

CS 416

Web Programming

HTML Basics cont. - links, tables

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Agenda

- Continue crash course in HTML
 - Hyperlinks
 - Tables

Hyperlinks

- Hyperlink is a connection to a URL
 - Link can be within page, local page, or external site
- Specified using ANCHOR tags `<a>` and ``
- The link itself can be any HTML content specified between the open and close tags
- Must have an HREF attribute that specifies the associated URL/Web address

```
<a href="http://www.ccsu.edu">  
    Central Connecticut State University</a>
```

```
<a href="personal.html">  
    <h1>Local Page</h1></a>
```

Linking within a page

- Anchor tags can also point to specific places within a page

- Specify a location with the *id* attribute:

```
<div id="HelpSection">some text </div>
```

- To link to that section you use the # with the section's id

```
<a href="#HelpSection">help</a>
```

```
<a href="mypage.html#HelpSection">help</a>
```

Grouping elements

- `` tag allows you to change style of segment of text
Some``Blue text``
- The `<div>` tag is similar to the `` tag except that it allows you to apply style to a group of elements together and separates them as if they were a paragraph

```
<div style="text-align:right">
```

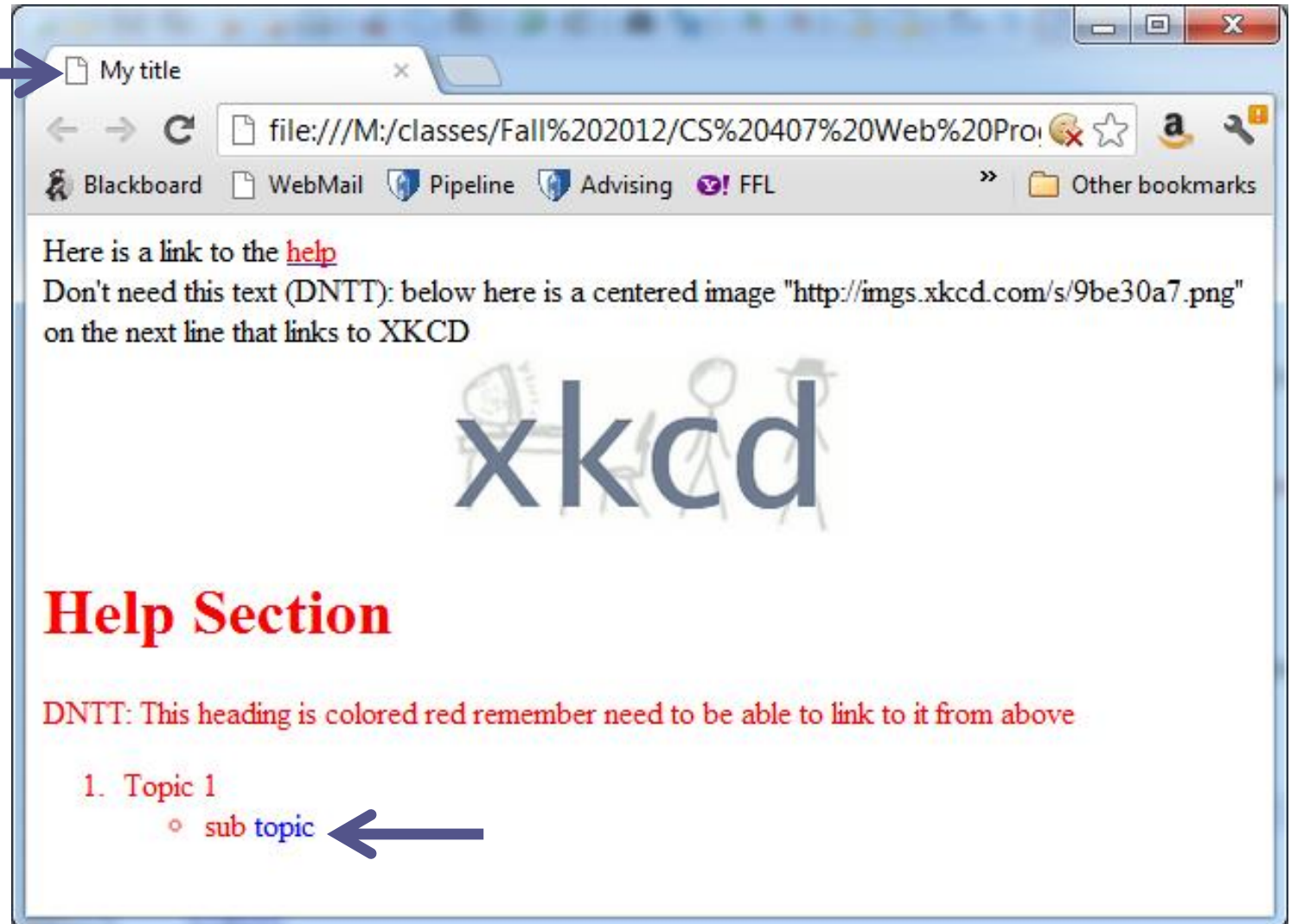
```
  <h1>...
```

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

```
</div>
```

- It is useful with images as the `style` alignment in the `` tag doesn't have an effect

Decompose



Tables

text can be aligned into rows and columns using a TABLE element

- `<table>` and `</table>` encapsulate the table data
- `<tr>` and `</tr>` encapsulate a row within the table
- `<th>` and `</th>` encapsulate the headers of a table
- `<td>` and `</td>` encapsulate table data within a row (i.e., a column entry)

The image shows a web browser window displaying a table and an HTML editor window showing the source code for the same table.

Browser Window (Lec2BasicTableExample.html):

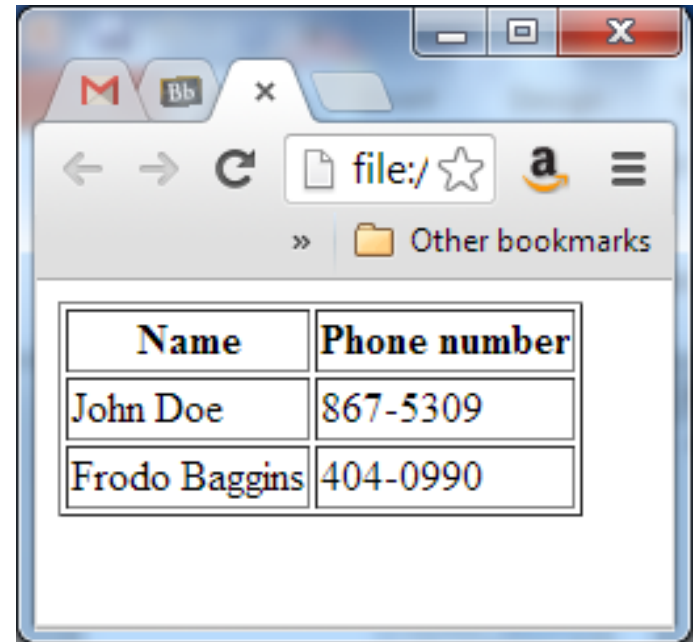
Name	Phone number
John Doe	867-5309
Frodo Baggins	404-0990

HTML Editor Window (Lec2BasicTableExample.html):

