

2.1 Apply Inline, Internal, and External CSS styles to HTML elements

The screenshot shows a code editor with two tabs: "Code Screenshot" and "Output Screenshot".

Code Screenshot:

```
<!DOCTYPE html>
<html>
<head>
    <title>CSS Examples</title>
    <!-- Internal CSS -->
    <link rel="stylesheet" href="data:text/css; charset=utf-8;" type="text/css" />
    <style>
        h1 {
            background: black;
            color: white;
            padding: 10px;
        }
        <!-- Internal CSS -->
        .internal {
            background: yellow;
            padding: 5px;
        }
    </style>
</head>
<body>
    <!-- Inline CSS -->
    <h1 style="color: red;">This is inline CSS</h1>
    <!-- Internal CSS -->
    <div>This is Internal CSS</div>
    <div class="internal">Internal CSS Div</div>
    <!-- External CSS -->
    <p class="external">This is External CSS</p>
</body>
</html>
```

Output Screenshot:

This is Inline CSS

This is Internal CSS

Internal CSS Div

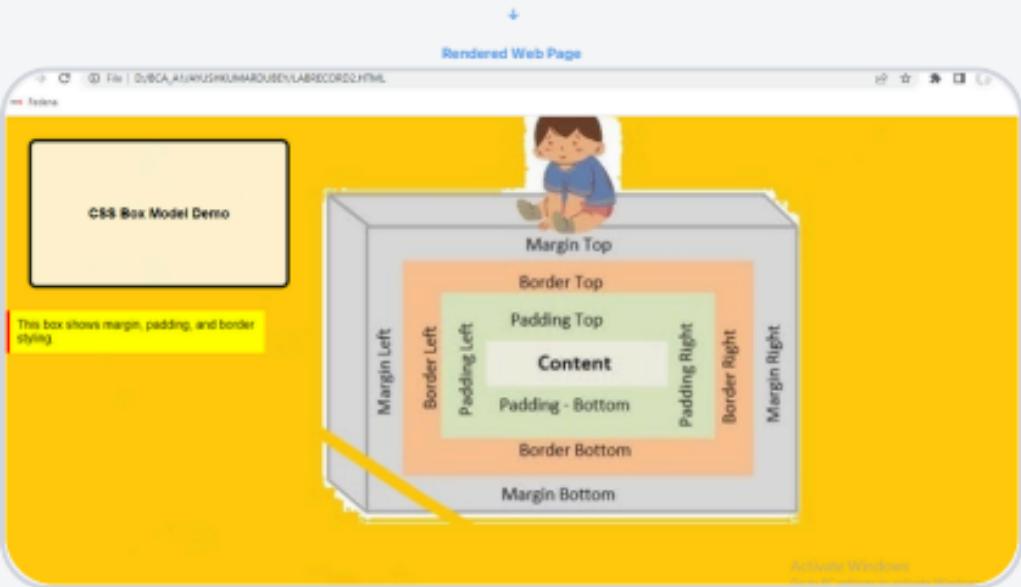
This is External CSS

2.2 Style a web page using advanced CSS: Box Model, background images, borders, margins, and padding

```
LABRECORD2.HTML
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>Advanced CSS Demo</title>
5   </head>
6   <body>
7     <p>Page background image: </p>
8     <div>
9       <h1>CSS Box Model Example</h1>
10      <div>
11        width: 100px;
12        height: 200px;
13        background: #f0f0f0;
14        border: 4px solid black;
15        border-radius: 10px;
16        <!-- Box Model Spacing -->
17        padding: 10px; <!-- Inside space -->
18        margin: 10px; <!-- Outside space -->
19        <!-- Center text -->
20        display: flex;
21        justify-content: center;
22        align-items: center;
23        font-size: 10px;
24        font-weight: bold;
25      </div>
26      <!-- Another element to show margin effect -->
27      <div>
28        background: yellow;
29        padding: 10px;
30      </div>
31    </div>
32  </body>
33 </html>
```

```
LABRECORD2.CSS
1 body {
2   background: #f0f0f0;
3   border: 1px solid black;
4   border-radius: 10px;
5   <!-- Box Model Spacing -->
6   padding: 10px; <!-- Inside space -->
7   margin: 10px; <!-- Outside space -->
8   <!-- Center text -->
9   display: flex;
10  justify-content: center;
11  align-items: center;
12  font-size: 10px;
13  font-weight: bold;
14 }
15 <!-- Another element to show margin effect -->
16 .note {
