

# Cascading Style Sheets

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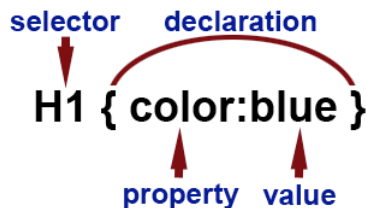
## Resources

WestCIV Complete Style Guide: [http://www.westciv.com/style\\_master/academy/css\\_tutorial/index.html](http://www.westciv.com/style_master/academy/css_tutorial/index.html)

Tizag.com: <http://www.tizag.com/cssT>

Tizag.com CSS Reference: <http://www.tizag.com/cssT/reference.php>

## A Style



## Internal, External and Inline Style Sheets

### Inline Style Sheets

- \* Style information goes around text, much like the old-fashioned `<FONT>` tags
- \* Like the old `<FONT>` tags, the style only applies to that text
- \* This is the weakest implementation of style sheets
- \* Most commonly used when using layers (`<DIV>` tag). (More on that later).
- \* Create a new file in Dreamweaver and call it `cssinline.html`
- \* In "Code View", insert the text below

#### cssinline.html

```
<span style="color: red; font-family: 'Arial,Helvetica', sans-serif "> This text is styled in red with  
Arial or Helvetica font, if available.</span>
```

- \* Save the file `cssinline.html` and check it in a browser.

### Internal Style Sheets

- \* Also called an "Embedded" Style Sheet
- \* Style information goes in the `<HEAD>` section of the document
- \* Styles are available to use on other text in this document
- \* Styles ARE NOT available for use in other documents

- \* Create a new file in Dreamweaver and call it **cssinternal.html**
- \* In “Code View”, insert the text on the left below

<b>cssinternal.html</b>	
<pre> &lt;html&gt; &lt;head&gt; &lt;title&gt;Style Sheets &lt;/title&gt; &lt;style type="text/css"&gt; .large24 {     font-size: 24px;     font-family: Arial, Helvetica, sans-serif; } &lt;/style&gt; &lt;/head&gt; &lt;/body&gt; &lt;span class="large24"&gt;This text is styled as part of an Internal Style Sheet.&lt;/span&gt; &lt;/body&gt; &lt;/html&gt; </pre>	<p>← This specifies the style information for .large24</p> <p>← This calls on the large24 style for the selected text</p>

- \* Save the file **cssinternal.html** and check it in a browser.

## External Style Sheets

### The External CSS File

- \* An external file holds the style information (i.e. stylesheet.css)
- \* The HTML file just contains a link to that style sheet
- \* The styles contained in the external style sheet can be used by all of the files on your site
- \* In Notepad (PC) or SimpleText (Mac), create a new file called **stylesheet.css**.
  - Save it in the same folder as your other HTML files for this lesson.
- \* Insert the text below

<b>stylesheet.css</b>
<pre> .large24 { font-size: 24px; font-family: Arial, Helvetica, sans-serif; } </pre>

- \* Save the file **stylesheet.css**

### The HTML File

- \* Create a new file in Dreamweaver and call it **cssexternal.html**
- \* In “Code View”, insert the text on the left below

## cssexternal.html

```
<html>
<head>
<title>Style Sheets</title>
<link href="stylesheet.css" rel="stylesheet"
type="text/css">
</head>
<body>
<span class="large24">This text is styled as part
of an External Style Sheet.</span>
</body>
</html>
```

← This connects the HTML file to the CSS file

← This calls on the large24 style from the external style sheet

\* Save the file **cssexternal.html** and check it in a browser.

### Why are they Called Cascading?

\* A web page gets its style information in the following order of priority:

- 1). Inline: (Overrides Internal and External)
- 2). Internal: (Overrides External)
- 3). External

\* You can specify styles that will apply to all of the pages on your site in an *External Style Sheet*, and then override them with *Internal* or *Inline Styles* when you need to make exceptions to those styles.

## Kinds of Styles

\*\*\* **NOTE:** For these examples, we'll use an *Internal Style Sheet*, placing the CSS in the **<HEAD>** section of the document

### Redefining an HTML Tag

- \* So far we've been applying the kind of CSS style we'll cover in #2 below, a Class.
  - \* Another powerful way to use CSS is to re-define a tag
  - \* If the style information gets removed, the tag goes back to normal
  - \* It maintains the tag's original properties, i.e. an **<H3>** tag always puts a paragraph-like break after it
- \* Create a new file in Dreamweaver and call it **redefinetag.html**
- \* In "Code View", insert the text on the left below

## redefinetag.html

```
<html>
<head>
<title>Style Sheets </title>
<style type="text/css">
h3 {
    font-family: Arial, Helvetica, sans-serif;
    font-size: 24px;
    font-weight: bold;
}
h4 {
    font-family: Arial, Helvetica, sans-serif;
    font-size: 18px;
    font-weight: bold;
}
</style>
</head>
</body>
<H3>This is H3 Text</H3>
<H4>This is H4 Text </H4>
</body>
</html>
```

← This specifies the style information for the tags <H3> and <H4>

← This calls on the <H3> style  
← This calls on the <H4> style

\* Save the file **redefinetag.html** and check it in a browser.

## Class

- \* Starts with a period (i.e. **.large24**)
- \* You get to name your own style
- \* There are two ways to apply:
  - 1. Tags**
    - Tag maintains its original properties, but ADDS properties to the tag
  - 2. Selections of Text**
    - Creates a <span> tag

### 1. Class Applied to a Tag

- \* We will apply the **large24** class to the <P> tag
- \* Create a new file in Dreamweaver and call it **classtag.html**
- \* In “Code View”, insert the text on the left below

### classtag.html

```
<html>
<head>
<title>Style Sheets </title>
<style type="text/css">
.large24 {
font-size: 24px;
font-family: Arial, Helvetica, sans-serif;
}
</style>
</head>
</body>
<p class="large24">This style is applied to the
entire tag.</p>
</body>
</html>
```

← This specifies the style information for .large24

← This calls on the large24 style for the selected <P> tag

- \* Save the file **classtag.html** and check it in a browser.
- \* We could have more than one class of <P>. Another paragraph could use a different style.

## 2. Class Applied to a Selection of Text: <span>

- \* We will apply the **large24** class to **selected text**
- \* Create a new file in Dreamweaver and call it **classselection.html**
- \* In “Code View”, insert the text on the left below

### classselection.html

```
<html>
<head>
<title>Style Sheets </title>
<style type="text/css">
.large24 {
font-size: 24px;
font-family: Arial, Helvetica, sans-serif;
}
</style>
</head>
</body>
<p>This style is applied <span class="large24">only
to a selection of text</span> within this paragraph.</p>
</body>
</html>
```

← This specifies the style information for .large24

← This calls on the large24 style for the selected text

- \* Save the file **classselection.html** and check it in a browser.



## selectorscontextual.html

```
<html>
<head>
<title>Style Sheets </title>
<style type="text/css">
td a {
    color: #00CC00;
    font-family: "Courier New", Courier, mono;
}
</style>
</head>
</body>
<table width="100%" border="1">
  <tr>
    <td>
      <a href="about.html">Here is a link</a>
    </td>
  </tr>
</table>
</body>
</html>
```

← This specifies the style rules for a situation where a <TD> is followed by a link  
\*\* NOTE: Tags are separated by a SPACE

← Here is <TD> followed by a link

\*\*\* NOTE: The tags must be used in this order. If we had specified instead bold followed by italic, the tags would have to be <B><I>Text here</B></I>, not <I><B>Text here</B></I>

\* Save the file **selectorscontextual.html** and check it in a browser.

### 3a. Link Pseudo Class Selectors (Redefining Links)

\* Allows you to redefine the <a> tag.

\* Allows a rollover effect with a:hover

\* Create a new file in Dreamweaver and call it **selectorspseudo1.html**

\* In “Code View”, insert the text on the left below

## selectorspseudo1.html

```
<html>
<head>
<title>Style Sheets </title>
<style type="text/css">
a:link {
    font-family: Arial, Helvetica, sans-serif;
    font-size: 12px;
    color: #0000FF;
    text-decoration: none;
}
a:visited {
    font-family: Arial, Helvetica, sans-serif;
    font-size: 12px;
    color: #4444FF;
}
</style>
</head>
</body>
</html>
```

← This specifies the style information for a links, visited links, active links and for when the mouse hovers over a link.

Tags must be in this order:

- link
- visited
- hover
- active

<pre> text-decoration: none; } a:hover { font-family: Arial, Helvetica, sans-serif; font-size: 12px; color: #0000FF; text-decoration: underline; } a:active { font-family: Arial, Helvetica, sans-serif; font-size: 12px; color: #4444FF; text-decoration: none; } &lt;/style&gt; &lt;/head&gt; &lt;/body&gt; &lt;a href="about.html"&gt;Click here&lt;/a&gt; &lt;/body&gt; &lt;/html&gt; </pre>	<p style="text-align: center;">← A standard link</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------

\* Save the file **selectorspseudo1.html** and check it in a browser.

### 3b. Link Pseudo Class Selectors (Different Links for Different Purposes)

\* Allows you to create different types of links for different purposes

\* Using the file **selectorspseudo1.html**, re-save it as **selectorspseudo2.html**

\* In “Code View”, add the text in **orange** below

<b>selectorspseudo2.html</b>	
<pre> &lt;html&gt; &lt;head&gt; &lt;title&gt;Style Sheets &lt;/title&gt; &lt;style type="text/css"&gt; a:link { font-family: Arial, Helvetica, sans-serif; font-size: 12px; color: #0000FF; text-decoration: none; } a:visited { font-family: Arial, Helvetica, sans-serif; font-size: 12px; color: #4444FF; text-decoration: none; } a:hover { font-family: Arial, Helvetica, sans-serif; font-size: 12px; </pre>	



#### 4. IDs

- \* Starts with a pound sign (i.e. **#header**)
  - \* Used to identify objects on a page
  - \* Can only be used once on a page
  - \* Often used to ID layers or images so they can be tracked
- \* Create a new file in Dreamweaver and call it **selectorsid.html**
- \* In “Code View”, insert the text on the left below

<b>selectorsid.html</b>	
<pre>&lt;html&gt; &lt;head&gt; &lt;title&gt;Style Sheets &lt;/title&gt; &lt;style type="text/css"&gt; <b>#header {</b>     <b>position: relative;</b>     <b>visibility: visible;</b>     <b>z-index: 1;</b>     <b>background-color: #000000;</b>     <b>color: #99FF99;</b> <b>}</b> &lt;/style&gt; &lt;/head&gt; &lt;/body&gt; &lt;p id="header"&gt;This text can only be used once on this page.&lt;/p&gt;&lt;/body&gt; &lt;/html&gt;</pre>	<p>← This specifies the style information for the header ID</p> <p>← Here is &lt;P&gt; with an ID of “header”</p>

\*\*\* This is mainly used for keeping track of layers. <DIV> (More on that to come)

- \* Save the file **selectorsid.html** and check it in a browser.

