



# HTML

CSCI 201

Principles of Software Development

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# Outline

- HTML Tags
- Program



- HTML stands for Hypertext Markup Language
  - › It is a markup language, which means it is used for processing, definition, and display of data
- HTML is a tag-based language, similar to XML
  - › HTML tags are already defined though

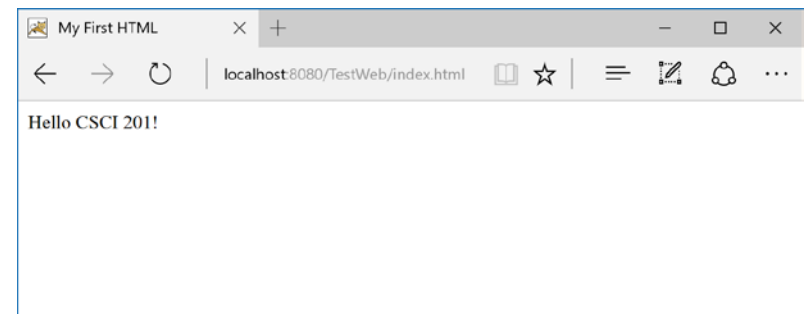
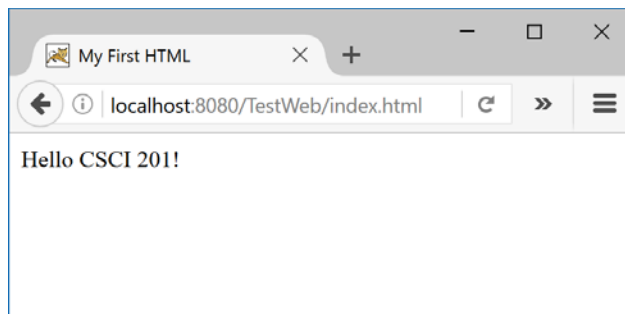
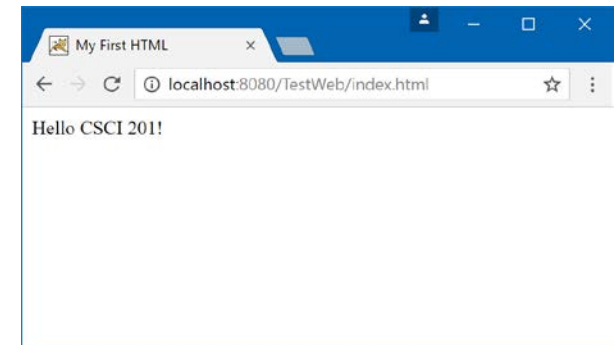
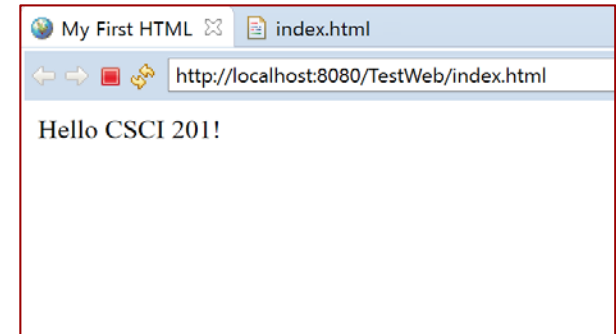
Version	Year
HTML	1991
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1999
XHTML	2000
HTML5	2014



# My First HTML



```
1 <!DOCTYPE html>
2 <!-- My first HTML comment -->
3 <html>
4   <head>
5     <title>My First HTML</title>
6   </head>
7   <body>
8     Hello CSCI 201!
9   </body>
10 </html>
```