17   background: yellow;
18   padding: 10px;
19   border-left: 1px solid red;
20   margin-top: 10px;
21   width: 100px;
22 }
23 <!-- Another element to show margin effect -->
24 .note2 {
25   background: yellow;
26   padding: 10px;
27   border-left: 1px solid red;
28   margin-top: 10px;
29   width: 100px;
30 }
31 .center {
32   background: yellow;
33   padding: 10px;
34   border-left: 1px solid red;
35   margin-top: 10px;
36   width: 100px;
37 }
```

HTML + CSS



Demonstrates the CSS Box Model (Margin → Border → Padding → Content).

2.3 Demonstrate the use of different CSS selectors (class, id, descendant, group, universal)

```
LABRECORD1.HTML
```

```
<!DOCTYPE html>
<html>
<head>
<title>CSS Selectors Example</title>
<style>
/* 1. Universal Selector */
* {
    font-family: Arial;
    margin: 10px;
}

/* 2. Class Selector */
.box {
    background: #lightblue;
    padding: 10px;
    border: 1px solid #blue;
}

/* 3. ID Selector */
#box {
    background: #black;
    color: #white;
    padding: 10px;
}

/* 4. Group Selector */
#box, .box {
    color: #green;
    text-decoration: underline;
}

/* 5. Descendant Selector */
div p {
    background: #yellow;
    padding: 10px;
}
</style>
</head>
<body>
<div class="box">
    This uses Class Selector
</div>
<div id="box">
    This uses ID Selector
</div>


Group Selector Applied



Group Selector Applied


<p>This paragraph is inside a div -- Descendant Selector applied</p>
</body>
</html>
```

```
LABRECORD2.HTML
```

```
<!DOCTYPE html>
<html>
<head>
    padding: 30px;
    border: 2px solid #blue;
}
/* 1. ID Selector */
#box {
    background: #black;
    color: #white;
    padding: 10px;
}

/* 2. Class Selector */
#box, .box {
    color: #green;
    text-decoration: underline;
}

/* 3. Descendant Selector */
div {
    background: #yellow;
    padding: 10px;
}
</style>
</head>
<body>
<div class="box">
    This uses Class Selector
</div>
<div id="box">
    This uses ID Selector
</div>


Group Selector Applied



Group Selector Applied


<p>This paragraph is inside a div -- Descendant Selector applied</p>
</body>
</html>
```

HTML + CSS



Rendered Web Page

This uses Class Selector

This uses ID Selector

Group Selector Applied

Group Selector Applied

This paragraph is inside a div -- Descendant Selector applied

Activate Windows

Demonstrates how different CSS Selectors (Class, ID, Group, Universal, and Descendant) target elements and control styling efficiently.

2.4 Create a responsive web page using media queries and mobile-first design with flexible units

```
LABRECORDHTML.htm
<!DOCTYPE html> ...
<html>
<head>
<title>Responsive Web Page</title>
<style>
<!--
margin: 0;
padding: 0;
border-style: none;
-->
body {
    font-family: Arial, sans-serif;
    line-height: 1.5;
    padding: 1em;
    background-color: #f0f0f0;
}
header {
    background-color: #e0e0e0;
    color: #000000;
    padding: 1em 0;
}
nav ul {
    display: flex;
    justify-content: center;
    list-style: none;
}
nav li {
    margin: 0 1em;
}
nav a {
    color: #000000;
}
```

```
LABRECORDHTML.htm
<!DOCTYPE html> ...
<html>
<head>
    <meta name="viewport" content="width=device-width, initial-scale=1.0, maximum-scale=1.0, user-scalable=no" />
    <style>
        body {
            text-align: center;
            padding: 2em 0;
            background-color: #f0f0f0;
            color: #000000;
        }
        .nav li {
            font-size: 1.2em;
            margin-bottom: 1em;
        }
        .nav a {
            font-size: 1.2em;
        }
        .content {
            display: flex;
            justify-content: space-between;
            gap: 1em;
            flex-wrap: wrap;
            margin-top: 2em;
        }
        .content article {
            background-color: #fff0f0;
            padding: 1.5em;
            flex-basis: 400px;
            border-radius: 10px;
        }
    </style>

```

```
RESULTHTML.htm
<html>
<head>
    <meta name="viewport" content="width=device-width, initial-scale=1.0, maximum-scale=1.0, user-scalable=no" />
    <style>
        header {
            text-align: center;
            padding: 1em;
            background-color: #e0e0e0;
            color: #000000;
            margin-top: 2em;
        }
        @media (min-width: 300px) {
            header {
                font-size: 1em;
            }
            nav a {
                font-size: 0.8em;
            }
        }
        .content article {
            flex-basis: 400px;
        }
        @media (min-width: 600px) {
            header {
                padding: 2em 0;
            }
            nav a {
                font-size: 0.9em;
            }
            .nav li {
        }
```

```
LABRECORDHTML.htm
<!DOCTYPE html> ...
<html>
<head>
    <meta name="viewport" content="width=device-width, initial-scale=1.0, maximum-scale=1.0, user-scalable=no" />
    <style>
        body {
            text-align: center;
            padding: 2em 0;
            background-color: #f0f0f0;
            color: #000000;
        }
        .content {
            gap: 2em;
        }
        .content article {
            flex-basis: 300px;
        }
        @media (min-width: 600px) {
            header {
                padding: 2em 0;
            }
            .nav a {
                font-size: 0.9em;
            }
            .nav li {
                font-size: 1.2em;
            }
            .nav a {
                font-size: 1.2em;
            }
            .content {
                gap: 1em;
            }
            .content article {
                flex-basis: 400px;
            }
            .content article + article {
                margin-top: 1em;
            }
            .content article + article + article {
                margin-top: 1em;
            }
            .content article + article + article + article {
                margin-top: 1em;
            }
            .content article + article + article + article + article {
                margin-top: 1em;
            }
            .content article + article + article + article + article + article {
                margin-top: 1em;
            }
        }
    </style>

```

Demonstrates a responsive web page built using media queries and mobile-first design with flexible units.

2.4 Create a responsive web page using media queries and mobile-first design with flexible units

Desktop View (Responsive Layout)

The screenshot shows a desktop browser window with the title bar "File | D:\BCA_A\ARUNSHKUMAR\OOS\LABRECORD2.HTML". The main content area displays a website titled "Welcome To Our E Library". The navigation bar at the top includes "Home", "About", "Services", and "Contact". Below the title, a sub-headline says "we provide resource's for your study.". Three main content boxes are present: "Our Services" (describing services like PDF notes and handwritten notes), "Assurity" (stating "A GROUP OF MEMBERS CHECK THE RESOURCE BEFORE UPLOADING IT." with a Trustpilot rating of 4 stars), and "About Us" (stating "A Group Of Students Manage This Website"). A footer bar at the bottom contains "© All Rights Are Reserved!" and "Activate Windows".