### Layout with CSS

#### Example 1: Simple Layout with a Container DIV and “Float”

Example: <http://streaming.smad.jmu.edu/smad404/lessons/css/floatlayout.html>

(Notice that the “Right Layer” is allowed to shrink or grow, depending on how much text is in the layer).

- \* Create a new file and call it **floatlayout.html**

<b>floatlayout.html</b>	
<pre>&lt;style type="text/css"&gt; body {     margin-left: 0px;     margin-top: 0px;     margin-right: 0px;     margin-bottom: 0px;</pre>	<b>The CSS</b>

```

}
#container {
    position: relative;
    margin: 0 auto;
    width: 770px;
}
#toplayer {
    float:left;
    left: 0px;
    top: 0px;
    width: 770px;
    height: 100px;
    z-index: 2;
    background-color: #99CCFF;
}
#leftlayer {
    padding: 0 0 0 0;
    margin: 0 0 0 0;
    float: left;
    width: 170px;
    z-index: 3;
    background-color: #FF99FF;
}
#rightlayer {
    padding:0 0 0 0;
    margin:0 0 0 0;
    float:left;
    width:600px;
    z-index: 4;
    background-color: #66FFFF;
}
#bottomlayer {
    padding:0 0 0 0;
    margin:0 0 0 0;
    float:left;
    width:770px;
    height:113px;
    z-index:5;
    background-color: #FFFFCC;
}
</style>

```

```

<div id="container">
  <div id="toplayer"><p>This is the Top
  Layer.</p></div>
  <div id="leftlayer"><p>This is the Left
  Layer.</p></div>
  <div id="rightlayer">
    <p>
    This is the Right Layer. This is the Right Layer.
    This is the Right Layer. This is the Right Layer.
  </p>

```

← This is the “container” DIV that allows the whole layout to be constrained to 770 pixels width. It is also horizontally centered. Do NOT use a height declaration.

← No relative or absolute positions are given, just a float property.

←

←

←

**The HTML**

```
This is the Right Layer. This is the Right Layer.  
This is the Right Layer. This is the Right Layer.  
This is the Right Layer. This is the Right Layer.  
</p>  
</div>  
<div id="bottomlayer">This is the Bottom  
Layer.</div>  
</div>
```

\* Save the file **floatlayout.html** and check it in a browser.

- Add content to the “Right Layer” to see how it can expand and push the “Bottom Layer” down the page.

(Note: The problem with the LEFTLAYER’s color not extending all the way down is only a problem if you choose to use a the background-color property.

If you need to fix the left layer’s height, we’ll do that in the below called “Creating Equal Height Layers”).

## Example 2: Putting a Drop Shadow Around the Layout

Example: <http://streaming.smad.jmu.edu/smad404/lessons/css/floatlayout-dropshadow.html>

Suppose you want to create the layout below...



(Graphic by SMAD student Sydney Stevens)

We will slice images so they fit in 3 DIVs, all inside a container DIV, as below.



**Step 1:** Create a drop shadow wider than the existing layout. The layout above is 960 pixels. The drop shadow image below is 1,000 pixels. Call it **dropshadow-sides.gif**. The image will tile vertically.

**Step 2:** Create an image for the bottom of the layout, as below. It is also 1,000 pixels wide. Call it **dropshadow-bottom.gif**.

\* Create a new file and call it **floatlayout-dropshadow.html**

<b>floatlayout-dropshadow.html</b>	
<pre> &lt;style type="text/css"&gt; #container { <b>background-image:</b> url(images/dropshadow-sides.gif); <b>background-repeat:</b> repeat-y; position: relative; margin: 0 auto; line-height: 0px; <b>width: 1000px;</b> } #top { float:left; <b>margin-left: 20px;</b> line-height: 0px; width: 960px; } </pre>	<p><b>The CSS</b></p> <p>← This is the “container” DIV that contains the drop shadow image for the sides. “Repeat-Y” tells the image to tile vertically.</p> <p>← Container DIV holds the drop shadow image, so it needs to be 1,000 pixels.</p> <p>← Put a margin-left that equals half the amount of the difference between they layout and the drop shadow. i.e. 1,000 – 960 equals 40. Half of that is 20.</p>

```
#middle {
float:left;
margin-left: 20px;
line-height: 0px;
width: 960px;
}
#bottom {
float:left;
margin-left: 20px;
line-height: 0px;
width: 960px;
}
</style>
```

### <div id="container">

```
<div id="top"></div>
```

```
<div id="middle"><a href="index.html"></a><a href="bio.html"></a><a href="resume.html"></a><a href="bio.html"></a></div>
```

```
<div id="bottom"></div>
```

```

</div>
```

**Do this for each DIV within the container that floats to the left.**

### The HTML

← The HTML contains all the sliced images within the layout.

← The bottom drop shadow image is not a background image. Rather, it is an “inline image” placed just before closing the container DIV.

## Creating Equal Height Layers (The “Hack”)

\* Thanks to [ProjectSeven.com](http://www.projectseven.com) for this “hack.”

[http://www.projectseven.com/tutorials/css/pvii\\_columns/index.htm](http://www.projectseven.com/tutorials/css/pvii_columns/index.htm)

\*\*\* **The Problem:** CSS layers (correctly called a <DIV> container) don’t behave like table cells. If you create a table with two side-by-side columns, the height of both columns will automatically expand to the full height of the tallest one. Each column will be the same height. This does not happen with CSS layers. DIVs are separate containers – one doesn’t know what the other is doing.

**Problem shown here:** <http://streaming.smad.jmu.edu/smad404/lessons/css/floatlayout.html>

\* One solution is to use javascript to fix this problem. The javascript asks the browser to report the rendered height of two or more DIVs and uses that information to set each DIV to the height of the tallest one – based on a particular tag in each column.

**The fix shown here:** <http://streaming.smad.jmu.edu/smad404/lessons/css/floatlayout-fix.html>

**Another example:** <http://streaming.smad.jmu.edu/smad404/lessons/css/floatlayout-fix2.html>  
(with animation).

\* Create a new file in Dreamweaver and call it **p7\_eqCols2\_10.js**

\* In code view, replace all the other text in the document with this text. (Copy and paste this into the document in code view – making sure you replace all the text there).

### p7\_eqCols2\_10.js

```
/*
-----
PVII Equal CSS Columns scripts -Version 2
Copyright (c) 2005 Project Seven Development
www.projectseven.com
Version: 2.1.0
-----
*/
function P7_colH2(){ //v2.1.0 by PVII-www.projectseven.com
var i,oh,h=0,tg,el,np,dA=document.p7eqc,an=document.p7eqa;if(dA&&dA.length){
for(i=1;i<dA.length;i+=2){dA[i+1].style.paddingBottom="";}for(i=1;i<dA.length;i+=2){
oh=dA[i].offsetHeight;h=(oh>h)?oh:h;}for(i=1;i<dA.length;i+=2){oh=dA[i].offsetHeight;
if(oh<h){np=h-oh;if(!an&&dA[0]==1){P7_eqA2(dA[i+1].id,0,np);}else{
dA[i+1].style.paddingBottom=np+"px";}}}document.p7eqa=1;
document.p7eqth=document.body.offsetHeight;
document.p7eqtw=document.body.offsetWidth;}
}
function P7_eqT2(){ //v2.1.0 by PVII-www.projectseven.com
if(document.p7eqth!=document.body.offsetHeight||document.p7eqtw!=document.body.offsetWidth){P7_colH2();}
}
function P7_equalCols2(){ //v2.1.0 by PVII-www.projectseven.com
var c,e,el;if(document.getElementById){document.p7eqc=new Array();
document.p7eqc[0]=arguments[0];for(i=1;i<arguments.length;i+=2){el=null;
c=document.getElementById(arguments[i]);if(c){e=c.getElementsByTagName(arguments[i+1]);
if(e){el=e[e.length-1];if(!el.id){el.id="p7eq"+i;}}}if(c&&el){
document.p7eqc[document.p7eqc.length]=c;document.p7eqc[document.p7eqc.length]=el}
setInterval("P7_eqT2()",10);}
}
function P7_eqA2(el,p,pt){ //v2.1.0 by PVII-www.projectseven.com
var sp=10,inc=20,g=document.getElementById(el);np=(p>=pt)?pt:p;
g.style.paddingBottom=np+"px";if(np<pt){np+=inc;
setTimeout("P7_eqA2('"+el+"','"+np+"','"+pt+"'",sp);}
}
}
```

\* Save the file **p7\_eqCols2\_10.js** in the same folder as the html file that will call on it.

\* Open the file called **floatlayout-nofix.html** created in the previous lesson and re-save it as **floatlayout-fix.html**.

### floatlayout-fix.html

```
<script type="text/javascript"
src="p7_eqCols2_10.js"></script>
```

```
<body
onLoad="P7_equalCols2(0,'leftlayer','P','rightlayer','P')">
```

← Place this in the HEAD of the document.

← Place this in the BODY tag. Change **bold** items to:

0 = no animation (change to 1 for animation).

leftlayer = first layer to make equal.

P = what tag in the layer to apply it to.

rightlayer = the next layer to make equal.

P = what tag in the layer to apply it to.

\* Save the file **floatlayout-fix.html** and check it in a browser. Both the “Left Layer” and the “Right Layer” should be equal heights.

\* This can be applied to as many columns as needed.

### Image Float – (Simple)

Example: <http://streaming.smad.jmu.edu/smad404/lessons/css/eximagefloat.html>

\* Create a new file in Dreamweaver and call it **imagefloat.html**

\* Use the image **lab.jpg**

### imagefloat.html

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

```
#imgback {
    background: url("lab.jpg") no-repeat;
    height: 700px;
}
```

```
#img {
    width: 168px;
    height: 116px;
    padding: 0;
    float: left;
    clear: left;
}
```

```
</style>
```

← Background Image

← <DIV> that specifies width & height of the background image

```
<table width="750">
```

```
  <tr>
    <td>
```

```
    <div id="imgback">
```

```
    <div id="img"></div>
```

```
    <p class="medtext">Text that wraps around goes here. Notice that it nested inside the imgback div.
```

```
  </p>
```

← Background Image

← Empty < DIV > that specifies width & height of the background image.

```

</div>
  </td>
</tr>
</table>

```

\* Save the file **imagefloat.html** and check it in a browser.