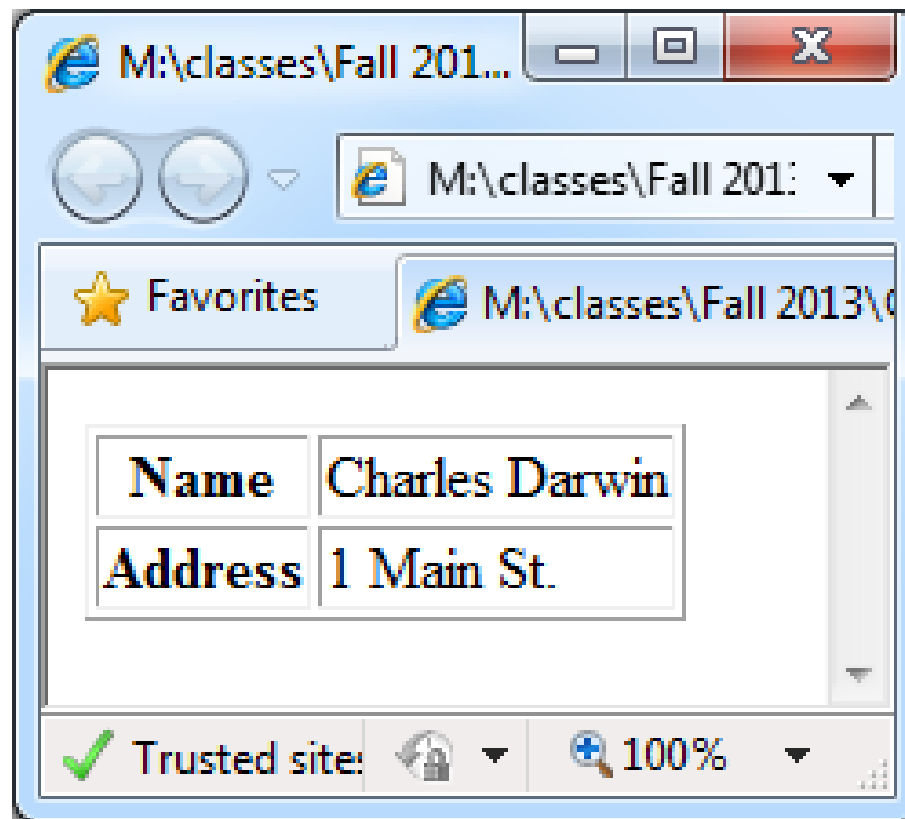
```
1 <html>
2   <body>
3     <table border="1">
4       <tr> <th>Name</th><th>Phone number</th> </tr>
5       <tr> <td>John Doe</td><td>867-5309</td> </tr>
6       <tr> <td>Frodo Baggins</td><td>404-0990</td> </tr>
7     </table>
8   </body>
9 </html>
```

Basic table

```
<html>
  <body>
    <table border="1">
      <tr>
        <th>Name</th>
        <th>Phone number</th>
      </tr>
      <tr>
        <td>John Doe</td>
        <td>867-5309</td>
      </tr>
      <tr>
        <td>Frodo Baggins</td>
        <td>404-0990</td>
      </tr>
    </table>
  </body>
</html>
```



Decompose

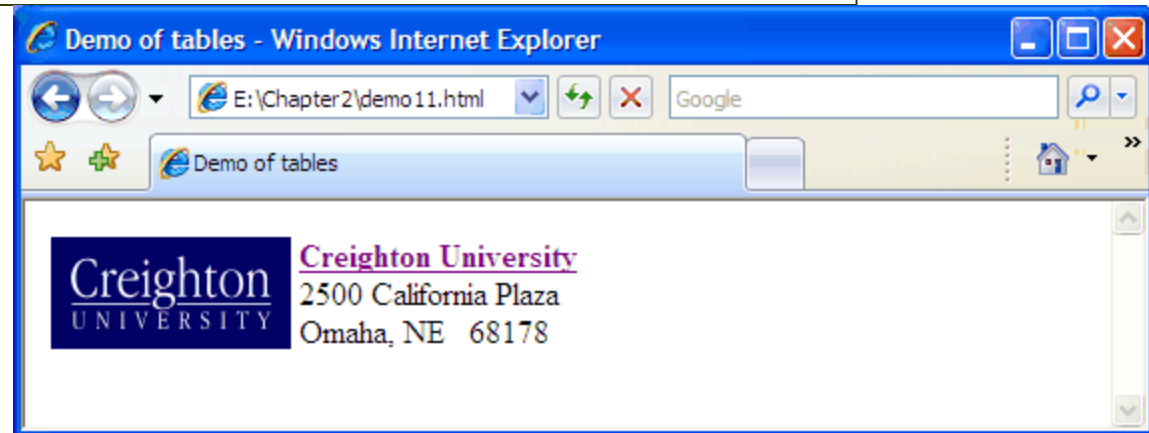


Tables for alignment

```
5.
6. <head>
7.   <title> Demo of tables </title>
8. </head>
9.
10. <body>
11.   <table>
12.     <tr>
13.       <td></td>
14.       <td><a href="http://www.creighton.edu"><b>Creighton University</b></a>
15.         <br />
16.         2500 California Plaza<br />
17.         Omaha, NE &nbsp; 68178</td>
18.     </tr>
19.   </table>
20. </body>
21. </html>
```

tables are commonly used to align elements in the page

■ here, an image is aligned to the left of some text



Complex tables

More complex relationships are common

Weekdays					Weekends	
M	T	W	R	F	Sa	Su

Y	\	X	
	\	T	F
	T	1	1
	F	1	0

Column spanning

For table data `<td>` (or header) to span more than one column the **colspan** attribute is set to the number of columns to span

```
<td colspan="2">
```

