Appin Technology Lab: CSS Notes

Introduction:

Cascading Style Sheets (CSS)

    Used to describe the presentation of documents
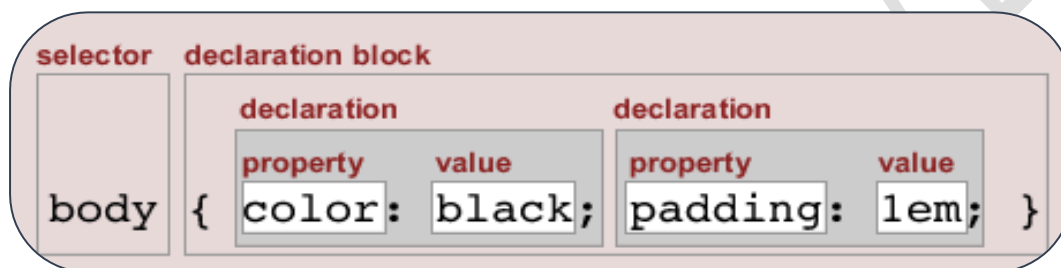
    Define sizes, spacing, fonts, colors, layout, etc.

    Improve content accessibility

    Improve flexibility

Designed to separate presentation from content

Due to CSS, all HTML presentation tags and attributes are deprecated, e.g. font, center, etc.

Stylesheets consist of rules, selectors, declarations, properties and values

Selectors are separated by commas

Declarations are separated by semicolons

Properties and values are separated by colons

Selector in CSS:

- Selector is used to select or point to a specific element within the page.

- Following are the most commonly used selectors:

1. **Universal Selector**

2. **Type Selector**

3. **ID Selector**

4. **Class Selector**

- The universal selector is indicated by * and applies to all the elements of a page.

- For example :*the following rule set changes all the element font name to "Arial"*

*

```
{

font-family: Arial;

}
```

ID

Id selector is used for an **unique element** .

Id selector uses **id attribute** of HTML <tag>.

Id selector defines with **'#'** .

#appin{……………..}

CLASS

class selector is used for a **group of elements**.

class selector uses **class attribute** of HTML <tag>.

Class selector defines with **'.'** .

.appin{……………..}

- Grouping of selectors is done when we want to apply same style to different elements.
- **For example: h1,h2,h3,h4,h5,h6**

```
{

color:red;

}
```

- Combining selectors is done so that we can hierarchically point to a specific element within the page.
- **For example: p.main**

```
{

font-size: 26px;

}
```

The above rule applies to only those "paragraphs" which have a class "main"

Combination of selectors can also use descendant technique.

In CSS, *descendant* means an element that is a child, grandchild, great grandchild, and so on,of another element.

Descendant selectors apply style based on whether one element contains another.

p a

{

font-weight: bold; color: red;

}

The above rule applies to all the anchors which are placed within the <p> tag.

HTML (content) and CSS (presentation) can be linked in three ways:

Inline: the CSS rules in the style attribute

No selectors are needed

Embedded(Internal) : Inside the <head> using <style> tag

External: CSS rules in separate file (best)

Usually a file with .css extension

Linked via <link rel="stylesheet" href=…> tag

➢ Color

body{color:red;}

h1{color:#00FF00;}

➢ Align

h1{text-align:left/right/center/justify ;}

➢ Decoration

h1{text-decoration:overline/line-through/underline;}

➢ Transformation

h1{text-transform:uppercase/lowercase/capitalize;}

➢ Indentation

p{text-indent:146px;}

Color

body{background-color:red;}

h1(background-color:#00FF00;}

Image

  background-image:url('File.ext') ;

       background-attachment:fixed;

Repeat

  background-repeat:repeat/no-repeat ;

Shorthand implementation

  body{background:#FFFFFF url('File.ext') no-repeat right top;}

   ➢ Family

        p{font-family:Arial,helventika,Sans-Serif;}

   ➢ Style

  h1{font-style:normal/italic/oblique ;}

   ➢ Size

  h1{font-size:40px /1em;}

   ➢ weight

h1{font-weight:bold/100 to 900/normal;}

   ➢ Shorthand

h1{**font:italic small-caps bold 15px georgia;**}

The **border-color** specifies the color of a border.

        ✓ **By name**

        ✓ **by #Code**

   ❖ The **border-style** specifies whether a border should be solid, dashed line, double
      line, or one of the other possible values.

        ✓ **dotted /dashed /solid /double /groove /ridge /inset /outset /none
           /hidden**

   ❖ The **border-width** specifies the width of a border.

        ✓ **thin/ thick / medium**

        ✓ **In pixels**

   ❖ Shorthand

h1{ border:1px solid red;}

border-collapse: collapse;

Border:

    Variants of Border

- ❖ **border-bottom-style**
- ❖ **border-top-style**
- ❖ **border-left-style**
- ❖ **border-right-style**
- ❖ **border-bottom-color**
- ❖ **border-top-color**
- ❖ **border-left-color**
- ❖ **border-right-color**
- ❖ **border-bottom-width**
- ❖ **border-top-width**
- ❖ **border-left-width**
- ❖ **border-right-width**

h1{border-top: 1px solid red;}

Links:

we will discuss Pseudo-Classes of CSS.

- ❖ The **:link** signifies unvisited hyperlinks.
- ❖ The **:visited** signifies visited hyperlinks.
- ❖ The **:hover** signifies an element that currently has the user's mouse pointer hovering over it.
- ❖ The **:active** signifies an element on which the user is currently clicking.

<style>

a:link {color: #000000}

a:visited {color: #006600}

a:hover {color: #FFCC00}

</style>

Margin:

The margin properties are used to generate space around elements.

The margin properties set the size of the white space outside the border.

margin-top

margin-right

margin-bottom

margin-left

All the margin properties can have the following values:

❑ auto - the browser calculates the margin

❑ *length* - specifies a margin in px, pt, cm, etc.

❑ *%* - specifies a margin in % of the width of the containing element

❑ inherit - specifies that the margin should be inherited from the parent element

If the margin property has four values:

margin: 25px 50px 75px 100px;

top margin is 25px

right margin is 50px

bottom margin is 75px

left margin is 100px

If the margin property has three values:

margin: 25px 50px 75px;

top margin is 25px

right and left margins are 50px

bottom margin is 75px

If the margin property has two values:

margin: 25px 50px;

top and bottom margins are 25px

right and left margins are 50px

If the margin property has one value:

margin: 25px;

all four margins are 25px

➢ **auto Value**

You can set the margin property to auto to horizontally center the element within its container.

```
div {
    width: 300px;
    margin: auto;
    border: 1px solid red;
}
```

<div>

<p>This div will be centered because it has margin: auto;

</p>

</div>

Padding:

The *padding* property allows you to specify how much space should appear between the content of an element and its border.

❖ The **padding-bottom** specifies the bottom padding of an element.

❖ The **padding-top** specifies the top padding of an element.

❖ The **padding-left** specifies the left padding of an element.

❖ The **padding-right** specifies the right padding of an element.

❖ The **padding** serves as shorthand for the preceding properties.

Example:

```
div {
    border: 1px solid black;
    background-color: lightblue;
}
div.appin {
    padding: 25px 50px 75px 100px;
}
```

<div class="appin">Appin tech lab bhopal</div>

Float:

Float:-the float property specifies whether or not a box (an element) should float.

Left

Right