



HTML + CSS

with Guy Routledge

@guyroutledge | #FEWD

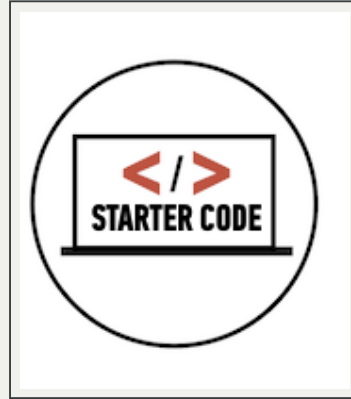
Agenda

- Recap
- More HTML
 - Images in HTML
 - HTML documents
- Intro to CSS
 - Link Tag
 - Colors
 - Fonts
- Styling with CSS
- Lab Time

Objective

By the end of the session you'll be able to:

- Create a valid, HTML5 document
- Learn new HTML tags
- Add images to the page
- Add a bit of style to the page



Resume Site

This is the project we'll be working with

Images

Images

Images are placed using the **** tag.

```

```

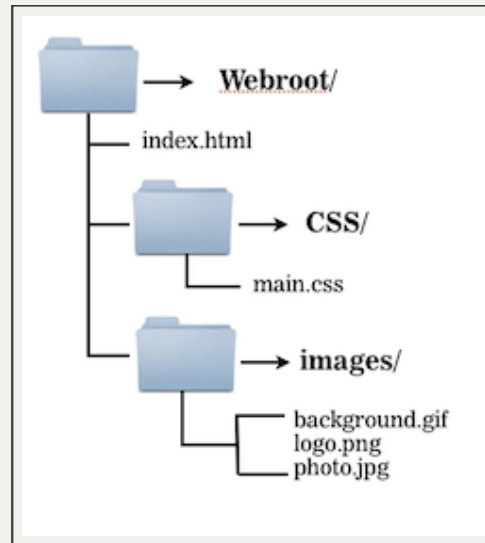
Images

The **img** tag requires a **src** attribute, which tells the browser where to find the image.

The **src** points to a resource a bit like the **href** of an **a** tag.

Images

How would you write the src?



There are different approaches to specifying an image location

Images

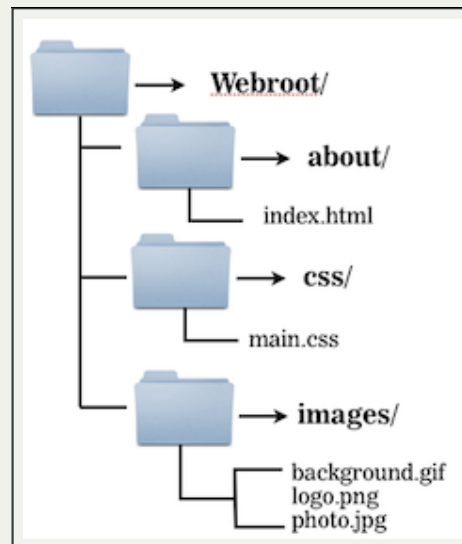
Inside **webroot**, a relative path could be used:

```

```

Images

Relative Path



Images

Inside **about** to reference the same **logo.png** image
we first need to go up the tree by one directory

```

```

Images

Absolute Path

```

```

Images

alt attribute provides a text description of the image

```

```

Images

There are four main image file formats:

Image File Formats

.png

- 24-bit png have alpha transparency
- 8-bit png have transparency but not semi-transparency
- Large file-size due to storing transparency info

Image File Formats

.gif

- Can be animated
- Have basic transparency, like an 8-bit PNG
- Used in HTML emails as PNG not widely supported

Image File Formats

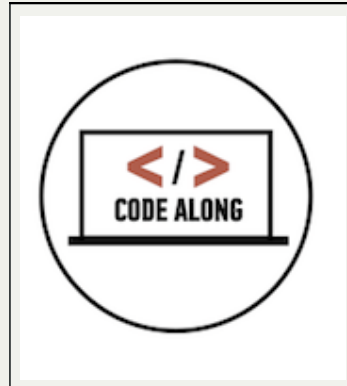
.jpeg || .jpg

- No transparency
- Most commonly used for photos
- Can be compressed to reduce file-size

Image File Formats

.svg

- Vector based
- Most commonly used for logos and illustrations
- Drawn with points and curves
- Infinitely scalable



Using Images & Learning new tags

HTML5 document

The browser renders HTML to the user so they can read your content, check out your images and click on your links.

This is the visible part of the document

HTML5 document

We also need to provide extra information and data to the browser about the page but don't want it to be visible to the user.

HTML5 document

To do this, we first declare a **doctype** to provide details of which version of HTML is being used. The latest version of HTML is HTML5. And its **doctype** looks like this

```
<!doctype html>
```

HTML5 document

To complete the valid HTML5 document, we wrap the whole page in an **html** tag and separate it into two parts.

The **head** contains all the data about the page.

The **body** contains all the visible content of the page.