That row (`<tr>`) will need to have that many fewer cells specified

Column spanning Ex.

```
<table border="1">
```

```
<tr>
```

```
<td>1-1</td>
```

```
<td>1-2</td>
```

```
<td>1-3</td>
```

```
</tr>
```

```
<tr>
```

```
<td colspan="2">2-1</td>
```

```
<td>2-3</td>
```

```
</tr>
```

```
</table>
```

1-1	1-2	1-3
2-1		2-3

Row spanning

For table data `<td>` to span more than one row the **rowspan** attribute is set to the number of rows to span

`<td rowspan="2">`

The spanned rows (`<tr>`) will need to have that many fewer cells specified

Row spanning Ex.

```
<table border="1">  
  <tr>  
    <td rowspan="2">1-1</td>  
    <td>1-2</td>  
  </tr>  
  <tr>  
    <td>2-2</td>  
  </tr>  
</table>
```

1-1	1-2
	2-2

Example 1

class meets			August
M	W	F	

4 columns by 2
rows

Only 2 cell entries
since first “cell”
takes up 3

```
<table border="1">  
  <tr>  
    <td colspan="3">class meets</td>  
    <td rowspan="2">August</td>  
  </tr>  
  <tr>  
    <td>M</td><td>W</td><td>F</td>  
  </tr>  
</table>
```

Note no entry for
4th cell since
already specified

Example 2

class meets	M	x
	W lab	
	F	x

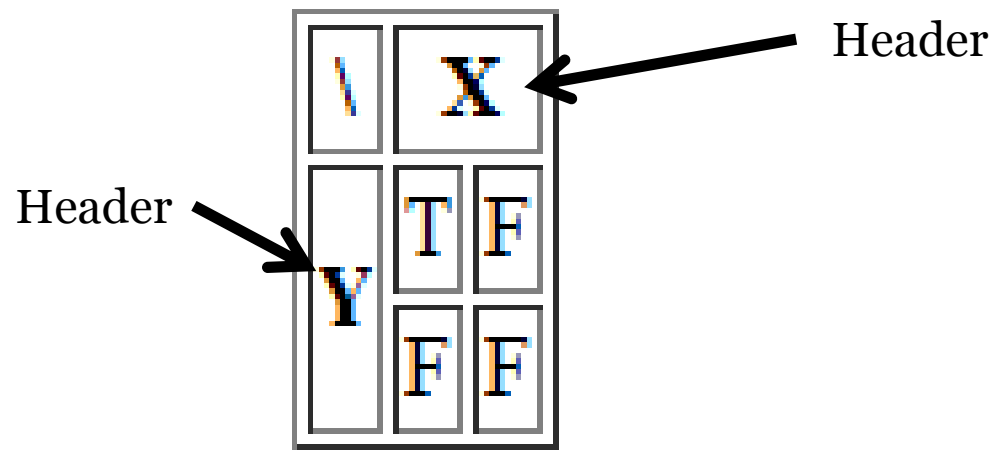
Table is 3 columns
by 3 rows

```
<table border="1">  
  <tr>  
    <td rowspan="3">class meets</td> <td>M</td> <td>x</td>  
  </tr>  
  <tr>  
    <td colspan="2">W lab</td>  
  </tr>  
  <tr>  
    <td>F</td> <td>x</td>  
  </tr>  
</table>
```

Only 1 cell specified since
first specified above and
this cell is 2 wide

Only 2 cells specified since
first specified above

Decompose



Analysis

\	X	
Y	T	F
	F	F

```
<table border="1">
  <tr>
    <th>\</th><th colspan="2">X</th>
  </tr>
  <tr>
    <th rowspan="2">Y</th>
    <td>T</td><td>F</td>
  </tr>
  <tr>
    <td>F</td><td>F</td>
  </tr>
</table>
```

Table is 3 columns
by 3 rows

First row has 2 cells
specified since second
cover 2nd and 3rd cells

3 cells are specified
with the first spanning
2 rows

2 cells are specified since
value of 1st cell in row
was specified earlier