



**SWCON104**  
Web & Python Programming

**CSS**

Department of Software Convergence

# Today

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- CSS
  - Inline
  - Internal
  - external (recommended)
- Website style and design
  - Artistic and graphic design principles
- Find places to practice CSS
  - Colors and layouts

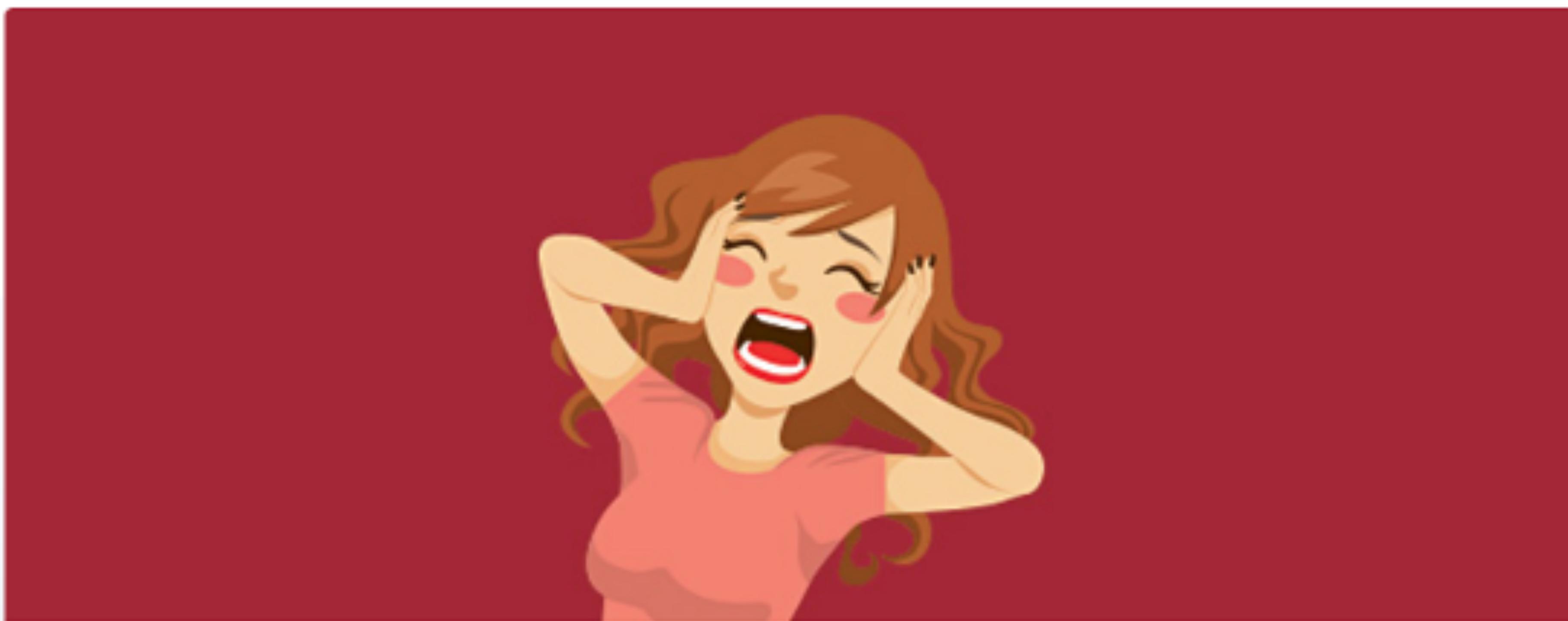
# Practice

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- Practice\_18\_CSS

## Bad Web Design: A Look At The Most Hilariously Terrible Websites From Around The Web

Posted on April 25, 2015 by Brenda Barron in Resources | 67 comments



# Web design principles

## Design Principles

I'm looking at these sites with several design principles in mind. They include:

- Easy to understand navigation
- Proper use of color
- Proper use of animation
- An easy to use layout
- Pleasing to the eye
- Appropriate to the topic
- The design elements don't get in the way of the content
- Great content that's easy to find, navigate, consume, and share



# Bad web designs



Reference: <https://www.elegantthemes.com/blog/resources/bad-web-design-a-look-at-the-most-hilariously-terrible-websites-from-around-the-web> 6

