**Notes: Basic Table and related elements and attributes**

Tables can be used in the usual way -- that is to store data[[1]](#footnote-1). A table is made up of rows (across) and columns (up and down).  Think of columns like columns of a building - they go up and down. The intersection of a row and a column is a cell.

table elements:

**<table></table>** - surrounds the entire table

**<tr></tr>** - tr stands for “table row”, surrounds an entire row.

**<td></td>** - td stands for “table data”, surrounds the contents of each cell

**<th></th>** - th stands for “table heading”. If the first row of the table is holding column headings (e.g. labels), then use <th> instead of <td> to mark each cell in it. The content of each cell will become bold and centered. Likewise, for cells in the first column holding row headings, replace <td> with <th>.

The following elements are useful for identifying particular row groups of a table to which to apply styles afterward. (Carey, p460):

**<thead></thead>** surrounds the rows that you identified as the *head* of the table

**<tfoot></tfoot>** surrounds the rows that you identified as the *foot* of the table

**<tbody></tbody>** surrounds the rows that you identified as the *body* of the table

**Table example:**

*Code to left, table rendered to the right.*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| <table border=”1”>  <tr>  <th>First</th> **\***  <th>Middle</th> **\***  <th>Last</th> **\***  </tr>  <tr>  <td>Henry</td>  <td>Humberto</td>  <td>Higgins</td>  </tr>  <tr>  <td>Mariah</td>  <td>Ann</td>  <td>Sierra</td>  </tr> </table> | |  |  |  | | --- | --- | --- | | **First** | **Middle** | **Last** | | Henry | Humberto | Higgins | | Mariah | Ann | Sierra |   🡨 <th>’s in row 1 |

Note1: Notice the 3 cells in the first row of the table above are marked with asterisks **\*** because they contain headings (labels). Thus, they should be marked with <th>’s instead of <td>’s. <th> will bold and center the content.

Note2: The table caption element is used to describe the table’s content. It appears above the table in the webpage. It makes the page *accessible.* A screen reader will read this caption to a blind user. Place the caption element on the line directly below the opening <table> tag. Example: **<caption>**names of contacts**</caption>.** This element replaces the deprecated summary attribute of the table element.

**Table Attributes are deprecated:**

Historically, tables were formatted using attributes instead of CSS styles. (Recall an attribute is contained inside of the opening element’s tag and it controls the behavior or appearance of the element.) For example, the following would apply a yellow fill color to a table row: <tr bgcolor=”yellow”>contents here</tr>. But now, most of these attributes are **deprecated** and their use should be avoided. CSS styles are used in their place.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table Attributes and associated elements | | | | | |
| **Attribute** | **deprecated?** | **What is it** | **Element applies to** | **value** | **CSS style to use instead** |
| border | yes | Line around the table and cells | **table** | Pixels (px)  (may leave units off; example:  border=“1”) | border  (apply it to table, td and th elements) |
| summary | yes | Used to describe table contents for speech or Braille-based browsers for accessibility | **table** | Short description in your own words | Use the <caption> element (HTML) |
| width, height (*deprecated* for cell) | yes | Width, height | **table, cell**,  **row, other** elements | pixels or % | width  height |
| align | yes | Horizontal alignment | **table**, **cell, row, other** elements | left, right, center | to align text inside a cell use text-align; To align table on page use margin, width styles |
| valign | yes | Vertical alignment | **cell, row, other** elements | top, middle, bottom |  |
| cellspacing | yes | Space between cells | **table** element | Pixels (px); example: cellspacing=“2” | border-collapse: separate**[[2]](#footnote-2)**, with border-spacing style |
| cellpadding | yes | Margin in each cell | **table** element | Pixels (px) | padding |
| bgcolor | yes | Background color | **Table, cell** elements | color, ex: #ffffcc | background-color |
| colspan | no | to merge cells across columns (horizontal) | **cell** element | number of cells to merge | none |
| rowspan | no | to merge cells across rows (vertically) | **cell** element | number of cells to merge | none |

**How to merge 2 or more cells using colspan or rowspan**:

* To merge, say, 2 cells horizontally across, (“across **col**umns”), insert **col**span=”2” into the <td> tag of first (leftmost) cell effected.
* To merge, say, 2 cells vertically,(“across **row**s”) insert **row**span=”2” into the <td> tag of first (topmost) cell effected.

Assume you start with a rectangular table. After inserting a colspan or rowspan, use visual inspection, and delete the “extra cells” that protrude out of the right side of the table.

**REQUIRED FOR THE TEST:** Elements: <table>, <tr>, <td>, <th>, <thead>, <tfoot>, <tbody>, <caption>, and Attributes: colspan, rowspan

Deprecated attributes: border, cellspacing, cellpadding, bgcolor. I recommend using the border attribute in a quickie “draft” table. But the use of the CSS border style is preferred.

**OPTIONAL**: **This page is optional**. It pertains to the <col> element. <col> stands for column.

**Tables using <col>**

**Defn: Columns**… The <col> element, once defined, allows one to use CSS to format certain columns and not others, for instance. (This discussion is included in our textbook along with several other ways to style tables.) Columns are implicitly created when you set up table rows (tr elements) and nest table cells (td or th elements) in them. Nonetheless, if you wanted to format a column(s), say, you would first identify them by using the <col></col> and <colgroup></colgroup> pairs. They correspond to column and group of columns of a table, respectively. (See Carey, 6e, p464 and 466 for more explanation.) See an example of the use of <col> below.]

Refer to the example table and code from page 1. As you can see the code on page 1 used no <col> elements to indicate the columns. They are not necessary because columns are implicitly created by the <td> (cell) tags. Nonetheless, if you wanted to format the columns, say, format the first column one way and the remaining columns another way, then you would first identify these columns. Just below the <table> tag, you could include, for example:

Note: span=”2” indicates 2 columns, the current one and the next one.

<colgroup>

<col class=”myfirstcolumn” />

<col class=”remainingcols” span=”2” />

</colgroup>

*Code to left, table rendered (with CSS colors) to the right.*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| <table border=”1”>  **<colgroup>**  **<col class=”myfirstcolumn” />**  **<col class=”remainingcols” span=”2” />**  **</colgroup>**  <tr>  <th>First</th>  <th>Middle</th>  <th>Last</th>  </tr>  <tr>  <td>Henry</td>  <td>Humberto</td>  <td>Higgins</td>  </tr>  <tr>  <td>Mariah</td>  <td>Ann</td>  <td>Sierra</td>  </tr>  </table> | Then afterward I can format with CSS:  **.myfirstcolumn {background-color: lightyellow}**  **.remainingcols {background-color: lightblue}**   |  |  |  | | --- | --- | --- | | **First** | **Middle** | **Last** | | Henry | Humberto | Higgins | | Mariah | Ann | Sierra |   light yellow  light blue |

1. Tables used to be used for page layout. [↑](#footnote-ref-1)
2. border-collapse: collapse -- This style rule will collapse adjacent cell and table borders into 1 border. [↑](#footnote-ref-2)