

# SMU Center for Continuing Adult Professional Education

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## **CSS Class**

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## *History of CSS*

CSS 1.0 came out early

Resources:

CSS and Web Design, by Richard York, WROX Group

## *W3C*

Sets standards for web programming on the internet

Stages of Development of CSS

- 1998 CSS 1.0
- 2001 CSS 2.1
- 2010 CSS 3.0

Separate groups worked on XHTML and CSS

Another group working on HTML 5.0 and CSS 3.0

- Tags would only have meaning
- Tags would NOT include styles

## *New HTML 5 tags*

- “Section” tag
- “Aside” tage
- Column
- Header
- Footer
- Nav
- Graphics with CSS
  - o Rounded borders
  - o Drop shadows
  - o Adobe petitioning to incorporate “Blending Modes”
  - o H/S/L – hue / saturation / lightness
  - o Alpha – transparency
- Dynamic navigation
  - o Ruby
  - o Javascript
  - o .NET
  - o Silverlight (?)
  - o Sliding graphics instead of overlapping images

## Example CSS Syntax

```
Selector (sometimes tag name)
{ (brackets begin and end the properties for each selector)
Property: value;
}
```

Example code:  
body { (there's only ONE "body" section per page)

```
    Color: red;
    Font-family: Georgia, Helvetica, Arial Medium, sans serif;
    Font-size: 12pt;
}
```

"color" property is reserved for text;  
"background-color" property use for background color;

Type of Selector	ID	Class	Standard HTML Tag
Starting character of CSS Selector	# (pound/number sign)	. (period)	(no starting char, just tag name)
Purpose	Assigns properties to one tag	Assigns properties to any number of tags	<b>Affects ALL instances on all pages affected by the CSS, because it re-assigns, overwrites the standard styles set up by the W3C</b>
Restrictions	Only one per page	May be used multiple times per page	

## CSS Coding and Location Hierarchy

Location of CSS coding	Strength (3 highest, 1 lowest)	Scope (3 highest, 1 lowest)
In-Line	3	1
Page level	2	2
External Style Sheet	1	3

Three different places / locations to write CSS styles:

- In-Line
  - Must be applied to EACH individual tag on every page where you want it to take affect
  - Overrides BOTH Page level AND External CSS style sheet
- Page Level Style Definitions - styles defined within <head>

```
<head>
    <style type="text/css">
```

```
        </style>
    </head>
```

- External CSS style sheet
  - MUST end with **.css** extension
  - May apply to any page within a website
  - Will be overridden by Page level and In-Line styles

ID (in the CSS style file or section, name starts with the # sign)

```
#specialpicture
{
    Height: 400px;
    Width: 400px;
    Border: 3px black solid;
}
```

Class

.specialsection (name of the class definition begins with 'period')

```
{
    Height: 600px;
    Width: 400px;
}
```

In-Line CSS – located within the <head> tag

```
<p style="color: #EEEEEE;">Write some text here</p>
```

## Box Model

- ID or a class
- Define its location and size

## *New HTML Elements*

In-Line HTML Elements

New

Audio

Details

Command

Datalist

Keygen

Mark

Meter

**Nav**

Source

Summary

Time

## Block Level

Article

Aside

Canvas

**Figcaption**

**Figure**

Footer

Header

Hgroup

Output

Progress

Video

Apply to text attributes:

- div
- p
- span

Markup Language	DocType Code
HTML 4.01 Loose	<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" http://www.w3.org/TR/html4/loose.dtd">
HTML 4.01 Strict	<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" http://www.w3.org/TR/html4/strict.dtd">
HTML 4.01 Frameset	<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN" http://www.w3.org/TR/html4/frameset.dtd">
XHTML1 Transitional	<!DOCTYPE HTML PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" http://www.w3.org/TR/xhtml1/loose.dtd">
XHTML1 Strict	<!DOCTYPE HTML PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" http://www.w3.org/TR/xhtml1/strict.dtd">
XHTML1 Frameset	<!DOCTYPE HTML PUBLIC "-//W3C//DTD XHTML 1.0 Frameset//EN" http://www.w3.org/TR/xhtml1/frameset.dtd">
HTML5/XHTML5	<!DOCTYPE HTML >

Font-

size options

“em” – an ‘m’ space, equivalent to the horizontal space required for the letter ‘m’.

