

HTML Tables

Organizing Page
Layout and Displaying
Page Data

HTML Tables

- Table are a way of organizing your pages and for displaying page data
- Are simple in the fact there are only a few html tags to know:
 - `<table>`
 - `<tr>`
 - `<td>`
 - `<th>`
 - `<caption>`

Why Use Tables?

■ Advantages

- “Liquid” layouts in *any* browser
- Simpler concept
- Emulates paper layouts
- May still use CSS formatting

■ Disadvantages

- Must edit every page to alter site
- Some effects not possible
- Static appearance
- Complex HTML code

Table Tag - `<table>`

- Denotes the start of a table
- Supported attributes:
 - width : defines how wide you want the table to be on the page
 - you should use % instead (better scaling) of pixels (though they will work too)
 - align (left, center or right) defines alignment for whole table
 - bgcolor : describes the background colour for the table
 - border : takes a number which is the number of pixels wide you want the border to be
 - cellpadding : Specifies the space between the cell walls and contents
 - cellspacing : Specifies the space between cells
- Note: height attribute is not supported, table content will dictate its height

Table Row Tags `<tr>`

- Defines the start of a row in a table
- Must exist inside `<table>` tags
- Supports attributes:
 - `align` : same as `<table>`
 - `valign`: vertical alignment, top, middle or bottom
 - `bgcolor` : will define a background color for a whole row

Table Data Tags `<td>`

- Defines the a cell in a table
- Must exist inside `<tr>` tags
 - (i.e. `<td>` exist inside `<tr>` exist in `<table>`)
- Supports attributes:
 - `align` : same a `<table>`
 - `width`: column width sized to fit (pixels) or can specify size relative to parent element
 - `valign`: vertical alignment to top, middle or bottom of the cell (table cannot do this)
 - `bgcolor` : will define a background color for a single cell
 - `colspan` : takes a number representing the number of columns you want the cell to "span"
 - `rowspan` : takes a number representing the number of rows you want the cell to "span"

Table Caption Tag `<caption>`

- Give a caption for a table
- Must occur the next line after the `<table>` tag

HTML Table Making Strategies

- Be sure to draw the table you are creating by hand, and number each cell
 - It is tough to know what you are working towards if you do not do this
- Be sure to turn your table borders on
 - This makes it easier to see if something is broken, and more importantly where is it broken

Simple Table Example

```
<table border="1">  
  <tr>  
    <td>row 1, cell 1</td>  
    <td>row 1, cell 2</td>  
  </tr>  
  <tr>  
    <td>row 2, cell 1</td>  
    <td>row 2, cell 2</td>  
  </tr>  
</table>
```

Rendered in the browser as:

row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2

Uneven Number of cells

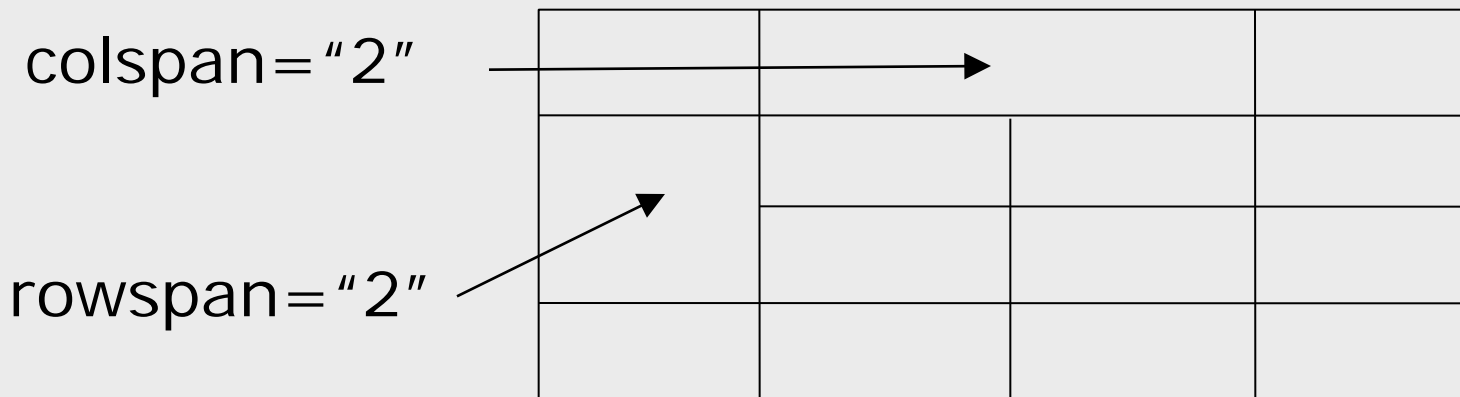
```
<table border="1">  
  <tr>  
    <td>row 1, cell 1</td>  
    <td>row 1, cell 2</td>  
    <td>row 1, cell 3</td>  
  </tr>  
  <tr>  
    <td>row 2, cell 1</td>  
    <td>row 2, cell 2</td>  
  </tr>  
  <tr>  
    <td>row 3, cell 1</td>  
  </tr>  
</table>
```

