

Introduction to CSS

1. Introduction of CSS:

- a. CSS is the language we use to style an HTML document.
- b. CSS describes how HTML elements should be displayed.

2. What is CSS?

- a. CSS stands for '*Cascading Style Sheet*'.
- b. CSS describes how HTML elements are to be displayed on screen.
- c. CSS is the language that is used to style HTML documents.

3. What is the use or purpose of CSS?

- a. It is a style sheet language which is used to describe the look and formatting of a document written in markup language.
- b. It provides an additional feature of HTML.
- c. It is generally used with HTML to change the Style of web pages and user interfaces.
- d. It is easier to make the web pages presentable using CSS.
- e. It is easy to learn and understand and used to control the presentation of an HTML document.
- f. CSS helps us to control the text color, font style, the spacing between paragraphs, sizing of columns, layout designs, and many more.

4. History of CSS:

- a. **1994** ⇒
 - i. '*Hakon Wium Lie*' proposed the idea of CSS.
 - ii. Till time there are 3 versions of CSS introduced.
 - iii. Now we are using the latest version of CSS i.e. **CSS3**
- b. **CSS1 (1996)** ⇒
 - i. The first official specification released in → 1996
 - ii. It allowed basic features. Basic Features like Styling such as changing text colors, fonts, and backgrounds colors.
 - iii. Also it provide the limited layout control to HTML document.
- c. **CSS2 (1998)** ⇒
 - i. The second official specification released in → 1998
 - ii. Introduced with new features.
 - iii. New Features such as ⇒ positioning, Z-index, and the introduction of media types for different devices.
 - iv. Improved control over layout to HTML document.
- d. **CSS3 (2011-Ongoing)** ⇒
 - i. The first draft of CSS3 released in → 1999
 - ii. CSS3 is not a single monolithic release but a collection of modular specifications introduced gradually.
 - iii. Modular Approach → Divided into modules.
 - iv. These modules cover various aspects of web design, such as animations, gradients, and flexible box, grid layout, etc.

- e. **CSS4 (2020 - in Development)** ⇒
 - i. CSS4 is the future of CSS, aiming to further enhance web design capabilities, including responsive design, variable fonts, and improved grid systems.

5. CSS History Timeline:

- a. 1994 ⇒ Hakon Wium Lie proposed the idea of CSS.
- b. 1996 ⇒ The first version of CSS was invented.
- c. 1998 ⇒ CSS2 was released and work on CSS3 began.
- d. 2011 - ongoing ⇒ CSS3 was different from other versions.
Also it fixed errors found in CSS2. CSS3 begins to roll out as a collection of modular specifications, enabling advanced styling and interactivity.
- e. 2020s ⇒ CSS4 is in development, poised to bring even more advanced features to the world of web design.

6. Syntax of CSS:

- a. A CSS rule consists of a selector and a declaration block.
- b. Syntax:

Declaration

Selector_Name {Property_Name : Property_Value;}

- c. Example ⇒

Selector Declaration Declaration

h1 { color:blue; font-size:12px; }

Property Value Property Value

7. Implementation of CSS → Ways to add CSS (3)

- a. There are three ways of inserting a style sheet :
 - i. Inline CSS
 - ii. Internal CSS
 - iii. External CSS

1. Inline CSS:

- a. An inline style is used to apply a unique style for a single element.
- b. Inline CSS is written inside an HTML tag with the style attribute.
- c. The style attribute can contain any CSS property.
- d. How to Add Inline CSS to HTML ⇒
- e. Here's the syntax for Inline CSS ⇒

```
<!-- one declaration -->
<element style="property: value;">

<!-- multiple declarations -->
<element style="property: value; property: value;">
```

- f. Example of Inline CSS ⇒

```
<h1 style="color: maroon">Inline CSS Implementation</h1>
<h1 style="color: maroon; background-color: wheat">
    Inline CSS Implementation
</h1>
```

2. Internal CSS:

- a. An internal style sheet is used if we want to provide style for a single HTML page.
- b. Internal CSS is written inside a `<style>` element, which goes inside `<head>` of the HTML document.

c. How to Add Internal CSS to HTML ⇒

d. Here's the syntax for Internal CSS:

```
<head>
  <style>
    selector {
      property: value;
    }
  </style>
</head>
<body>
  <!-- page content goes here -->
</body>
```

e. Example of Internal CSS ⇒

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Document</title>
    <style>
      body {
        background-color: wheat;
      }
      h1 {
        color: maroon;
        margin-left: 40px;
      }
      p {
        color: blue;
        margin-left: 40px;
      }
    </style>
  </head>
  <body>
    <h1>Internal CSS Implementation</h1>
    <p>
      Internal CSS is written inside a style element, which goes inside the head of the HTML document.
    </p>
  </body>
</html>
```

3. External CSS:

- a. External CSS is written in a separate file called an external stylesheet, and linked to the HTML document with a `<link>` tag inside a `<head>` section.
- b. We create a separate CSS file is called an external stylesheet.
- c. This file ends with the extension `.css`
- d. With an external stylesheet, we can change the look of an entire website by changing just one file.
- e. How to Link External CSS to HTML ⇒
- f. Here's the syntax for External CSS External CSS File →

style.css

```
body {  
    background-color: wheat;  
}  
  
h1 {  
    color: maroon;  
}  
  
p {  
    color: blue;  
    padding: 10px;  
    background-color: white;  
}
```

- g. Example of External CSS:

```
<!DOCTYPE html>  
<html lang="en">  
    <head>  
        <meta charset="UTF-8" />  
        <meta name="viewport" content="width=device-width,  
initial-scale=1.0" />
```

```

<title>External CSS</title>
<link rel="stylesheet" href="style.css" />
</head>
<body>
<h1>External CSS Implementation</h1>
<p>by using a &lt;link&gt; element to link to an
external CSS file</p>
</body>
</html>

```

- **Note** ⇒

- The first priority always goes to Inline CSS.
- But we can set the priority with the help of ***!important*** keyword.
- OR whichever style implementation is closest to the HTML element that style definition is applied to that particular HTML element.

- **Bonus Topic:**

- The ***@import*** rule allows us to import a style sheet into another style sheet.
- The ***@import*** rule must be at the top of the document.
- Syntax:

```

@import url(path_of_css_file_you_want_to_import); //By p
assing path directly.
@import url("String_path"); //With the help of String we
can pass Path.

```

- Example ⇒

```
@import url("./updatedstyle.css");
body {
    background-color: wheat;
}
h1 {
    color: maroon;
}
p {
    color: blue;
    padding: 10px;
    background-color: white;
}
```