell Spacing and Padding

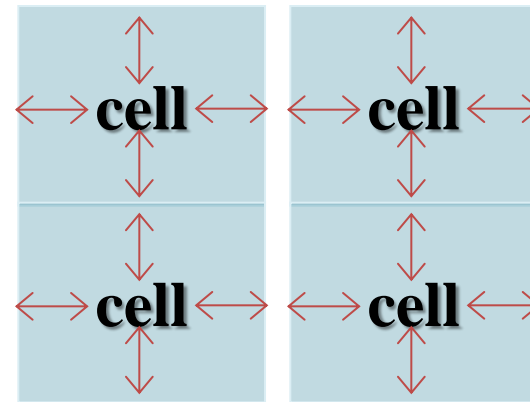
- Tables have two important attributes:

- ◆ **cellspacing**



- ◆ Defines the empty space between cells

- ◆ **cellpadding**



- ◆ Defines the empty space around the cell content

Tables with Different Cell Spacing & Cell Padding Values

different cell spacing values

A	B
C	D

0 pixels

A	B
C	D

1 pixel

A	B
C	D

5 pixels

A	B
C	D

10 pixels

different cell padding values

A	B
C	D

0 pixels

A	B
C	D

1 pixel

A	B
C	D

5 pixels

A	B
C	D

10 pixels

Syntax : <table cellpadding="5" cellspacing="5">

Defining Cell Padding & Cell Spacing

- Cell spacing refers to the space between the cells.

- The syntax for specifying the cell space is:

<table cellpadding="value">

- *value* is the width of the interior borders in pixels
- the default cell spacing is 2 pixels

- Cell padding refers to the space within the cells.

- The syntax for this attribute is:

<table cellpadding="value">

- *value* is the distance from the table text to the cell border, as measured in pixels
- the default cell padding value is 1 pixel

Table attributes

```
<table border="3" align="center" cellspacing="6"
cellpadding="6" bgcolor="cyan">
  <caption>
    <h2>Course Data</h2>
  </caption>
  <tr>
    <th>Name</th>
    <th>Course</th>
    <th>Year</th>
  </tr>
  <tr>
    <td>A B Morgan</td>
    <td>Fishing</td>
    <td>5</td>
  </tr>
  <!-- etc -->
```

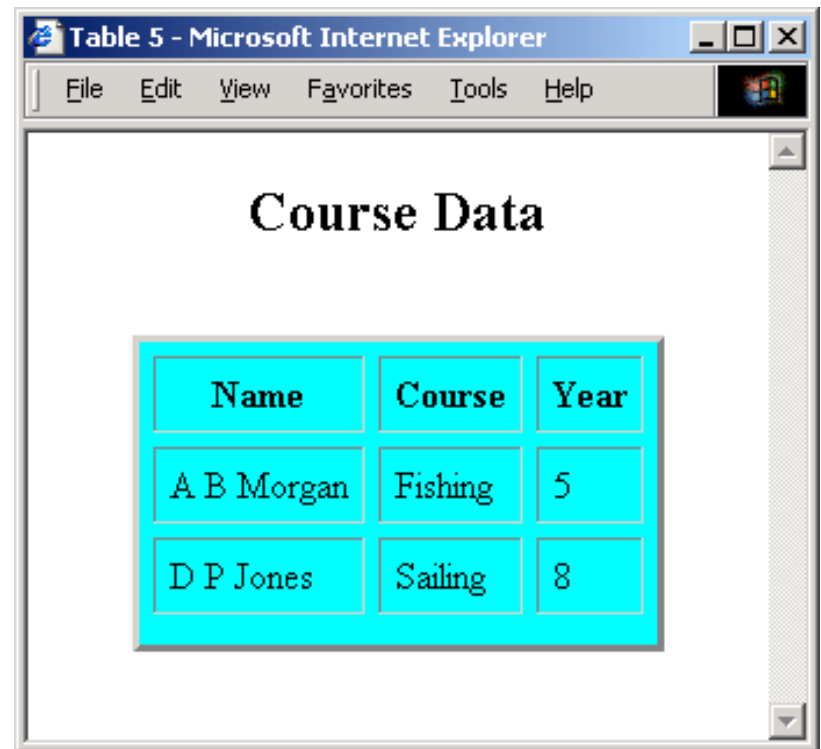


Table Width and Height

- Table Width & Height is *optional*.
- Width & Height can be defined in the open table tag
 - **Example:** `<table width="100" height="100">`
- If no size values are specified, the browser will decide on an appropriate size. Results will vary between browsers.
- To create a table whose height is equal to the entire height of the display area, enter the attribute `height="100%"`.

Values of the Align & Valign Attributes

<code>align="left"</code> <code>valign="top"</code>	<code>align="left"</code> <code>valign="middle"</code>	<code>align="left"</code> <code>valign="bottom"</code>
<code>align="center"</code> <code>valign="top"</code>	<code>align="center"</code> <code>valign="middle"</code>	<code>align="center"</code> <code>valign="bottom"</code>
<code>align="right"</code> <code>valign="top"</code>	<code>align="right"</code> <code>valign="middle"</code>	<code>align="right"</code> <code>valign="bottom"</code>

Aligning a Table on the Web Page

- By default, a browser places a table on the left margin of a Web page, with surrounding text placed above and below the table.
- To align a table with the surrounding text, use the **align** attribute as follows: **align="alignment"**
 - *alignment* equals “*left*”, “*right*”, or “*center*”
 - *left* or *right* alignment places the table on the margin of the Web page and wraps surrounding text to the side
 - *center* alignment places the table in the horizontal center of the page, but does not allow text to wrap around it
- The align attribute is similar to the align attribute used with the **** tag.