Rendered in the browser as:

row 1, cell 1	row 1, cell 2	row 1, cell 3
row 2, cell 1	row 2, cell 2	
row 3, cell 1		

Spanning Cells

- To fix the uneven number of cells you can span cells
- Across columns
 - `colspan="n"`, where n is the number of columns
 - Reduce number of cells in row accordingly
- Across rows
 - `rowspan="n"`, where n is the number of rows



Colspan and Rowspan

- When you “span” multiple rows and columns with the rowspan and colspan attributes on a cell(ie. the<td> tags)

```
<table border="1" width="100%">
  <tr>
    <td width="20%">r1c1</td>
    <td width="70%">r1c2</td>
    <td width="10%">r1c3</td>
  </tr>
  <tr>
    <td>r2c1</td>
    <td colspan="2" rowspan="2">row 2, cell 2</td>
  </tr>
  <tr>
    <td>r3c1</td>
  </tr>
</table>
```

r1c1	row 1, cell 2	r1c3
r2c1	row 2, cell 2	
r3c1		

Width Attributes

- The browser will give equal shares to each column in the table unless you specify something else
- You can use width attribute to set column widths using:
 1. Percentages (recommended for scalability) or
 2. Pixels (not recommended)
- Try to have your percentages add up to 100%

Colspan and Rowspan

- You can “span” multiple rows and columns with the row and colspan attributes on a cell (<td> tags)

```
<table border="1">
  <tr>
    <td width="20%">row 1, cell 1</td>
    <td width="70%">row 1, cell 2</td>
    <td width="10%">row 1, cell 3</td>
  </tr>
  <tr>
    <td>row 2, cell 1</td>
    <td colspan="2" rowspan="2">row 2, cell 2</td>
  </tr>
  <tr>
    <td>row 3, cell 1</td>
  </tr>
</table>
```

row 1, cell 1	row 1, cell 2	row 1, cell 3
row 2, cell 1	row 2, cell 2	
row 3, cell 1		

Layout

- Create a paper design
 - “Master plan”
 - Divide page into rectangular cells
 - Subdivide cells with nested tables
- Create table HTML code as a shell
 - Indent table, tr and td elements for clarity
 - Add content later
 - Use validator to check for missing closing tags

Nesting Tables

- Entire table may appear inside a an existing table `<td>` element
- NOTE: the code can get messy
 - Use indentation to structure HTML code
 - Make sure all elements have closing tags

Nested Tables

```
<td>
```

```
  <table border="0" cellpadding=0  
    cellspacing=0>
```

```
    <tr>
```

```
      <td>
```

```
    </tr>
```

```
    <tr>
```

```
      <td align="center">Norwegian Blue  
        (lovely plumage)</td>
```

```
    </tr>
```