# CSS types

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- Cascading Style Sheets (CSS)
- Inline : Using the style attribute in HTML elements
- Internal : Using a <style> element in <head> section
- External : Using an external CSS file (recommended)

# Recall inline CSS

The screenshot shows a browser window with two tabs: "javaScriptTesting.html" and "html2.html". The "javaScriptTesting.html" tab is active, displaying the following code:

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>Onblur Event Page</title>
5
6   <script>
7
8     function doMath()
9     {
10       var x = 2;
11       var y = 10;
12       var z = 4;
13       var answer = x * y / z;
14
15       document.getElementById("output").innerHTML = "The result is " + answer;
16     }
17   </script>
18
19 </head>
20
21 <body>
22   <p>JavaScript Testing.</p>
23
24   <button onclick="doMath();">Do the Math</button>
25   <p id="output" style="color:green;font-size:200%;"></p>
26
27 </body>
28
29 </html>
```

The browser's output pane shows the results of the script execution:

JavaScript Testing.

Do the Math

The result is 5

# Internal CSS

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>Onblur Event Page</title>
5
6      <script>
7
8          function doMath()
9          {
10              var x = 2;
11              var y = 10;
12              var z = 4;
13              var answer = x * y / z;
14
15              document.getElementById("output").innerHTML = "The result is " +
16          }
17      </script>
18
19      <style type="text/css">
20          p.regular {color:blue;font-size:100%;}
21          p.medium {color:green;font-size:150%}
22      </style>
23
24  </head>
25
26  <body>
27      <p>JavaScript Testing.</p>
28
29      <button onclick="doMath();">Do the Math</button>
30      <p id="output" style="color:green;font-size:200%;"></p>
31
32      <p class="regular">This is a test of regular.</p>
33      <p class="testClass">This is a test of the test Class.</p>
34
35  </body>
36
37  </html>
```

JavaScript Testing.

Do the Math

The result is 5

This is a test of regular.

This is a test of the test Class.



# External CSS

The image shows a code editor interface with two tabs: 'basic.css' and 'html2.html'. The 'basic.css' tab contains the following CSS code:

```
1  body {  
2      background-color: lightblue;  
3  }  
4  h1 {  
5      color: navy;  
6      margin-left: 20px;  
7  }  
8  .testClass{  
9      color: red;  
10     font-size: 300%;  
11 }
```

The 'html2.html' tab contains the following HTML and JavaScript code:

```
1  <!DOCTYPE html>  
2  <html>  
3  <head>  
4      <title>Onblur Event Page</title>  
5  
6      <link rel="stylesheet" type="text/css" href="basic.css">  
7  
8      <script>  
9  
10     function doMath()  
11     {  
12         var x = 2;  
13         var y = 10;  
14         var z = 4;  
15         var answer = x * y /  
16             document.getElementById('myText').value;  
17         document.getElementById('result').value = answer;  
18     }  
19     </script>  
20
```

# External CSS

The screenshot shows a web browser window with three tabs: "javaScriptTesting\_css.html", "html2.html", and "basic.css". The "basic.css" tab is active, displaying the following CSS code:

```
1  body {  
2      background-color: lightblue;  
3  }  
4  h1 {  
5      color: navy;  
6      margin-left: 20px;  
7  }  
8  .testClass{  
9      color: red;  
10     font-size: 300%;  
11 }
```

The "basic.css" tab has a red bracket on the right side, highlighting the closing brace of the ".testClass" selector.

The left side of the screen shows the w3schools.com website, specifically the "CSS Syntax and Selector" page. The URL is "css-syntax-and-selectors.htm". The page content includes:

- A sidebar with links to various CSS topics like CSS Tutorial, CSS Home, CSS Introduction, CSS Syntax (which is highlighted), CSS How To, CSS Colors, CSS Backgrounds, CSS Borders, CSS Margins, CSS Padding, CSS Height/Width, CSS Box Model, CSS Outline, CSS Text, CSS Fonts, CSS Icons, CSS Links, CSS Lists, CSS Tables, CSS Display, CSS Max-width, CSS Position, CSS Overflow, and CSS Float.
- The main content area has a header "WebStor" and a sub-header "CSS Syntax and Selector".
- A navigation link "[Previous](#)".
- A section titled "CSS Syntax" with the following text:

A CSS rule-set consists of a selector and a declaration block:

Selector	Declaration	Declaration
<b>h1</b>	<b>{ color:blue; font-size:12px; }</b>	
Property	Value	Property
		Value

The selector points to the HTML element you want to style.  
The declaration block contains one or more declarations separated by semicolons.  
Each declaration includes a CSS property name and a value, separated by a colon.  
A CSS declaration always ends with a semicolon, and declaration blocks are surrounded by curly braces.

