Tutorial 5 – Building HTML tables

A Text Table

Computer Models

Manufacturer	Model	Price
City Computers	P325+	$2500
MidWest CPU	586/Ultra	$2700
CowCity Computers	P133/+	$2450
CMF Computers	P150z	$2610

- Good for text-based browsers in UNIX systems

A Graphical Table

Computer Models		
Manufacturer	**Model**	**Price**
City Computers	P325+	$2500
MidWest CPU	586/Ultra	$2700
CowCity Computers	P133/+	$2450
CMF Computers	P150z	$2610

- Better looking
- More flexibility
- Good for browsers in Windows system

Creating Tables

- <table>…</table> tags
- add a row
  - <tr>…</tr>
- add a cell
  - <td>…</td>
  - <th>…</th>, cell content is bolded and centered
- Example

```
<table>
   <tr>
   <th> fruits </th>
   <td> apple </td>
   <td> orange </td>
   </tr>
</table>
```

ONE ROW with THREE COLUMN !

Attributes for cell tags <td>, <th>

- COLSPAN: allows a cell span two columns
- ROWSPAN: allows a cell span two rows
- example

```
<table>
<tr>
<td colspan="2"> fruits </td>
</tr>
<tr> <td> apple </td>
    <td> orange </td>
</tr>
</table>
```

fruits	
apple	orange

Working with row groups

- Three types of rowgroups
  - <thead>: marker header rows, one header-row-group per table
  - <tfoot>: mark footer rows, one footer-row-group per table
  - <tbody>: mark body rows, a table can have multiple body-row-groups with different "names"

Working with row groups – syntax

```
<table>
    <thead>
        table rows
    </thead>
    <tfoot>
        table rows
    </tfoot>
    <tbody>
        table rows
    </tbody>
</table>
```

EXAMPLE

```
<thead>
    <tr>
        <th colspan="2"> KPAF Programs </th>
    </tr>
    <tr>
        <th> Time </th>
        <th> Program </th>
    </tr>
</thead>
```

Note: <tfoot> is placed BEFORE <tbody>

Working with column groups

- To define a column, on the top of a table, add
  <col span="value" />
  - ***value*** is the number of columns in the group
- **<col />** tag supports the align, bgcolor, valign, and width attributes.
- e.g., **<col class="column1" span="2" />**

```
col.column1 {background-color: red}
```

The <colgroup> tag

- Another way of grouping columns is by using <colgroup> tag
- syntax:

```
<colgroup>
    columns
</colgroup>
```

  - ***columns*** are definitions for individual columns within the group (defined using the <col> tag.)
- e.g.,

```
<colgroup class="columns">
        <col class="column1" />
        <col class="nextColumns" span="2" />
    </colgroup>
```


Attributes for table

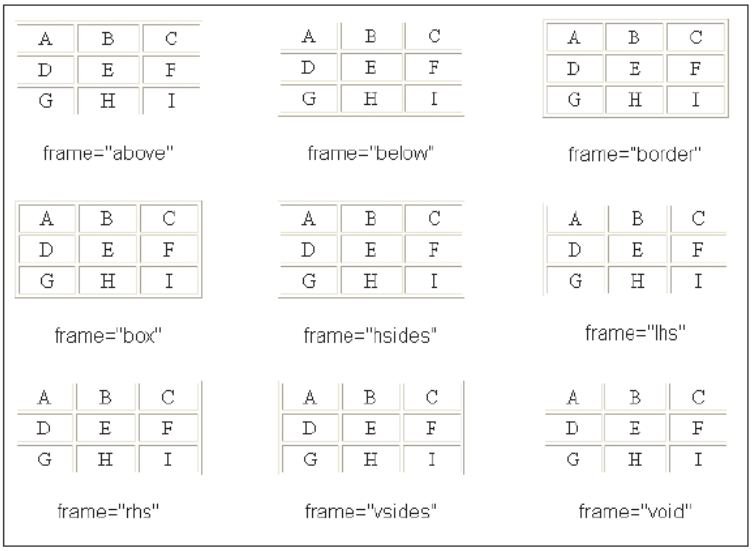
- BORDER: defines the width of border lines, *in pixels*
- cellspacing: defines space between cells, *in pixels*
- cellpadding: defines space between cell border and content, *in pixels*
- WIDTH, HEIGHT: set table size or content size
  - in pixels
  - percentage – percent of the display area
- example

```
<table border="10" cellspacing="2" cellpadding="20"
width="500" height="200">
    <tr><th> fruits </th> <td> apple </td>
    </tr>
</table>
```

