Cascaded Style Sheets - CSS
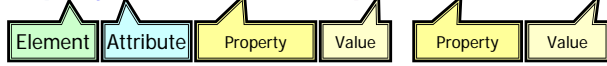
- ❖ **CSS** provides format specifications for XHTML/HTML structural elements
- ❖ **Three ways to create** *Style Definitions*
  - ◆ *Inline Styles* = Format for single element
  - ◆ *Embedded CSS* = Format all similar elements in an XHTML document
  - ◆ *External CSS* = Link to external CSS file that may be shared by many html documents
- ❖ **Two types of** *Style Sheet Rules*
  - ◆ *Redefined Element* = Presentation specification for existing XHTML element
  - ◆ *Style Class* = Presentation specification which can be applied to any element

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Anatomy of a Style

- ❖ **Inline Style Definition**
  <p style = "font-size: 20pt; color: #0000FF">

  | Element | Attribute | Property | Value | Property | Value |

- ❖ **Style Sheet Rule** (Embedded CSS & External CSS)
  h1 { font-family:"Verdana"; color:#009900}

  | Selector | Property | Value | Property | Value |

- ❖ **Listing of all CSS Properties**
  http://www.htmlhelp.com/reference/css/properties.html

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CSS font-family Specifications

- ❖ **Times New Roman is the default font for all text on most Internet browsers**
- ❖ **Other fonts may be specified using the CSS property font-family**
- ❖ **Font must be available on client computer with order of preference left to right**
- ❖ **Font Groups**
  - ◆ **Serif = Best for paragraphs**
    - ♦ **font-family: "Georgia","Times New Roman","Times",serif;**
  - ◆ **Sans-Serif = Best for headings**
    - ♦ **font-family: "Verdana","Arial","Helvetica",sans-serif;**
  - ◆ **Monospace = Equal width characters**
    - ♦ **font-family: "Courier New" ,"Courier",monospace;**
  - ◆ **Special Characters = Non-text symbols**
    - ♦ **font-family: "Wingdings";**

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Font Related Styles Properties

- ❖ **See Appendix B for details**
  - ◆ **font-family: "Verdana", "Arial", sans-serif;**
  - ◆ **font-size: 18pt;** /* Can also use px */
  - ◆ **font-weight: 600;** /* Range 100 to 900 */
  - ◆ **font-style: italic;** /* or normal */
  - ◆ **font-variant: small-caps;** /* or normal */
  - ◆ **line-height: 22pt;** /* Can also use px */
- ❖ **Combined form font properties**
  font: italic 400 12pt/15pt "Georgia"
  variant weight *size line-height* *font-family*

  - ◆ **text-align: center;** /* or left, right, justify */
  - ◆ **text-transform:capitalize;** /* uppercase, lowercase */
  - ◆ **text-decoration: underline;** /* or none, blink */
  - ◆ **text-indent: 8pt;** /* first line of paragraph indent */

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Inline Style Example

This is a test of setting various text style attributes:
Here is some **Strong** text,

Blue H3 Text

Text that is *Emphasized* can look like this.

```
<head>
  <title>Inline Style
</head>
<body>
  <p style="font-size: 12pt; font-family: Arial;" >This is a
    test of setting various text style attributes:<br />
    Here is some
      <strong style="font-size: 18pt; font-weight: 700">
    Strong</strong> text, </p>
  <h3 style="color: #0000FF" >Blue H3 Text</h3>
  <p>Text that is <em>Emphasized</em>
    can look like this. </p>
</body>
```

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Embedded Style Sheet with Redefined Elements

```
<head>
  <title>Embedded CSS Example</title>
  <style type="text/css">
  /*<![CDATA[*/
    body { background-color: #FFFFFF; color: #000000 }
    p { font-family: "Arial"; font-size: 12pt }
    strong { font-size: 18pt; font-weight: 600 }
    h3 { color: #0000FF }
    em { font-size: 14pt; font-style: italic;
      text-transform: uppercase; color: #990000;
      background-color: #CCFFFF}
  /*]]>*/
  </style>
</head>
<body>
  <p>This is a test of setting
    various text style
    attributes:<br />
    Here is some <strong>Strong</strong>, </p>
  <h3>Blue H3 Text</h3>
  <p>Text that is <em>Emphasized</em> can look like this.</p>
</body>
```

This is a test of setting various text style attributes:
Here is some **Strong** text,

Blue H3 Text

Text that is *EMPHASIZED* can look like this.

External Style Sheet with Redefined Elements

```
<head>
  <title>External CSS Example</title>
  <link rel="stylesheet" type="text/css" href="example2.css" />
</head>
<body>
  <p>This is a test of setting
    various text style
    attributes:<br />
    Here is some <strong>Strong</strong> text,</p>
  <h3>Blue H3 Text</h3>
  <p>Text that is <em>Emphasized</em> can look like this.</p>
</body>
```

This is a test of setting various text style attributes:
Here is some **Strong** text,

Blue H3 Text

Text that is *EMPHASIZED* can look like this.

```
/* example2.css file that is linked to from html document  */
body { background-color: #FFFFFF; color: #000000 }
p { font-family: Arial; font-size: 12pt }
strong { font-size: 18pt; font-weight: 600 }
h3 { color: #0000FF }
em { font-size: 14pt; font-style: italic; text-transform: uppercase;
     color: #990000; background-color: #CCFFFF }
```

Inheritance - Cascade Rules

❖ *Child* elements inherit styles from *parent*

◆ **Determines element appearance if no style property
   is specified for an element**

◆ **Inline elements inherit styles of block-level element**

◆ **Nesting Order of inline elements define inheritance**

```
<head>
  <title>Inheritance Example</title>
  <style type="text/css">
    body { font-family: Arial; font-size: 16pt}
    p { color:#0000FF; background-color:#FFFF00 }
    i { color:#FF0000; text-decoration: underline;}
    b { color:#00FF00; }
  </style>
</head>
<body>
  <p>Parent <b>element</b> p <i>child
  <b>element</b>em</i> looks like this.</p>
</body>
```

Parent element p *child element em* looks like this.   8