

CSCI 241

Layout Control with HTML table and CSS

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HTML Tables

- One basic use of the table element in XHTML is to create a structure to hold tabular data
- To add a table to a Web page, we use `<table>`, `<tr>`, `<td>` and `<th>` tags
- The `<table> </table>` tag creates a table structure
- The `<tr> </tr>` tag adds a row to the table
- The `<td> </td>` tag adds a data cell within a row
- The `<th> </th>` tag adds a data cell as a table heading
- A table can be nested in another table

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Add Tables to the Web

- In the `<table>` tag, we can specify some attributes like width, border, cellpadding, cellspacing, align, bgcolor, etc.
- In the `<tr>` tag, we can specify align, bgcolor, valign, etc.
- In the `<td>` tag, we can specify align, valign, bgcolor, width, height, rowspan, colspan, nowrap, etc.
- For many of attributes, we can indicate the values with pixels or percent
- To create a Web page with independent (liquid) design, we should use percent to specify the values

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Add Tables to the Web

- An example:

```
<table border="1" width="80%">
<caption>List of Universities</caption>
<tr>
<th width="30%">Name</th>
<th width="70%">Address</th>
</tr>
<tr>
<td>Winthrop</td>
<td>Rock Hill, SC 29733</td>
</tr>
<tr>
<td>York Technical College</td>
<td>Rock Hill, SC 29730</td>
</tr>
</table>
```

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Add Tables to the Web

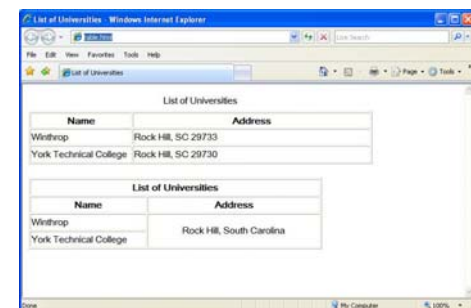
- Another example using *rowspan* and *colspan*:

```
<table border="1" width="500" rules="all">
<tr><th colspan="2">List of Universities</th></tr>
<tr>
<th width="200">Name</th>
<th width="300">Address</th>
</tr>
<tr>
<td>Winthrop</td>
<td rowspan="2" align="center">Rock Hill, South
Carolina</td>
</tr>
<tr>
<td>York Technical College</td>
</tr>
</table>
```

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Add Tables to the Web



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Tables for the Page Layout

- Another important use of the table element is to create page layout structure
- Page Layout is the arrangement of text, graphics, and whitespaces on a page
- The problem is that layouts with tables tend to be very complex. Thus table is usually used for creating the basic layout structure of pages
- An HTML editor like Expression Web and Dreamweaver is usually very convenient to create table-based layouts

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Tables for the Page Layout

- The following HTML code creates a page layout using the <table> element

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">
<head>
<title>CSCI 241 Home</title>
</head>
<body>
<table width="700" border="0" bgcolor="#99CCFF">
<tr>
<td height="80" align="center" >
<h3>CSCI 241.01<br />Client/Server Programming for the World
Wide Web</h3>
</td>
</tr>
</table>
```

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Tables for the Page Layout

```
<tr>
<td height="30" align="center" bgcolor="#11EE11">
<a href="default.htm">Home</a> &nbsp;
<a href="syllabus.htm">Syllabus</a> &nbsp;
<a href="schedule.htm">Schedule</a> &nbsp;
<a href="topics.htm">Topics</a> &nbsp;
<a href="assignments.htm">Assignments</a> &nbsp;
<a href="resources.htm">Resources</a>
</td>
</tr>
<tr>
<td height="600" valign="top">
Add page content here.
</td>
</tr>
</table>
</body>
</html>
```

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Tables for the Page Layout



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CSS for the Page Layout

- We can also use <div> element with CSS to control page layout.
- A <div> element is a container that can be placed at any position with the position:, float:, top:, left:, right:, bottom: and/or z-index: properties.
- Within a <div> we can have any other tags.
- The following example shows that we use three <div> containers (boxes or layers) to control the same layout.

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CSS for the Page Layout

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en"
lang="en">
<head>
<title>CSCI 241 Home</title>
</head>
<body>
<div id="Layer1" align="center" style="background-color:#99CCFF;
float:left; width:700px; height:80px; z-index:1;">
<h3>CSCI 241.01<br />Client/Server Programming for the World
Wide Web</h3>
</div>
```

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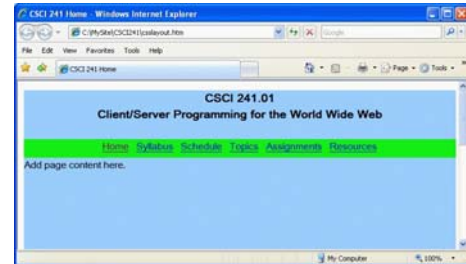
CSS for the Page Layout

```
<div id="Layer2" align="center" style="background-color:#11EE11;
float:left; width:700px; height:30px; z-index:2;">
  <a href="default.htm">Home</a> &nbsp; &nbsp; &nbsp;
  <a href="syllabus.htm">Syllabus</a> &nbsp; &nbsp; &nbsp;
  <a href="schedule.htm">Schedule</a> &nbsp; &nbsp; &nbsp;
  <a href="topics.htm">Topics</a> &nbsp; &nbsp; &nbsp;
  <a href="assignments.htm">Assignments</a> &nbsp; &nbsp; &nbsp;
  <a href="resources.htm">Resources</a>
</div>
<div id="Layer3" style="background-color:#99CCFF; float:left;
width:700px; height:600px; z-index:3;">
  Add page content here.
</div>
</body>
</html>
```

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CSS for the Page Layout



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Design and Usability Rules

- To create an effective Web page, we also need to follow some basic design and usability rules
- Content on a Web page:
 - Content should be meaningful, interesting, and well-organized
 - Keep paragraphs short and include a margin
 - Break up long sections of text with bullets, tables and headings
 - Don't underline any text unless it is a hyperlink
- Navigation:
 - Each page should provide navigation buttons or links to allow users easily access related pages directly

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Design and Usability Rules

- Fonts and Colors:
 - Always provide some contrast in color choice: use a light-colored font on a dark background, or vice versa
 - Red, yellow, orange and green are the most difficult colors of text to read online
- Images:
 - Don't use too many graphics or animations on a page. Most people find them annoying
 - Less graphics can reduce page downloading time (fast response)

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