CSS

Cascading Style sheets and the rules therein .

And now, some CSS

- Your content is the actual information- the paragraphs, words, images, links, etc. in your web site.
- The style consists of your ‘presentation rules’- rules that control the layout (positioning of elements), the color scheme, the font choice, and the background.
- The advantages of using CSS is that it separates the presentation from the content. It is the clothing you put on your xhtml document that you can change time and time again.
- If all the pages in your web site point to a single style sheet, then, if you want to make a change in your style, then you only have to make the change in the style sheet, instead of making the change in every single xhtml file

How to Apply the CSS to the XHTML

Inline styles (least flexible)

- defined within a tag such as `<p>` using the style attribute

Embedded (internal) style sheets

- defined in head of document using `<style>` tag

External style sheets (most flexible)

- connected to an HTML document using the `<link>` tag or the `import` directive

Structure of a CSS Rule

With HTML, we had elements, attributes, and values

With CSS, we have selectors, properties, and values

The Parts of the CSS Rule

h1 { color: red;}

- h1 is the selector
- color is the property which defines the presentational aspect
- red is the value
- color : red is the statement or declaration
- h1 { color: red;} the 'rule'

The property-value pair goes inside the curly brackets { }
The property is followed by colons : (not an equal sign)
After red, there is a semi-colon in case we want to add more statements to the rule. (a rule can contain several statements)

h1 { color: red;}

- In this rule we have made, we have stated that all h1 elements in our xhtml code will be red

- So, wherever we have an h1, in our code, it will be presented as red

- *In your style sheet, type in h1 { color: red;}

Lets add some declarations to our original rule

- We have h1 { color: red;}
- Now, we'll control the font appearance
- h1 {color: red;

  font-family:Arial, Helvetica, sans-serif;

  }
- *Type in the additional statement/declaration in your existing rule

What elements do we have in our html document?

- <p>, <h1>, <h2>, <img> <a href> etc.

All of these are elements.

When we make a rule, we are 'selecting' these elements and controlling their appearance

In CSS terminology, we are using 'Element Selectors'.

Grouping

- You can group selectors.

- Separate each selector with a comma.
- In the example below we have grouped all the header elements.
- All header elements will be green:

```
h1,h2,h3,h4,h5,h6 { color: green }
```

*group at least 2 elements and give them the same rule

CSS Properties

There are 6 categories of selector properties

- Font Properties
- Color and Background Properties
- Text Properties
- Box Properties
- Classification Properties

There are also several ways to specify units

- Em- the multiplier
- Pixels
- Percentage
- Pts

Color and Background Properties

Color

We can control the color of the type and the color of the background of our elements

```
p { color: #336633;
     background-color: #CCCCCC;
   }
```

*Lets add background colors and type colors to our h3's

What are all these numbers and letters about ??

- #336633 represents a hexadecimal value that generates a color
- There are 16 predefined colors indicated by name like orange, blue, red, etc, but to use colors beyond these, you must use the hexadecimal or other ways of designating the color such as with rgb values
- http://www.w3schools.com/Html/html_colors.asp
- http://www.devguru.com/Technologies/html/quickref/color_chart.html

- * Make rules to control the background color of the <body>

Font Properties

Font family

- `font-family: list of values`

Specific font families have names such as Times or Arial. There are also some generic names:

- serif
- sans-serif
- Monospace

*Make your paragraph text monospace

Font Properties

Examples

p {font-family: Times New Roman,
    Times, serif;}

p {font-family: Verdana, Arial,
    Helvetica, sans-serif;}

- In these examples the preferred family is the first one listed. If it is not found the next one is chosen and so on. If none of the specific font families is found a generic serif (first example) or sans-serif (second example) family is used.

Font Properties

Font Style

- font-style: value
  where value is normal or italic,

Example

- h1 {font-family: Arial,
  sans-serif; font-style: italic}

*Make your h2 and h3 font-style italic

Font Properties

Font Weight

- font-weight: value
  where value is normal, bold, bolder, lighter, 100-900 in steps of 100. (Stick with just bold- There seems to be no difference between bold and bolder- and there is no change when you put in ‘lighter’)

Example

- h1,h2,h3

```
  {font-family: Arial,
    sans-serif;
    font-weight: bold
  }
```

Font Properties

Font Size

- font-size: value where value is an absolute size, relative size, length, percentage.
- Absolute sizes:

  xx-small, x-small, small, medium, large,
  x-large, xx-large.
- Relative sizes:

  larger and smaller
- length or percentage

  10pt, 12pt, 150%, 200%, etc.

Font Properties

Examples

- h1 {font-size: xx-large}
- h1,h2,h3 {font-size: larger}
- body {font-size: 14pt}
- p {font-size: 2em}
- body {font-size: 100%;}

-note-* in your body, designate a percentage of 62.5%, and then in your p, use ems.-

Why? - http://www.alistapart.com/articles/howtosizetextincss/
http://css-tricks.com/css-font-size/

Font Properties- Size

The multiplier- EM-

-EM is a unit of measurement coming from the print world. 1em=16px (which is the browser's default)

Here is where the definition of cascade makes a play. The body is 100% or 12pts or 16px. The body contains all the content so that size cascades or applies to all the other content. We use the multiplier to adjust the size of the content inside the body, but it is based on that initial size designated in the body rule.

Text Properties-

- word-spacing p {word-spacing: .5em;}
- letter-spacing h2 {letter-spacing: 2em;}
- text-decoration a {text-decoration: none;}
- text-transform h2 {text-transform: uppercase;}
- text-align h3{text-align: center;}
- line-height p {line-height: 1.5em;}

Descendent Selectors

- What if we wanted one paragraph's background to be pink, but not the others ? We can use descendent selectors.

- footer p {background-color: pink;}