

1. CSS (Cascading Style Sheets)

CSS (Cascading Style Sheets) is a language to manipulate the look and positioning of HTML elements of a web document.

Although HTML gives both the organization and the content, CSS takes care of the styling, e.g., colors, fonts, spacing, alignment, and responsiveness.

This is often referred to as cascading styles, i.e., styles are applied in a hierarchy: styles may have different origins (browser defaults, external files, inline styles), and in case of multiple occurrences of definitions, the last one wins.

2. Role of CSS

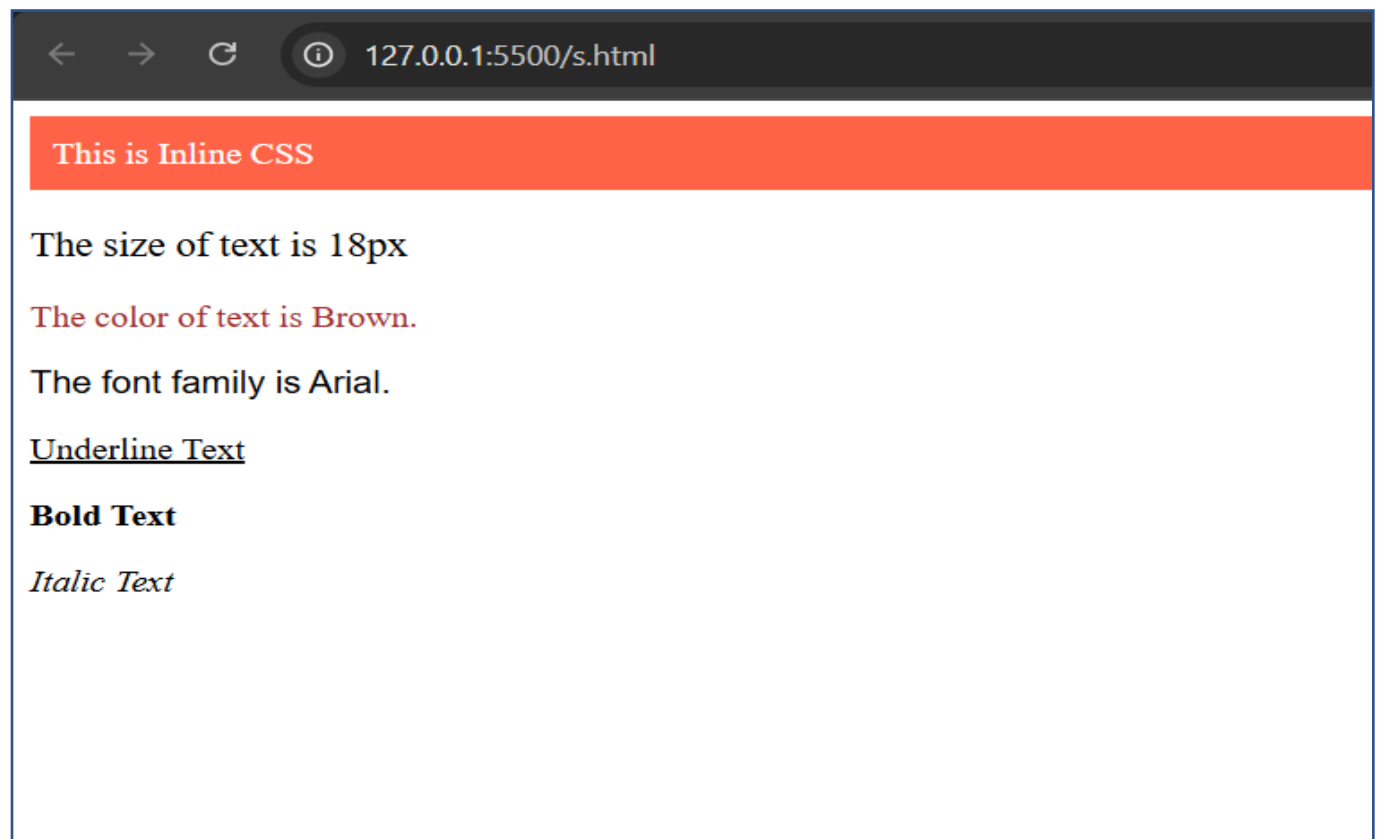
- Allows responsive design that makes the pages fit the varying screen sizes.
- A content (HTML) is isolated and designed, allowing easy maintenance of code.
- Enhances the visual presentation of content.
- Makes web pages attractive, readable, and user-friendly.

