

WEBD101 ASSIGNMENT DETAILS - SPRING 2020

WEEK	READINGS	ASSIGNMENT	DUE DATE	ASSIGNMENT TYPE	PTS
1 CH1 site CH2 site	CH1, CH2 (Intro, HTML basics)	1-1: Reading & Quick Check	Sunday, February 2nd	TestCraft	15
		1-2: Week 1 Exercises	Sunday, February 2nd	Drop Box Submission	20
		1-3: Week 1 Case Study	Sunday, February 2nd	Drop Box Submission	20
		1-4: Introduce Yourself	Sunday, February 2nd	Discussion Board Post(s)	-
		Weekly Meet Session	Monday, January 27th	Meet Tool	-
2 CH3 site	CH3 (CSS basics)	2-1: Reading & Quick Check	Sunday, February 9th	TestCraft	15
		2-2: Week 2 Exercises	Sunday, February 9th	Drop Box Submission	20
		2-3: Week 2 Case Study	Sunday, February 9th	Drop Box Submission	20
		Weekly Meet Session	Monday, February 3rd	Meet Tool	-
3 CH4 site	CH4 (images)	3-1: Reading & Quick Check	Sunday, February 16th	TestCraft	15
		3-2: Week 3 Exercises	Sunday, February 16th	Drop Box Submission	20
		3-3: Week 3 Case Study	Sunday, February 16th	Drop Box Submission	20
		3-4: Week 3 Discussion	Thursday, February 13th	Discussion Board Post(s)	35
4 CH5 site	CH5 (web design)	Weekly Meet Session	Monday, February 10th	Meet Tool	-
		4-1: Reading & Quick Check	Sunday, February 23rd	TestCraft	15
		4-2: Week 4 Exercises	Sunday, February 23rd	Drop Box Submission	20
		4-3: Week 4 Project	Sunday, February 23rd	Drop Box Submission	40
5 CH6 site	CH6 (page layout)	Weekly Meet Session	Monday, February 17th	Meet Tool	-
		5-1: Reading & Quick Check	Sunday, March 1st	TestCraft	15
		5-2: Week 5 Exercises	Sunday, March 1st	Drop Box Submission	20
		5-3: Week 5 Case Study	Sunday, March 1st	Drop Box Submission	20
6 CH7 site	CH7 (links, layout, mobile)	Weekly Meet Session	Monday, February 24th	Meet Tool	-
		6-1: Reading & Quick Check	Sunday, March 8th	TestCraft	15
		6-2: Week 6 Discussion	Thursday, March 5th	Discussion Board Post(s)	35
7 CH8 site	CH8 (tables)	6-3: Midterm Exam	Sunday, March 8th	TestCraft	100
		7-1: Reading & Quick Check	Sunday, March 15th	TestCraft	15
		7-2: Week 7 Exercises	Sunday, March 15th	Drop Box Submission	20
		7-3: Week 7 Case Study	Sunday, March 15th	Drop Box Submission	20
		7-4: Week 7 Project	Sunday, March 15th	Drop Box Submission	40
8 CH9 site	CH9 (forms)	Weekly Meet Session	Monday, March 9th	Meet Tool	-
		8-1: Reading & Quick Check	Sunday, March 22nd	TestCraft	15
		8-2: Week 8 Exercises	Sunday, March 22nd	Drop Box Submission	20
		8-3: Week 8 Case Study	Sunday, March 22nd	Drop Box Submission	20
		8-4: Week 8 Project	Sunday, March 22nd	Drop Box Submission	40
9 CH11 site	CH11 (multimedia, interactivity)	Weekly Meet Session	Monday, March 16th	Meet Tool	-
		9-1: Reading & Quick Check	Sunday, March 29th	TestCraft	15
		9-2: Week 9 Exercises	Sunday, March 29th	Drop Box Submission	20
		9-3: Week 9 Discussion	Thursday, March 26th	Discussion Board Post(s)	35
		9-4: Week 9 Project	Sunday, March 29th	Drop Box Submission	40
10 CH13 site	CH13 (web promotion)	Weekly Meet Session	Monday, March 23rd	Meet Tool	-
		10-1: Reading & Quick Check	Sunday, April 5th	TestCraft	15
		10-2: Week 10 Exercises	Sunday, April 5th	Drop Box Submission	20
		10-3: Week 10 Case Study	Sunday, April 5th	Drop Box Submission	20
		10-4: Week 10 Project	Sunday, April 5th	Drop Box Submission	40
11 CH14 site	CH14 (JavaScript, jQuery)	Weekly Meet Session	Monday, March 30th	Meet Tool	-
		11-1: Reading & Quick Check	Sunday, April 12th	TestCraft	15
		11-2: Week 11 Exercises	Sunday, April 12th	Drop Box Submission	20
		11-3: Week 11 Case Study	Sunday, April 12th	Drop Box Submission	20
		11-4: Week 11 Project	Saturday, April 18th	Drop Box Submission	40
12	No new material	Weekly Meet Session	Monday, April 6th	Meet Tool	-
		12-1: Reflection Paper	Saturday, April 18th	Drop Box Submission	30
		12-2: Extra Credit Assignment	Saturday, April 18th	Drop Box Submission	+10

