

## CSS Classes

- ❖ **Class** = custom style specification that can be associated with any qualifying xhtml element
- ❖ Style Sheet Rule **Class Identifier** is preceded with dot
  - .important { text-decoration: underline; }
  - .Passing { color: #00FF00; font-style: italic; }
  - .MakeRedAndBold { color: #FF0000; font-weight: 800; }
- ❖ A Style Sheet Class can be selected for an element using the element's **class** attribute
  - <strong class="Passing">Grade = Pass</strong>
  - <p class="important">For Score &lt; 60 then F</p>
  - <h2 class="MakeRedAndBold">Grade = Fail</h2>

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### Style Sheet Classes Example

Bob: Grade = Pass  
 For Score < 60 then F

Henry:

Grade = Fail

```

<head>
<title>Quiz Results</title>
<style type="text/css">
/** /
p { font-family: Verdana, Arial; font-size: 12pt }
.important { text-decoration: underline; }
.Passing { color: #00FF00; font-style: italic; }
.MakeRedAndBold { color: #FF0000; font-weight: 800 }
/* ]]&gt;*/
&lt;/style&gt;
&lt;/head&gt;
&lt;body&gt;
&lt;p&gt;Bob:
&lt;strong class="Passing"&gt;Grade = Pass&lt;/strong&gt;&lt;/p&gt;
&lt;p class="important"&gt;For Score &amp;lt; 60 then F&lt;/p&gt;
Henry: &lt;h2 class="MakeRedAndBold"&gt;Grade = Fail&lt;/h2&gt;
&lt;/body&gt;
    </pre>
</div>
<div data-bbox="105 530 459 874" data-label="Complex-Block">
<h3 style="text-align: center;">CSS pseudo-class selector for &lt;a&gt;</h3>
<ul style="list-style-type: none;">
<li>❖ Turns off underline for hyperlinks
            <ul style="list-style-type: none;">
<li>a { text-decoration: none; } [ none | underline | overline ]</li>
</ul>
</li>
<li>❖ &lt;a&gt; pseudo-classes are available
            <ul style="list-style-type: none;">
<li>a:link { text-decoration: none; color: #CC0000; }</li>
<li>a:visited { text-decoration: none; color: #3300CC; }</li>
<li>a:focus { text-decoration: underline; }</li>
<li>a:hover { text-decoration: underline; color: #FF3300; background-color: #CCFFCC; }</li>
<li>a:active { text-decoration: none; color: #FF9966; }</li>
</ul>
</li>
<li>❖ A hyperlink can have only one state at a time so best to use above order</li>
</ul>
<div style="border: 2px solid orange; padding: 5px; display: inline-block; margin-top: 10px;">
<span style="color: red; font-weight: bold;">My Resume</span>
</div>
<div style="border: 1px solid gray; padding: 5px; display: inline-block; margin-top: 5px;">
<span style="color: red; font-weight: bold;">Resume</span>
</div>
<p style="text-align: right; font-size: small;">Copyright © 2007 R.M. Laurie 3</p>
</div>
<div data-bbox="531 530 889 874" data-label="Complex-Block">
<h3 style="text-align: center;">Resume Example without CSS</h3>
<pre>
&lt;body&gt;
&lt;h2&gt;Academic Employment Experience:&lt;/h2&gt;
&lt;h3&gt;University of Guam&lt;/h3&gt;
&lt;h4&gt;Taught courses with the following content:&lt;/h4&gt;
&lt;ul&gt;
&lt;li&gt;Web Site Design: XHTML, CSS, Web Graphics&lt;/li&gt;
&lt;li&gt;Introduction to Programming: JavaScript, DOM&lt;/li&gt;
&lt;li&gt;Database Management Systems: MS Access, ERD&lt;/li&gt;
&lt;li&gt;Developmental Mathematics: Arithmetic to Algebra&lt;/li&gt;
&lt;/ul&gt;
&lt;/body&gt;
    </pre>
<div style="border: 1px solid gray; padding: 5px; margin-top: 10px;">
        Academic Employment Experience:
    </div>
<div style="border: 1px solid gray; padding: 5px; margin-top: 5px;">
        University of Guam
    </div>
<div style="border: 1px solid gray; padding: 5px; margin-top: 5px;">
        Taught courses with the following content:
        <ul style="list-style-type: none; padding-left: 20px;">
<li>• Web Site Design: XHTML, CSS, Web Graphics</li>
<li>• Introduction to Programming: JavaScript, DOM</li>
<li>• Database Management Systems: MS Access, ERD</li>
<li>• Developmental Mathematics: Arithmetic to Algebra</li>
</ul>
</div>
</div>
<div data-bbox="92 900 290 922" data-label="Page-Footer">
<p>Copyright © 2007 R.M. Laurie</p>
</div>
<div data-bbox="895 902 905 922" data-label="Page-Footer">
<p>1</p>
</div>
```

## Margin and List-Style Properties

- ❖ See Appendix B for details
- ❖ Margin is transparent space between elements
  - ◆ `margin-top: 0;` /\* removes top margin \*/
  - ◆ `margin-right: 10px;`
  - ◆ `margin-bottom: 6pt;` /\* only ½ line if 12pt font \*/
  - ◆ `margin-left: 20px;` /\* similar to blockquote \*/
- ❖ Combined form font properties  
`margin: 0 12pt 15px 0;`  
*top right bottom left*
- ❖ List-Style Properties
  - ◆ `list-style-image: url(filename);` /\* For bullet lists \*/
  - ◆ `list-style-position: inside;` /\* default outside \*/
  - ◆ `list-style-type: upper-alpha;` /\* for ordered lists \*/

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## Academic Employment Experience:

University of Guam

Taught courses with the following content:

- ◆ Web Site Design: XHTML, CSS, Web Graphics
- ◆ Introduction to Programming: JavaScript, DOM
- ◆ Database Management Systems: MS Access, ERD
- ◆ Developmental Mathematics: Arithmetic to Algebra

```

/* External CSS Fill 03_Experience.css */
body { background-color:#FFFFCC; color:#000033; }
h2 {margin-top:8pt; margin-bottom:4pt;
font-weight:900; letter-spacing:2pt; font-size: 16pt;
font-family:"Verdana"; color:#003399; }
h3 {margin-top:4pt; margin-bottom:2pt; margin-left:10pt;
font-weight:700; letter-spacing:1pt; font-size:14pt;
font-family:"Verdana"; color:#996600; }
h4 {margin-top:2pt; margin-bottom:2pt; font-weight:400;
margin-left:20pt; font-size:12pt;
font-family:"Georgia"; }
ul {font-size:12pt; font-family:"Georgia"; margin-top:4pt; margin-
bottom:2pt;}
li { list-style-image:url(bltdiamond.gif); list-style-position:outside;
margin-left:40pt;}
    
```

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## Style Sheet Selectors

- ❖ Context Selector (Occurrences of `em` in `h1`)
 

```
h1 em { color:#FF0000; font-weight: 800; }
```
- ❖ Class Selector
 

```
.important { text-decoration: underline; }
em.important { text-decoration: #CC0000; }
```

Occurrences of `em` with class `important`
- ❖ Nested List Item Context Selectors
 

```
ol ol li { list-style-type: decimal }
ol ol ol li { list-style-type: lower-alpha }
ol ol ol ol li { list-style-type: lower-roman }
```

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## CSS Body background Specifications

- ❖ **background-color**

```
body { background-color: #FF99CC; }
```
- ❖ **background-image** (tiled x and y directions)
 

```
body { background-image: url(wpBubbles.jpg); }
```
- ❖ **background-repeat** [repeat-x | repeat-y | no-repeat]
 

```
body { background-repeat: repeat-y; }
```
- ❖ **background-attachment** [fixed, scroll]
 

```
body { background-attachment: fixed; }
```
- ❖ **background-position** [% | <length>] [top | center | bottom] [left | center | right]
 

```
body { background-position: 10px 20px; }
```
- ❖ **Combined background property**

```
body { background: #FF99CC url(wpBubbles.jpg)
repeat-y bottom left fixed; }
```

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### CSS Body background Example

This is a test of CSS selectors

It is an *important issue* if styles will combine.

```

<head>
  <title>Selector Test</title>
  <style type="text/css">
    /**]
      body {
        background-image: url(wpBubbles.jpg);
        background-color: #990000;
        color: #009900;
      }
      .important { text-decoration: underline; }
      em.important { color: #FF0000; }
    /*]]&gt;*/
  &lt;/style&gt;
&lt;/head&gt;
&lt;body&gt;
  &lt;h2 class="important"&gt;This is a test of CSS
  selectors&lt;/h2&gt;
  &lt;p&gt;It is an &lt;em class="important"&gt;important
  issue&lt;/em&gt;
  if styles will combine.&lt;/p&gt; &lt;/body&gt;
    </pre>
<p style="text-align: right; font-size: x-small;">Copyright © 2007 R.M. Laurie 9</p>
</div>
<div data-bbox="530 121 889 465" data-label="Complex-Block">
<h3 style="text-align: center;">Specificity Precedence - Cascade Rules</h3>
<ul style="list-style-type: none; padding-left: 0;">
<li>❖ Determines element appearance if more than one style property is specified for element</li>
<li>❖ The strongest selector is the most specific</li>
<li>❖ If the same property in inherited elements
      <ol style="list-style-type: none; padding-left: 20px;">
<li>1. Inner Nested Inline (Strongest)</li>
<li>2. Block Level</li>
<li>3. Document Elements (Weakest)</li>
</ol>
</li>
<li>❖ If the same selector and property
      <ol style="list-style-type: none; padding-left: 20px;">
<li>1. Element style attributes Inline Styles (Strongest)</li>
<li>2. Element id attributes applied from CSS rules</li>
<li>3. Element class attributes applied from CSS rules</li>
<li>4. Element has no attributes applied from CSS rules</li>
</ol>
</li>
<li>❖ User Agent
      <ol style="list-style-type: none; padding-left: 20px;">
<li>1. Author (Strongest)</li>
<li>2. User = Browser defined</li>
<li>3. Browser default (Lowest)</li>
</ol>
</li>
</ul>
<p style="text-align: right; font-size: x-small;">Copyright © 2007 R.M. Laurie 10</p>
</div>
<div data-bbox="104 530 458 874" data-label="Complex-Block">
<h3 style="text-align: center;">Location Precedence - Cascade Rules</h3>
<ul style="list-style-type: none; padding-left: 0;">
<li>❖ If highest two style rules have the same level of specificity, then the last style specified determines the appearance of the html document</li>
<li>❖ Keep in mind the head of the html document is processed first by the browser followed by the body
      <ol style="list-style-type: none; padding-left: 20px;">
<li>1. Inline Styles (Strongest)</li>
<li>2. The last style specified has priority for the External and Embedded Specifications
          <ul style="list-style-type: none; padding-left: 20px;">
<li>◆ Embedded CSS (Last has priority)</li>
<li>◆ External CSS (Last has priority)</li>
</ul>
</li>
</ol>
</li>
</ul>
<p style="text-align: right; font-size: x-small;">Copyright © 2007 R.M. Laurie 11</p>
</div>
<div data-bbox="91 898 290 922" data-label="Page-Footer">
<p>Copyright © 2007 R.M. Laurie</p>
</div>
<div data-bbox="893 900 911 921" data-label="Page-Footer">
<p>3</p>
</div>
```