

## What is CSS?

CSS stands for Cascading Style Sheets.

- It is used to style HTML documents, allowing developers to control the appearance of web pages. CSS separates content from design, enabling easier maintenance and flexibility in web development.
- CSS was developed by Hakon Wium Lie and Bert Bos. They began working on CSS in 1994 and presented the first CSS draft specification in 1995. The official CSS specification was published in December 1996 by the World Wide Web Consortium (W3C).

## What are all the things in the CSS?

1. **Selectors:** CSS uses selectors to target HTML elements for styling. Common selectors include element selectors (e.g., `h1`), class selectors (e.g., `.class-name`), and ID selectors (e.g., `#id-name`).
2. **Properties and Values:** CSS properties define how elements are styled. Each property has a value that specifies the style. For example, `color: red;` changes the text color to red. Properties are grouped into categories based on their function, such as layout, typography, and background.
3. **Box Model:** Every HTML element is represented as a rectangular box. The box model includes margins, borders, padding, and the content area, which affects how elements are displayed and interact with each other.
4. **Layout Techniques:** CSS provides various layout techniques, including:
  - **Flexbox:** A layout model that allows for responsive design and alignment of items in a container.
  - **Grid:** A two-dimensional layout system that enables complex designs with rows and columns.
5. **Responsive Design:** CSS supports media queries, allowing styles to adapt to different screen sizes and devices, ensuring a consistent user experience across platforms.

## Types of CSS

- Inline CSS
- Internal CSS
- External CSS.

### Inline CSS

Inline CSS applies styles directly to individual HTML elements using the `style` attribute. It is useful for quick fixes or overriding other styles for a specific element.

**Example:** `<p style="color:blue; font-size:20px;">`

## Internal CSS

Internal CSS is defined within a <style> tag in the <head> section of an HTML document. It is ideal for styling a single HTML page. Internal CSS provides better organization than inline CSS but is less efficient for multi-page websites.

### Example

```
<!DOCTYPE html>

<html>

<head>

<style>

h1 {

color: green;

font-size: 30px;

}

</style>

</head>

<body>

<h1>This is an internal CSS example.</h1>

</body>

</html>
```

## External CSS

External CSS stores styles in a separate .css file, which is linked to the HTML document using a <link> tag. It is the most efficient method for large projects with multiple pages.

### HTML:

```
<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="styles.css">

</head>

<body>
```

```
<h1>This is an external CSS example.</h1>
```

```
</body>
```

```
</html>
```

### **CSS (styles.css):**

```
h1 {  
  color: red;  
  font-size: 25px;  
}
```

### **When to Use Each Type**

- **Inline CSS:** For quick fixes or when external styles are unsupported (e.g., in emails).
- **Internal CSS:** For single-page websites or small projects.
- **External CSS:** For large-scale projects requiring consistent styling across multiple pages.