Style

Weight bold

Color: rgba( 255, 0, 0, .75);

- a represents the transparency
- 0 = transparent / 1 = 100% opaque
-

## Selective / Contingency Styling

- Universal Selector '\*'

```
*
{
    Font-size: 14px;
}
```

- Style Contingency – to assign the SAME property values to multiple Selectors, you can separate them with 'commas' in the CSS style sheet (at the <style> document level, or in the External StyleSheet.css file with the same

```
h1, h2, h3, h4
{
    Font-family: 16px;
    Color: darkred;
}
```

- Universal Descendant – to apply a property to ANY tag, use the 'Section' selector and the asterisk where

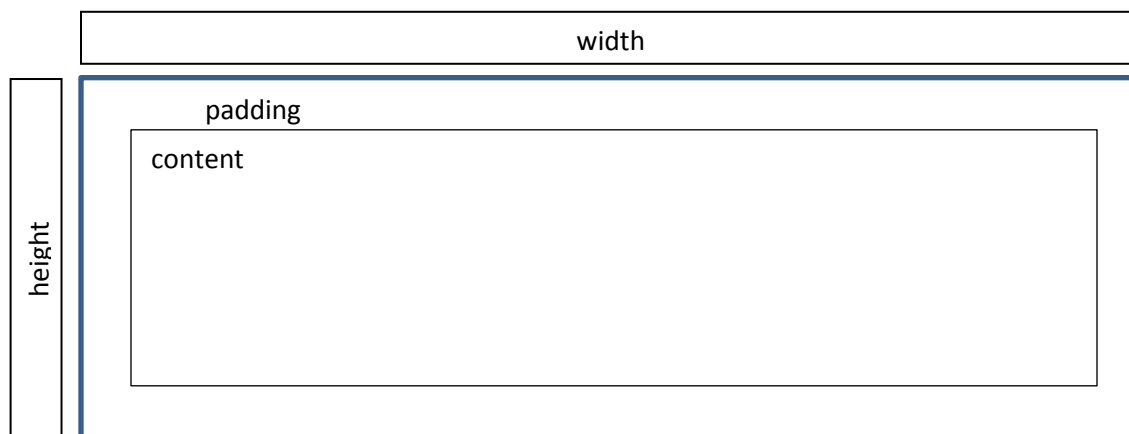
Examples:

```
Section * strong /* applies the Strong attributes to all Selectors within a
<section>*/
{
}
```

```
h1 * strong
{
    /* applies to any h1 tag with the 'strong' attribute */
}
```

## Box Model

Specifically dealing with 'div' tags



Container border: thickness (2px)

## Positioning

- Absolute:
- Relative:

Good to put

Group Selectors with similar styles for Keyboard, Mouse and Tablet users a:hover, a:active, a:focus

```
.container /* same thing that Kim calls "wrapper" */
```

In order to stack div's properly:

```
.sidebar1 {  
    float: left;  
    width: 180px;  
    background: #EADCAE;  
    padding-bottom: 10px;  
}  
  
/* 'content' is what Kim calls the 'wrapper' */  
.content {  
    padding: 10px 0;  
    width: 600px;  
    float: left;  
}  
  
/* 'aside' is like a right hand sidebar */  
aside {  
    float: left;  
    width: 180px;  
    background: #EADCAE;  
    padding: 10px 0;  
}
```

Special Characters

- Begin the html code with ampersand (&) and end with semi-colon (;).
  - o &amp; - ampersand
  - o &copy; - © copyright symbol

#### Web Fonts

- Verdana, Arial, Helvetica, sans-serif
- Georgia, Times, 'Times New Roman', serif

WOFF – web open-source font format

```
<style>
```

```
@font-face
```

```
{
```

```
    font-family: 'Body Font';
```

```
    src: url('../fonts/fontname.eot');
```

```
/* Local source decoy, Internet Explorer ignores local source attributes, so placing a decoy in front of
your url, IE will skip over and read the url. */, p129
```

```
    src: local('name'), url('../directory info/fontfilename.woff');
```

```
}
```

font-variant

- small-caps
- normal
- inherit (whatever the parent variant is)

text-transform:

- lowercase;
- uppercase;

text-decoration:

- overline;
- underline;

letter-spacing: .125em; /\* Adds spacing, or with '-' subtracts spacing \*/

word-spacing: .125em; /\* Adds spacing, or with '-' subtracts spacing \*/

line-height: 1.33; /\* MULTIPLIES line height to line spacing \*/

kerning – still not available in CSS 3.0

Lists

- ul – un-ordered list
- ol – ordered list
- dl – description list
- dt – description topic / title
- dd – description data (description description)

## *Resuming Class on 4/23/2012*

Look at resource website:

Home page: <http://www.csszengarden.com>

Mozart page: <http://www.csszengarden.com/?cssfile=189/189.css>

Jlkjl

Lkjlkj

Lkjlkj

Setting Footer position

#content

```
Padding-bottom: 100px; /* height of the footer */
```

#footer

```
Background: #color;
```

```
Width 100%
```

```
Height 100 px
```

```
Position: absolute;
```

```
Bottom: 0;
```

```
Left: 0;
```

CSS – cascading style sheet

Classes indicated in .css with

Class starts with period

ID starts with #

Everything “\*”

Re-assigning styles to html tags, just use the name of the tag (body, h1, etc.)

