HTML, CSS

HyperText MarkUp Language

- HTML: Describes the content and structure of information on a web page (not style).

- An HTML document is made up of elements that are delineated by tags:

- syntax: <element>[content]</element> example: <p>This is a paragraph</p>

- In this course, we'll primarily use HTML5.

History

- First conceived in 1990 based on SGML

- 1995 Browser wars

  - browser specific elements <blink>..</blink>

  - HTML became fragments

  - bad grammar

- Apps - Java, Flash

- 2007 work on HTML 5 began

HTML5

- HTML5: Fifth and current version published by the W3C in October 2014.

- Designed to support modern multimedia (e.g. <video>, <canvas>), semantic formatting, cross-mobile applications, and JS APIs.

```
<!DOCTYPE html>
<html>
    <head>
            <meta charset="utf-8">
            <title>Hello World</title>
    </head>
    <body>
            <h1>Hello CSC309</h1>
  <a href="https://csc309-fall-2016.github.io/">web
 page</a>
    </body>
</html>
```

Bold tags are required components of a valid page

CSS

- CSS describes the appearance, layout, and presentation of information on a web page.

- Describes how information is to be displayed, not what is being displayed.

- Can be embedded in HTML document using the <style> element or placed in separate .css file (recommended).

A CSS file consists of one or more rules. Each rule starts with a selector, which specifies an HTML element(s) and then applies style properties to them.

```
selector {
    property: value;
    property: value;
}
p {
    font-family: sans-serif;
    color: red;
}
```

CSS code can be embedded within the head of an HTML page or placed inline in an element.

Bad style and should be avoided when possible (why?)

```
<head>
<style type="text/css">
  p { font-family: sans-serif; color: red; } h2 { background-color: yellow; }
</style>
</head>
<body>
  <p style="display: inline;">[content]</p>
</body>
```

- Properties of an element cascade together in this order of precedence:
  - browser's default styles
  - external style sheet files (in a <link> tag)
  - embedded/internal style sheets (inside a <style> tag in the page's header)
  - inline style (the style attribute of the HTML element)
  - adding !important can override the order

Validate your document!

HTML validator:

https://validator.w3.org/

CSS validator:

https://jigsaw.w3.org/css-validator/