Web Development & Design Foundations with HTML5

Ninth Edition

Chapter 8

Tables

Learning Objectives

8.1 Create a basic table with the table, table row, table header, and table cell elements

8.2 Configure table sections with the thead, tbody, and tfoot elements

8.3 Increase the accessibility of a table

8.4 Style an HTML table with CSS

8.5 Describe the purpose of CSS structural pseudo-classes

HTML Table

Tables are used on web pages to organize tabular information

Composed of rows and columns – similar to a spreadsheet.

Each individual table cell is at the intersection of a specific row and column.

Configured with table, tr, and td elements

Name	Birthday	Phone
Jack	5/13	857-555-5555
Sparky	11/28	303-555-5555

HTML Table Elements

- <table>

  Contains the table

- <tr>

  Contains the table row

- <td>

  Contains the table cell

- <caption>

  Configures a description of the table

Bird Sightings	
Name	Date
Bobolink	5/25/10
Upland Sandpiper	6/03/10

HTML Table Example 1 (1 of 2)

```
<table border="1">
 <caption>Bird Sightings</caption>

 <tr>

  <td>Name</td>

  <td>Date</td>

 </tr>

 <tr>

  <td>Bobolink</td>
```

HTML Table Example 1 (2 of 2)

```
  <td>5/25/10</td>

 </tr>

 <tr>

  <td>Upland Sandpiper</td>

  <td>6/03/10</td>

 </tr>

</table>
```

Bird Sightings	
Name	Date
Bobolink	5/25/10
Upland Sandpiper	6/03/10

HTML Table Example 2 (1 of 2)

```
<table border="1">
 <tr>
  <th>Name</th>
  <th>Birthday</th>
 </tr>
 <tr>
  <td>James</td>
  <td>11/08</td>
 </tr>
```

HTML Table Example 2 (2 of 2)

```
 <tr>
  <td>Karen</td>
  <td>4/17</td>
 </tr>
 <tr>
  <td>Sparky</td>
  <td>11/28</td>
 </tr>
</table>
```

Using the `<th>` Element

Name	Birthday
James	11/08
Karen	4/17
Sparky	11/28

HTML Table Attributes

- align (obsolete)
- bgcolor (obsolete)
- border
- cellpadding (obsolete)
- cellspacing (obsolete)
- summary (obsolete but may be reinstated)
- width (obsolete)

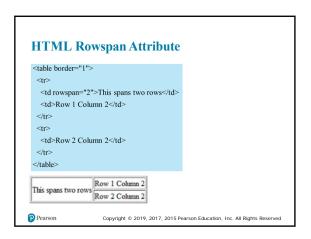Use CSS to configure table characteristics instead of HTML attributes

HTML Common Table Cell Attributes

- align (obsolete)
- bgcolor (obsolete)
- colspan
- rowspan
- valign (obsolete)
- height (deprecated)
- width (deprecated)

Use CSS to configure most table cell characteristics instead of HTML attributes

HTML Colspan Attribute

```
<table border="1">
 <tr>
  <td colspan="2">
  Birthday List</td>
 </tr>
 <tr>
  <td>James</td>
  <td>11/08</td>
 </tr>
 <tr>
  <td>Karen</td>
  <td>4/17</td>
 </tr>
</table>
```

Birthday List	
James	11/08
Karen	4/17

HTML Rowspan Attribute

```
<table border="1">
 <tr>
  <td rowspan="2">This spans two rows</td>
  <td>Row 1 Column 2</td>
 </tr>
 <tr>
  <td>Row 2 Column 2</td>
 </tr>
</table>
```

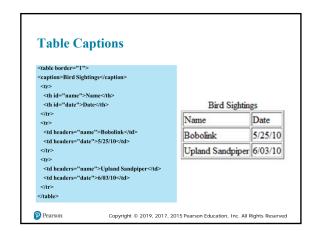| This spans two rows	Row 1 Column 2
	Row 2 Column 2

Accessibility and Tables

Use table header elements (<th> tags) to indicate column or row headings.
Use the caption element to provide a text title or caption for the table.

- Complex tables: Associate table cell values with their corresponding headers
  - <th> tag id attribute
  - <td> tag headers attribute

Table Captions

```
<table border="1">
<caption>Bird Sightings</caption>
 <tr>
  <th id="name">Name</th>
  <th id="date">Date</th>
 </tr>
 <tr>
  <td headers="name">Bobolink</td>
  <td headers="date">5/25/10</td>
 </tr>
 <tr>
  <td headers="name">Upland Sandpiper</td>
  <td headers="date">6/03/10</td>
 </tr>
</table>
```

Bird Sightings

Name	Date
Bobolink	5/25/10
Upland Sandpiper	6/03/10

Checkpoint 8.1

1. Describe the purpose of using a table on a web page.
2. How is the text contained in a th element displayed by the browser?
3. Describe one coding technique that increases the accessibility of an HTML table.

Using CSS to Style a Table

HTML Attribute	CSS Property
Align	Center align a table: table { width: 75%; margin: auto; } Center align within a table cell: text-align: center;
Bgcolor	background-color
Cellpadding	Padding
Cellspacing	border-spacing or border-collapse
Height	Height
Valign	vertical-align
Width	Width
Border	border, border-style, or border-spacing
--	background-image

CSS Structural Pseudo-Classes

Pseudo-class	Purpose
:first-of-type	Applies to the first element of the specified type
:first-child	Applies to the first child of an element (CSS2 selector)
:last-of-type	Applies to the last element of the specified type
:last-child	Applies to the last child of an element
:nth-of-type(n)	Applies to the "nth" element of the specified type Values: a number, odd, or even

Zebra Stripe a Table

tr:nth-of-type(even) { background-color: #eaeaea; }

Table Row Groups (1 of 2)

```
<table><caption>Time Sheet</caption>
 <thead>
  <tr>
   <th id="day">Day</th>
   <th id="hours">Hours</th>
  </tr>
 </thead>
 <tbody>
  <tr>
   <td headers="day">Monday</td>
   <td headers="hours">4</td>
  </tr>
```

Table Row Groups (2 of 2)

```
    …
    <tr>
      <td headers="day">Friday</td>
      <td headers="hours">3</td>
    </tr>
  </tbody>
  <tfoot>
    <tr>
      <td headers="day">Total</td>
      <td headers="hours">18</td>
    </tr>
  </tfoot> </table>
```

<thead>
table head rows

<tbody >
table body rows

<tfoot>
table footer rows

Time Sheet

Day	Hours
Monday	4
Tuesday	3
Wednesday	5
Thursday	3
Friday	3
Total	**18**

Checkpoint 8.2

1. Describe a reason to configure a table with CSS properties instead of HTML attributes.
2. List three elements that are used to group table rows.

Summary

This chapter introduced the HTML and CSS techniques used to create and configure tables on web pages.

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