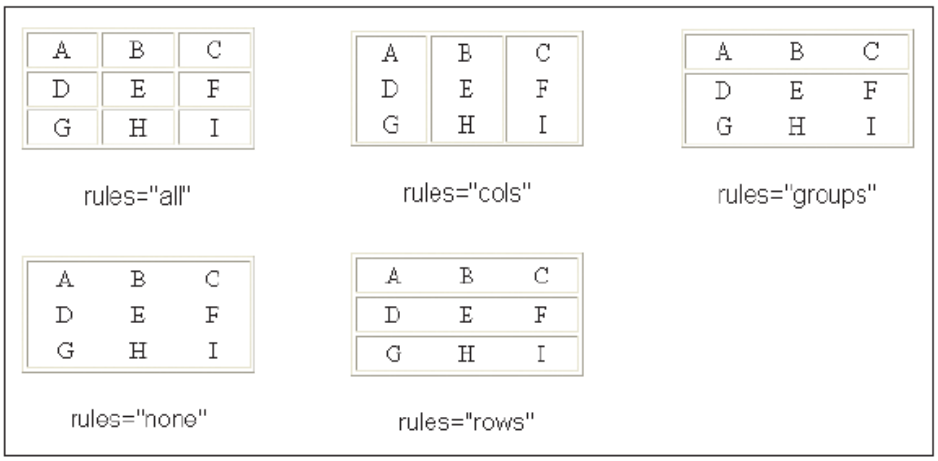
Attributes for table (cont.)

- frame, controls display of borderlines (Figure 5-27 in text)
  - attribute value: "box" | "above" | "below" | "hsides" | "vsides" | "lhs" | "rhs" | "void"
- rules, controls display of table gridlines (Figure 5-29 in text)
  - attribute value: "all" | "rows" | "cols" | "none"
- align, defines alignment of table contents in a cell
  - attribute value: "left" | "right" | "center"
- valign, defines vertical alignment of table contents
  - attribute value: "top" | "middle" | "bottom" | "baseline"

Frame examples



- A **table rules** specifies how the internal gridlines are drawn within the table



Pseudo class(revisit)

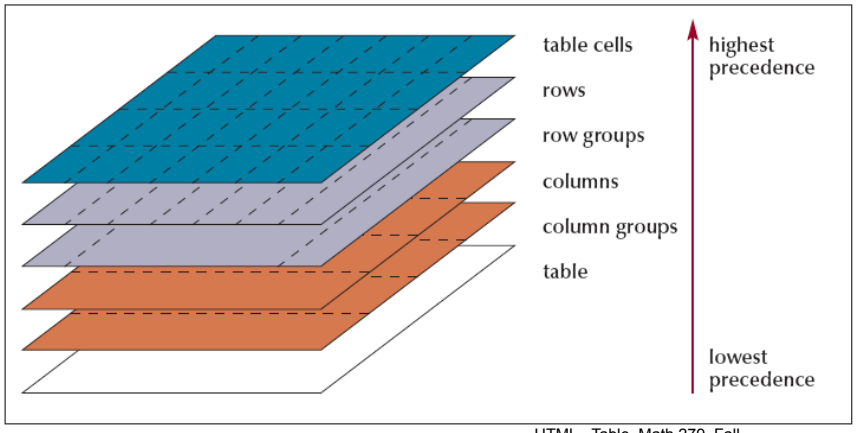
- tagname:nth-of-type(i) select the element which matches the tagname and is the i-th child of its parent element
  - e.g.: p:nth-of-type(2) select the second p tag
- Create banded table

  tr:nth-of-type(odd) { background-color: yellow; }

  tr:nth-of-type(even) { background-color: rgb(145, 255, 145); }

Formatting Tables with CSS

- most general styles are those applied to the entire table



Applying Table Styles to Other Page Elements

Display Style	Equivalent HTML Element
`display: table`	table (treated as a block-level element)
`display: table-inline`	table (treated as an inline element)
`display: table-row`	tr
`display: table-row-group`	tbody
`display: table-header-group`	thead
`display: table-footer-group`	tfoot
`display: table-column`	col
`display: table-column-group`	colgroup
`display: table-cell`	td or th
`display: table-caption`	caption

Example

```
<dl>
   <div>
      <dt>bandwidth</dt>
      <dd>A measure of data transfer speed over
          a network</dd>
   </div>
   <div>
      <dt>HTTP</dt>
      <dd>The protocol used to communicate with
          Web servers</dd>
   </div>
</dl>
```

definition list code

```
dl     {display: table; border-collapse: collapse;
        width: 300px}

dl div {display: table-row}

dt, dd {display: table-cell; border: 1px solid black;
        vertical-align: top; padding: 5px}
```

table styles

bandwidth	A measure of data transfer speed over a network
HTTP	The protocol used to communicate with Web servers

definition list displayed as table

Homework

- READ Tutorial 5
- Review assignment
- Case Problem 1
- Case Problem 2