**Getting Started with CSS**

***Assessing Style Rules***

* Rather than adding formatting elements to a Web page, CSS adds style information to elements defined in the HTML code for a Web page. You add CSS to an HTML document by inserting **style rules**.
  + Lines or blocks of CSS code that specify the presentation of Web page elements
* Style Rule Syntax-
  + A style rule is composed of two main parts:
    - One or more **selectors**
      * Identify the HTML element or elements to which the style rule applies
    - On or more **name-value pairs** follow the selector(s)
      * Each pair specifies a CSS **property** to apply to the selectors and the value to assign to the property
      * Each name-value pair ends with a *semicolon*
      * All name-value pairs declared for a selector are enclosed in a set of curly brackets.
  + EXAMPLE:

In the example at right:

**h1 {**

**text-align: center;**

**width: 40em;**

**}**

* + - **h1** represents the **selector**
    - **text-align** is the **property**
    - **center** is the **value**
    - all **name-value pairs** are enclosed within **{ }** curly brackets
    - This **style rule** example center the text of any h1 heading in a Web document and sets its width to 40 ems.
* Kinds of Selectors-
  + The most general selectors are the names of HTML elements, such as h1 or p
    - Known as **type selectors**
    - Apply the associated name/value pairs to *every* instance of the specified element
      * The h1 example above would apply the center alignment and specified width to every <h1> used in the HTML document
  + Sometimes instead of modifying all the elements of a certain type, you want to make changes that affect only a single element
    - Known as **id selectors**
    - You can create a special type of selector
      * **#** followed by a unique id selector that you create
    - Apply the associated name/value pairs to individual elements
    - EXAMPLE:

**#contact {**

**text-align: right;**

**}**

In the example at right:

* + - * **#contact** represents the id selector
      * **text-align** is the property
      * **right** is the value
      * all **name-value pairs** are enclosed within **{ }** curly brackets
    - This **id selector** can be added to any existing tag in the HTML document .
  + Sometimes you want to apply a style rule to multiple elements in a Web document. The **id** element limits a given value to a single instance on a Web page, you can create a selector that applies to any number of elements on a page
    - Known as **class selectors**
    - Creates a style rule based on values assigned to elements using the HTML class attribute
    - Allows you to apply a style rule to an unlimited number of separate elements
      * **.** followed by the class attribute value
    - EXAMPLE:
      * **.maintext** represents the class selector

**.maintext {**

**text-align: center;**

**}**

* + - * **text-align** is the property
      * **right** is the value
      * all **name-value pairs** are enclosed within **{ }** curly brackets
    - This **class selector** can be added to any existing tag in the HTML document
  + Sometimes you want to modify a section not a single element
    - Use the <div> </div> tags with other attributes/style selectors to apply properties to a section of a Web page

***Types of Style Sheets***

* Embedded Style Sheet
  + The most straightforward way to affect the presentation of a single Web page
  + A section of CSS code entered in the head element of an HTML document
    - Insert CSS code using a **style element** with an **attribute** specifying tht the contents are written in CSS
      * <style type=”text/css”> </style>
      * Style rules are typed between the style tags above
* External Style Sheet
  + A separate file containing style information that multiple Web pages can link to
  + CSS code entered into a separate HTML document (saved as filename.css) which you can link to your Web page.
    - <link rel=”stylesheet” type=”text/css” href=”filename.css” />
      * The link element makes the contents of an external file available in the HTML document
      * Link is added to the <head> </head>section of the HTML document

***CSS Properties and Values***

|  |  |  |  |
| --- | --- | --- | --- |
| **GROUP** | **AFFECTS** | **PROPERTIES** | **ALLOWBLE VALUES** |
| Text  alignment | The horizontal alignment of text | Text-align | **left, right, center, justify** |
| Dimensions | The dimensions of an element | width, height, max-width, max-height, min-width, min-height | **value** in em or pixels, **percent** of the encolosing element, **auto** (default) |
| Border | The properties of the border around an element | border-width, border-top-width, border-right-width, border-bottom-width, border-left-width | **thin, medium, thick, value** (in em or pixels |
| border-style, border-top-style, border-right-style, border-bottom-style, border-left-style | **dotted, dashed, solid, double, groove, ridge, inset, outset** |
| border-color, border-top-color, border-right-color, border-bottom-color, border-left-color | color as a **name**, or **hexadecimal code** in the format #rrggbb |
| Padding | The space between element contents and border | padding, padding-top, padding-right, padding-bottom, padding-left | **value** in em or pixels, **percent** of the enclosing element |
| Margins | The space outside of the element border | Margin, margin-top, margin-right, margin-bottom, margin-left | **value** in em or pixels, **percent** of the enclosing element, **auto** (default) |