After name of style begin and end with { }

Each property ends with semi-colon “;”

Power of style vs Scope of style

External css has the highest scope, but may be easily overridden

Document level – overrides external css

Inline – most specific and overrides both document level and external style sheets.

Two ways to reference a .css file

- @import – first item in a in the <style> tag with the css code
  - o Best practice to use only in external css pages
- <link> - in the head is the last thing
  - o Best practice to use this only in the <head> of html page

Editing css – just need a text editor

css-p allowed for positioning elements on a screen (came out after version CSS1 but before CSS2)



Only valid CSS selectors:

- html
- id
- class

Margin – between boxes

Padding – between inside edge of box and other contents

Padding: 0px 0px 0px 0px; /\* top, right, bottom, left (ie clockwise) \*/

“color” property assigns color to **text**

Units of measurement:

- pt
- px
- em
- in
- %
- pc – pica – a size unit used in printing
- NOT VALID
  - o Dpi

Border-style

- dashed
- solid
- ridge
- 

CSS Quick Reference Guide – p 393 !!!

<span> in an “in-line” tag that applies to the text as it appears on a page...

Multiple classes may be used on the same element with one selector:

Example of 2 classes being applied to the <span> tag, ie to the text:

```
<span class="myclass bold">My text.</span>
```

Positioning [code example – “position: relative; “ ]

- Relative – adjusts the selector in relation to where the selector (tag / element) would NORMALLY be;
- Absolute – in relation to the TOP / LEFT corner of the html page
- Static – stays where it should be in the flow of elements;
- Fixed – permanent position on the **screen not the coding of the page.**
  - o Navigation element would always be visible whereas the rest of the contents would scroll up down / right left

Proper syntax for linking a CSS Style sheet:

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

Shortcut clockwise attributes:

- Margin
- Padding
- Color:
- Font:

HOWEVER, BEST Practice indicates to spell out EACH attribute separately

LVHA – acronym for the CORRECT order of styling LINKS in a CSS style sheet

- Link
- Visited
- Hover
- Active

“clear” – erases the prior “float” commands

- When you want to make sure the style does NOT float
  - o “footers” are a good example when to use “clear”

To create a block with rounded borders (only with Firefox or Safari):

```
.blockclass {  
    border-style: solid;  
    border-width: 2px;  
    -webkit-border-radius: 25px;  
    -moz-border-radius: 25px;  
    border-radius: 25px;  
  
    -webkit-border-top-right-radius  
}
```

For rollover buttons:

See note from HTML class moving a picture up/down or side to side

Styles for list items

Li:first-of-type

For List Item Rollovers

- Need one style for the top
- One style for all the ones in the middle
- One style for the bottom!

## Colors

1. Hexadecimal – starts with ‘#’ sign and 3 OR 6 numbers corresponding to red-green-blue.

#FFFFFF; = white

#FF0000; = red

2. Or RGB (red/gree/blue)

Syntax examples:

```
color: rgb(0, 0, FF, );
```

```
color: rgba(0, 0, FF, .5 ); /* the ‘a’ stands for ‘alpha’ which means opacity, in this case  
50% */
```

Text-shadow: *x-y* offset from the text / **blur of shadow (# of px)** / rgba(red, green, blue, opacity) , [can add a second shadow here too AFTER a “comma – ‘, ’ !”];

Syntax example:

```
text-shadow: 2px -2px 1px rgba(150, 150, 255, .75);
```

To declare a selector attribute as important, use write ***!important*** AFTER the colon.

CSS styles are “cascading” because the style **FURTHEST** away from the selector is the **weakest**; the style **CLOSEST** to the selector has the **strongest** influence on the selector style, ie the ‘last’ value of an attribute takes precedence.

Some styles MAY be “inherited” from “parent”, pp 113 – 115.

**READ Chapter 4 – has “magical” attributes!**