3. Methods of CSS

- There are three ways to add CSS in HTML, which are given below:
- a. Inline CSS: This method involves applying styles directly to individual HTML elements using the style attribute. An example is given below:

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Structure of HTML</title>
7 </head>
8 <body>
9   <p style="color: white; background-color: tomato; margin: 0; padding: 10px;">This is Inline CSS</p>
10  <p style="font-size: 18px;">The size of text is 18px</p>
11  <p style="color: brown;">The color of text is Brown.</p>
12  <p style="font-family: Arial, Helvetica, sans-serif;">The font family is Arial.</p>
13  <p style="text-decoration: underline;">Underline Text</p>
14  <p style="font-weight: bold;">Bold Text</p>
15  <p style="font-style: italic;">Italic Text</p>
16 </body>
17 </html>
```

```
8 <body>
9   <p style="color: white; background-color: tomato; margin: 0; padding: 10px;">This is Inline CSS</p>
10  <p style="font-size: 18px;">The size of text is 18px</p>
11  <p style="color: Brown;">The color of text is Brown.</p>
12  <p style="font-family: Arial, Helvetica, sans-serif;">The font family is Arial.</p>
13  <p style="text-decoration: underline;">Underline Text</p>
14  <p style="font-weight: bold;">Bold Text</p>
15  <p style="font-style: italic;">Italic Text</p>
16 </body>
17 </html>
```



- b. Internal CSS: Written in a `<style>` block inside the HTML `<head>`. Example is given below:

```

s.html > html > head > style > .footer
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Structure of HTML</title>
7      <style>
8          .title{
9              font-size: 18px;
10             background: tomato;
11             color: white;
12             padding: 10px;
13             margin: 0px;
14         }
15         .btn1{
16             background-color: aquamarine;
17             color: brown;
18             font-size: 16px;
19             border: none;
20             padding: 10px 20px;
21             cursor: pointer;
22         }
23         .btn1:hover{
24             background-color: lightcoral;
25             color: white;
26         }
27         .footer{
28             font-size: 25px;
29             color: gray;
30             margin-top: 20px;
31             font-weight: bold;
32         }
33     </style>

```

```

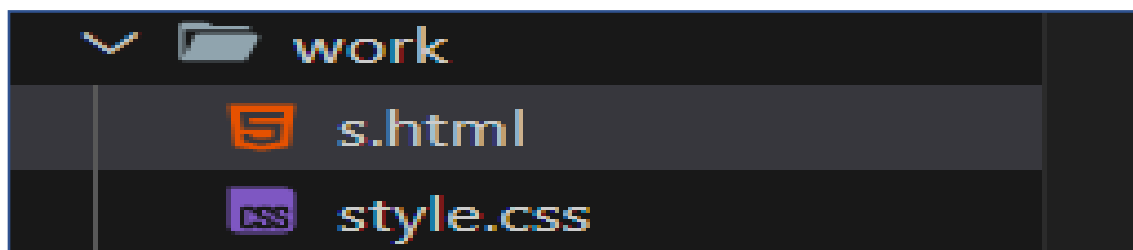
34 </head>
35 <body>
36     <p class="title">This is Internal CSS</p>
37     <br>
38     <button class="btn1">Click me</button>
39     <p class="footer">Thank You</p>
40 </body>
41 </html>

```



c. External CSS: Saved in a .css file and linked to the HTML.