Mobile View (Media Query Applied)

The screenshot shows a mobile browser window on a "Dimensions Samsung Galaxy S20 Ultra" device. The title bar shows "File | D:\BCA_A\ARUNSHKUMAR\OOS\LABRECORD2.HTML". The developer tools are open, showing the "Sources" tab with the file path "D:\BCA_A\ARUNSHKUMAR\OOS\LABRECORD2.HTML". The main content area of the browser shows the same "Welcome To Our E Library" website as the desktop view, but it is scaled down and optimized for mobile. The "Our Services" box is visible on the left, and the "Assurity" and "About Us" boxes are partially visible on the right. The footer bar at the bottom contains "© All Rights Are Reserved!" and "Activate Windows".

Demonstrates a responsive web page built using media queries and mobile-first design with flexible units.

2.5 Use div and span elements for layout and apply styling with CSS

```
HTML <x>
<html><head></head><body><div><span><strong><em><del><ins><br><hr><img alt="Image placeholder" style="width: 100%; height: 100%; object-fit: cover;"></div><div><h1>LIBRARY</h1><h2>Books</h2><ul><li>Book 1</li><li>Book 2</li><li>Book 3</li><li>Book 4</li><li>Book 5</li><li>Book 6</li><li>Book 7</li><li>Book 8</li><li>Book 9</li><li>Book 10</li></ul><hr><div><h3>Search</h3><input type="text" placeholder="Search books..."/><button type="button">Search
```

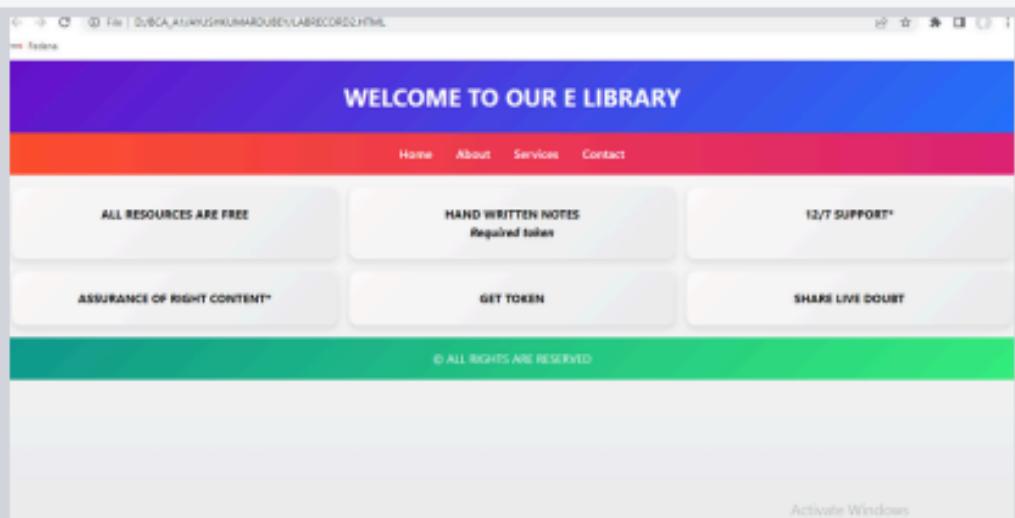
```
 1 //LABRICORCH.HTML //
 2 
 3 <html> <head> <body> <div> <div> <div> <div> <div> <div> <div>
 4   background: linear-gradient(15deg, #e1f5fe, #d9eaf7);
 5   height: 100vh;
 6   width: 100vw;
 7 }
 8 
 9 .main {
10   padding: 30px;
11 }
12 
13 .grid {
14   display: grid;
15   grid-template-columns: 1fr;
16   gap: 1em;
17 }
18 
19 .card {
20   background: linear-gradient(15deg, #e1f5fe, #d9eaf7);
21   padding: 1.5em;
22   border-radius: 15px;
23   box-shadow: 0 4px 10px rgba(0,0,0,0.1);
24   transition: transform 0.2s ease;
25 }
26 
27 .card:hover {
28   transform: translateY(-5px);
29   background: linear-gradient(15deg, #e1f5fe, #d9eaf7);
30   color: #fff;
31 }
32 
33 .center {
34   background: linear-gradient(15deg, #e1f5fe, #d9eaf7);
35   color: #fff;
36   text-align: center;
37   padding: 30px;
38 }
39 
40 .grid > div {width: 100%};
```

```
 ① LIBRARYCODE-HTML.R
 ② <LIBRARYCODE>LATIVE> <html> <body> <div>main> <div>header> <div>content> <div> footer>
 ③ <div> header </div>
 ④ <div> title="header">
 ⑤ <span>STRONG>WELCOME TO OUR E-LIBRARY</STRONG></span>
 ⑥ </div>
 ⑦ </div>
 ⑧ <div> main </div> -->
 ⑨ <div> class="nav">
 ⑩ <span> Home </span>
 ⑪ <span> About </span>
 ⑫ <span> Services </span>
 ⑬ <span> Contact </span>
 ⑭ </div>
 ⑮ </div>
 ⑯ <div> main </div> -->
 ⑰ <div> class="main">
 ⑱ <div> class="grid4">
 ⑲ <div> class="card"><span>STRONG>ALL RESOURCES ARE FREE</span></div>
 ⑳ <div> class="card"><span>STRONG>HAND WRITTEN NOTES</span></div>
 ㉑ <div> class="card"><span>STRONG>LETT SURVEY</span></div>
 ㉒ <div> class="card"><span>STRONG>ASSURANCE OF RECENT CONTENT</span></div>
 ㉓ <div> class="card"><span>STRONG>100% VOTED</span></div>
 ㉔ <div> class="card"><span>STRONG>SHRI LAL BUDH&#39;S</span></div>
 ㉕ </div>
 ㉖ </div>
 ㉗ <div> class="Footer">
 ㉘ <div> class="copyr> ALL RIGHTS ARE RESERVED</div>
 ㉙ </div>
 ㉚ </body>
 ㉛ </html>
```