# CSS Selector

- Element selector

In the following example all <p> elements will be center-aligned, with a red text color:

## Example

```
p {  
    color: red;  
    text-align: center;  
}
```

# CSS Selector

- ID selector

- The id selector uses the id attribute of an HTML element to select a specific element.
- The id of an element should be unique within a page, so the id selector is used to select one unique element!
- To select an element with a specific id, write a hash (#) character, followed by the id of the element.
- The style rule below will be applied to the HTML element with id="para1":

## Example

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

# CSS Selector

- Class selector

- The class selector selects elements with a specific class attribute.
- To select elements with a specific class, write a period (.) character, followed by the name of the class.
- In the example below, all HTML elements with class="center" will be red and center-aligned:

## Example

```
.center {  
    text-align: center;  
    color: red;  
}
```

## CSS Comments

Comments are used to explain the code, and may help when you edit the source code at a later date.

Comments are ignored by browsers.

A CSS comment starts with `/*` and ends with `*/`. Comments can also span multiple lines:

### Example

```
p {  
    color: red;  
    /* This is a single-line comment */  
    text-align: center;  
}  
  
/* This is  
a multi-line  
comment */
```

[Try it Yourself »](#)

# Comments

---

- Python

```
# comment for one line  
""" comment for  
multiple lines  
"""
```

- HTML

```
<!-- HTML comment tag -->
```

- CSS

```
/* Single-line comment */  
/* Multiple lines  
work as well */
```

- Javascript

```
// comment for one line  
/* This also works */  
/* Comment can span  
As many lines as you like */
```

# CSS Colors

- Google: rgb color table
  - [http://www.rapidtables.com/web/color/RGB\\_Color.htm](http://www.rapidtables.com/web/color/RGB_Color.htm)
- Naver: ppt 색조합
  - <http://seiru523.blog.me/220954665056>

The screenshot shows a navigation bar at the top with links for Home, HTML, CSS (which is highlighted in green), JavaScript, SQL, PHP, Bootstrap, jQuery, and More. On the left, there's a sidebar with various CSS topics. The main content area is titled "Color Names" and contains a table titled "Example" showing color names next to their corresponding color swatches.

Color	Name
Red	Red
Green	Green
Blue	Blue
Orange	Orange
Yellow	Yellow
Cyan	Cyan
Black	Black

[Try it Yourself »](#)

# CSS Colors: color names example

```
<!DOCTYPE html>
<html>
<body>

<h2>Color Names Examples</h2>
<p>Note: You will learn more about the background-color and the color property later in our tutorial.</p>

<h2 style="background-color:red">
Red background-color
</h2>

<h2 style="background-color:green">
Green background-color
</h2>

<h2 style="background-color:blue;color:white">
Blue background-color and white text color
</h2>

<h2 style="background-color:orange">
Orange background-color
</h2>

<h2 style="background-color:yellow">
Yellow background-color
</h2>

<h2 style="background-color:cyan">
Cyan background-color
</h2>

<h2 style="background-color:black;color:white">
Black background-color and white text color
</h2>

</body>
</html>
```

## Color Names Examples

Note: You will learn more about the background-color and the color property later in our tutorial.

**Red background-color**

**Green background-color**

**Blue background-color and white text color**

**Orange background-color**

**Yellow background-color**

**Cyan background-color**

**Black background-color and white text color**



# CSS Colors: <div> example

The screenshot shows a web browser interface with a code editor on the left and a preview area on the right.

**Code Editor (Left):**

```
<!DOCTYPE html>
<html>
<style>
div {height:50px; width:100%;}
</style>

<body>
<div style="background-color:green"></div>

<h2>Color Names Examples</h2>
<p>Note: You will learn more about the background-color and the color property later in our tutorial.</p>

<h2 style="background-color:red">
Red background-color
</h2>
```

**Preview Area (Right):**

Result Size: 616 x 733

The preview shows a green rectangular box at the top, followed by the heading "Color Names Examples". Below it is a note about learning background-color and color properties. At the bottom, there are three colored boxes: a red one labeled "Red background-color", a green one labeled "Green background-color", and a blue one labeled "Blue background-color and white text color".

# CSS Colors: RGB color example

The screenshot shows a code editor interface with a toolbar at the top. The code editor displays an HTML file containing several 

## elements with different background colors set using the RGB color model.

```
<!DOCTYPE html>
<html>
<body>
<h2>RGB Color Examples</h2>

<h2 style="background-color:rgb(255, 0, 0)">
Background-color set by using rgb(255, 0, 0)
</h2>

<h2 style="background-color:rgb(0, 255, 0)">
Background-color set by using rgb(0, 255, 0)
</h2>

<h2 style="background-color:rgb(0, 0, 255)">
Background-color set by using rgb(0, 0, 255)
</h2>

<h2 style="background-color:rgb(255, 165, 0)">
Background-color set by using rgb(255, 165, 0)
</h2>

<h2 style="background-color:rgb(255, 255, 0)">
Background-color set by using rgb(255, 255, 0)
</h2>

<h2 style="background-color:rgb(0, 255, 255)">
Background-color set by using rgb(0, 255, 255)
</h2>

</body>
</html>
```

**RGB Color Examples**

- Background-color set by using rgb(255, 0, 0)**
- Background-color set by using rgb(0, 255, 0)**
- Background-color set by using rgb(0, 0, 255)**
- Background-color set by using rgb(255, 165, 0)**
- Background-color set by using rgb(255, 255, 0)**
- Background-color set by using rgb(0, 255, 255)**

# CSS layout

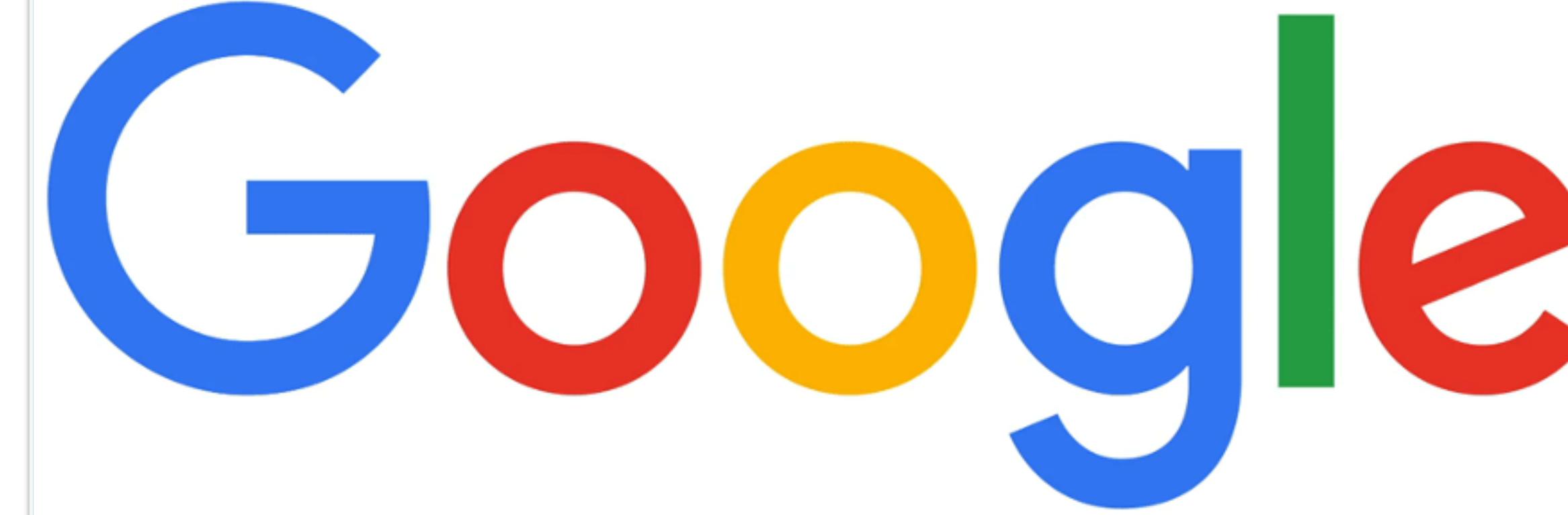
- Html2.html -> CSSlayout.html
- google.png ->khu\_logo.png

```
 1  <!DOCTYPE html>
 2  <html>
 3  <head>
 4      <title>CSS Layout Page</title>
 5
 6
 7  </head>
 8
 9  <body>
10
11     <H1 style="color:blue;">CSS Layout</H1>
12
13     <a href="http://swcon.knu.ac.kr">Department of Software Convergence</a>
14
15     
16
17     <p style="font-size:150%; color:red">Practicing HTML is fun. <br>So far
18     <strong>HTML</strong> is a language made of tags that
19     help us describe how we want our webpages to look.
20     We have tried the <em>head, title, H(heading),</em>
21     and paragraph tags so far. <br>
22     Very few people know all the tags in HTML,
23     but that is okay because we can do a lot with just
24     some basic tags. We can learn about new tags when
25     we need them.</p>
26
27     </body>
28
29     </html>
30
```

