Computer Resource Centre – Piliyandala Education Zone
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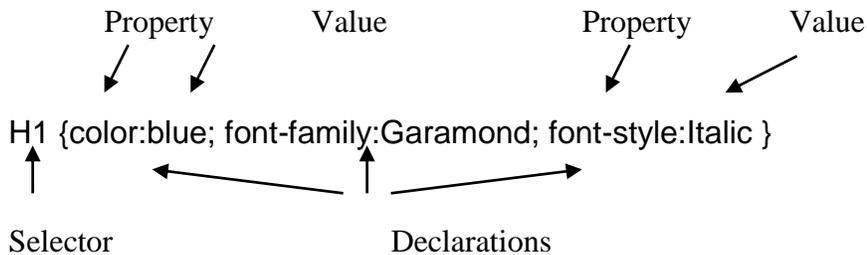
Web Designing – Cascading Style Sheets

Cascading Style Sheets (CSS)

CSS stands for **C**ascading **S**tyle **S**heets It defines **how to display** HTML elements in a web page.**CSS** commands can be write internally or as an External Style Sheet. External Style Sheets saved lot of work and they are saved as "**css**" file.

CSS Syntax

Two main parts of CSS are selector, and one or more declarations.

Property   Value   Property   Value

H1 {color:blue; font-family:Garamond; font-style:Italic }

Selector   Declarations

Style Sheets with HTML File

Example 1:
Change the properties of "H1" Tag. These properties are changing all the "<H1>" tags of this HTML Page.

```
<html>
<head>
<style type="text/css">
H1{color:blue; font-family:Garamond; font-style:Italic }
</style>
</head>
<Body>
<H1>Hello</h1>
<H2>Hello</h2>
<H3>Hello</h3>
</body>
</html>
```

Example 2:
Change the properties of "Paragraph" Tag. These properties are changing all the "<P>" tags of this HTML Page.

```
<html>
<head>
<style type="text/css">
P{text-align:center; text-transform:uppercase; color:red;font-size:30pt; font-style:Italic;
font-family:Garamond }
</style>
</head>
<Body>
<p>Hello Sri Lanka</p>
<br>
<h2>Hello</h2>
</body>
</html>
```

Example 3 :
Change the properties of "<TH>" and "<TD>" Tags of this HTML file.

```
<html>
<head>
<style type="text/css">
TH{background:yellow }
TD{background:#cc66cc; text-align:center; color:blue}
</style>
</head>
<Body>
<table border="2" width="20%">
<Tr><th>Name</th><th>Age</th></tr>
<Tr><td>Ravi</td><td>23</td></tr>
<Tr><td>Saman</td><td>45</td></tr>
</table>
</body>
</html>
```

Example 4
Change the properties of "<Body>" Tag of this HTML file.

```
<html>
<head>
<style type="text/css">
body{background:yellow; color:red; }
a:link{color:red; background:green}
a:visited{color:blue; background:green}
a:active{color:pink; background:white}
</style>
</head>
<Body>
<table border="2" width="20%">
<Tr><th>Name</th><th>Age</th></tr>
<Tr><td>Ravi</td><td>23</td></tr>
<Tr><td>Saman</td><td>45</td></tr><br>
<font size=6>
<a href="les1.html">Lesson1</a>
</font>
</table>
</body>
</html>
```

CSS Comments

You can write Comments of your CSS Codes for future usage. Comments are ignored by browsers.

CSS comments are begins with "/*", and ends with "*/", like this:

The "id" and "class" Selectors in CSS

You can specify your own selectors called "id" and "class" in CSS in order to setting a style in HTML element.

The id Selector

This selector is used to specify a style for a single, unique element. This id attribute of the HTML element is defined with a "#". We will be applied to the element with id="firstpara" as follows.