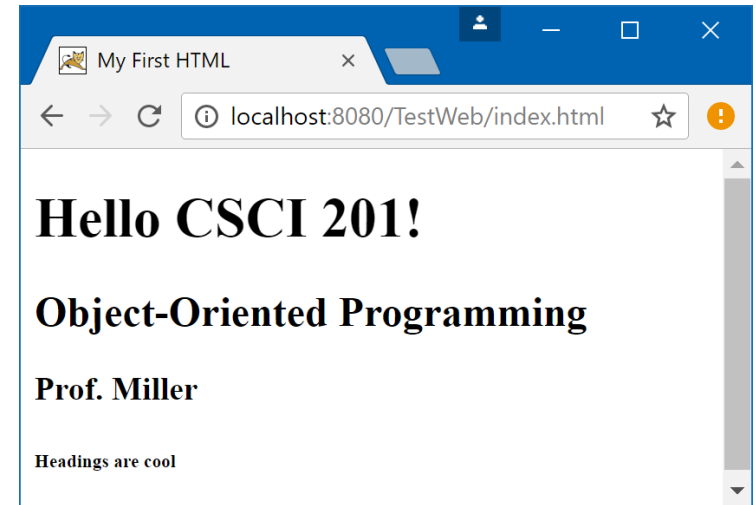


# HTML Headings



- Heading tags should be used for different levels in a document
  - › The size and look can be changed with CSS, so don't use these tags solely to change the size of the font

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>My First HTML</title>
5   </head>
6   <body>
7     <h1>Hello CSCI 201!</h1>
8     <h2>Object-Oriented Programming</h2>
9     <h3>Prof. Miller</h3>
10    <h6>Headings are cool</h6>
11  </body>
12 </html>
```

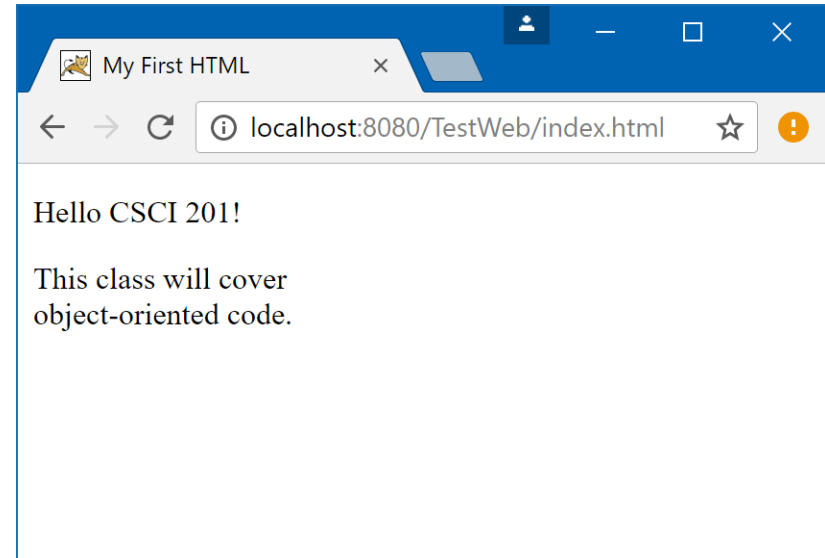


# HTML Line Breaks



- Paragraph tags separate logical display blocks
- Line breaks are used for formatting

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>My First HTML</title>
5   </head>
6   <body>
7     <p>Hello CSCI 201!</p>
8     <p>This class will cover<br />object-oriented code.</p>
9   </body>
10 </html>
```