Column and Row Span – Example - 1

```
<TABLE border="1">
  <TR>
    <TD>1</TD>
    <TD rowspan="2">2 </TD>
    <TD>3</TD>
  </TR>
  <TR>
    <TD>4 </TD>
    <TD>6</TD>
  </TR>
  <TR>
    <TD>7 </TD>
    <TD>8 </TD>
    <TD>9 </TD>
  </TR>
</TABLE>
```

1	2	3
4		6
7	8	9

Column and Row Span – Example - 2

```
<table cellpadding="0">
  <tr>
    <td>Cell[1,1]</td>
    <td colspan="2">Cell[2,1]</td>
  </tr>
  <tr>
    <td>Cell[1,2]</td>
    <td rowspan="2">Cell[2,2]</td>
    <td>Cell[3,2]</td>
  </tr>
  <tr>
    <td>Cell[1,3]</td>
    <td>Cell[2,3]</td>
  </tr>
</table>
```

Cell[1,1]	Cell[2,1]	
Cell[1,2]	Cell[2,2]	Cell[3,2]
Cell[1,3]		Cell[2,3]

Spanning Rows and Columns

- To merge several cells into one, you need to create a **spanning cell**.
- A spanning cell is a cell that occupies more than one row or column in a table.
- Spanning cells are created by inserting the **rowspan** and **colspan** attribute in a **<td>** or **<th>** tag.
- The syntax for these attributes is: **rowspan="value"**
colspan="value"
 - *value* is the number of rows or columns that the cell spans in the table

Applying a Background Color

- Table elements support the **bgcolor** attribute.
- To specify a background color for all of the cells in a table, all of the cells in a row, or for individual cells, by adding the **bgcolor** attribute to either the **<table>**, **<tr>**, **<td>**, or **<th>** tags as follows:

<table bgcolor="color">

<tr bgcolor="color">

<td bgcolor="color">

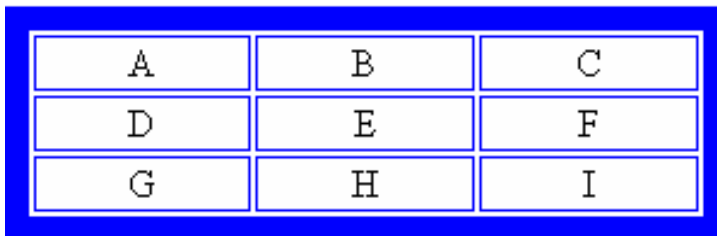
<th bgcolor="color">

– *color* is either a color name or hexadecimal color value

The bordercolor Attribute

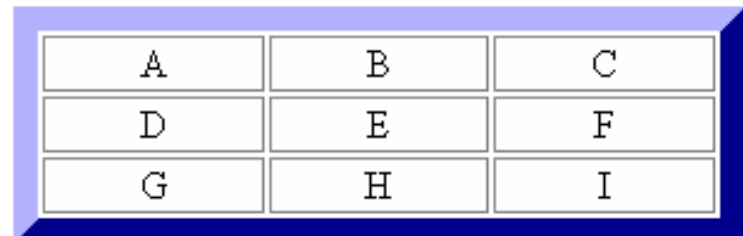
- By default, table borders are displayed in two shades of gray that create a three-dimensional effect.
- The syntax for the bordercolor attribute is:
<table bordercolor="color">
 - *color* is an HTML color name or hexadecimal color value
- Internet Explorer and Netscape apply this attribute differently.

<table border="10" bordercolor="blue">

A 3x3 table with a thick blue border. The cells contain the letters A through I in a 3x3 grid.

A	B	C
D	E	F
G	H	I

Internet Explorer

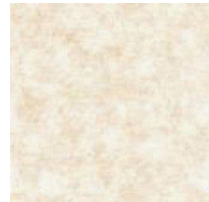
A 3x3 table with a thick blue border. The cells contain the letters A through I in a 3x3 grid.

A	B	C
D	E	F
G	H	I

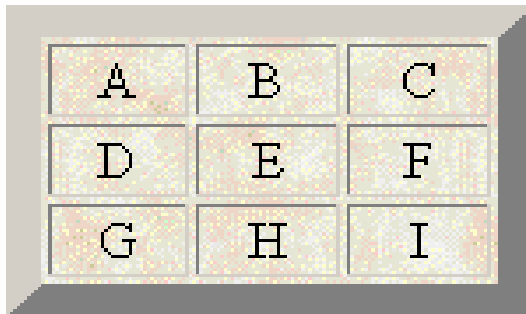
Netscape

Applying a Table Background

- Add a background image to your tables using the **background** attribute.
- A background can be applied to the entire table or to a cell.

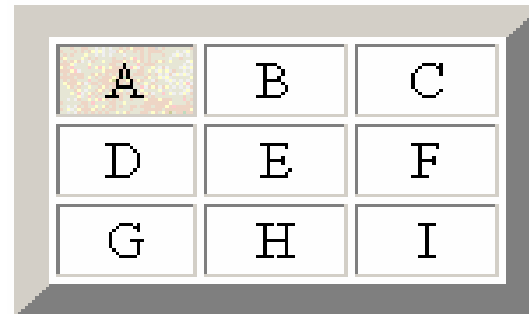


parch.jpg



A	B	C
D	E	F
G	H	I

↑
`<table background="parch.jpg">`



A	B	C
D	E	F
G	H	I

↑
`<td background="parch.jpg">`