Please click [HERE](#) for a brief introduction to the class, including my contact information, general rules for the course (including our learning environment, attendance, assignments, and miscellaneous items), and some useful references. Click [HERE](#) for a list of design principles that you need to follow for ALL of your web page assignments. Points may be deducted if these principles are not adhered to as expected!

ALL ASSIGNMENTS ARE DUE BY 11:59 PM EST. Click on the [Chapter links](#) to view the PDF slides for each chapter. Click on the [week number links](#) to view the folder contents for each week.

Web Development & Design Foundations with HTML5

CHAPTER 8 TABLES

Learning Outcomes

In this chapter, you will learn how to ...

- Create a basic table with the table, table row, table header, and table cell elements
- Configure table sections with the thead, tbody, and tfoot elements
- Increase the accessibility of a table
- Style an HTML table with CSS
- Describe the purpose of CSS structural pseudo-classes

HTML Table

Tables are used on web pages to organize tabular information

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

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

HTML Table Elements

- `<table>`
Contains the table
- `<tr>`
Contains a table row
- `<td>`
Contains a table cell
- `<caption>`
Configures a description of the table

Bird Sightings

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

Table Example

```
<head>
  <style>
    table, td { border: 1px solid black; }
  </style>
</head>
...
<table>
  <caption>Bird Sightings</caption>
  <tr>
    <td>Name</td>
    <td>Date</td>
  </tr>
  <tr>
    <td>Bobolink</td>
    <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

DEMO

Table Example 2

```
<head>
  <style>
    table, td, th { border: 1px solid black; }
  </style>
</head>
...
<table>
<tr>
  <th>Name</th>
  <th>Birthday</th>
</tr>
<tr>
  <td>James</td>
  <td>11/08</td>
</tr>
<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

DEMO

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

```
<head>
  <style>
    table, td { border: 1px solid black; }
  </style>
</head>
...
<table>
  <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

DEMO

HTML rowspan Attribute

```
<table>  
<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

DEMO

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

Using CSS to Style a Table

HTML Attribute	CSS Property
align	Center align a table: <code>table { width: 75%; margin: auto; }</code> Center align within a table cell: <code>text-align: center;</code>
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

[DEMO](#)

