CSS

What is CSS?
- Cascading Style Sheets
- Standard design language for the Web
- Controls color, typography, and layout

CSS Syntax
- Selector (h1, main, body, etc.)
- Declaration statement (“declares” what the code does with { })
- Property (property: value;) – ends with colon
- Value (property: value;) – ends with semi-colon
- Comment tags /* * /
  - Different syntax from html comment tags <!-- -->

/* red paragraph text */
p { color: red;}

CSS Selectors
- HTML tag
- Class
  <h1 class="hide"></h1>
  .hide {display: none;}
- Id

<main id="wrapper"></main>
#wrapper { background-image: none; }
CSS

- Pseudo-class (links)

```css
selector:pseudo-class { property: value; }
a:link { color: #FF0000; }
a:visited { color: rgb(0,0,255); }
a:hover { color: green; }
```

Tag Selector

- Rewrite HTML tags
- Add functionality
- Overwrite inherent styles

```css
body {

  font-family: "Arial", Helvetica, sans-serif;
  color: #333;
  background-image: url("images/background.jpg");
  font-size: 1.5em;
  font-weight: normal;
}

h1 {

  color: black;
  font-family: "Times New Roman", Times, serif;
  font-size: 2em;
  font-weight: bold;
}
```
CSS

Class Selector

- "dot class"
- use multiple times on Web page

```css
.green-copy {
    color: green;
    font-size: 2em;
    font-weight: 900; /* 100-900 thickness */
}
```

ID Selector

- "pound id"
- unique identifier
- use only once per Web page

```css
#main-header {
    height: 100px;
    width: 960px;
    background-color: rgba(255,255,255,0.5);
}
```

CSS Box Model

- All HTML elements can be considered "boxes"
- "box model" is used when talking about CSS design and layout
CSS

- essentially a box that wraps around HTML elements
  - margins – clears an area outside the border
  - borders – border that goes around the padding and content
  - padding – clears an area around the content; transparent
  - content – content of the box, where text/images appear

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Box Positions

- static (default, in the “flow”)
  - /* default state; positioned relative to the browser window, and will not move even if the window is scrolled */
- relative (position relative to its parent)
  - position: relative;
  - /* element positioned relative to its normal position */
CSS

- fixed (glued to the background)
  - position: fixed;
- absolute (removed from the flow)
  - position: absolute;
  - /* removed from normal flow; other parts of the doc behave like the absolutely positioned element does not exist; can overlap other elements */
- z-index (stacking order for absolute positioned objects)
  - /* sets the stack order; number, auto, inherit */

Declaring Multiple Selectors

- both selector conditions must be met for declaration to work
- targets CSS
- good for multiple navigation styles

```css
nav, a {

  font-family: "Lucida Console", Monaco, monospace;
  text-decoration: none; /* underline, line-through, overline */
  color: #333;
  background-color: #E3E3E3;
}
```
CSS

Embedded style sheet

- Single page Website
- Override global style
- Design/testing prrocess

```html
<style>
  body {
    font-family: "Arial", Helvetica, sans-serif;
    color: black;
  }
</style>
```

External style sheet (most used!)

- Linked in `<head>` tag
  - `<link>` tag only goes in
- Global style

```html
<head>
  <link href="mystyle.css" rel="stylesheet" type="text/css">
/* “href” specifies URL location of linked doc;  
“rel” specifies the relationship between the current 
document and the linked doc; */
```
CSS

“type” specifies the media type of the linked doc */

</head>