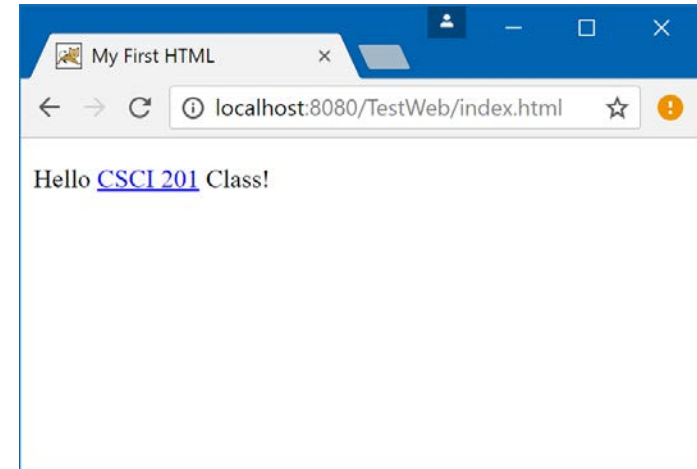


# HTML Links



- Anchor tags allow one page to link to another page

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>My First HTML</title>
5   </head>
6   <body>
7     <p>Hello <a href="csci.html">CSCI 201</a> Class!</p>
8   </body>
9 </html>
```

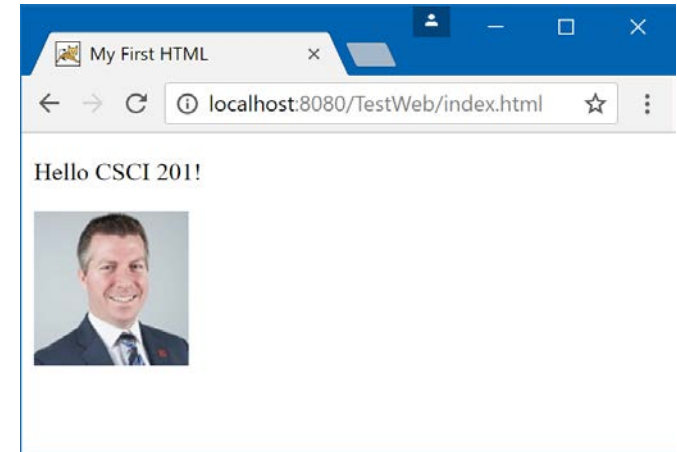


# HTML Images



- Image tags allow images to be displayed

```
1  <!DOCTYPE html>
2  <html>
3    <head>
4      <title>My First HTML</title>
5    </head>
6    <body>
7      <p>Hello CSCI 201!</p>
8      
9    </body>
10 </html>
```





# HTML Preformatted Text



- Preformatted text will be displayed in Courier New exactly as it is formatted in the code, including whitespace

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>My First HTML</title>
5   </head>
6   <body>
7     <h2>Here is a Java method</h2>
8     <pre>
9 public void foo() {
10     System.out.print("Hello");
11     System.out.print("CSCI 201");
12 }
13   </pre>
14 </body>
15 </html>
```

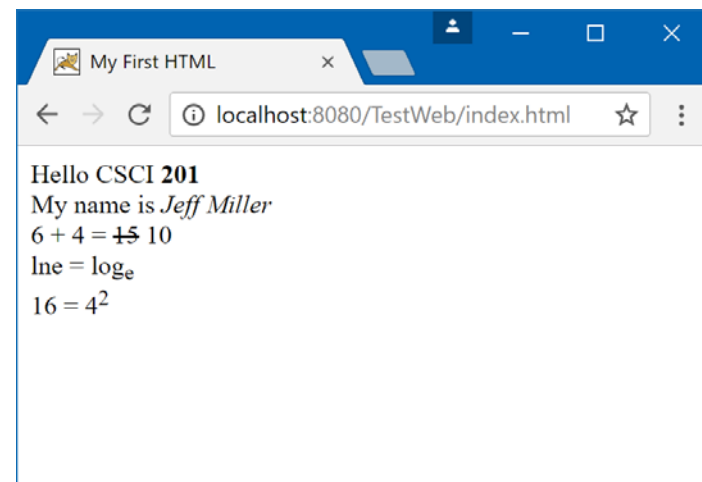


# HTML Text Formatting



- There are many tags for formatting text

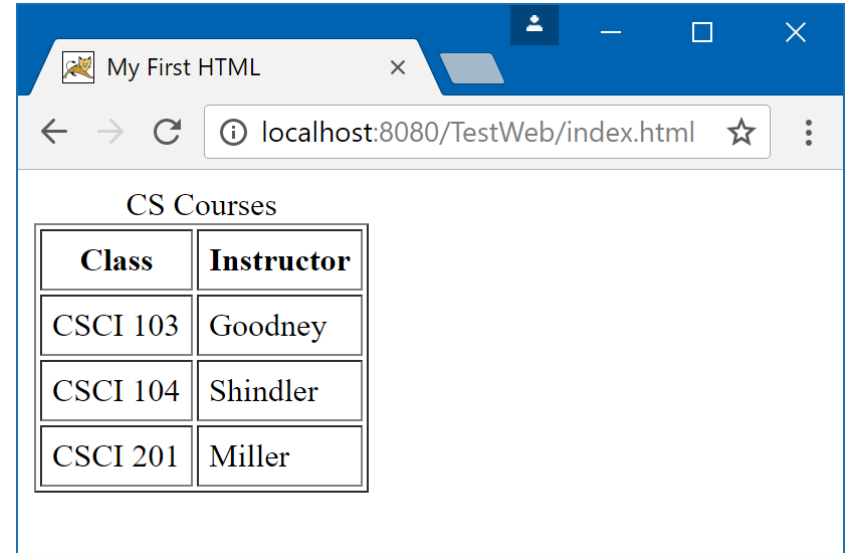
```
1  <!DOCTYPE html>
2  <html>
3    <head>
4      <title>My First HTML</title>
5    </head>
6    <body>
7      Hello CSCI <strong>201</strong><br />
8      My name is <em>Jeff Miller</em><br />
9      6 + 4 = <del>15</del> 10<br />
10     lne = log<sub>e</sub><br />
11     16 = 4<sup>2</sup><br />
12   </body>
13 </html>
```



# HTML Tables



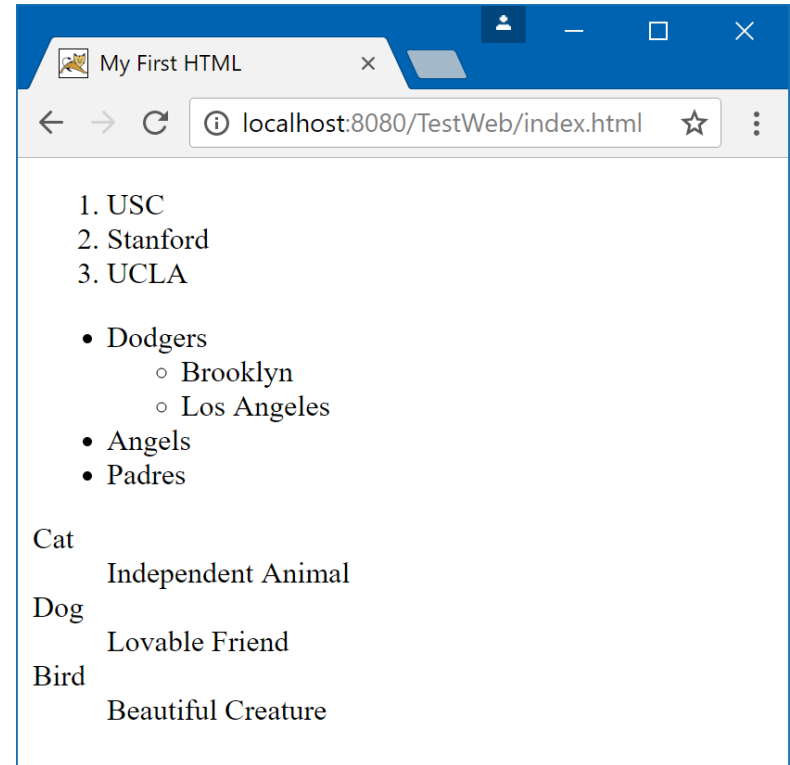
```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>My First HTML</title>
5   </head>
6   <body>
7     <table border="1" cellpadding="5">
8       <caption>CS Courses</caption>
9       <tr>
10        <th>Class</th>
11        <th>Instructor</th>
12      </tr>
13      <tr>
14        <td>CSCI 103</td>
15        <td>Goodney</td>
16      </tr>
17      <tr>
18        <td>CSCI 104</td>
19        <td>Shindler</td>
20      </tr>
21      <tr>
22        <td>CSCI 201</td>
23        <td>Miller</td>
24      </tr>
25    </table>
26  </body>
27 </html>
```



