CSS

Cascading Style Sheet

It is the language for describing the presentation of webpages, including colors, layout and fonts, thus making our web pages presentable to the users.

History of CSS

CSS was first proposed by Hakon Wium Lie on October 10, 1994.
CSS was proposed in 1994 as a web Styling language, to solve some of the Problem HTML4.

Why CSS

CSS Saves time.
Easy Maintenance
Search Engines
Superior styles to HTML
Offline Browsing.

Limitations

Confusion due to many CSS Version.
Cross-browser Issues.
Security Issues.
Extra work for Developers

Advantages of CSS

- Better website Speed
- Easier to maintain
- Consistent design
- Time - Saving
- Better devic compatibility.
- Platform Independence.
- Global web Standards.
- Pages Load faster.

-:- CSS Syntax -:-

3 Elements to a CSS Statement

- Selector
- Property
- Value.

Selector

P {

font-Size : 20 px ;
Property   Value
}
declaration

-:- 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.

/* Supported in style attribute. */

-:- White Spaces in CSS -:-

White Spaces are special characters that can be an actual space, or tab, newline (carriage return). These white spaces are used to construct your stylesheet extra readable.

-:- Types of CSS -:-

There are three ways to integrate CSS

- inline CSS
- Internal CSS
- External CSS

Inline CSS :- Inline css are placed within an HTML Elements in the code.

Inline style do not have selectors because its written inside the html element.

`<p style="color: Blue; font-size: 20px;">` Inline `</p>`

Internal CSS :- An internal CSS is used to define a Style for a Single HTML Page. An Internal css is defined in the <head> section of an HTML page, within a <style> element.

```
<html>
  <head>
    <style>
      p {
          background-color : Red ;
          font-size : 30px ;
          Color : #00efcd ;
      }
    </style>
  </head>
  <body>
    <p> Internal CSS </p>
  </body>
</html>
```

External CSS :- External Style can be reused to apply on more than one Page by only linking style sheet to the web page.

```
<html>
  <head>
    <link rel = "Stylesheet" href = "style.css">
  </head>
</html>
```

External Style Sheet

Merits :-- • One change to the style sheet will change all linked Pages.
• Consistent look and feel across multiple web pages.

Demerits :- • To render the document, the external style sheet should be loaded.

Internal Style Sheet

Merits :-- • Multiple tag types can be created in a single document.
• Extra download is unnecessary.

Demerits :-- • Multiple documents cannot be controlled.
• It effects only one page.
• It will increase the load time for the page.

CSS Selector

Css ID Selector

The id selector uses the id attribute of an HTML element to select a specific element. The id of an element is 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, also k/a Pound followed by the id of the Element. An id name cannot start with a number.

```
#aa  ──── id Selector
{

Color : Blue ;
text-align : Center ;
font-size : 100 % ;

}
```

<p id="aa"> This is id selector </p>

Id tells which style to use

Css Class Selector

The class selector selects HTML elements with a specific class attribute.
To select Elements with a specific class, write a period (.) character, followed by the class name.

```
.bb  ──── Css class definition starts with "."
{

Color : blue ;

}
```

<h2 class="bb"> This is class Selector </h2>
This tells which class to use to style

Css Univergal Selector

The css universal selector select all HTML Elements on the page.

To select an element with a universal selector write a star (*) character, followed by the universal selector of the element.

```
<Style>
    *  {
            margin : 0 ;
            Padding : 0 ;
            text-align : center ;
            Color : Blue ;

    }
</style>
```

universal selector which applied to all HTML Elements

Css Element / Group Selector.

The Element selector selects HTML Element based on the Element name.

```
h1, h3  {
            text-align : center;
            font-size : 80 px ;

    }
```

CSS Values and Units

CSS has several different units for expressing a length. Many CSS properties take "length" values, Such as width, margin, padding, font-size, etc.

Length is a number followed by a length unit, Such as 20px, 2em etc.

Absolute length

The absolute length units are fixed and a length expressed in any of these will appear as exactly that size.

Unit	Description
cm	Centimeter
mm	milimeters
in	inches (1 in = 96px = 2.54 cm)
Px	Pixels (1 px = 1/96th of 1 in)
Pt	Points (1 pt = 1/72 of 1 in)
Pc	Picas (1 pc = 12 pt)

Relative Longths

Relative length units specify of a length relative to another length property.
Relative units Scale better b/w different rendering medium.

units :—
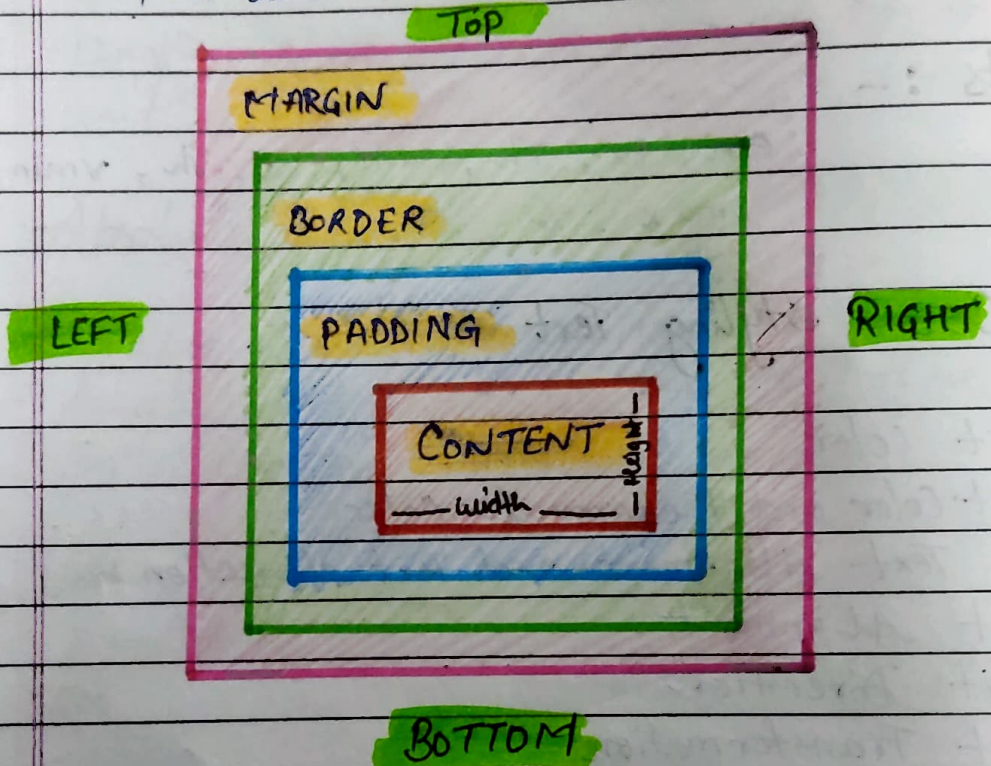
em, ex, ch, rem, vw, vh, vmin, vmax, %

CSS Styling Text

- Text Color
- Text Color and Background Color
- CSS Text Alignment and Text direction
- Text Alignment.
- Text Direction.
- Text Transformation
- CSS Text indentation,
- Letter spacing,
- Line Height,
- Word Spacing, and white spaces.
- Text Shadow.

This text is styled with some text formatting Properties. The heading uses the text-align, text-transform, and color properties. The paragraph is indented, aligned, and the space b/w character is specified.

CSS Box Model

The CSS box model is essentially a box that wraps around every HTML element. It consist of : margins, borders, padding, and the actual content.

Website Layout

A website can divided into various section comprising of header, menus, content and footer based on which there are many different layout design available for developer. Different layouts can be created by using div tag and use CSS property by using div to stlyle it.

Header

navigation Menu

Content | Main Content | Content

Footer