CSS / *Cascading Style Sheets*

CSS, is used to tell web browsers how to style (color, font, size) and display HTML-structured text.

HTML provides the structure

CSS provides the style

There are 3 ways to define styles:

- Inline
- External style sheet
- Embedded style sheet

Using an External Style Sheet

Using an external style sheet avoids duplication, makes maintenance easier, and allows you to make a site-wide change in one place.

1. Create a new file in the same folder as your index.html file.

2. Give it the extension `.css` (“style.css” is a good name).

```
<!DOCTYPE html>
<html>
<head>
  <title>My stylin website</title>
  <link rel="stylesheet" href="style.css">
</head>
<body>
</body>
</html>
```

3. Add a link in the `<head>`.

Using an Embedded Style Sheet

Defining CSS rules

When using inline css, style properties are set per element, but when you use an external stylesheet you define "rules" that get applied more generally to elements.

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

CSS rule

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

This rule tells the browser to make the text of all paragraphs red and bold.

There are many CSS properties:

https://developer.mozilla.org/en-US/docs/Web/CSS/Reference

CSS rule hierarchy

In CSS (cascading style sheet) styles **cascade** down the sheet from top to bottom.

```
p {
  background: orange;
  font-size: 24px;
}
p {
  background: green;
}
```

Because the paragraph selector that sets the background color to green comes after the paragraph selector that sets the background color to orange, it will take precedence in the cascade. All of the paragraphs will appear with a green background. The font size will remain 24 pixels because the second paragraph selector didn't identify a new font size.

If there is a conflict of property values, the more immediate rule will be followed, overriding any enclosing parent rules. This is the "cascading" in Cascading Style Sheet (CSS).

CSS Selectors

Type selectors target elements by their element type. For example, should we wish to target all division elements, , we would use a type selector of div.

```
div { ... }
```

Class Selectors

Class selectors allow us to select an element based on the element's class attribute value. Class selectors are a little more specific than type selectors, as they select a particular group of elements rather than all elements of one type.

Class selectors allow us to apply the same styles to different elements at once by using the same class attribute value across multiple elements.

Within CSS, classes are denoted by a leading period, followed by the class attribute value.

Here the class selector will select any element containing the class attribute value of awesome, including both division and paragraph elements.

CSS

```
.awesome { ... }
```

HTML page

```
<div class="awesome">...</div>
<p class="awesome">...</p>
```

ID Selectors

ID selectors are even more precise than class selectors, as they target only one unique element at a time. Just as class selectors use an element's class attribute value as the selector, ID selectors use an element's id attribute value as a selector.

Regardless of which type of element they appear on, id attribute values can only be used once per page. If used they should be reserved for significant elements.

Within CSS, ID selectors are denoted by a leading hash sign, #, followed by the id attribute value.

CSS

#specificThing { ... }

HTML

<div id=“specificThing">...

Hexadecimal colors

Hexadecimal color values consist of a pound, or hash, #, followed by a three- or six- character figure. The figures use the numbers 0 through 9 and the letters a through f, upper or lower case. These values map to the red, green, and blue color channels.

You can also use RGB color notation, HSL, and color names

Lengths can be specified absolutely (pixels)
or relatively (percentages)

Absolute

```
p {
  font-size: 14px;
}
```

Relative

```
col {
  width: 50%;
}
```

More Info:

Building Your First Webpage
http://learn.shayhowe.com/html-css/building-your-first-web-page/

Getting To Know CSS
http://learn.shayhowe.com/html-css/getting-to-know-css/