CSS

Cascading Style Sheets

Intially HTML is used to create web pages and then CSS is used to add some flavors to that page. It is language that describes the style or how the HTML elements are displayed. Simply With HTML you will define the content of a document, headings, paragraphs, lists, tables, and so on. CSS will be used to define what each of those elements will look like by defining a Rule.

eg.Used top specify text size, style, color etc.

Ways to Insert CSS into HTML

- External CSS
- Internal CSS
- Inline CSS

External CSS

The CSS is embed within your HTML document using <link> element,inside the <head> section.

Eg.

HTML—mypage.html

<!DOCTYPE html>

<html>

<head>

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

</head>

<body>

<p>This is my Page.</p>

</body>

</html>

```
CSS-mystyle.css
body {
background-color: lightblue;
}
```

Internal CSS

The CSS is embed within your HTML document inside the <style> tag,inside the <head> section.

Eg.

```
HTML-mypage.html
<!DOCTYPE html>
<html>
<head>
<style>
body {
background-color: lightblue;
}
</style>
</head>
<body>
<p>This is my Page.</p>
</body>
</html>
```

Inline CSS

The CSS is embed within the <style> attribute of the relevant element.

Eg.

```
HTML-mypage.html
<!DOCTYPE html>
<html>
```

```
<body>

<p style="background-color: lightblue">This is my Page.</p>

</body>

</html>
```
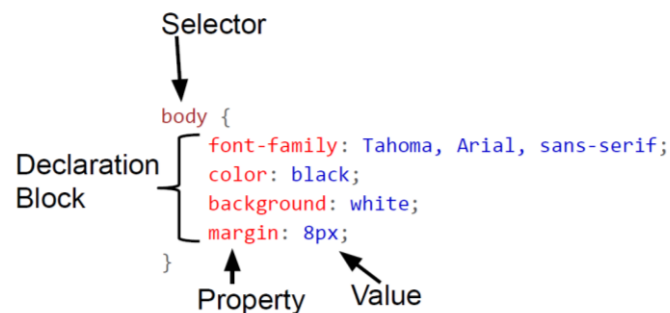
CSS Syntax

A CSS comprises of a selector,property,value

Syntax: selector { property: value }

Eg. body { background-color: lightblue }

Style sheet contain one or more **CSS Rules**

Selector

```
body {
    font-family: Tahoma, Arial, sans-serif;
    color: black;
    background: white;
    margin: 8px;
}
```

Declaration Block

Property   Value

Selector

CSS Selectors are used select or specify the particular element you want to style.

Types of selectors:

- Simple selectors (select elements based on name, id, class)

- Combinator selectors (select elements based on a specific relationship between them)

- Pseudo-class selectors (select elements based on a certain state)

- Pseudo-elements selectors (select and style a part of an element)

- Attribute selectors (select elements based on an attribute or attribute value)

Element Selector

Used to select the HTML element by specifying the element name.

Eg.

```
p {
color: red;
}
```

ID selector

Used to select the HTML element by specifying the id name.

Eg.

```
#id_name {
color: red;
}
```

Class selector

Used to select the HTML element by specifying the class name.

Eg.

```
.class_name {
color: red;
}
```

Universal selector

Used to select all HTML elements by using *

Eg.

```
* {
color: red;
}
```

Grouping selector

Used to select the HTML element by grouping them together.

Eg.

```
body,p,h1 {
color: red;
}
```

CSS comments

In CSS comments are present inside /* ...... */ block.

Eg.

```
/* It is a comment in CSS */
```

CSS Rules Overriding

Order of precedence:

Inline > Internal > External

Inline elements have highest priority than the others.

CSS Measurements

1. % - defines measurement as percentage. eg. font-size:10%

2. cm - defines measurement as centimeters. eg. font-size:10cm

3. px - defines measurement as pixels. eg. font-size:10px

4. pt - defines measurement as points. eg. font-size:10pt

CSS colors

* Keyword - using name of that color we can apply the color to the elements. eg. color:blue;

* RGB Absolute - it takes three values red,blue,green by specifying integer value from 0 to 255. eg. color:rgb(0,255,100)

* RGB % - same as the above instead of specifying integer value we can able to specify percentage for each. eg. color:rgb(50%,50%,10%)

* HEX code - we can specify the color by specifying the hexadecimal code. eg. color:#F0EE11

* Short HEX code - same as the above here we can specify the short hex code. eg. color:#FFF

We can also use color picker provided by google to specify the accurate color.

CSS fonts

Font-family	used to change the face of the font. eg. Arial
Font-style	used to make italic or oblique.
Font-variant	used to create small caps effect.
Font weight	used to specify the weight of the fonts. eg. bold,bolder
Font size	used to specify the size of the font.

CSS Images

We can also able to control the image display using CSS by using border,height,width properties.

Eg.

```
<img style="border:1px solid red; width:100%;"src="logo.png" />
```


CSS Borders

By using CSS we can set borders to elements with different style and color.

Eg.

```
p{
    border:1px solid;
    border-color:#009900
}
```

We can also set different styles of borders like solid,dotted,dashed,double etc.

Psuedo classes

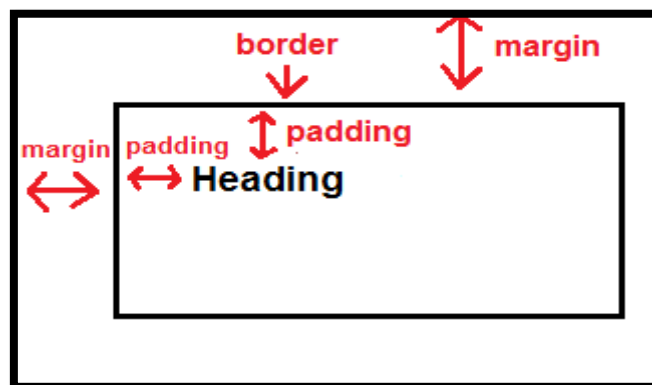Pseudo classes add some special effects to the selector.

Eg.link,visited,hover etc,.

```
Syntax: selector:pseudo-class {property: value}
Eg. : p:hover{ color:#FF0 }
```

Other properties

Property	Description
Margin	used to specify the margin at top,bottom,left,right. eg. margin: 15px
Padding	used to specify the padding at top,bottom,left,right. eg. padding: 20px

Position Properties

The four position properties are:

- static

- relative

- absolute

- fixed

Position properties are modified by the properties: top, right, bottom, left.

CSS Validations

Validation is the process of checking something against a rule.It is necessary to check your CSS document before you publish into the web.

Some of the validators:

* W3C CSS Validator

* WDG CSS check validator

Advantages

- saves time

- Pages load faster

- Easy maintenance

- Superior styles to HTML

- Multiple Device Compatibility

References

- W3 schools
- Tutorials point