### Image Float: Ragged Wrapping – (Sandbagging)

Example 1: <http://streaming.smad.jmu.edu/smاد404/lessons/css/exsandbagging.html>

(The red lines around it are just to show the empty <divs>)

Example 2: [http://www.bigbaer.com/css\\_tutorials/css.image.text.wrap.htm](http://www.bigbaer.com/css_tutorials/css.image.text.wrap.htm)

\* Create a new file in Dreamweaver and call it **sandbagging.html**

\* Use the image **camerawomen.jpg**

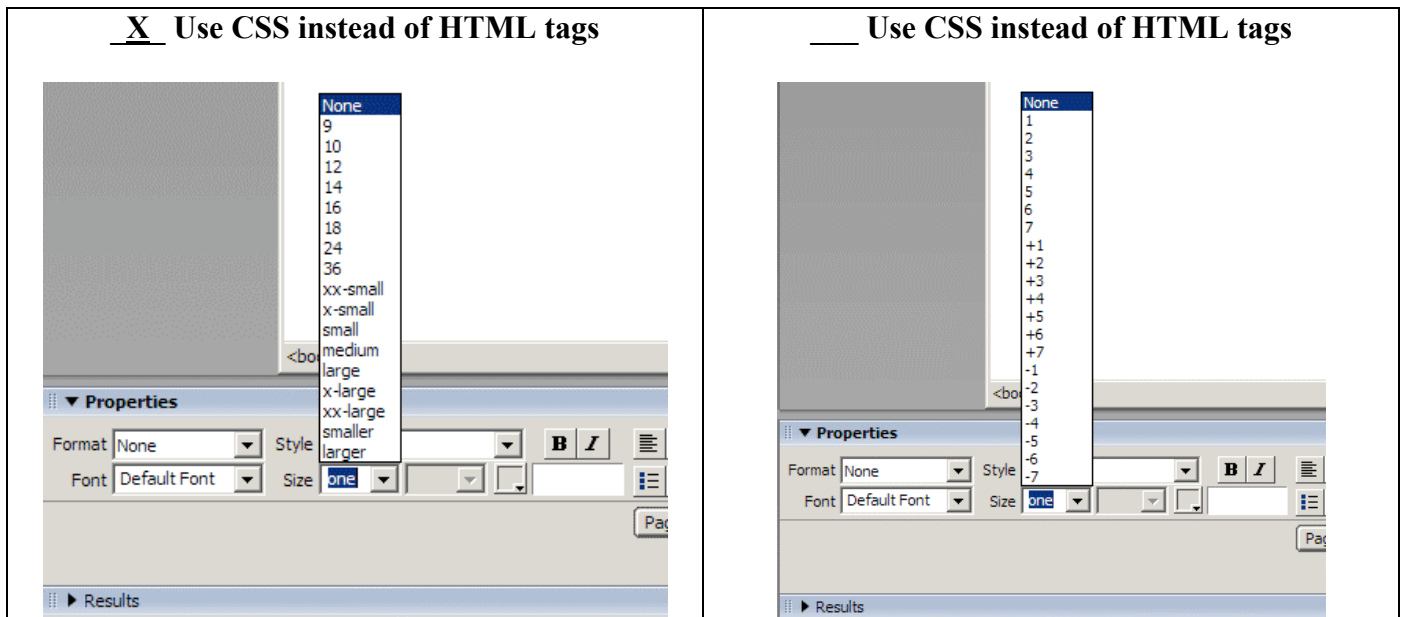
<b>sandbagging.html</b>	
<b>STEP 1:</b> Place the following into the head section of the document.	<pre> &lt;style type="text/css"&gt; #imgback {     background: url("camerawomen.jpg") no-repeat;     height: 132px; } &lt;/style&gt; </pre>
<b>STEP 2:</b> Place the following into the body section of the document to make the background image shows up.	<pre> &lt;table width="750"&gt;   &lt;tr&gt;     &lt;td&gt;       &lt;div id="imgback"&gt;       &lt;/div&gt;     &lt;/td&gt;   &lt;/tr&gt; &lt;/table&gt; </pre>
<b>STEP 3:</b> Draw each layer in Dreamweaver to conform to the variations in the image.	

<p><b>STEP 4:</b> In Dreamweaver, "Code View":</p> <ul style="list-style-type: none"> <li>- Remove these: <code>position: absolute;</code></li> <li>- Add these to the layer tags: <code>padding: 0;</code> <code>float: left;</code> <code>clear: left;</code></li> </ul>	<p>i.e.: Dreamweaver might create this:</p> <pre>&lt;div id="Layer1" style="position: absolute; left: 20px; top: 46px; width: 122px; height: 16px; z-index: 1; padding: 0; float: left; clear: left"&gt;&lt;/div&gt;</pre>
<p><b>STEP 5:</b></p> <ul style="list-style-type: none"> <li>- Cut and paste the layer tags (such as shown in STEP 4) into the head of the document in the &lt;style&gt; section.</li> <li>- Change the formatting to look like this →</li> </ul>	<pre>#Layer1 { left: 20px; top: 46px; width: 122px; height: 16px; padding: 0; float: left; clear: left; z-index: 1 } #Layer2 { left: 10px; top: 65px; width: 141px; height: 15px; padding: 0; float: left; clear: left; z-index: 2 } #Layer3 { left: 10px; top: 84px; width: 132px; height: 17px; padding: 0; float: left; clear: left; z-index: 3 } #Layer4 { left: 10px; top: 102px; width: 137px; height: 17px; padding: 0; float: left; clear: left; z-index: 4 } #Layer5 { left: 10px; top: 121px; width: 140px; height: 19px; padding: 0; float: left; clear: left; z-index: 5 } #Layer6 { left: 10px; top: 140px; width: 145px; height: 31px; padding: 0; float: left; clear: left; z-index: 6 }</pre>
<p><b>STEP 6:</b> Place the <b>following text</b> into the document between the tags in <b>red</b>.</p>	<pre>&lt;table width="750"&gt;   &lt;tr&gt;     &lt;td&gt;       &lt;div id="imgback"&gt;         &lt;div id="Layer1"&gt;&lt;/div&gt;         &lt;div id="Layer2"&gt;&lt;/div&gt;         &lt;div id="Layer3"&gt;&lt;/div&gt;         &lt;div id="Layer4"&gt;&lt;/div&gt;         &lt;div id="Layer5"&gt;&lt;/div&gt;         &lt;div id="Layer6"&gt;&lt;/div&gt;         &lt;p&gt;This is the text that will raggedly wrap around the background image etc. etc.&lt;/p&gt;       &lt;/div&gt;     &lt;/td&gt;   &lt;/tr&gt; &lt;/table&gt;</pre>

\* Save the file **sandbagging.html** and check it in a browser.

## Setting up Dreamweaver for CSS

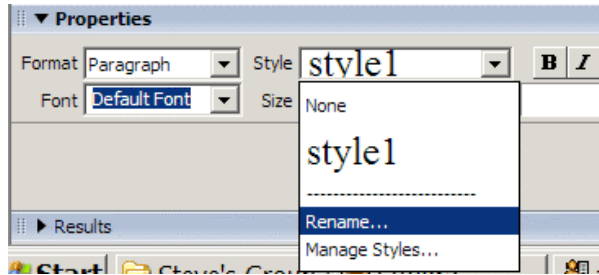
- \* Dreamweaver automatically uses CSS for text, instead of the old-fashioned HTML font tags.
- \* Create a new file in Dreamweaver and call it **dwcsslesson1.html**
- \* Edit > Preferences > (“General” category)
  - See what the Font and Size boxes look like in the Properties Inspector with it checked and unchecked.



## CSS in Dreamweaver

### Create Styles with an “Internal” Style Sheet (Using the Properties Inspector)

- \* Create a new file in Dreamweaver and call it **dwcssinternal.html**
- \* Type some text on the screen and select it with your mouse
- \* Properties Inspector: Size > 24
  - This creates a style called **style1**
  - Rename this style by clicking on the drop-down arrow next to the “Style” box



- Call it **large24**

- You can now use this “style” on other text.

\* In Dreamweaver: Code View (Notice this CSS)

```
<style type="text/css">
.large24 {font-size: 24px}
</style>
```

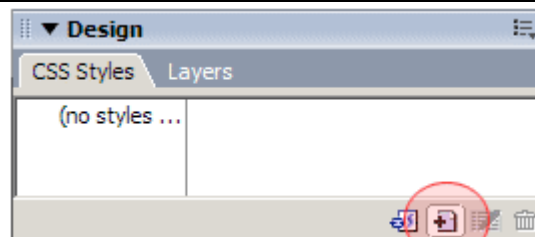
\* Save the file **dwcssinternal.html** and check it in a browser.

## Create Styles with an “Internal” Style Sheet (Using the CSS Styles Tab)

\* Open the file **dwcssinternal.html**

\* Design Panel > **CSS Styles** tab

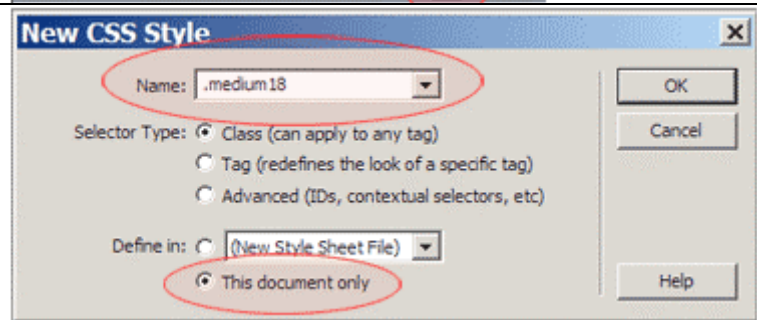
\* Click on the “New CSS Style” button



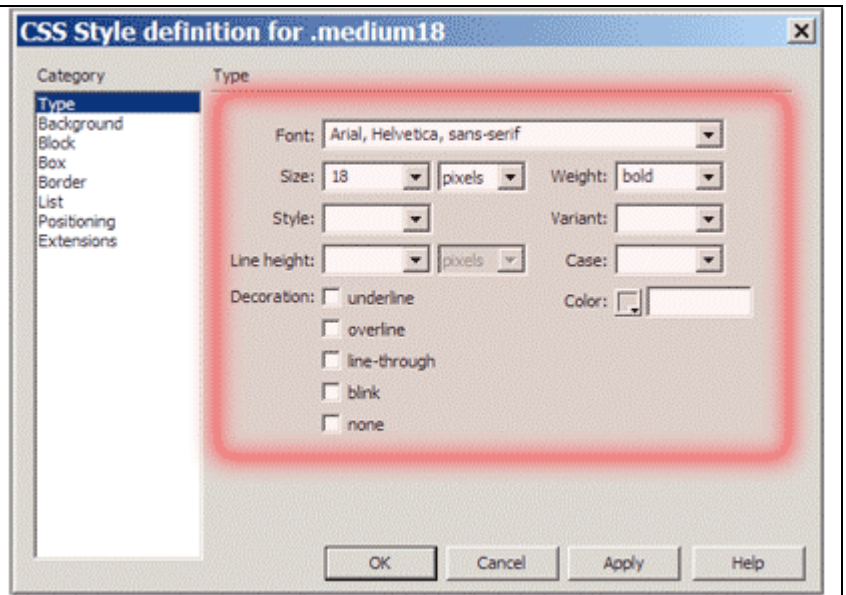
\* Give it the name **.medium18**

\* Select the “This document only” box  
to make an Internal style sheet

- Click OK



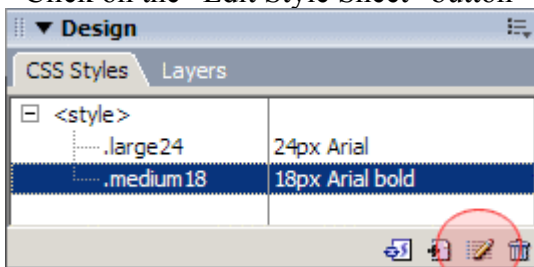
- \* Create the style as such →
- Click OK