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; }
```

[DEMO](#)

Table Row Groups

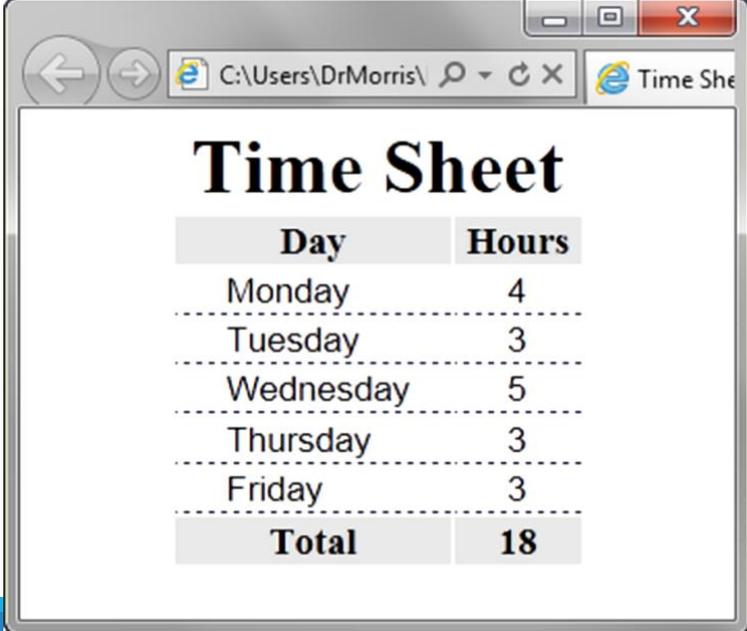
DEMO

<thead>
table head rows

<tbody >
table body rows

<tfoot>
table footer rows

```
<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>
...
  <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>
```



The screenshot shows a web browser window with the address bar displaying 'C:\Users\DrMorris\' and the page title 'Time Sheet'. The main content of the page is a table titled 'Time Sheet' with two columns: 'Day' and 'Hours'. The table contains the following data:

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

Table Examples

- Download and unpack the file examples.zip here ..

<http://cs.franklin.edu/~crawfor1/webd101/PPTS/WEEK7/>

- Open the file `examples/columnHeaders.html`
- Open the file `examples/rowHeaders.html`

examples/columnHeaders.html

District	Name	Party
1	Visclosky	DEM
2	Donnelly	DEM
3	Souder	REP
4	Buyer	REP
5	Burton	REP
6	Pence	REP
7	Carson	DEM
8	Ellsworth	DEM
9	Hill	DEM

Table 1.1: Indiana's Delegation to the 110th United States Congress (2007-2009)

```

<body>
<table summary="Table 1.1 represents Indiana's Congressional Delegation to the U.S. House of
Representatives for the 110th. United States Congress.">
  <caption>
    Table 1.1: Indiana's Delegation to the 110th United States Congress (2007-2009)
  </caption>
  <tr>
    <th>District</th>
    <th>Name</th>
    <th>Party</th>
  </tr>
  <tr>
    <td>1</td>
    <td>Visclosky</td>
    <td>DEM</td>
  </tr>
  <tr>
    <td>2</td>
    <td>Donnelly</td>
    <td>DEM</td>
  </tr>
  <tr>
    <td>3</td>
    <td>Souder</td>
    <td>REP</td>
  </tr>
  <tr>
    <td>4</td>
    <td>Buyer</td>
    <td>REP</td>
  </tr>
  <tr>
    <td>5</td>
    <td>Burton</td>
    <td>REP</td>
  </tr>
  <tr>
    <td>6</td>
    <td>Pence</td>
    <td>REP</td>
  </tr>
  <tr>
    <td>7</td>
    <td>Carson</td>
    <td>DEM</td>
  </tr>
  <tr>
    <td>8</td>
    <td>Ellsworth</td>
    <td>DEM</td>
  </tr>
  <tr>
    <td>9</td>
    <td>Hill</td>
    <td>DEM</td>
  </tr>
</table>
</body>

```

inline styles

```

<style type="text/css">
  table
  {
    border: thin solid black;
    caption-side: bottom;
    margin-right:auto;
    margin-left:auto;
    width:45%;
    border-collapse:collapse;
  }
  td,th
  {
    border: thin solid black;
    padding: 5px;
    border-collapse:collapse;
  }
  caption
  {
    font-style:italic;
    padding-top: 8px;
    margin-right:auto;
    margin-left:auto;
  }
</style>

```

examples/rowHeaders.html

HEX	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
DEC	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Table 3.2: Hexadecimal (Base-16) and Decimal (Base-10) Equivalents

