

WEB PROGRAMMING

CSS3

Cascading Style Sheet

Cascading Style Sheets

- allows you to specify the *presentation* of elements on a web page (e.g., fonts, spacing, sizes, colors, positioning) *separately* from the document's *structure and content* (section headers, body text, links, etc.).
- simplifies maintaining and modifying web pages, especially on large-scale websites.

Inline Styles

- We can declare document styles inline in the HTML5 markup, in embedded style sheets or in separate CSS files.
- **inline styles** declare an individual element's format using the HTML5 attribute **style**.
- Inline styles *override* any other styles applied.

How to Use Inline Style in HTML



- Using the style attribute

```
<h1 style="...">...</h1>
```

- We use style, followed by the equality sign (=), and then a quote where all of the style values will be stored using the standard CSS property-value pairs - "property: value;".

```
<h1 style="color: red; font-size: 40px;">Hello World</h1>
```

Cont.,



- This is similar to :

```
<head>
<style>
h1
{color: red; font-size: 40px; }
</style>
</head>
<body>
<h1 >Hello World</h1>
</body> </html>
```



- `<html>`
- `<head>`
- `<title>Hello World</title>`
- `<style> p { color: green; } </style> </head>`
`<body>`
- `<p style="color: red;">Paragraph one is red.</p>`
- `<p style="color: red;">Paragraph two is also red.</p>`
- `</body> </html>`

Advantages of Inline CSS:



- Inline takes precedence over all other styles.
- Any styles defined in the internal and external style sheets are overridden by inline styles.
- You can quickly and easily insert CSS rules into an HTML page, which is useful for testing or previewing changes and performing quick fixes on your website.
- There is no need to create an additional file.
- To apply styling in JavaScript, use the style attribute.

Disadvantages of Inline CSS



- Adding CSS rules to each HTML element takes time and makes your HTML structure unorganized. It's difficult to keep up, reuse, and scale.
- The size and download time of your page can be affected by styling multiple elements.
- Inline styles cannot be used to style pseudo-elements and pseudo-classes. For example, you can style the visited, active, and link colors of an anchor tag using external and internal style sheets.

Uses of an embedded style sheet in CSS



- It allows you to define styles for a particular HTML document as a whole in one place
- The `<style>` tag takes the 'type' attribute that defines the type of style sheet being used (ie. text/CSS).
- When the list of CSS rule sets is inserted in the style element, it will apply the associated properties to all elements on the web page.

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
  <title>Page Title</title>
```

```
  <!-- Embedded stylesheet -->
```

```
  <style>
```

```
    h2 {
```

```
      font-size: 1.5rem;
```

```
      color: blue;
```

```
      text-align: center;
```

```
    }
```

```
    p {
```

```
      font-variant: italic;
```

```
    }
```

```
  </style>
```

```
</head>
```

```
<body>
```

```
  <h2>Welcome To  
  GFG</h2>
```

```
  <p>This document is using  
  an embedded  
  stylesheet!</p>
```

```
  <p>This is a paragraph</p>
```

```
  <p>This is another  
  paragraph</p>
```

```
</body>
```

```
</html>
```

```
<!DOCTYPE html>
<html>

<head>
  <title>Page Title</title>

  <!-- Embedded stylesheet
  -->
  <style>
    h2 {
      font-size: 1.5rem;
      color: #2f8d46;
      text-align: center;
    }

    .p-content {
      font-variant: italic;
    }
  </style>
</head>
```

```
<body>
  <h2>Welcome To Geeks for
  Geeks</h2>
  <p class="p-content">
    This document is using an
    embedded stylesheet!
  </p>

  <p>This is a paragraph</p>
  <p>This is another
  paragraph</p>
</body>

</html>
```

External CSS



- With an external style sheet, you can change the look of an entire website by changing just one file!
- Each HTML page must include a reference to the external style sheet file inside the `<link>` element, inside the head section.
- An external style sheet can be written in any text editor, and must be saved with a `.css` extension.
- The external `.css` file should not contain any HTML tags.

mystyle.css



```
body {  
  background-color: light blue;  
}
```

```
h1 {  
  color: navy;  
  margin-left: 20px;  
}
```



```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="mystyle.css">
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

Multiple Style Sheets



- If some properties have been defined for the same selector (element) in different style sheets, the value from the last read style sheet will be used.

```
h1 {  
  color: navy;  
}
```

```
h1 {  
  color: orange;  
}
```

```
<head>  
<link rel="stylesheet" type="text/css" href="mys  
tyle.css">  
<style>  
h1 {  
  color: orange;  
}  
</style>  
</head>
```

Cascading Order



- All the styles in a page will "cascade" into a new "virtual" style sheet by the following rules, where number one has the highest priority:
 - Inline style (inside an HTML element)
 - External and internal style sheets (in the head section)
 - Browser default
- An inline style has the highest priority, and will override external and internal styles and browser defaults