```
<link rel="stylesheet" href="style.css">
```



```

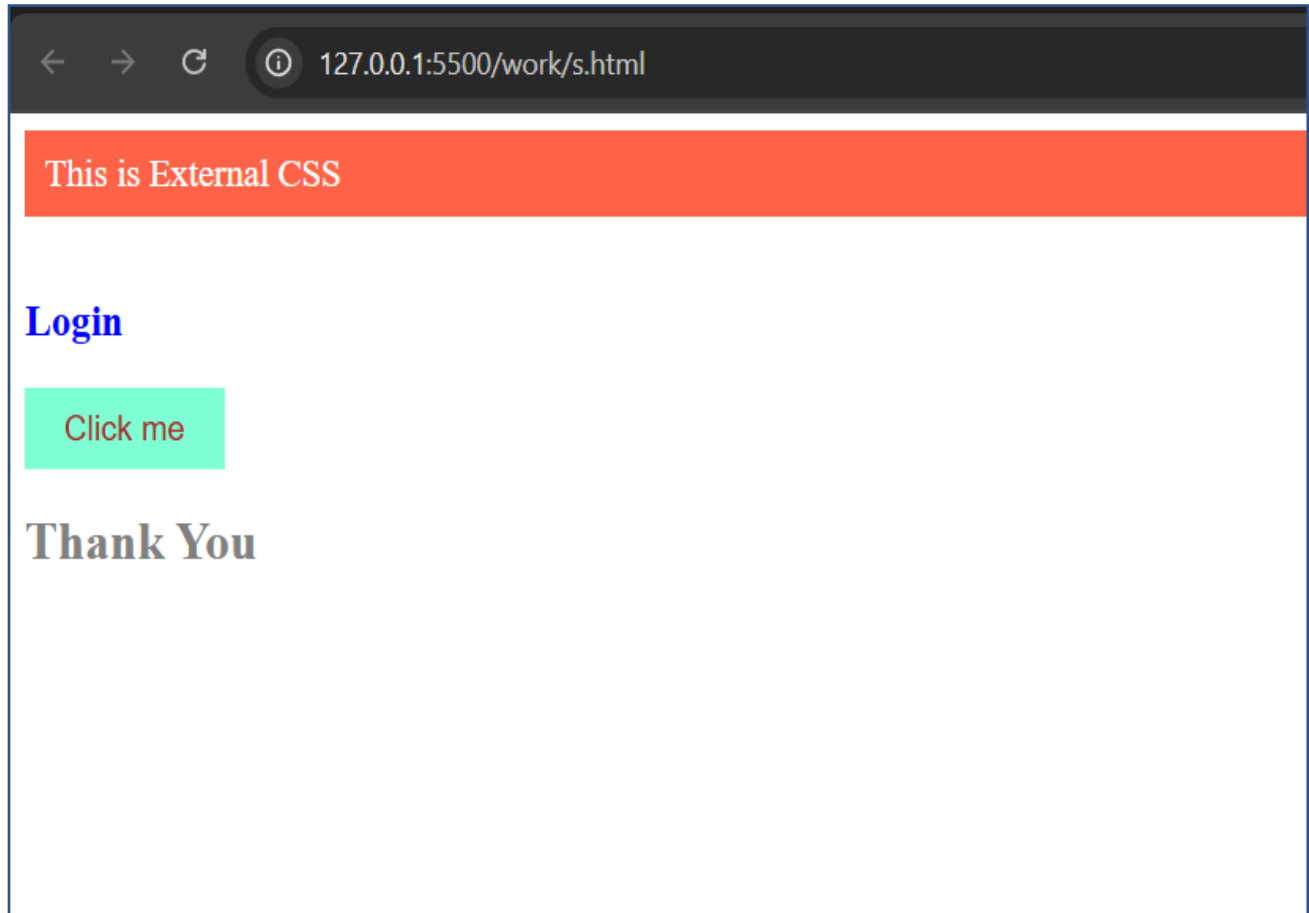
work > s.html > html > body
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4  |   <meta charset="UTF-8">
5  |   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6  |   <link rel="stylesheet" href="style.css">
7  |   <title>CSS</title>
8  </head>
9  <body>
10 |   <p class="title">This is External CSS</p>
11 |   <br>
12 |   <p class="para">Login</p>
13 |   <button class="btn1">Click me</button>
14 |   <p class="footer">Thank You</p>
15 </body>
16 </html>

```