- \* Type some more text on the screen.
- \* Properties Inspector > Style > Apply the new style **.medium18**

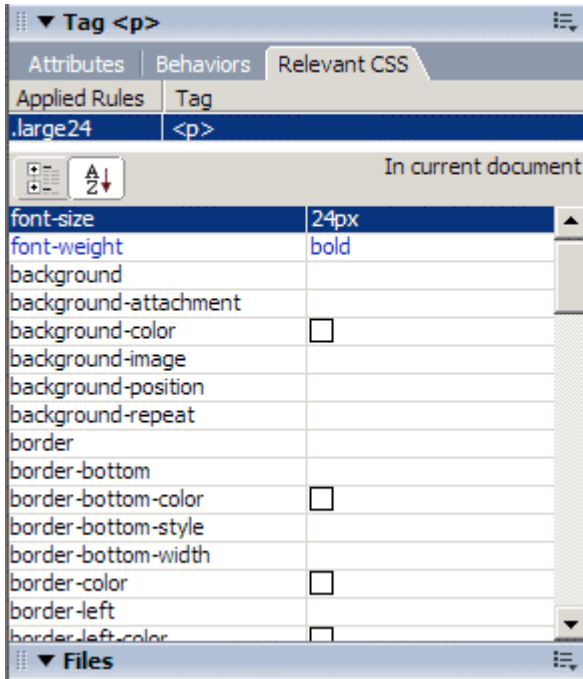
### Editing the Style

- \* Design Panel > **CSS Styles tab**
  - Click on the style you want to edit
  - Click on the “Edit Style Sheet” button



### Further Adjustments to the CSS

- \* Design Panel > **CSS Styles tab**: Select the **.medium18** style to adjust it.
- \* Tag Inspector Panel > **Relevant CSS tab**



- \* Experiment with the settings and check the code in Code View.
- \* Save the file **dwcssinternal.html** and check it in a browser.

## Create Styles with an “External” Style Sheet

- \* Create a new file in Dreamweaver and call it **dwcssexternal.html**

### Creating or Attaching a New Style Sheet

- \* Design Panel > CSS Styles tab

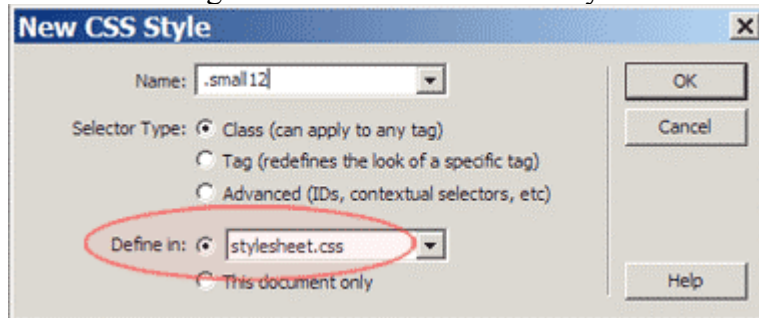
<p>* Click on the “Attach Style Sheet” button</p>	
<p>* File/URL: Type <b>stylesheet.css</b>          * Add as: Link          - Click OK</p>	

\*\*\* **NOTE: To Attach an Existing Style Sheet**

- \* This allows us to create a new file, but attach a style sheet that we'll use for all of the pages on the site
- \* Design Panel > **CSS Styles tab**
- \* Click on the "Attach Style Sheet" button, then browse to the .css file you want to attach

**Creating a Style Using the External Style Sheet**

- \* Design Panel > **CSS Styles tab**
- \* Click on the "New CSS Style" button
- \* Use the setting below to use the External style sheet:



- \* Create the **.small12** style style using the following settings:
  - Font: Arial, Helvetica, sans-serif
  - Size: 12
- \* Create some text in the file **dwcssexternal.html**, select it, and apply the **.small12** style
- \* Save the file **dwcssexternal.html** and check it in a browser.

## Using "Class" in Dreamweaver

\*\*\* For the next examples, we'll place the styles in an *Internal Style Sheet*

\* Recall that there are two ways to apply "Class" selectors:

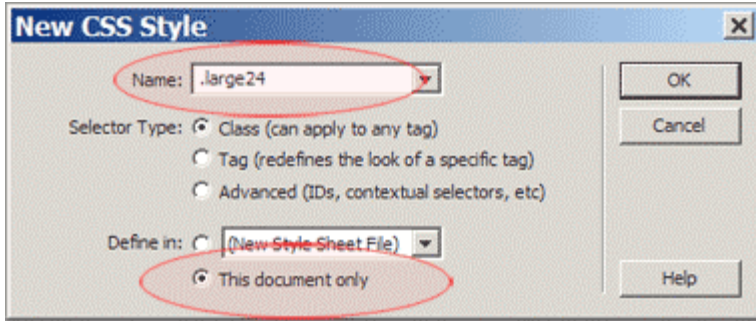
**1. Tags**

- Tag maintains its original properties, but ADDS properties to the tag

**2. Selections of Text**

- Creates a <span> tag

- \* Create a new file in Dreamweaver and call it **dwcssclass.html**
- \* Click on the "New CSS Style" button
  - Selector Type: **Class** (as below)

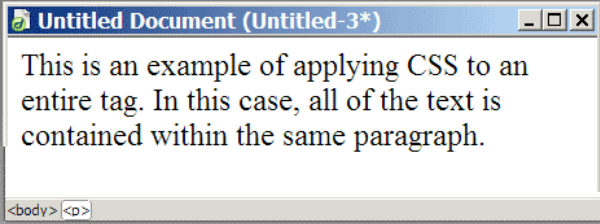
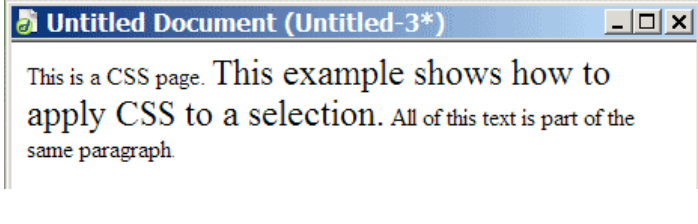


\* Create a style called **.large24** using the following settings:

- Font: Arial, Helvetica, sans-serif
- Size: 24
- Weight: bold

\* Type a few lines of text, and create a paragraph break between each

\* Apply the **.large24** style to both a **tag** and a **selection of text**, as below

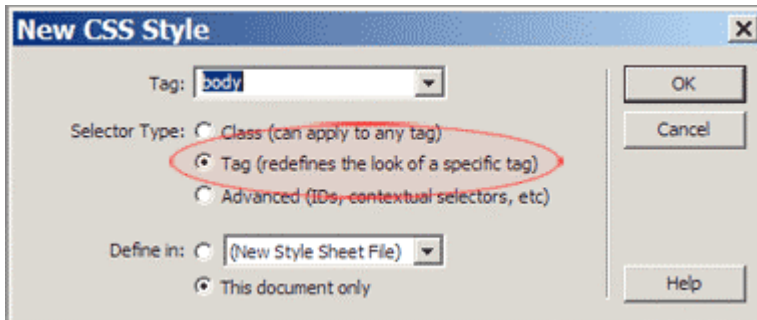
1. Tags	2. Selections of Text <span>
<p>* Use the “Tag Selector to select a &lt;P&gt; tag: - (Make sure the document window is maximized in order to see the “Tag Selector”).</p> <p>* Apply the Large24 style:</p> 	<p>* Select some text on the screen: * Apply the Large24 style:</p> 
<p><b>&lt;p class="large24"&gt;</b>This is an example of applying CSS to an entire tag. In this case, all of the text is contained within the same paragraph. <b>&lt;/p&gt;</b></p>	<p>&lt;p&gt;This is a CSS page. <b>&lt;span class="large24"&gt;</b>This example shows how to apply CSS to a selection. <b>&lt;/span&gt;</b> All of this text is part of the same paragraph.</p>

\* Save the file **dwcssclass.html** and check it in a browser.

## Redefining Tags in Dreamweaver

\* Create a new file in Dreamweaver and call it **dwcsstag.html**

- \* Click on the “New CSS Style” button
  - Selector Type: **Tag** (as below)



- The drop-down menu allows you to select tags, or you can type in your own.

\* Tag: Using the drop-down menu, select **h6**

- Click OK

\* Use the following settings:

- Font-family: Arial, Helvetica, sans-serif

- Font-size: 10px

- Font-weight: bold

\* Create some text in the file **dwcstag.html**, select it, and apply the **.h6**

\* Save the file **dwcstag.html** and check it in a browser.