HTML5 document

```
<!doctype html>
<html>
  <head>
    <title>title goes here</title>
    <meta charset="utf-8">
  </head>
  <body>
    ...
  </body>
</html>
```


HTML5 document

There's a sublime shortcut for building this initial structure.

```
html<tab>
```

New tags

We added the following new tags to the resume exercise:

```
<nav></nav>  
<blockquote></blockquote>  
<div></div>
```

CSS

CSS

Cascading **S**tyle **S**heets

Used to apply styling to your content

CSS - Syntax

```
selector {  
  property: value;  
}
```

CSS

Where can CSS go?

- On an element in a **style** attribute
- In the **<head>** inside a **<style>** tag
- In a separate **.css** file

CSS

Using a separate **CSS** file

Its best practice to put **CSS** in its own file
and link to it from the **<head>**.

```
<link rel="stylesheet" href="style.css">
```

CSS Break Down

```
p {  
  color: red;  
  font-weight: bold;  
}
```


CSS Break Down

This whole thing is called a **rule**.

The **p** is called a **selector**, and it's followed by a set of **property : value** pairs in a style block

CSS Break Down

The **selector**, **p** in this case, specifies what parts of the HTML document should be styled by the declaration. This selector will style all **p** elements on the page.

CSS Break Down

The **declaration block** here is:

```
{  
  color: red;  
  font-weight: bold;  
}
```

Declarations go inside curly braces.

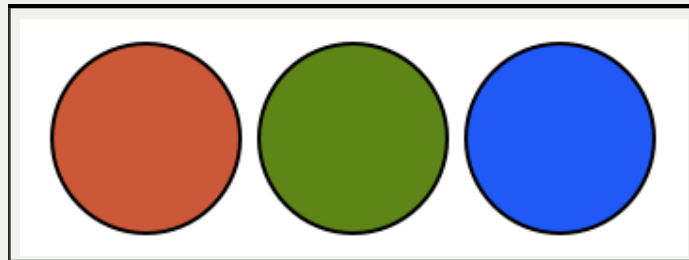
CSS Process

This is the process we go through to style an entire page. Elements are "selected" in the document and then given a series of property:value pairs to create the desired effect.

CSS Colours

CSS Colors

Colors can be specified in CSS in a variety of ways:



Colour Keywords

These are used less frequently, but are handy for basic colors like **black** and **white**. There are several

See [here](#) for more

Hex Colours

	#FF0000 (full red, no green, no blue)
	#00FF00 (no red, full green, no blue)
	#0000FF (no red, no green, full blue)

RGB Color Values

`rgb(0, 0, 0)`

- The first value is red, the second green, the third blue.
- Each value can range from 0 to 255

RGBA Colors

`rgba(0, 0, 0, 0)`

- RGBa works identically to RGB, expect that it takes a 4th value called the "alpha".
- This is a value between 0 and 1 which will be used to determine a color's opacity



HSL Colours

hsl(0, 0%, 0%)

Similar notation to RGB values, but specify colors using hue, saturation, and lightness.

HSLA

hsla(0, 0%, 0%, 0.5)

As with RGBa, HSLa is exactly like HSL for the first 3 values, but takes a 4th alpha-channel value.

Fonts

There are numerous things we can style to make text look more interesting and more readable.

Font properties

There are lots of CSS properties for styling text but here are some key ones:

```
h1 {  
  font-size: 50px;  
  font-family: 'Avenir', 'Arial', sans-serif;  
  font-weight: bold;  
  font-style: italic;  
  line-height: 1.3;  
}
```

Font properties

- **font-size** sets the size of the text
- **font-family** sets the typeface
- **font-weight** sets the boldness (number or keyword)
- **font-style** can set italic text
- **line-height** sets the spacing between lines

More CSS

For more about CSS colours, check out

<http://www.atozcss.com/c>

For more about font/text properties check out

<http://www.atozcss.com/l>

<http://www.atozcss.com/t>

Centring the content

It's very common for a website to have a centered column of content, narrower than the full width of the screen. To achieve this, we wrap a containing element around the content tags that we want to center.

Centring the content

A **div** tag is ideal for this purpose and is very commonly used to **divide** up the page into chunks that can be moved around as a single entity.

```
<div>
  <h2>...</h2>
  <p>...</p>
  <p>...</p>
  <blockquote>...</blockquote>
  <p>...</p>
</div>
```

Centring the content

To center this **div** of content, we give it a **width** and set **auto** on its horizontal margins.

```
div {  
  width: 800px; /* could be any number of px */  
  margin-left: auto;  
  margin-right: auto;  
}
```

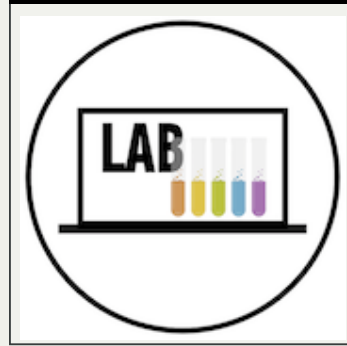
Centring the content

To center text-based content (like paragraphs or headings) we can use the **text-align** property.

```
h1 {  
  text-align:center;  
}
```

CSS Review

- CSS is for styling your content
- A selector specifies what will be styled
- A series of property:value pairs defines styles
- CSS should be written in a separate **.css** file



Lab Time

Resume Page

Homework

Finish your about page & resume website