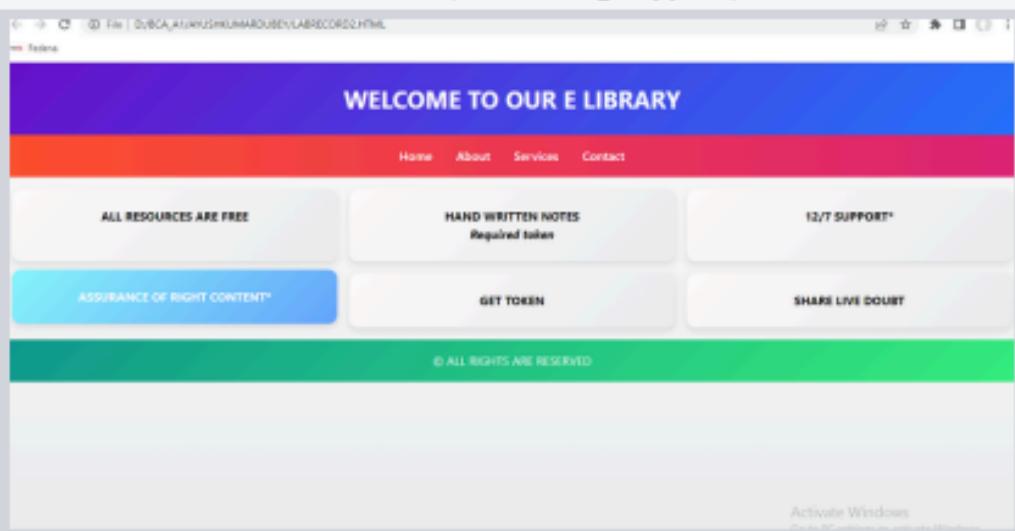
Demonstrates layout structuring using div and span elements with applied CSS styling, including hover-based color transitions."

2.5 Use div and span elements for layout and apply styling with CSS

Desktop View



Hover Effect (Color Change Applied)



Demonstrates layout structuring using div and span elements with applied CSS styling, including hover-based color transitions."