## Advanced CSS Selectors in Dreamweaver

\* Recall that there are 4 ways to utilize Advanced CSS Selectors:

**1. Groups of Tags**

**2. Contextual Selectors**

**3. Link Pseudo Class Selectors**

**4. IDs**

### 1. Groups of Tags

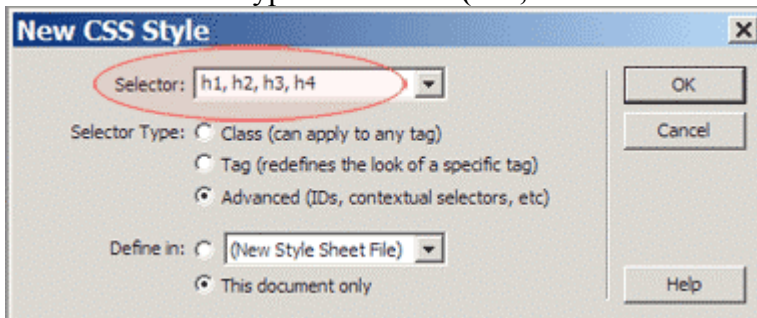
\* Create a new file in Dreamweaver and call it **dwcssgroup.html**

\* Click on the “New CSS Style” button

- Selector: (Use the values below)

- Separate the tags with **COMMAS**

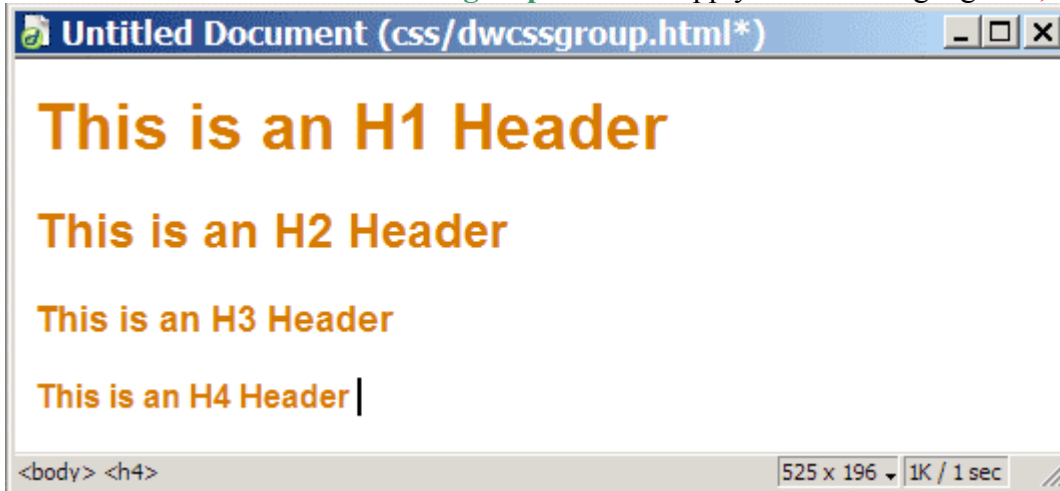
- Selector Type: **Advanced (IDs, contextual selectors, etc)** (as below)



- Click OK

- \* Use the following settings:
  - Font-family: Arial, Helvetica, sans-serif
  - Font-weight: bold
  - Color: #CC6600

\* Create some text in the file **dwcssgroup.html** and apply the following tags **.h1, h2, h3 and h4**



\* Note that all the headers take on the properties defined in the style, while maintaining the original header properties.

\* Save the file **dwcssgroup.html** and check it in a browser.

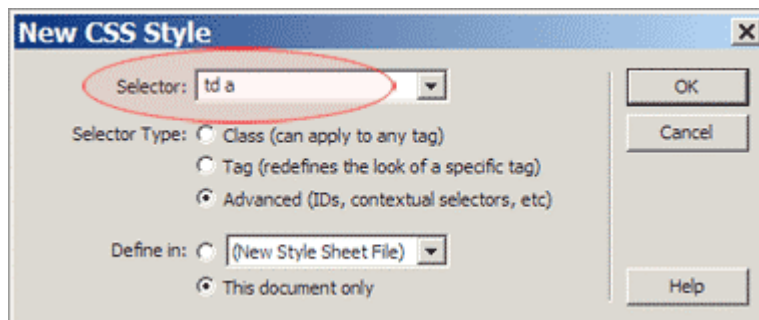
## 2. Contextual Selectors

\* Create a new file in Dreamweaver and call it **dwcsscontext.html**

\* Click on the “New CSS Style” button

- Selector: (Use the values below)
  - Separate the tags with **SPACES**

- Selector Type: **Advanced (IDs, contextual selectors, etc)** (as below)

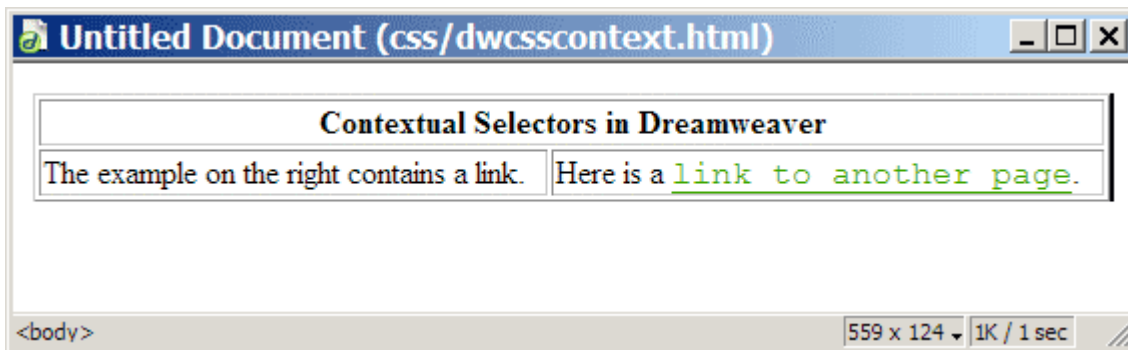


- Click OK

\* Use the following settings:

- Font: Courier New, Courier, mono
- Color: #339900;

\* Using the file **dwcsscontext.html**, create a table and place a link inside a table cell `<td>`.



\* Save the file **dwcsscontext.html** and check it in a browser.

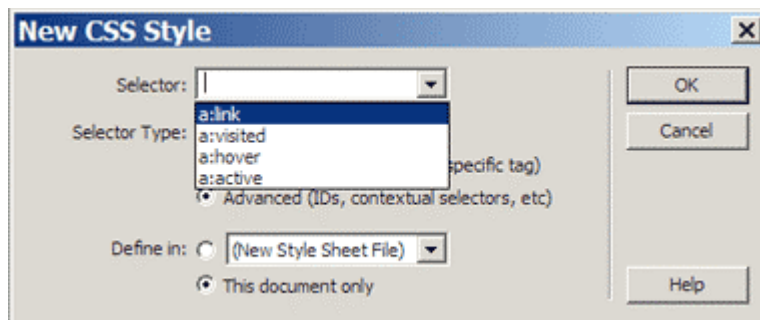
### 3a. Link Pseudo Class Selectors (Redefining Links)

- \* Allows you to redefine the <a> tag, along with visited and active link colors
- \* Allows a rollover effect with a:hover

\* Create a new file in Dreamweaver and call it **dwcsspseudo.html**

\* Click on the “New CSS Style” button

- Selector: **a:link**
- Selector Type: **Advanced (IDs, contextual selectors, etc)** (as below)



- Click OK

\* Use the following settings:

- Font-family: Arial, Helvetica, sans-serif
  - Font-size: 12px
  - Color: #0000FF
  - Text-decoration: none
- Click OK

\* Repeat these steps for the following:

#### **a:visited**

- font-family: Arial, Helvetica, sans-serif;
- font-size: 12px;
- color: #4444FF;
- text-decoration: none;

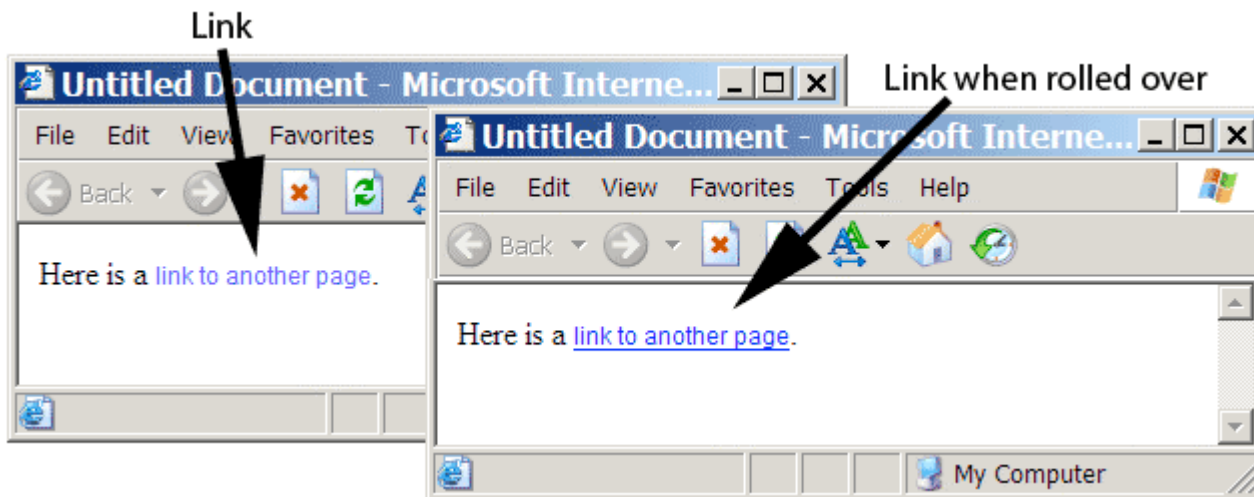
**a:hover**

font-family: Arial, Helvetica, sans-serif;  
font-size: 12px;  
color: #0000FF;  
text-decoration: underline;

**a:active**

font-family: Arial, Helvetica, sans-serif;  
font-size: 12px;  
color: #4444FF;  
text-decoration: none;

\* Save the file **dwcsspseudo.html** and check it in a browser. Make sure you roll over the link. It should look like below:



**3b. Link Pseudo Class Selectors (Different Links for Different Purposes)**

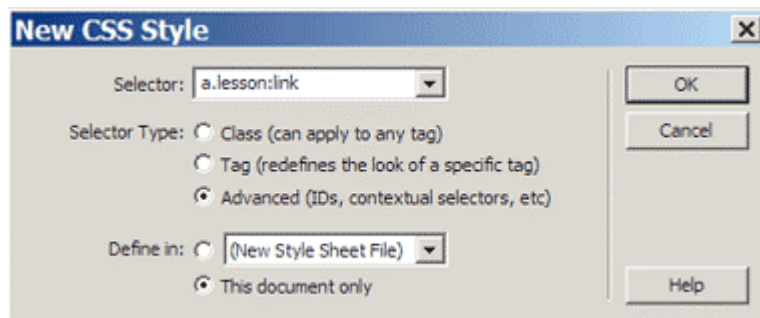
\* Allows you to create different types of links for different purposes

\* Using the file **dwcsspseudo.html**, re-save it as **dwcsspseudo2.html**

\* Click on the "New CSS Style" button

- Selector: **a.lesson:link**

- Selector Type: **Advanced (IDs, contextual selectors, etc)** (as below)



- Click OK

\* Use the following settings:

- Font-family: Courier New, Courier, mono
- Font-size: 11px
- Color: #00DD00
- Font-weight: bold
- Text-decoration: none
- Click OK

\* Repeat these steps for the following:

**a.lesson:visited**

- font-family: Courier New, Courier, mono
- font-size: 11px
- color: #00DD00
- font-weight: bold
- text-decoration: none

