CSS - Cascading Style Sheets

From
http://www.csstutorial.net/
http://www.w3schools.com/css/default.asp

What is CSS?

- **CSS** stands for *Cascading Style Sheets*
- Styles define **how to display** HTML elements
- **External Style Sheets** can save a lot of work
- External Style Sheets are stored in **CSS files**

Syntax

A CSS rule has two main parts: a selector, and one or more declarations:

```
Selector    Declaration    Declaration
h1           {color:blue; font-size:12px;}
```

The id Selector

The id selector is used to specify a style for a single, unique element.

The id selector uses the id attribute of the HTML element, and is defined with a "#".

The style rule below will be applied to the element with id="para1":

```cpp
#para1
{
```
text-align: center;
color: red;
}

The class Selector

The class selector is used to specify a style for a group of elements. Unlike the id selector, the class selector is most often used on several elements.

This allows you to set a particular style for many HTML elements with the same class.

The class selector uses the HTML class attribute, and is defined with a ".".

In the example below, all HTML elements with class="center" will be center-aligned:

```css
.center {text-align: center;}
```

You can also specify that only specific HTML elements should be affected by a class.

In the example below, all p elements with class="center" will be center-aligned:

```css
p.center {text-align: center;}
```

Example

'File 'myCSS.css'

/* Generic Selectors */

body {
  font-family: Georgia, "Times New Roman", Times, serif;
  font-size: 14px;
  color: #333333;
color: #00CC00;
text-decoration: underline;
font-weight: bold;
}

li a:visited {
    color: #00CC00;
text-decoration: none;
font-weight: bold;
}

a:hover {
    color: rgb(0, 96, 255);
padding-bottom: 5px;
font-weight: bold;
text-decoration: bold;
}

li a:hover {
    display: block;
    color: rgb(0, 96, 255);
padding-bottom: 5px;
font-weight: bold;
border-bottom-width: 1px;
border-bottom-style: solid;
border-bottom-color: #C6EC8C;
}

a:active {
    color: rgb(255, 0, 102);
font-weight: bold;
}

/************************* ID's *************************/

#navigation {
    position: absolute;
width: 210px;
height: 600px;
margin: 0;
margin-top: 50px;
border-right: 1px solid #C6EC8C;
font-weight: normal;
}
Go to the Web Designers Killer Handbook home page and grab the practice HTML page that we will used as the starting template for this tutorial. You can find it under the heading: 'To create the practice HTML page do the following:'.

Follow the instructions there and create your basic HTML page... and do it now!
<div> tags are designed to be used to create a ‘division’ in the document or in other words create a container.

The CSS Box Model

CSS has this feature and concept of a box model that essentially is a box that wraps around HTML elements. This box model consists of: padding, margins, borders and the actual content. This allows us to place a border around elements and space elements in relation to other elements.

The image below illustrates the box model:

![Box Model Diagram]

Explanation of the different parts:

- **Margin** - Clears an area around the border. The margin does not have a background color, it is completely transparent
- **Border** - A border that goes around the padding and content. The border is affected by the background color of the box
- **Padding** - Clears an area around the content. The padding is affected by the background color of the box
- **Content** - The content of the box, where text and images appear

So in our case anything in between our `<div>` tags is the ‘content’. Right after that comes the padding. Then there is a border and finally a margin. Margin and padding may seem like the same thing but if you think about it, you can see how being able to control the space **before the border** (padding) and **after the border** (margins) can really effect your layouts.

```css
#navigation {
/*a comment*/
  position: absolute;
  width: 210px;
  height: 600px;
  margin: 0;
  margin-top: 0px;
  border-right: 1px solid #C6EC8C;
  font-weight: normal;
}

#centerDoc {
  position: absolute;
  padding: 0 0 20px 0; /*top right bottom left*/
  margin-top: 50px;
  margin-left: 235px;
}

p {
  width: 80%;
}

h1 {
  font-family: Georgia, "Times New Roman", Times, serif;
  font-size: 18px;
  font-weight: bold;
  color: #000000;
}

li {
```
```css
list-style-type: none;
line-height: 150%;
list-style-image: url(../images/arrowSmall.gif);
}
or
li {
  list-style-type: disc;
  line-height: 150%;
}

GROUPING SELECTORS
h1, h2, p
{
  color: green;
}

NESTING SELECTORS
It is possible to apply a style for a selector within a selector.
In the example below, one style is specified for all p elements, one style is specified for all elements with class="marked", and a third style is specified only for p elements within elements with class="marked":

p
{
  color: blue;
text-align: center;
}
.marked
{
  background-color: red;
}
Images

All block-level and inline elements (tags) can have background images inserted into them. Block-level tags are <p> and <div>.

```html
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<html>
  <head>
    <title>CSS image placement</title>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
    <style type="text/css" media="screen">
      #headline1 {
        background-image: url(images/newsletter_headline1.gif);
        background-repeat: no-repeat;
        background-position: left top;
        padding-top:68px;
        margin-bottom:50px;
      }
      #headline2 {
        background-image: url(images/newsletter_headline2.gif);
        background-repeat: no-repeat;
        background-position: left top;
        padding-top:68px;
      }
    </style>
  </head>
  <body>
    <div id="headline1">Some text ...</div>
    <div id="headline2">Some more text ..</div>
  </body>
</html>
```
Insert CSS into webpages

1. With an external file that you link to in your web page:

```
<link href="myCSSfile.css" rel="stylesheet" type="text/css">
```

2. By creating a CSS block in the web page itself; typically inserted at the top of the web page in between the <head> and </head> tags:

```
<head>
  <style type="text/css">
    p { padding-bottom: 12px; }
  </style>
</head>
```

3. By inserting the CSS code right on the tag itself:

```
<p style="padding-bottom:12px;">Your Text</p>
```

Generally speaking we can say that all the styles will "cascade" into a new "virtual" style sheet by the following rules, where number four has the highest priority:

1. Browser default
2. External style sheet
3. Internal style sheet (in the head section)
4. Inline style (inside an HTML element)