

Learn to Code

Session 2
HTML with CSS

Reminder

<https://atom.io/>

<https://craigmayhew.github.io/tutorials/>

HTML 5

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <title>Craig's Tutorial Page</title>
  </head>
  <body>
    This is the content of the page, for now it's just text.
  </body>
</html>
```

Pro Tip: Press ctrl + u in Chrome to view the HTML of any web page on the internet.

List of Tags: <http://www.w3schools.com/tags/default.asp>

HTML 5

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <title>Craig's Tutorial Page</title>
  </head>
  <body>
    <p>This is the content of the page, and <a href="https://www.google.com/">this is a link to
Google</a>.</p>
    <p>This is an example of <b>bold</b>, <u>underlined</u>, <i>italics</i> and a
<u><b>combination</b></u>. All of this is within a paragraph tag.</p>
  </body>
</html>
```

HTML 5

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <link rel="stylesheet" type="text/css" href="theme.css">
    <title>Craig's Tutorial Page</title>
  </head>
  <body>
    <p>This is the content of the page, and <a href="https://www.google.com/">this is a link to
    Google</a>.</p>
    <p>This is an example of <b>bold</b>, <u>underlined</u>, <i>italics</i> and a
    <u><b>combination</b></u>. All of this is within a paragraph tag.</p>
  </body>
</html>
```

Do it once, do it well.

Automate, and you never need do it again.

Cascading Style Sheet (CSS 3)

```
body {  
    background-color: grey;  
}
```

```
.huge {  
    font-size: 40px;  
}
```

```
#cage {  
    color: orange;  
    font-weight: bold;  
}
```

HTML 5

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <link rel="stylesheet" type="text/css" href="theme.css">
    <title>Craig's Tutorial Page</title>
  </head>
  <body>
    <p id="cage">This is the content of the page, and <a class="huge" href="https://www.google.com/"
>this is a link to Google</a>.</p>
    <p>This is an example of <b>bold</b>, <u>underlined</u>, <i>italics</i> and a
<u><b>combination</b></u>. All of this is within a paragraph tag.</p>
  </body>
</html>
```


Cascading Style Sheet (CSS 3)

```
/* all elements with class="craig" that are nested within the one element with id="cage" */
#cage .craig {
    color: orange;
    font-weight:bold;
}

#cage b.craig {
    color: #0000CC;
    font-weight:bold;
}

/* a much more complex example, but not actually used in our html */
#cage p b.craig:first {

}
```

HTML 5

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <link rel="stylesheet" type="text/css" href="theme.css">
    <title>Craig's Tutorial Page</title>
  </head>
  <body>
    <p id="cage">This is the content of the page, and <a class="huge" href="https://www.google.com/"
>this is a link to Google</a>.</p>
    <p>This is an example of <b>bold</b>, <u>underlined</u>, <i>italics</i> and a
<u><b>combination</b></u>. All of this is within a paragraph tag.</p>
  </body>
</html>
```

Specificity!

High score wins!

Start at 0.

Add 1000 for any style attribute (BUT DON'T USE THESE).

Add 100 for each #id

Add 10 for each class/pseudo-class

Add 1 for each element

Specificity!

```
/* 100 + 10 */
```

```
#cage .red {  
  color: red;  
}
```

```
/* 100 + 1 + 10 */
```

```
#cage div.yellow {  
  color: yellow;  
}
```

Anti Patterns

Style Attribute

Don't use it. Ever.

```
<a href="https://www.google.com/" style="color:green;">this is a link to Google</a>
```

!important

Don't use it. Almost never.

```
#cage .craig {  
  color: orange !important;  
  font-weight:bold;  
}
```

Do you even hex?

Hexadecimal

Dec: 0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15

Hex: 0,1,2,3,4,5,6,7,8,9,A, B, C, D, E, F

9 = 9

10 = A

16 = 10

64 = 40

255 = FF

Colours

colour: black

colour: #000000

colour: rgb(0,0,0)

colour: red

colour: #ff0000

colour: rgb(255,0,0)

http://www.w3schools.com/tags/ref_colorpicker.asp

FAQ

- ~230 style properties
- You can have multiple CSS files per page.
- The css files can get very long and complicated.
- You can apply an open source css theme to your page / website / app. Make sure to check the license!
- Not everyone has the same fonts.
- “Red” might not be the same red for everyone.
- #FFF is shorthand for #FFFFFF
- There are 52 different CSS selectors.
- class=“onething anotherthing thirdclass” is valid. However, the order they are listed has no effect on priority. The priority is handled by specificity within the css file(s).
- Specificity is complicated.

Fin! Next Step

Create your own css theme. Background color?
background image? Font?!

<https://www.google.com/fonts>

```
background-image: url("http://craig.mayhew.  
io/uploads/2014/04/reprap_mendel_felix_small.  
jpg");
```