**a.lesson:hover**

- font-family: Courier New, Courier, mono
- font-size: 11px
- color: #00AA00
- font-weight: bold
- text-decoration: underline

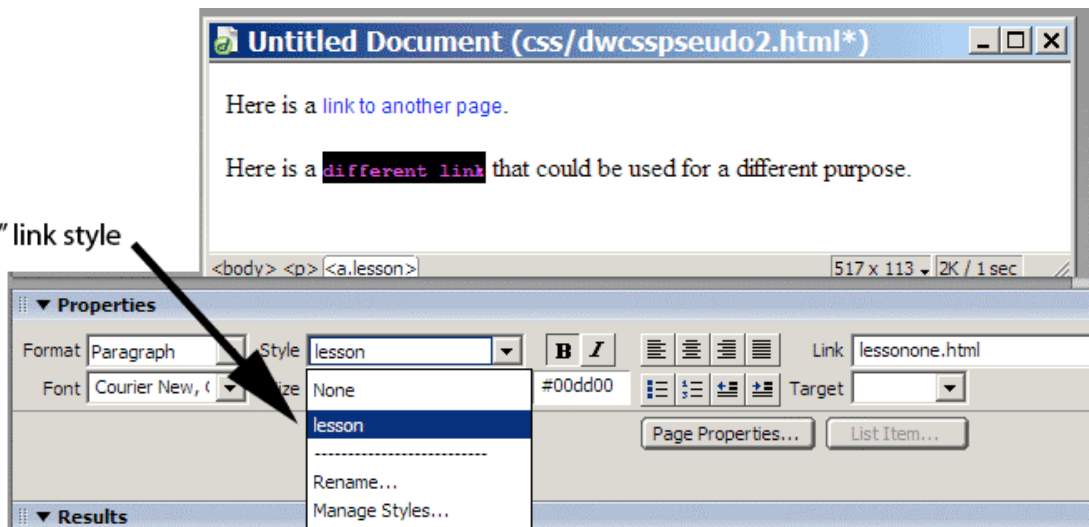
**a.lesson:active**

- font-family: Courier New, Courier, mono
- font-size: 11px
- color: #00DD00
- font-weight: bold
- text-decoration: underline

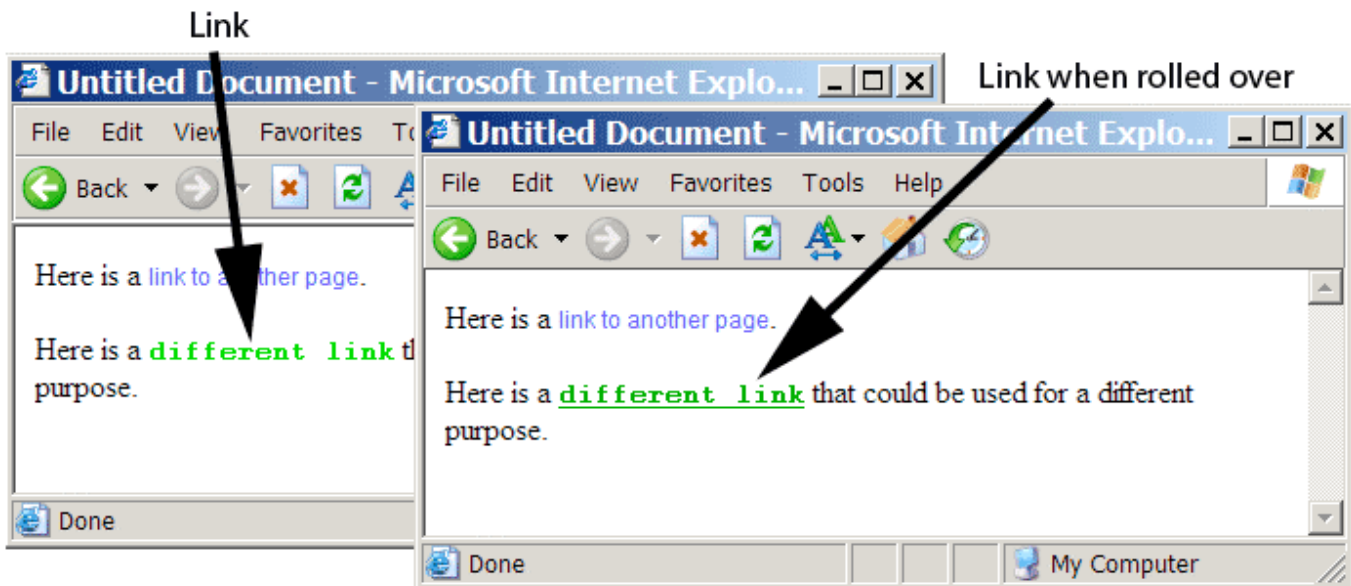
\* Create a link on the page **dwcsspseudo2.html**

\* To apply the “lesson” style to the link, select the text and use the Properties Inspector as below:

Applying the “lesson” link style

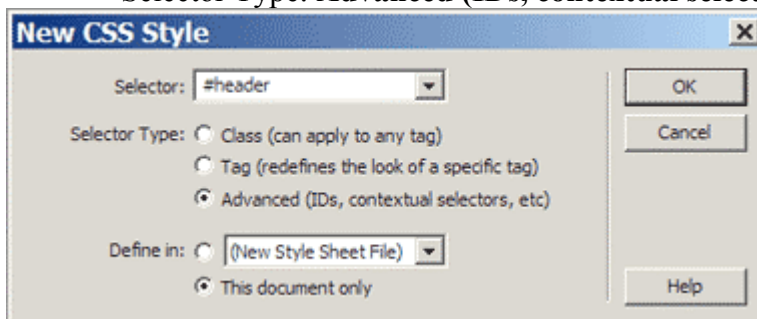


\* Save the file **dwcsspseudo2.html** and check it in a browser. You should have two different link styles. Make sure you roll over the links. They should look like below:



#### 4. IDs

- \* Starts with a pound sign (i.e. **#header**)
- \* Used to identify objects on a page
- \* Can only be used once on a page
- \* Often used to ID layers or images so they can be tracked
  
- \* Create a new file in Dreamweaver and call it **dwcssid.html**
- \* Click on the “New CSS Style” button
  - Selector: (Use the values below)
    - Start the style with # (**POUND SIGN**). Call it **#header**
    - Selector Type: **Advanced (IDs, contextual selectors, etc)** (as below)

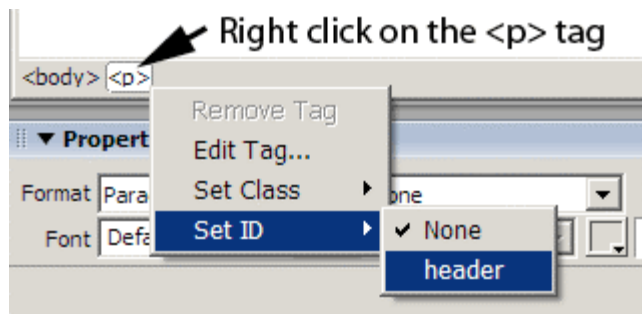


- Click OK
- Create the style by changing the font, size, weight and color

## Applying the ID to a tag

\* Create some text on the file **dwcssid.html**

\* Using the “Tag Selector”, right click on the tag to select the **#header** ID

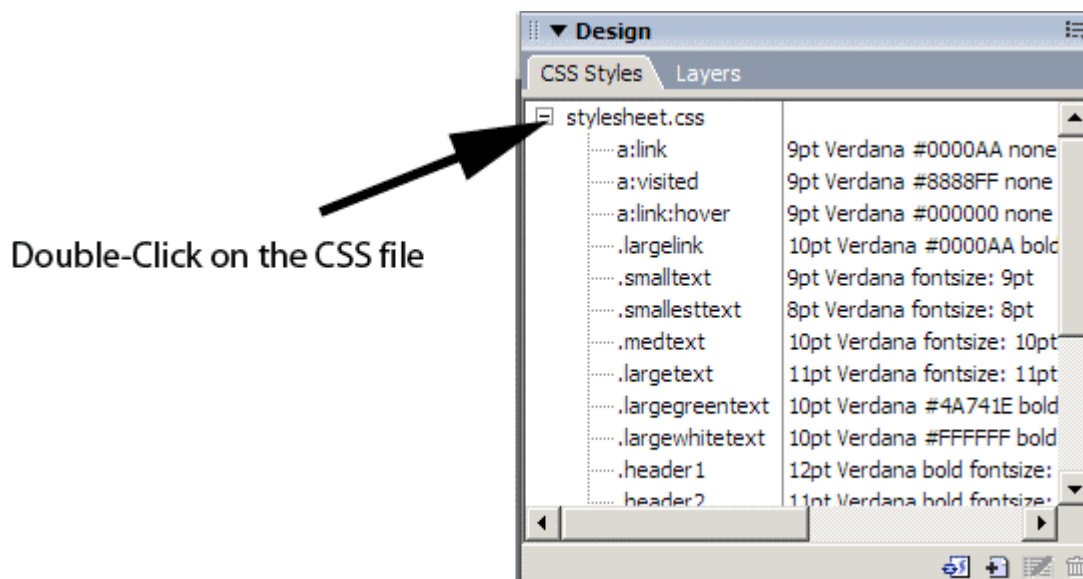


\* Save the file **dwcssid.html** and check it in a browser.

## Editing the CSS File vs. Using the Dreamweaver Panels

\* You may find it easier to make changes to the CSS file by simply opening the file and typing in changes of copying and pasting.