# HTML Lists



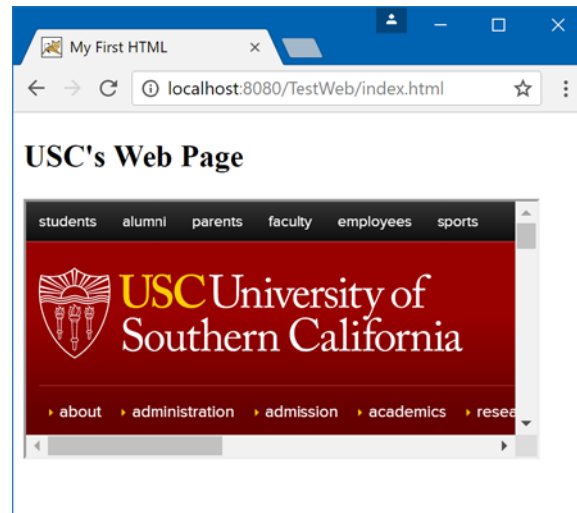
```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>My First HTML</title>
5   </head>
6   <body>
7     <ol>
8       <li>USC</li>
9       <li>Stanford</li>
10      <li>UCLA</li>
11    </ol>
12    <ul>
13      <li>
14        Dodgers
15        <ul>
16          <li>Brooklyn</li>
17          <li>Los Angeles</li>
18        </ul>
19      </li>
20      <li>Angels</li>
21      <li>Padres</li>
22    </ul>
23    <dl>
24      <dt>Cat</dt><dd>Independent Animal</dd>
25      <dt>Dog</dt><dd>Lovable Friend</dd>
26      <dt>Bird</dt><dd>Beautiful Creature</dd>
27    </dl>
28  </body>
29 </html>
```



# HTML Inline Frame



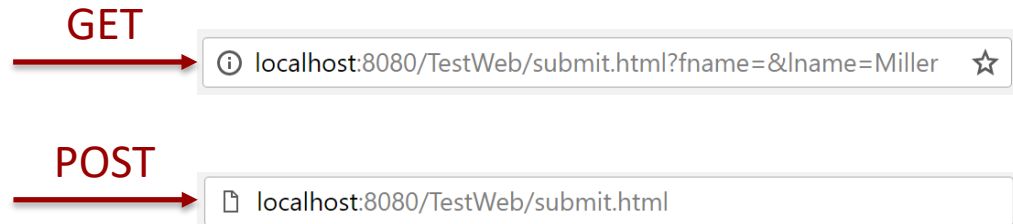
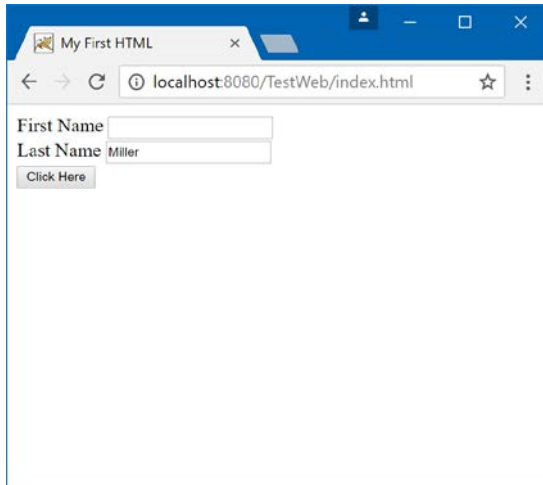
```
1  <!DOCTYPE html>
2  <html>
3    <head>
4      <title>My First HTML</title>
5    </head>
6    <body>
7      <h2>USC's Web Page</h2>
8      <iframe src="http://www.usc.edu" height="200" width="400" />
9    </body>
10 </html>
```



# HTML Forms



```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>My First HTML</title>
5   </head>
6   <body>
7     <form action="submit.html" method="GET" >
8       First Name <input type="text" name="fname" /><br />
9       Last Name <input type="text" name="lname" value="Miller" /><br />
10      <input type="submit" value="Click Here" />
11    </form>
12  </body>
13 </html>
```