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

```
Eg.
<html>
<head>
<style type="text/css">
#firstpara
{
text-align:center;
color:red;
}
</style>
</head>

<body>
<p id="firstpara">Hello World! *** This paragraph is affected by the style ***.</p>
<p>This paragraph is not affected by the style.</p>
</body>

</html>
```

The class Selector

This selector is used to specify a style for a group of elements. This allows you to set a particular style for any HTML elements with the same class.
The class selector is defined with a "."
Eg.
all HTML elements with class="centergreen" will be center-aligned and text colour is green.

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

```
<html>
<head>
<style type="text/css">
.centergreen
{
text-align:center; color:green;
}
</style>
</head>

<body>
<h1 class="centergreen">Center-aligned heading</h1>
<p class="centergreen">Center-aligned paragraph.<br> Sri Lanka is very beautiful Country. Sinhalese are
the majority and Muslims, Tamils and other people are lived in our country. They are having different
religions such as Buddhism, Christian, Muslim. </p>
Welcome to the Pearl of the Indian Ocean Sri Lanaka.
</body>
</html>
```

Three Ways to Insert CSS

There are three ways of inserting a style sheet.
➢ External style sheet
➢ Internal style sheet
➢ Inline style

External Style Sheet

Save an external style sheet and each page must link to the style sheet using the <link> tag. The <link> tag goes inside the head section.

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

You can use text editor to write an external style sheet and it should be saved with a .css extension. Eg.

```
H3 {text-align:center;}
p {margin-left:20px;}
body { background-color:#33cc66;}
```

Internal Style Sheet

You can define internal styles in the head section of an HTML page, by using the <style> tag.

```
<head>
<style type="text/css">
H3 {text-align:center;}
p {margin-left:20px;}
body { background-color:#33cc66;}
</style>
</head>
```

Inline Styles

An inline style loses many of the advantages of style sheets by mixing content with presentation. Use this method sparingly!

To use inline styles you use the style attribute in the relevant tag. The style attribute can contain any CSS property. The example shows how to change the color and the left margin of a paragraph:

```
<p style="color:green;margin-left:25px">This is a paragraph.</p>
```

How to use Background Effect in CSS

CSS background properties are used to define the background effects of an element.

Following CSS properties are used for background effects.
background-color, background-image, background-repeat, background-attachment, background-position

The background color can be specified by a color name, like "red" or RGB value or like "rgb(255,0,0)" or a hexadecimal value, like "#dd2205"

Examples
Body {background-color:#33cc66}
H1 {background-color:#66AA34}
P {background-color:#BB4412}
DIV {background-color:#b1c6de}

Background Image
body {background-image:url('sunset.jpg')}

How to use Text Effect in CSS

Text Color

body {color:blue;}
h1 {color:#00ff00;}
h2 {color:rgb(255,0,0);}

Text Alignment

```
<html>
<head>
<style type="text/css">
h1 {text-align:center;}
p.date {text-align:right;}
p.main {text-align:left;}
</style>
</head>
<body>
<h1>CSS text-align Example</h1>
<p class="date">May, 2009</p>
<p class="main">Web development is very interesting!</p>
<p><b>Note:</b> Resize the browser window to see how the value "justify" works.</p>
</body>
</html>
```

Text Decoration

```
<html>
<head>
<style type="text/css">
a {text-decoration:none;}
</style>
</head>
<body>
<p>Link to: <a href="http://www.pilicrc.sch.lk">Piliyandala Zonal CRC</a></p>
</body>
</html>
```

h1 {text-decoration:overline;}
h2 {text-decoration:line-through;}
h3 {text-decoration:underline;}
h4 {text-decoration:blink;}

Text Transformation

```
<html>
<head>
<style type="text/css">
p.uppercase {text-transform:uppercase;}
p.lowercase {text-transform:lowercase;}
p.capitalize {text-transform:capitalize;}
p{word-spacing:30px;}
</style>
</head>
<body>
<p class="uppercase">This is some text.</p>
<p class="lowercase">This is some text.</p>
<p class="capitalize">This is some text.</p>
</body>
</html>
```