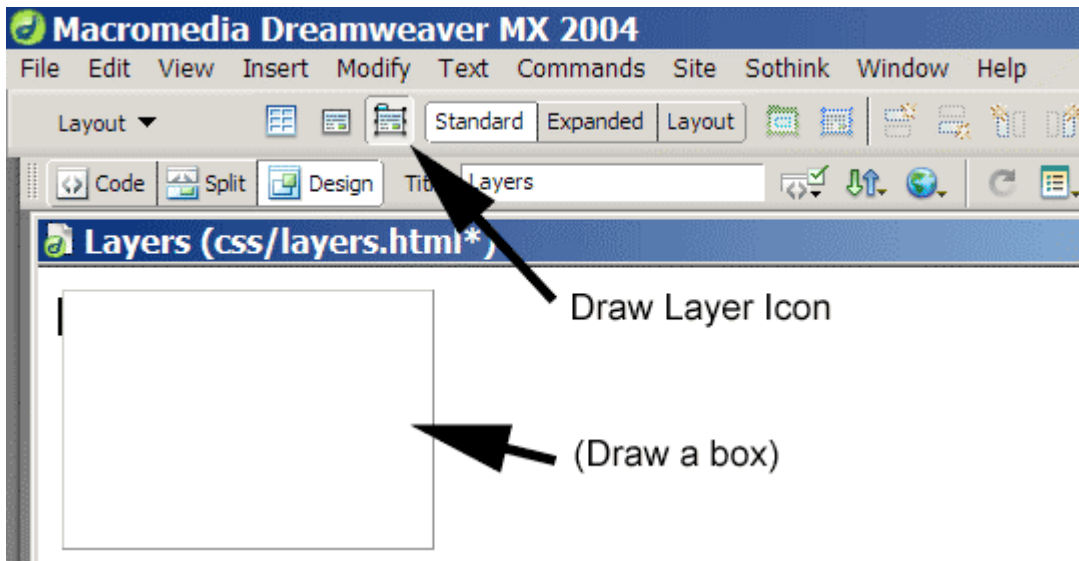
\* To open a stylesheet, just double-click on it in the CSS Styles panel



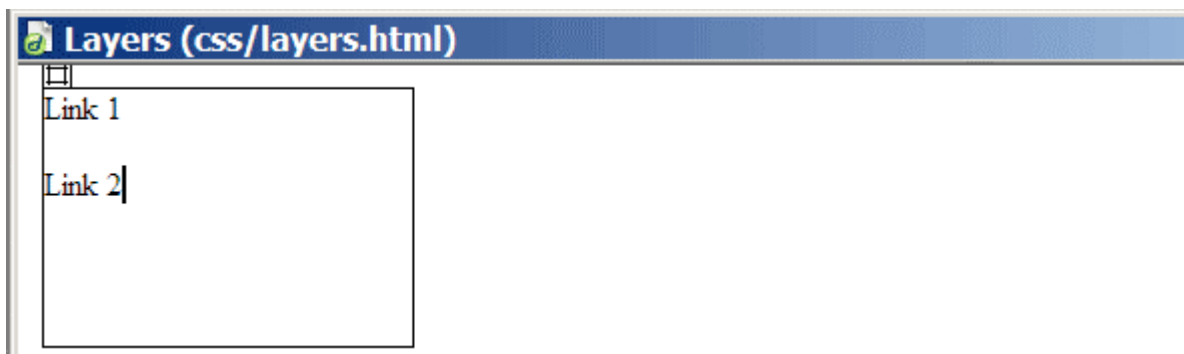
## CSS at Work (Sample Applications)

### Creating Layers for Positioning

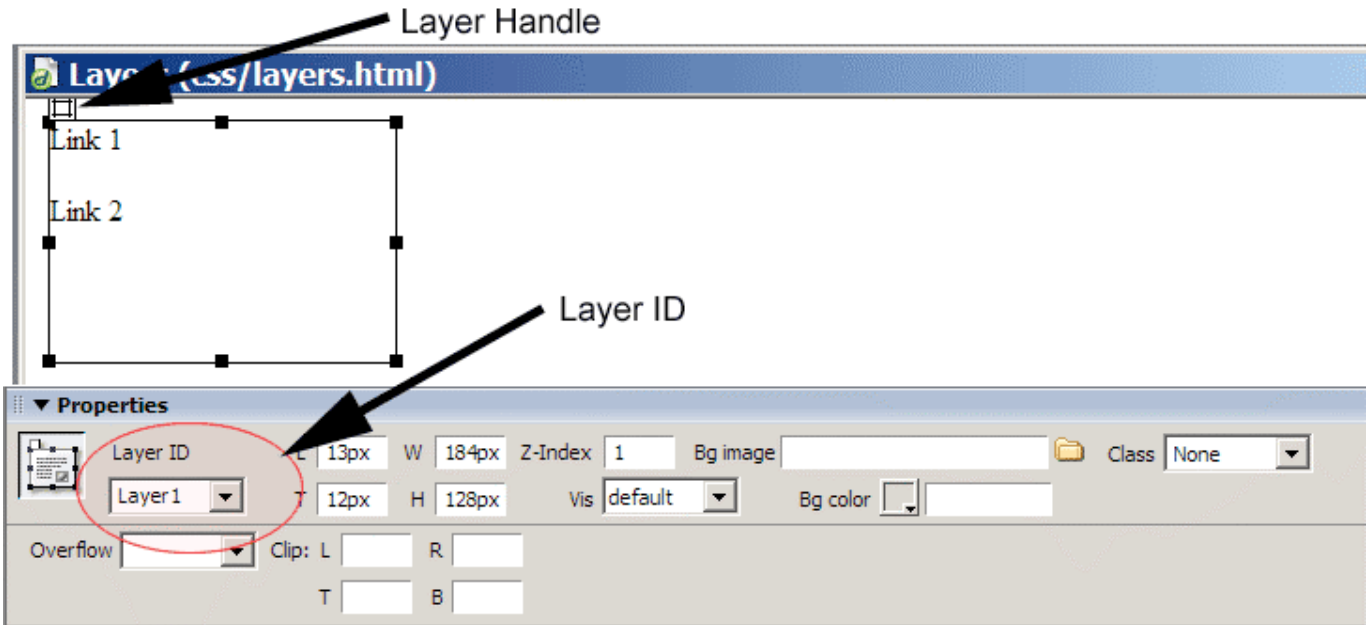
- \* Create a new file in Dreamweaver and call it **layers.html**
- \* Insert Bar > Draw Layer Icon: Draw a layer box in the upper left hand corner, as below



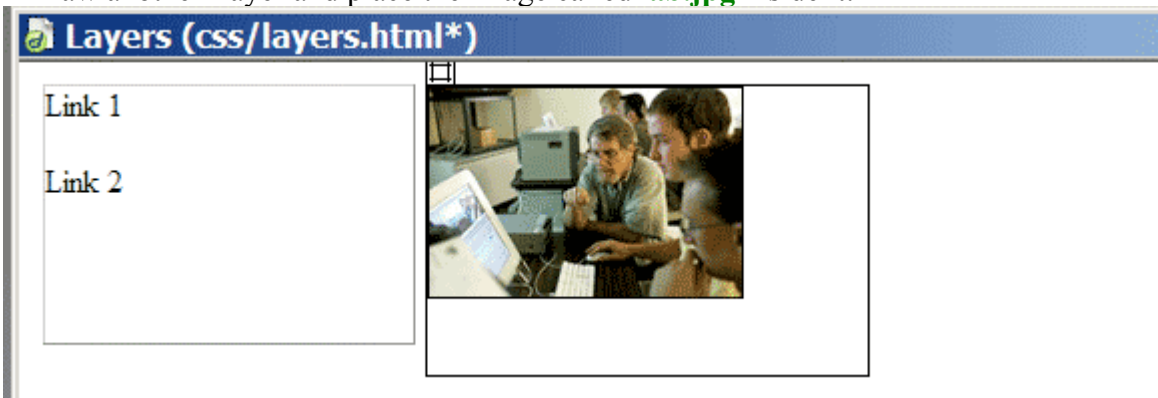
- \* Click inside the Layer
- \* Type some text for links in the box, as below:



- \* Click on the Layers Handle to select it (see below)
- \* Properties Inspector: Notice the name of the layer (Layer ID) is **Layer 1**
  - You can change the layer name if you desire

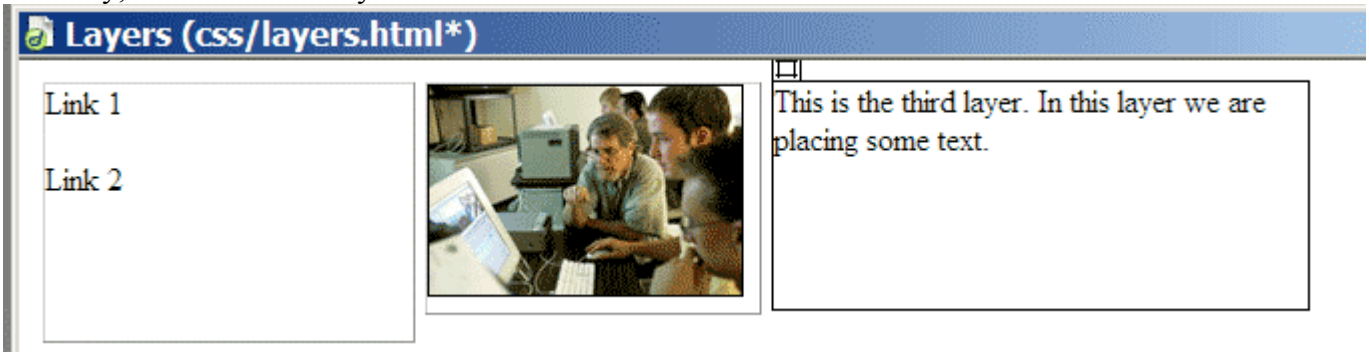


\* Draw another Layer and place the image called **lab.jpg** inside it:



\* Click on the edge of the layer and resize the layer using the layer handles

\* Finally, draw one more layer with some text



\* Save the file **layers.html** and check it in a browser.

### Converting Layers to Tables and Tables to Layers

\* Modify > Convert > (Select the appropriate option)

### Positioning Using an External Style Sheet (Using ID)

This allows you to create a layout that you can apply to every web page. And, if you need to make a change to the layout, you make it in the external file and it affects all the pages on your site.

#### OPTION 1: (Automatic manipulation)

\* Simply create all the layers (and other style information) in the document, then do the following:

- File > Export > CSS Styles...
- Pick the style sheet where you want to put the style information.

#### OPTION 2: (Manual manipulation)

\* Using the file **layers.html**, rename it **layersexternal.html**

\* Link the file **layersexternal.html** to an external style sheet file you call **stylelayers.css**

\* Once you have designed the Layer layout you want for your pages, find the following tag in the file **layersexternal.html**:

```
<div id="Layer1" style="position:absolute; left:13px; top:12px; width:184px; height:128px; z-index:1">
```

\*\*\* z-index:1 (This indicates the stacking order of multiple layers. Higher numbers are on top).

