COMP 1017

Day 11
Introduction to CSS

What is CSS?

CSS, or Cascading Style Sheets, tells your browser how everything should look.

It's a set of rules, which you write, for presenting HTML elements.

Because HTML was never designed for formatting, CSS can:

➜lay out the content
➜style the content

The best part is that one stylesheet can control the look of all of the pages in your website.

This can save you a lot of work and go a long way towards making your site look and feel consistent.

CSS Rules

So, a stylesheet has a bunch of rules that tell a browser how to present your HTML.

What do these rules look like?

selector   property   value

```css
p { color: red; }
```

A selector is the HTML element that you want to style.

A property is the type of style you want to change.

A value is what you want to set that property to.

A declaration is a property and a value pair.

You can have multiple declarations in one rule.

```css
p {
        color: red;
        font-size:
12px;
}
```

Syntax

Okay, so what about syntax?

Just like HTML elements need to be inside < angle brackets >,
CSS declarations need to be inside { curly braces }.

Properties and values must be separated by a colon (:).

All declarations must end with a semicolon (;).

If you do not end your declarations with a semicolon, it would be like not closing an HTML tag.

Hint: this is one (1) bad.

Including CSS

How do we include CSS in our website?

There are three ways:

1. linking
2. embedding
3. inline styles*

* don't actually do this.

Linking to CSS

Linking to a CSS file* is best practice.

* AKA an external stylesheet

To do it, use the following tag in your <head>:

```
<link rel="stylesheet" href="css/styles.css">
```

Your <head> should look something like the following …

```html
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>My test page</title>
      <!-- CSS style sheet -->
    <link rel="stylesheet" type="text/css"
    href="css/styles.css">
      <!-- End of CSS files →
  </head>
```

Embedding CSS

This is the next-best option.

Alright, so that's how you link to an external stylesheet.

What about embedding?

Using a special tag, you can totally write CSS in your <head>.

```
<style>

  p {

    color: red;

  }

</style>
```

Altogether, this would make your <head> look something like …

```html
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>My test page</title>
    <style>
      p {
        color: red;
      }
    </style>
  </head>
```

Inline Styles

Not Recommended

You want validation errors? Because this is how you get validation errors!

```html
<p style="color:red;">Don't do this.</p>
```

The reason that we don't do this anymore is that it's really hard to edit everything line-by-line.

This means that your website won't be maintainable.

The Cascade

The victor is always the last rule standing.

We figured out what 'stylesheets' means; what about 'cascading'?

This means that if you have multiple styles applied to an element, the last rule applied will win.