Text Indentation

p {text-indent:50px;}

All CSS Text Properties

Property	Description
color	Sets the color of text
direction	Specifies the text direction/writing direction
letter-spacing	Increases or decreases the space between characters in a text
line-height	Sets the line height
text-align	Specifies the horizontal alignment of text
text-decoration	Specifies the decoration added to text
text-indent	Specifies the indentation of the first line in a text-block
text-shadow	Specifies the shadow effect added to text
text-transform	Controls the capitalization of text
unicode-bidi	
vertical-align	Sets the vertical alignment of an element
white-space	Specifies how white-space inside an element is handled
word-spacing	Increases or decreases the space between words in a text

CSS Font

Font Family

p{font-family:"Times New Roman", Times, serif;}

Font Style

p.normal {font-style:normal;}
p.italic {font-style:italic;}
p.oblique {font-style:oblique;}

Font Size

h1 {font-size:40px;}
h2 {font-size:30px;}
p {font-size:14px;}
h1 {font-size:2.5em;} /* 40px/16=2.5em */
h2 {font-size:1.875em;} /* 30px/16=1.875em */
p {font-size:0.875em;} /* 14px/16=0.875em */

All CSS Font Properties

Property	Description
font	Sets all the font properties in one declaration
font-family	Specifies the font family for text
font-size	Specifies the font size of text
font-style	Specifies the font style for text
font-variant	Specifies whether or not a text should be displayed in a small-caps font
font-weight	Specifies the weight of a font

CSS Links

Styling Links

a:link {color:#FF0000;}   /* unvisited link */
a:visited {color:#00FF00;} /* visited link */
a:hover {color:#FF00FF;} /* mouse over link */
a:active {color:#0000FF;} /* selected link */

Text Decoration

<html>
<head>
<style type="text/css">
a:link {text-decoration:none;}   /* unvisited link */
a:visited {text-decoration:none;} /* visited link */
a:hover {text-decoration:underline;}   /* mouse over link */
a:active {text-decoration:underline;} /* selected link */

```
</style>
</head>
<body>
<p><b><a href="default.asp" target="_blank">This is a link</a></b></p>
<p><b>Note:</b> a:hover MUST come after a:link and a:visited in the CSS
definition in order to be effective.</p>
<p><b>Note:</b> a:active MUST come after a:hover in the CSS definition in order
to be effective.</p>
</body>
</html>
```

Background Color

```
a:link {background-color:#B2FF99;}
a:visited {background-color:#FFFF85;}
a:hover {background-color:#FF704D;}
a:active {background-color:#FF704D;}
```

CSS Tables

```
<html><head>
<style type="text/css">
table,th,td
{
border:1px solid black;
}
table {width:100%;}
th{height:50px; background-color:blue; color:white;}
td{text-align:center;}
</style>
</head>
<body>
<table>
<tr>
<th>First Name</th>
<th>Last Name</th>
</tr>
<tr>
<td>Pasan</td>
<td>Silva</td>
</tr>
<tr>
<td>Isuru</td>
<td>Ranasingha</td>
</tr>
</table>
</body></html>
```

What is CSS Float?

With CSS float, an element can be pushed to the left or right, allowing other elements to wrap around it. It is useful technique.

How Elements Float

Element can only be floated left or right. A floated element will move as far to the left or right as it can. The elements after the floating element will flow around it. The elements before the floating element will not be affected. If an image is floated to the right, a following text flows around it, to the left.

Eg1

```
<html><head>
<style type="text/css">
img
{
float:right;
}
</style>
</head>

<body>
<p>Image will float to the right </p>
<p>
<img src="beach.jpg" width="200" />
I love my Country Sri Lanka. I love my Country Sri Lanka. I love my Country Sri Lanka.
I love my Country Sri Lanka. I love my Country Sri Lanka. I love my Country Sri Lanka.
I love my Country Sri Lanka. I love my Country Sri Lanka.
</p></body>
</html>
```


Image will float to the right

I love my Country Sri Lanka. I love my Country Sri Lanka. I love my Country Sri Lanka. I love my Country Sri Lanka. I love my Country Sri Lanka. I love my Country Sri Lanka. I love my Country Sri Lanka. I love my Country Sri Lanka.