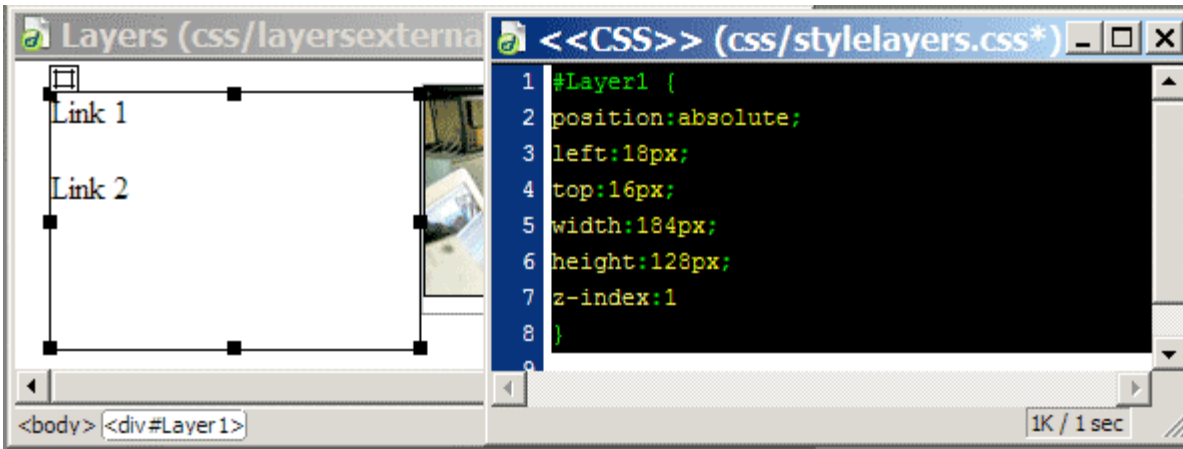
\* Copy and paste the text to **stylelayers.css**, and alter it as so:

```
#Layer1 {  
    position:absolute;  
    left:13px;  
    top:12px;  
    width:184px;  
    height:128px;  
    z-index:1  
}
```

\* Replace the tag above in your **layersexternal.html** file with:

```
<div id="Layer1">
```

\* With both files in “Code View” on your screen, change the position of the layer in **layersexternal.html**, and notice it changes the position information in **stylelayers.css**, as below



## Show/Hide Layers

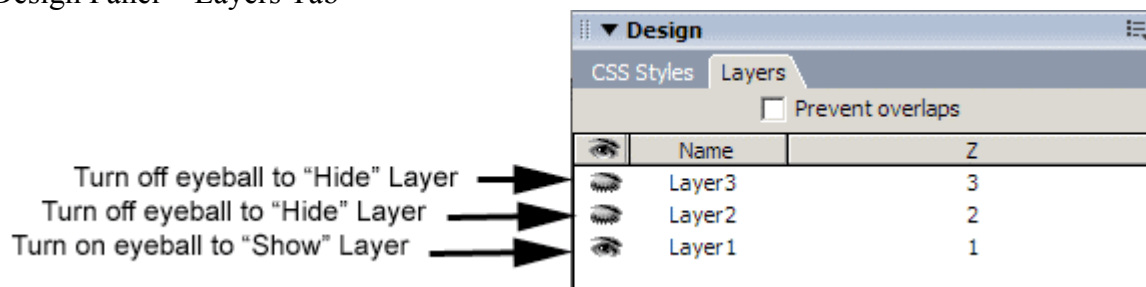
Example 1: <http://streaming.smad.jmu.edu/smad404/lessons/css/showhide.html>

Example 2: <http://www.drsteveanderson.com/canals/map.html>

In this lesson, we will start with only Layer 1 showing, and allow the user to show the other layers by clicking on the links in Layer 1.

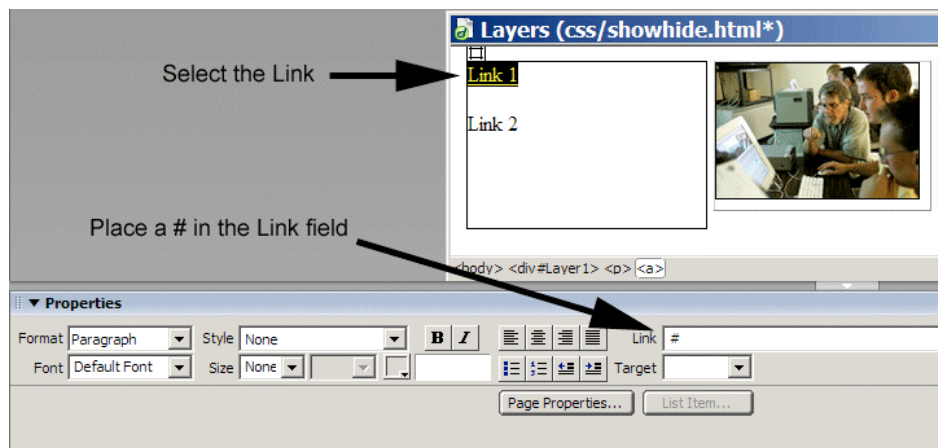
\* Use the file called **layers.html** and rename it **showhide.html**

\* Design Panel > Layers Tab >

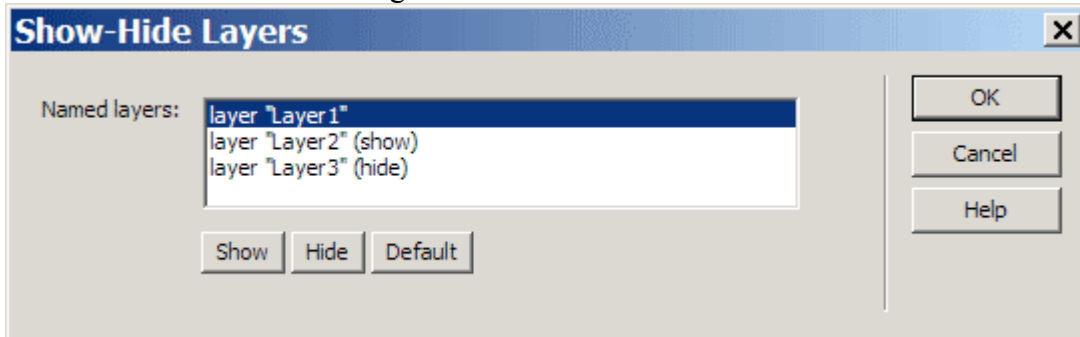


\* Layer 1: Select the Link 1 text (as below)

\* Properties Inspector: Place a pound sign in the "Link" field, as below



- \* Tag Inspector Panel > Behaviors Tab > Click on the + sign
  - Show-Hide Layers
  - Use the settings below:

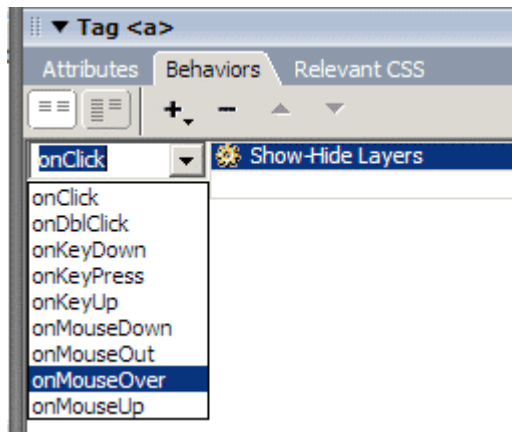


- \* Do the same series of steps for Link 2 with the following settings:
  - layer "Layer1"
  - layer "Layer2" (hide)
  - layer "Layer3" (show)

\* Save the file **showhide.html** and check it in a browser.

\*\*\* NOTE: You can also make the Layers appear **onMouseOver**, instead of **onClick**.

- Tag Inspector Panel > Behaviors Tab > Use the drop-down menu to change the setting, as below



\*\*\*\* THE SECTION THAT FOLLOWS IS UNDER DEVELOPMENT \*\*\*\*

## **Drag Layers and Timeline Animation**

\*\*\* For this lesson, we'll create a simple Tic-Tac-Toe game where the words animate and the layers can be moved by the user.

\* Create a new file in Dreamweaver and call it **game.html**

\* Use the image **lab.jpg**

\* View > Grid > Show Grid

\* View > Grid > Snap To Grid

### **\* Working With Layers**

\* Design Panel > Layers Tab

- Make sure "Prevent Overlaps" is unchecked

\* Insert Bar (Layout Tab) > "Draw Layer" icon

- Draw a small box toward upper left corner (leave some space from top)

- Left-click inside the "Layer Box"

\* Insert Bar (Common Tab) > "Insert Image" icon

- Select the image "board.gif"

\* Left-click on the Layer's handle (top left)

\* Properties: Layer ID: "board" (this names the layer)

### **\* Working with the Timeline**

\* Windows > Others > Timelines

- Left-click on the handle of the "board" layer, drag it to the Timeline – Channel 1

- Drag the right keyframe to frame 30

- Properties: (Check the Autoplay box)

### **\*\* Animating "Tic-Tac-Toe"**

- Objects Palette: "Draw Layer" icon

- Make the layer to the top right of the board

- Objects Palette: "Insert Image" icon

- Select the image "tic.gif"

- Left-click on the layer's handle

- Properties: Layer ID: "tic"

\* DO THE SAME PROCEDURE FOR "TAC" and "TOE"

- Drag the "tic" layer to the Timeline – Channel 2

- Drag the right keyframe to frame 30

- Left-click on frame 15 of Channel 2: Add Keyframe

- Set locations for frames 15 and 30 to animate "tic" to an area above the board.

\* DO THE SAME PROCEDURE FOR “TAC” and “TOE” USING THE FOLLOWING:

Tac: First frame at frame 5, keyframe at frame 20

Toe: First frame at frame 10, keyframe at frame 25

- Set locations for frames to animate “tac” and “toe” to final positions

\*\*\*\*\* WORKED ON FROM HERE DOWN \*\*\*\*\*

\* **Creating the Moveable Layers**

- \* Insert Bar (Layout Tab) > “Draw Layer” icon
  - Draw the layer box just below the starting positions of “tic-tac-toe”
- \* Insert Bar (Common Tab) > “Insert Image” icon
  - Insert “x.gif”
- \* Left-click on the layer’s handle
- \* Properties Inspector: Layer ID: “x1”
  
- \* Left-click on the **image** inside the layer (not on the layer’s handle)
- \* Tag Inspector Panel > Behaviors Tab
  - Click on the + button > Drag Layer
    - Layer: layer “x1”
    - Movement: unconstrained
    - “Get current position”
    - Snap if within 20 pixels of Drop Target

\*\* FOLLOW THE PREVIOUS STEPS (“Placing Xs and Os”) FOR 4 MORE Xs

- Layer ID: x2
- Layer ID: x3
- Layer ID: x4
- Layer ID: x5

\*\* DO THE SAME FOR ALL THE Os

\*\* **Dragging the X and O Layers to the Timeline**

Drag the x1 Layer to Timeline - Channel 5
Drag the x2 Layer to Timeline - Channel 6
Drag the x3 Layer to Timeline - Channel 7
Drag the x4 Layer to Timeline - Channel 8
Drag the x5 Layer to Timeline - Channel 9
Drag the o1 Layer to Timeline - Channel 10
Drag the o2 Layer to Timeline - Channel 11
Drag the o3 Layer to Timeline - Channel 12
Drag the o4 Layer to Timeline - Channel 13
Drag the o5 Layer to Timeline - Channel 14

- Drag the last keyframe of each channel to frame 30

- File > Save

- Go to a browser and open game.html

## Dreamweaver Extensions

### Persistent Layers