# CASCADING STYLE SHEETS (CSS)

A newer way to structure HTML documents is through the use of cascading style sheets(CSS). Cascading Style Sheets allow you to determine how a variety of page elements will be displayed with precision, thus removing the limitations of HTML.  This applies to font sizes, page positioning, and other page formatting options.  It also introduces new elements that were not possible with just HTML.

The following will show you the most common, useful, and widely supported CSS commands.  THIS WILL NOT SHOW ALL ELEMENTS.

**Style sheets come in three varieties… embedded, inline, and linked.  Embedded styles are coded into the HEAD section of the page, inline styles are built into standard HTML tags, and linked styles are called from a remote file.**

A linked style sheet is a separate file that resides on your server.  All your formatting commands are placed in this style sheet, and the style sheet is linked to within the HEAD section of documents.  With one simple link on each page, the layout for the page is controlled from this linked style sheet.  You can change every page on your web site that is linked to this style sheet by changing the code in that one style sheet.  With linked style sheets, you don't have to repeat all the style sheet code on each page.

One of the nice things about linked styles is that once you've written the initial style sheet, the same styles can be applied to every web page on your site with just that one line of code added to your HEAD section.  If you change the linked file, the change affects every page on your web site that is linked to it.  If you want to format something differently from your standard layout, you can include an embedded style to override the linked file.

## Style Sheet Syntax

The style sheet syntax (the official structure of the code) consists of three parts:

**Selector {property: value}**

The selector is the HTML element you want to set the style for, such as the body, font, or other elements.  The property is the attribute of the selector you want to define.

**body{color: #abc123}**

To change more than one attribute:

**body{font-family: Arial, Garamond;**
      **color: blue**
      **font-size: 12;**
      **background: white}**

# **Style Sheet Body Properties**

```
BODY
{
  font-family: Comic Sans MS, Arial, Helvetica;
  color:#0000FF;
  font-size:20pt;
  font-weight:bold;
  font-style:normal;
  background-color:#000076;
  background-image: url(image.gif);
  background-attachment:fixed;
  text-align:justify
}
```

Notes:

|  | **Possible Values** |
|---|---|
| **font-weight: &lt;value&gt;** | normal, bold, bolder, lighter, 100,200,300,400,500,600,700,800,900 |
| **font-style: &lt;value&gt;** | normal, italic, or oblique<br><br>**NOTE: Formatting a full page of text in italic or oblique isn't a good choice. It's harder to read, especially over an electronic medium such as the internet. It's better too use those styles for emphasis on a word or few words by using an inline font tag with the style element added.** |
| **background-color: &lt;value&gt;**<br>**background-image: url(image.gif)** | Use either background color, or image, **NOT BOTH** |
| **\*\*\*If you do not want to use one of the properties in a CSS, you do not have to include it!\*\*\*** | |

# Style Sheet Heading Properties

With style sheets, you can specify the size of each heading (h1 – h6), as well as the color, font, and background color for each heading size.  In style sheets, the heading can have a background color of its own. Without style sheets, you had to do this with a table and a colored backround cell.

```
h1
{
  font-family: Arial, Verdana;
  color:#C15A64;
  font-size:20pt;
  font-weight:bold;
  font-style:normal;
  background-navy
}
```

```
h2
{
  font-family:  Arial, Verdana;
  color:red;
  font-size: 16pt;
  background:#000000      **If you don't want a background color for h2, then simply leave that line out.
}
```

**You can group styles if you want all the selectors to have the same values.  For example, if you want some of your headings to use the same color, separate the selectors with commas:**

**h1, h2, h3 {color: red}**

# Style Sheet Link Properties

You can set the same link properties in style sheets as in HTML – and then some. Tow of the more popular uses are to remove the underline from links and to cause the link to change colors when the mouse is hovering over it.

| HTML Tag | Style Sheet Tag Equivalent |
|---|---|
| link | A: link |
| alink | A: active |
| vlink | A: visited |

A: link
{
  font-family: Arial, Helvetica;
  color: #BF36C1;
  font-size:12pt;
  text-decoration:none
}

Text-decoration:<value>

Possible values:  underline, overline, line-through, blink

A:visited
{
  font-family: Arial, Helvetica;
  color: # 19BA20;
  font-size:12pt;
  text-decoration:none
}

A: active
{
  font-family: Arial, Helvetica;
  color: # EFC3F0;
  font-size:12pt;
  text-decoration:none
}

A:hover
{
  font-family: Arial, Helvetica;
  color: # DFEF55;
  font-size:12pt;
  font-weight:bold;
  text-decoration:underline & overline;
}

In the hover style, a font-weight of bold was added. The link text will change color and turn bold when a visitor's cursor is on the link. Be careful with this though, if the link is surrounded by text, it will move all the text in that line, and may move a word to the next line. Also, you can add a font-weight of bold to all of the link styles if you choose.

# Tables and Style Sheets

**You can add all of the formatting options you've learned to table and table data cells style sheets.**

```
table
{
  border: 0;
  border-color: # 96DF99
}

td
{
  font-family:Arial, Comic Sans MS;
  color:#FFFFFF
  font-size:12pt;
  font-weight:bold;
  text-align:center
}

td.other
{
  font-family: Arial, Helvetica;
  color:#FF0000;
  font-size:12pt;
  font-weight:bold;
  text-align:center
}
```

**This is a different class for the td tag. When using in HTML:**
**<td class= "other">**

**Using HTML, all the font tag and background color tags need to be include for each and every table cell. But, with style sheets, those values are extracted from the style sheet for the two different table data cells. The name "other" could be any name. Try to use names that you will remember. For example, if you are working with a table with two columns, you might make td classes that are td.left, and td.right.**

## EMBEDDED STYLE SHEETS

**In the <head> tag:**

**<head>**
<title>Practice CSS page</title>

**<style type= "text/css">**

BODY
{
 font-family: Comic Sans MS, Arial, Helvetica;
 color:#0000FF;
 font-size:20pt;
 font-weight:bold;
 font-style:normal;
 background-color: #000076;
}

TD
{
 font-family:Arial, Helvetica;
 color:#FFFFFF;
 font-size:12pt;
 font-weight:bold;
 text-align: center;
}


****ALL OTHER SELECTORS AND PROPERTIES GO HERE******

**</style>**
**</head>**


## LINKED STYLE SHEETS

1.      In notepad, type in your selectors and properties:

2.      Save as "yourfile.css"   **IMPORTANT:  you need to type an extension of .css**

3.      In your HTML code:  in the <head> tag, insert the following:

**<link rel="stylesheet" type="text/css" href="yourfile.css">**


*The style sheet file has no HTML code in it, and has no opening or closing style tags.  Browsers recognize style sheet files by the .css extension.*

*There is no closing tag for the link.  This causes the browser to use whatever styles you coded into your style sheet throughout the document, unless you use an embedded style of inline style to override it.*