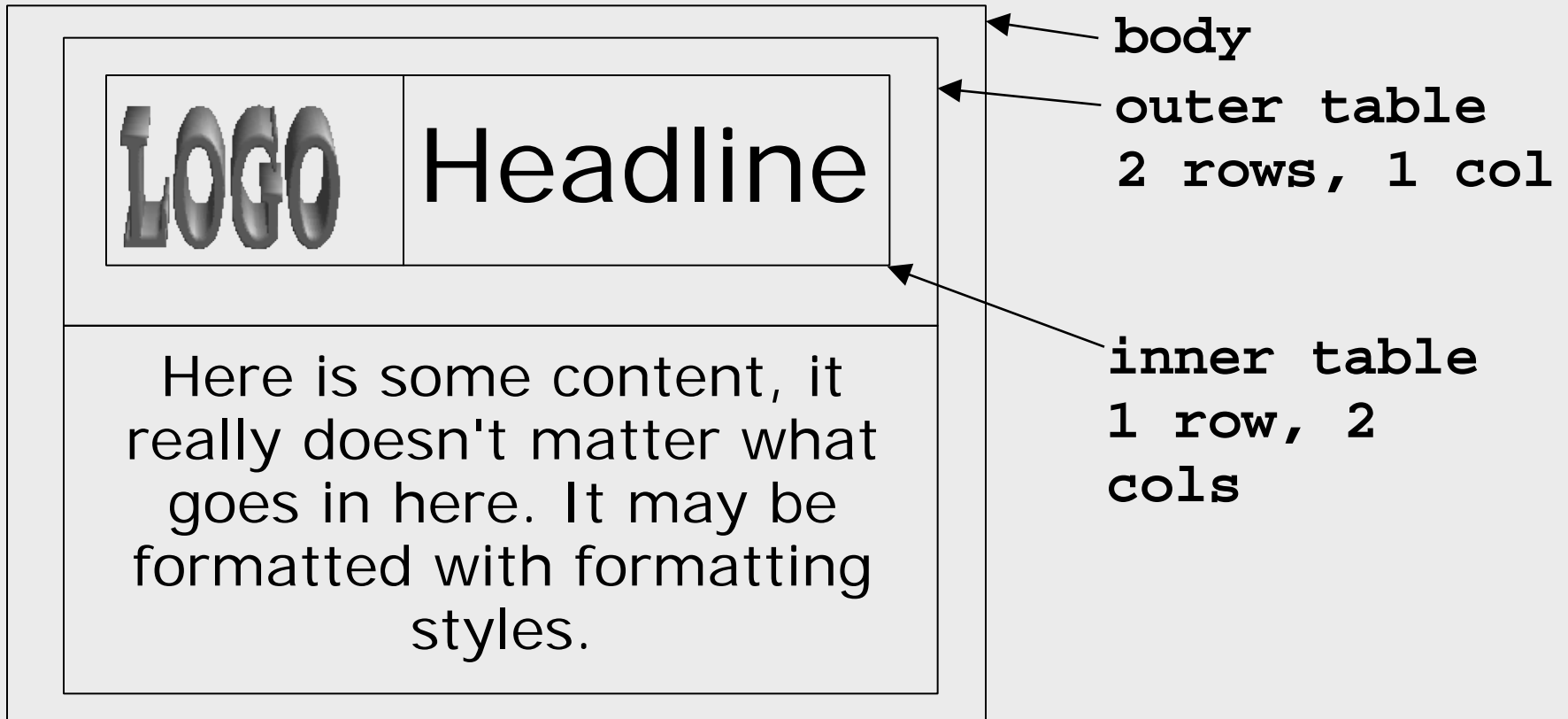
```
  </table>
```

```
</td>
```

td tags
for outer
table

Layout with tables

- Create page layout using nested tables



Check out w3schools

- W3schools.com is an excellent resource for tables as well
- Check out:
 - http://www.w3schools.com/tags/tag_table.asp
 - See the examples section at the bottom of the page