```

work > style.css > .title
1  .title{
2  |   font-size: 18px;|
3  |   background: tomato;
4  |   color: white;
5  |   padding: 10px;
6  |   margin: 0px;
7  | }
8  .para{
9  |   font-size: 20px;
10 |   color: blue;
11 |   font-weight: bold;
12 | }
13 .btn1{
14 |   background-color: aquamarine;
15 |   color: brown;
16 |   font-size: 16px;
17 |   border: none;
18 |   padding: 10px 20px;
19 |   cursor: pointer;
20 | }
21 .btn1:hover{
22 |   background-color: lightcoral;
23 |   color: white;
24 | }
25 .footer{
26 |   font-size: 25px;
27 |   color: gray;
28 |   margin-top: 20px;
29 |   font-weight: bold;
30 | }

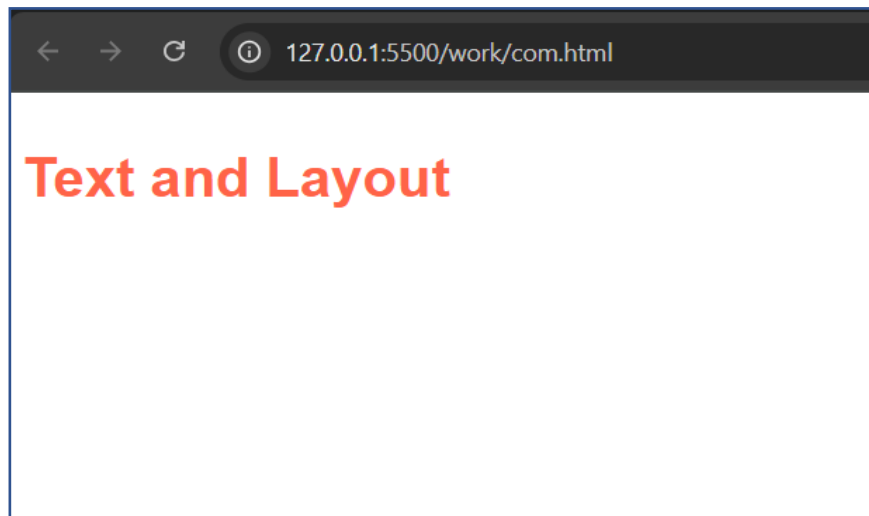
```



4. CSS Properties

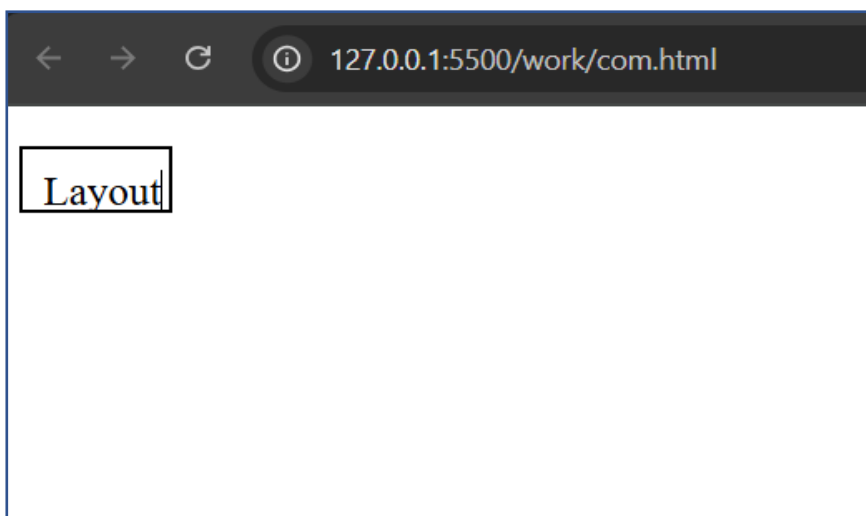
- Text and Fonts: color, font-family, font-size, text-align, font-weight. Example given below:

```
work > com.html > html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Document</title>
7      <style>
8          .text{
9              font-family: Arial, Helvetica, sans-serif;
10             font-size: 32px;
11             font-weight: bold;
12             color: tomato;
13             text-align: left;
14         }
15     </style>
16 </head>
17 <body>
18     <p class="text">Text and Layout</p>
19 </body>
20 </html>
```



- Layout: margin, padding, height, width, border. Example given below:

```
work > com.html > html > head > style > .layout
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>Document</title>
7    <style>
8      .layout{
9        font-size: 20px;
10       margin-right: 15px;
11       border: 2px solid black;
12       padding: 10px 10px;
13       width: 50px;
14       height: 10px;
15     }
16   </style>
17 </head>
18 <body>
19   <p class="layout">Layout</p>
20 </body>
21 </html>
```



5. Designing Portfolio

➤ Code Screenshot:

```
work > index.html > html > body > footer > p.footer-text
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <link rel="stylesheet" href="style.css">
7   <title>Portfolio</title>
8 </head>
9 <body>
10  <header>
11    <p class="title">Portfolio</p>
12    <nav>
13      <ul class="link">
14        <li><a href="">Home</a></li>
15        <li><a href="">Assignment</a></li>
16      </ul>
17    </nav>
18  </header>
19
20  
21
22  <main>
23    <p class="main-title">Hello, I'm a Developer</p>
24    <p class="info">I create beautiful, functional, and user-centered digital experiences. With a passion fo
25
26    <button class="view"><a href="">View My Work</a></button>
27  </main>
28
29  <footer>
30    <p class="footer-text">© 2025 Sijan Gupta. All rights reserved.</p>
31  </footer>
32
33 </body>
```

```
work > style.css > footer
1 *{
2   box-sizing: border-box;
3   margin: 0px 0px;
4   padding: 0px 0px;
5   font-family: Arial, Helvetica, sans-serif;
6 }
7
8 header{
9   background-color: #333;
10  display: flex;
11  align-items: center;
12  justify-content: space-between;
13 }
14 header .title{
15   font-size: 20px;
16   color: white;
17   font-weight: bold;
18   padding: 20px 20px;
19 }
20 .link{
21   list-style: none;
22 }
23 .link li{
24   display: inline-block;
25   margin: 0px 20px;
26 }
27 .link a{
28   color: white;
29   text-decoration: none;
30 }
31 .link a:hover{
32   opacity: 0.8;
```



```

34 .link a:active{
35     opacity: 0.6;
36 }
37
38 .profile-pic {
39     float: right;
40     width: 400px;
41     height: 400px;
42     margin: 60px 90px;
43     border-radius: 50%;
44     border: 10px solid black;
45 }
46 main {
47     text-align: left;
48     margin-left: 80px;
49     margin-top: 100px;
50     font-family: Arial, Helvetica, sans-serif;
51 }
52 .main-title {
53     font-size: 60px;
54     font-weight: bold;
55     width: 350px;
56     line-height: 60px;
57     color: grey;
58     margin-bottom: 22px;
59 }
60 .info{
61     font-size: 22px;
62     color: grey;
63     width: 480px;
64     line-height: 31px;
65     margin-bottom: 35px;

```

```

60 .info{
61     font-size: 22px;
62     color: grey;
63     width: 480px;
64     line-height: 31px;
65     margin-bottom: 35px;
66 }
67 .view{
68     border: none;
69     background-color: #0072ff;
70     color: white;
71     font-size: 16px;
72     padding: 10px 15px;
73     border-radius: 8px;
74     margin-left: 85px;
75     cursor: pointer;
76     transition: background-color 0.3s ease, color 0.3s ease;
77 }
78 .view a{
79     color: white;
80     text-decoration: none;
81 }
82 .view:hover{
83     background-color: #005bb5;
84 }
85 .view:active{
86     background-color: #003f80;
87     color: #e0e0e0;
88 }
89

```

```
89
90 footer{
91   position: fixed;
92   bottom: 0;
93   width: 100%;
94   background-color: #333;
95   color: white;
96   padding: 12px 20px;
97   text-align: center;
98   font-family: Verdana, Geneva, Tahoma, sans-serif;
99   font-size: 18px;
100 }
```

➤ Output Screenshot:

