Tables in HTML

CSE/ISE 102: Introduction to Web Design

Stony Brook University

Overview of Topics

- Basic Table Structure
- Spanning Rows and Columns
- Cell Padding and Spacing

Using Tables

- Tables are used to present data arranged into tabular form (rows and columns)
  - e.g., calendars, schedules, statistics, etc.
- Table cells can contain any sort of information, including images, multimedia elements, and even other tables
- Tables used to be used for layout purposes as well
  - e.g., multiple columns, controlling alignment, etc.
  - This is no longer the case, thanks to style sheets

Basic Table Structure

Sample Table

Menu Item	Calories	Fat (g)
Chicken noodle soup	120	2
Caesar salad	400	26

Minimal Table Structure

- All of a table's content goes into cells
  - cells are arranged into rows
  - a cell can contain header information or table data
- Relevant tags
  - <table>...</table> — surrounds the entire table markup
  - <tr>...</tr> — defines a table row
  - <th>...</th> — defines a table header (e.g., titles for the columns)
  - <td>...</td> — defines the data for a single table cell

Table Code Example

```
<table>
  <tr>
    <th>Menu Item</th>
    <th>Calories</th>
    <th>Fat (g)</th>
  </tr>
  <tr>
    <td>Chicken noodle soup</td>
    <td>120</td>
    <td>2</td>
  </tr>
  ...
</table>
```

Setting Table Size

- HTML tables are *row-centric*
  - Cells are organized by row
- The number of columns in a table is determined by the number of cells in each row
  - For a four-column table, you must make sure that each row has four <td> or <th> elements

Table Headers

- By default, table headers are bold and centered
  - Don't just try to replicate this using plain <td> tags!
  - Change this using (what else?) CSS
- Table header tags are used to make tables accessible because they provide context about the cells in a row or column

Spanning Rows and Columns

Column Spans

- Use the colspan attribute to stretch a cell to the right over neighboring columns
  - e.g., <th colspan="2">...</th> will stretch over 2 columns
- Every row should have an equal number of cells or equivalent `colspan` values
  - e.g., <tr><th colspan="3">...</th><th>...</th></tr> has 4 columns in all

7:00 PM	7:30 PM	8:00 PM
The Sunday Night Movie		
Bonanza	Perry Mason	

Row Spans

- Use the `rowspan` attribute to stretch a cell downward over several rows
  - e.g., <th rowspan="3">...</th>
- You can skip <td> elements for the spanned cells in subsequent rows
- Remember that rows always span *downward*

apples	oranges	pears
bananas		
lychees		pineapple

Cell Padding and Spacing

Space and Table Cells

- Cell padding is the space between the edge of a cell and its contents
- Cell spacing is the space between table cells
- We used to specify these using the `cellpadding` and `cellspacing` attributes in the `<table>` element, but this is obsolete in HTML 5
- We now use CSS as follows...

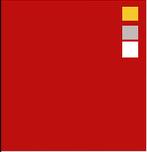
Cell Padding

- Apply the `padding` property to the `<td>` or `<th>` elements:

  ```
  th { padding: 2px 4px 2px 4px; }
  ```

  - 'px' = "pixels"
- List the padding amounts in the order **T**op **R**ight **B**ottom **L**eft
  - Mnemonic: TRouBLe
- If you only supply two values, the first is used for top/bottom and the second is used for left/right edges
  - Three values are in order: top right/left bottom

Cell Spacing

- This is slightly more complicated than cell padding
- Start by setting the `border-collapse` property to `separate`
- Then use `border-spacing` to set the actual spacing value
  - this defaults to 2px
- Example:

  ```
  td { border-collapse: separate;
       border-spacing: 5px;
     }
  ```

Cell Borders

- Add the `border-style` property to your table CSS
- Available options are `hidden`, `double`, `solid`, `dashed`, `dotted`, `ridge`, `outset`, `groove`, and `inset`