# CSS layout

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>CSS Layout Page</title>
5
6  </head>
7
8  <body>
9
10 <H1 style="color:blue;">CSS Layout</H1>
11
12 <a href="http://swcon.knu.ac.kr">Department of Software Convergence</a>
13
14 
15
16
17 <p style="font-size:150%; color:red">Practicing HTML is fun. <br>So far
18 <strong>HTML</strong> is a language made of tags that
19 help us describe how we want our webpages to look.
20 We have tried the <em>head, title, H(heading),</em>
21 and paragraph tags so far. <br>
22 Very few people know all the tags in HTML,
23 but that is okay because we can do a lot with just
24 some basic tags. We can learn about new tags when
25 we need them.</p>
26
27 </body>
28
29 </html>
```

**CSS Layout**



but that is okay because we can do a lot with just some basic tags. We can learn about new tags when we need them.

Department of Software Convergence

Practicing HTML is fun. So far we have learned HTML is a language made of tags that help us describe how we want our webpages to look. We have tried the *head*, *title*, *H(heading)*, and paragraph tags so far. Very few people know all the tags in HTML,



# CSS layout

---

```
  
  
  
  
<p style="color:blue;font-size:200%; clear:left;">
```

# CSS references

The screenshot shows the W3Schools CSS Reference page. The top navigation bar includes links for Home, HTML, CSS, JAVASCRIPT, SQL, PHP, BOOTSTRAP, JQUERY, MORE, and REFERENCES. The left sidebar has a 'CSS Reference' section with a 'CSS Reference' link highlighted in green, and a list of CSS topics: CSS Selectors, CSS Functions, CSS Reference Aural, CSS Web Safe Fonts, CSS Animatable, CSS Units, CSS PX-EM Converter, CSS Colors, CSS Color Values, CSS Default Values, CSS3 Browser Support, and CSS Entities. Below this is a 'CSS Properties' section with a list of properties: align-content, align-items, align-self, all, animation, animation-delay, animation-direction, and animation-duration. The main content area features a large 'CSS Reference' title, a 'Home' button, a 'Next' button, and a note stating 'W3Schools' CSS reference is tested regularly with all major browsers.' It also lists 'CSS Property Groups' such as Color, Background and Borders, Basic Box, Flexible Box, Text, Text Decoration, Fonts, Writing Modes, Table, Lists and Counters, Animation, Transform, Transition, Basic User Interface, and Multi-column. A note at the bottom states: 'The "CSS" column indicates in which CSS version the property is defined (CSS1, CSS2, or CSS3).'

## CSS Reference

[CSS Reference](#)

CSS Selectors  
CSS Functions  
CSS Reference Aural  
CSS Web Safe Fonts  
CSS Animatable  
CSS Units  
CSS PX-EM Converter  
CSS Colors  
CSS Color Values  
CSS Default Values  
CSS3 Browser Support  
CSS Entities

### CSS Properties

align-content  
align-items  
align-self  
all  
animation  
animation-delay  
animation-direction  
animation-duration

## CSS Reference

[Home](#) [Next](#)

★ W3Schools' CSS reference is tested regularly with all major browsers.

### CSS Properties

#### CSS Property Groups

- [Color](#)
- [Background and Borders](#)
- [Basic Box](#)
- [Flexible Box](#)
- [Text](#)
- [Text Decoration](#)
- [Fonts](#)
- [Writing Modes](#)
- [Table](#)
- [Lists and Counters](#)
- [Animation](#)
- [Transform](#)
- [Transition](#)
- [Basic User Interface](#)
- [Multi-column](#)

The "CSS" column indicates in which CSS version the property is defined (CSS1, CSS2, or CSS3).

### Color Properties

# CSS Properties

## CSS border Property

[« Previous](#)

[Co](#)

### Example

Set the style of the four border:

```
p {  
    border: 5px solid red;  
}
```

[Try it Yourself »](#)

## CSS display Property

[« Previous](#)

[Co](#)

### Example

Display <p> elements as inline elements:

```
p.inline {  
    display: inline;  
}
```

[Try it Yourself »](#)

## CSS height Property

[« Previous](#)

[Co](#)

### Example

Set the height and width of a paragraph:

```
p.ex {  
    height: 100px;  
    width: 100px;  
}
```

[Try it Yourself »](#)



# Practice CSS

- together.html
- together.css
- How to put a picture inside the table?
- How to put a link inside the table?

```
1  <!DOCTYPE html>
2  <html>
3  |  <head>
4  |  |  <title>Together Page</title>
5  |  |  <link rel="stylesheet" type="text/css" href="together.css">
6  |  |  <script>
7  |  |  |
8  |  |  function doMath()
9  |  |  {
10 |  |  |  var x = 2;
11 |  |  |  var y = 10;
12 |  |  |  var z = 4;
13 |  |  |  var answer = x * y / z;
14 |  |  |
15 |  |  |  document.getElementById("output").innerHTML = "The result is " + answer;
16 |  |  |
17 |  |  }
18 |  |  </script>
19 |  |
20 |  </head>
21 |  |
22 |  <body>
23 |  |  <H1>Together Page</H1>
24 |  |
25 |  |  <button onclick="doMath();">Do the Math</button>
26 |  |  <p id="output"></p>
27 |  |
28 |  |  
29 |  |
30 |  |  <p id="text">Practicing HTML is fun. <em>So far</em> we have learned
31 |  |  |  <strong>HTML</strong> is a language made of tags that
32 |  |  |  help us describe how we want our webpages to look.
33 |  |  |  We have tried the <em>head, title, H(heading),</em>
34 |  |  |  and paragraph tags so far. <br>
35 |  |  |  Very few people know all the tags in HTML,
36 |  |  |  but that is okay because we can do a lot with just
37 |  |  |  some basic tags. We can learn about new tags when
38 |  |  |  we need them.</p>
39 |  |
40 |  |  <p class="regular">This is a test of regular.</p>
41 |  |
42 |  |  <p class="testClass">This is a test of test Class.</p>
43 |  |
44 |  <table>
45 |  |  <tr>
46 |  |  |  <td>Day 1</td><td>Walking</td><td>30 minutes</td>
47 |  |  |
48 |  |  <tr>
49 |  |  |  <td>Day 2</td><td>Swimming</td><td>45 minutes</td>
50 |  |  |
51 |  |  <tr>
52 |  |  |  <td>Day 3</td><td>Resting</td><td>500 minutes</td>
53 |  |  |
54 |  |  <tr>
55 |  |  |  <td>Day 4</td><td>Resting</td><td>500 minutes</td>
56 |  |  |
57 |  |  </table>
58 |  |
59 |  </body>
60 |  |
61 |  </html>
```

# Reference

[www.w3schools.com](http://www.w3schools.com)

The screenshot shows the w3schools.com homepage with a dark header bar. The header includes the w3schools logo, navigation links for Tutorials, References, Exercises, Videos, and a search bar. Below the header, a large "Learn to Code" section features a "With the world's largest web developer site." tagline, a search bar, and a "Not Sure Where To Begin?" button. The main content area has a yellow background and is titled "CSS". It contains the text "The language for styling web pages" and three buttons: "Learn CSS", "CSS Reference", and "Get Certified". A modal window titled "CSS Example:" displays the following CSS code:

```
body {  
    background-color: lightblue;  
}  
  
h1 {  
    color: white;  
    text-align: center;  
}  
  
p {  
    font-family: verdana;  
}
```

At the bottom of the modal is a "Try it Yourself" button.

The screenshot shows a detailed view of a CSS example. The title "CSS Example:" is at the top. Below it is the same CSS code as shown in the modal on the left. At the bottom of the code block is a large green "Try it Yourself" button.

# Reference





# Thank you