```

<style type="text/css">
  table
  {
    border: thin solid black;
    caption-side: bottom;
    margin-right:auto;
    margin-left:auto;
    border-collapse: collapse;
    width: 75%;
  }
  td,th
  {
    border: thin solid black;
    padding: 5px;
    width:5%;
  }
  caption
  {
    font-style:italic;
    padding-top: 8px;
    margin-right:auto;
    margin-left:auto;
  }
</style>

<body>
  <table summary="Table 3.2 represents Hexadecimal (Base-16) and their Decimal (Base-10) equivalents.">
    <caption>
      Table 3.2: Hexadecimal (Base-16) and Decimal (Base-10) Equivalents
    </caption>
    <tr>
      <th>HEX</th>
      <td>0</td>
      <td>1</td>
      <td>2</td>
      <td>3</td>
      <td>4</td>
      <td>5</td>
      <td>6</td>
      <td>7</td>
      <td>8</td>
      <td>9</td>
      <td>A</td>
      <td>B</td>
      <td>C</td>
      <td>D</td>
      <td>E</td>
      <td>F</td>
    </tr>
    <tr>
      <th>DEC</th>
      <td>0</td>
      <td>1</td>
      <td>2</td>
      <td>3</td>
      <td>4</td>
      <td>5</td>
      <td>6</td>
      <td>7</td>
      <td>8</td>
      <td>9</td>
      <td>10</td>
      <td>11</td>
      <td>12</td>
      <td>13</td>
      <td>14</td>
      <td>15</td>
    </tr>
  </table>
</body>

```

Cell Border & Padding

- The `padding` property specifies the amount of space between a cell's content and the border of that cell.
- The `border-spacing` property specifies the space between cells.
- Don't like the double lines that make up a cell's border?

Try adding the following to your `table` rule:

```
border-spacing: 0px;
```

Using border-collapse

- Internet Explorer does not support the border-spacing property
- Another solution is to use the border-collapse property. We can set border-collapse to collapse so that the browser will not render any border spacing.
- In your table rule, replace the border-spacing declaration with the following:

```
border-collapse: collapse;
```

- Now it will render properly in IE as well!

Spanning Across Rows & Columns

- At times, we might have data cells that will need to span across more than one column or row.
- To achieve this, we can use the `rowspan` or `colspan` properties.
- The value of `rowspan` and `colspan` should be an integer number that represents the number of rows or columns a particular `<td>` spans.

rowspan & colspan Examples

- To see an example of rowspan, see <examples/rowSpan.html>
- To see an example of colspan, see <examples/colSpan.html>
- To see an example of rowspan & colspan, see <examples/combinedSpan.html>

1	2	3
4		5
6	7	8

Rowspan Example

examples/rowSpan.html

```

<style type="text/css">
  table
  {
    border: thin solid black;
    caption-side: bottom;
    margin-right:auto;
    margin-left:auto;
    border-collapse: collapse;
    width: 75%;
  }
  td
  {
    border: thin solid black;
    padding: 5px;
    width:5%;
    text-align:center;
    vertical-align:center;
    font-size: xx-large;
  }
  caption
  {
    font-style:italic;
    padding-top: 8px;
    margin-right:auto;
    margin-left:auto;
  }
  .spanColor
  {
    background-color:#F69;
  }
</style>

```