# HTML Forms



```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>My First HTML</title>
5   </head>
6   <body>
7     <form action="submit.html" method="GET">
8       First Name <input type="text" name="fname" /><br /><br />
9       <fieldset>
10        <legend>Grade</legend>
11        <input type="radio" name="grade" value="1">Freshman</input>
12        <input type="radio" name="grade" value="2">Sophomore</input>
13        <input type="radio" name="grade" value="3">Junior</input>
14        <input type="radio" name="grade" value="4">Senior</input>
15      </fieldset>
16      <br />
17      <input type="submit" value="Click Here" />
18    </form>
19  </body>
20 </html>
```

A screenshot of a web browser window titled "My First HTML". The address bar shows "localhost:8080/TestWeb/index.html". The form is rendered with a "First Name" text input field, a "Grade" field containing four radio buttons labeled "Freshman", "Sophomore", "Junior", and "Senior", and a "Click Here" submit button.

My First HTML

localhost:8080/TestWeb/index.html

First Name

Grade

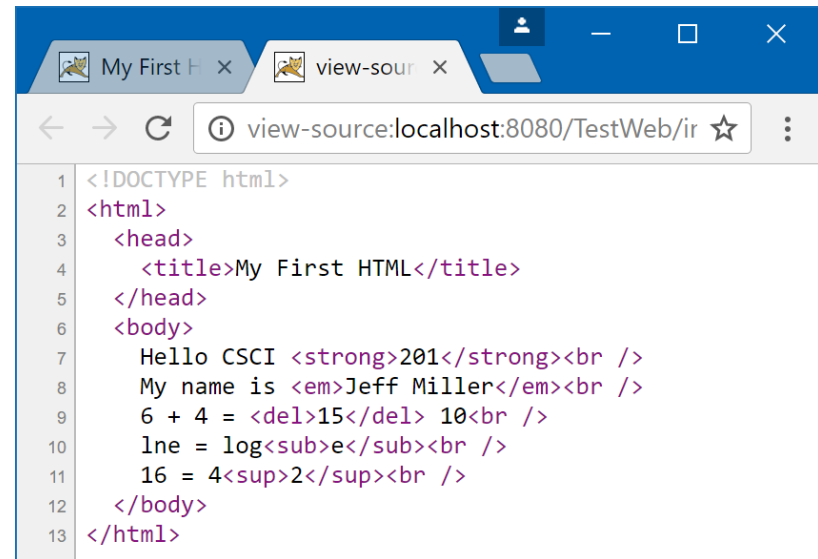
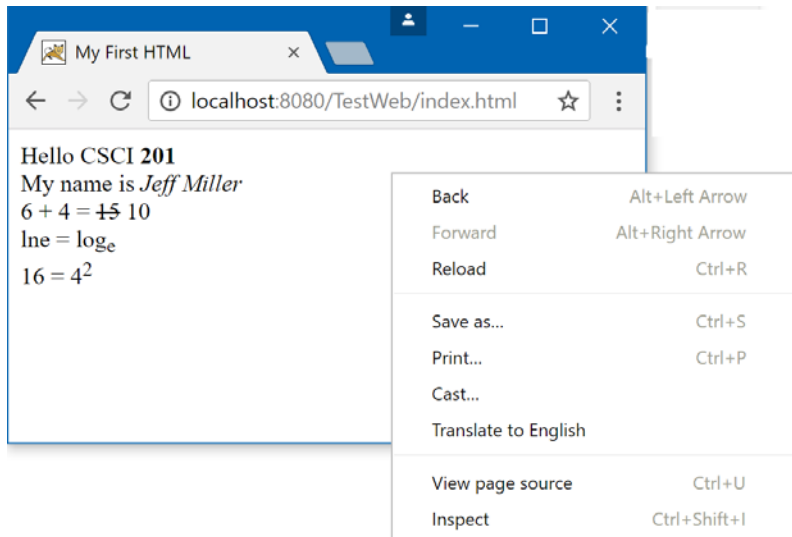
Freshman  Sophomore  Junior  Senior

Click Here

# More HTML



- For more information on HTML
  - › Go to <http://www.w3schools.com/html>
  - › Go to any web page and view the source







# Outline

- HTML Tags
- Program

# Program



- Create the following page.
  - › Note: Starting with `base.html` from the Lectures page of the course web site will make the CSS program in the next lecture easier