```

53 <body>
54
55   <table summary="rowspan Example.">
56     <caption>
57       Rowspan Example
58     </caption>
59
60     <!-- FIRST ROW, INCLUDES ROWSPAN-->
61     <tr>
62       <td>
63         1
64       </td>
65       <td rowspan="2" class="spanColor">
66         2
67       </td>
68       <td>
69         3
70       </td>
71     </tr>
72
73     <!-- SECOND ROW; INCLUDES ONLY TWO <td>s. Why?-->
74     <tr>
75       <td>
76         4
77       </td>
78       <td>
79         5
80       </td>
81     </tr>
82
83     <!-- THIRD ROW -->
84     <tr>
85       <td>
86         6
87       </td>
88       <td>
89         7
90       </td>
91       <td>
92         8
93       </td>
94     </tr>
95   </table>
96 </body>

```

View the file
examples/rowSpan.html
for solution

1	2	
3	4	5
6	7	8

Colspan Example

examples/colspan.html

```

<style type="text/css">
  table
  {
    border: thin solid black;
    caption-side: bottom;
    margin-right:auto;
    margin-left:auto;
    border-collapse: collapse;
    width: 75%;
  }
  td
  {
    border: thin solid black;
    padding: 5px;
    width:5%;
    text-align:center;
    vertical-align:center;
    font-size: xx-large;
  }
  caption
  {
    font-style:italic;
    padding-top: 8px;
    margin-right:auto;
    margin-left:auto;
  }
  .spanColor
  {
    background-color:#F69;
  }
</style>

```

```

53 <body>
54
55   <table summary="rowspan Example.">
56     <caption>
57       Colspan Example
58     </caption>
59
60     <!-- FIRST ROW, INCLUDES COLSPAN; INCLUDES ONLY TWO <td>s. Why?-->
61     <tr>
62       <td>
63         1
64       </td>
65       <td colspan="2" class="spanColor">
66         2
67       </td>
68     </tr>
69
70     <!-- SECOND ROW-->
71     <tr>
72       <td>
73         3
74       </td>
75       <td>
76         4
77       </td>
78       <td>
79         5
80       </td>
81     </tr>
82
83     <!-- THIRD ROW -->
84     <tr>
85       <td>
86         6
87       </td>
88       <td>
89         7
90       </td>
91       <td>
92         8
93       </td>
94     </tr>
95   </table>
96 </body>

```

View the file
examples/colspan.html
for solution

1	2	
3		
4	5	6

Example of a cell using both colspan and rowspan.

examples/combinedSpan.html

```
<style type="text/css">
  table
  {
    border: thin solid black;
    caption-side: bottom;
    margin-right:auto;
    margin-left:auto;
    border-collapse: collapse;
    width: 75%;
  }
  td
  {
    border: thin solid black;
    padding: 5px;
    width:5%;
    text-align:center;
    vertical-align:center;
    font-size: xx-large;
  }
  caption
  {
    font-style:italic;
    padding-top: 8px;
    margin-right:auto;
    margin-left:auto;
  }
  .spanColor
  {
    background-color:#F69;
  }
</style>
```

```
53 <body>
54
55 <table summary="rowspan Example.">
56 <caption>
57 Example of a cell using both colspan and rowspan.
58 </caption>
59
60 <!-- FIRST ROW, INCLUDES ROWSPAN & COLSPAN-->
61 <tr>
62 <td>
63 1
64 </td>
65 <td rowspan="2" colspan="2" class="spanColor">
66 2
67 </td>
68 </tr>
69
70 <!-- SECOND ROW; INCLUDES ONLY ONE <td>. Why?-->
71 <tr>
72 <td>
73 3
74 </td>
75 </tr>
76
77 <!-- THIRD ROW -->
78 <tr>
79 <td>
80 4
81 </td>
82 <td>
83 5
84 </td>
85 <td>
86 6
87 </td>
88 </tr>
89 </table>
90 </body>
```

View the file
examples/combinedSpan.html
for solution

SUMMARY ATTRIBUTE

(will not validate at W3C)

alternatives

“The summary attribute on the table element is obsolete. Consider describing the structure of the table in a caption element or in a figure element containing the table; or, simplify the structure of the table so that no description is needed.”

**NOTE: All examples in these slides include the summary attribute
... your tables should use one of these alternatives instead**

(i.e., your files that use tables should validate using the W3C validator)!!!