

Lahore Garrison

University

DHA Phase 6 Lahore

Lab Task 6



Student Name	Ateeb Qaiser
Student Roll No	Fa23/BSCS/279
Section	G
Subject	Web Technologies Lab
Instructor Name	Mr. M Yousaf

Lab 6: CSS Fundamentals & Box Model:

Lab Objectives

- Apply CSS rules to style a webpage.
- Understand and use the **CSS Box Model**.
- Use **selectors, positioning, and layout techniques**.
- Inspect and debug layout using **browser DevTools**.

Tools Required

- **VS Code** (with Live Server extension)
- **Browser DevTools** (Chrome, Firefox, etc.)
- A basic **HTML portfolio page** to style

Step 1: Style the Personal Portfolio

HTML File (index.html) – Basic Structure

CSS File (style.css) – Styling and Box Model

```
/* General Reset */
{
    box-sizing: border-box;
    margin: 0;
    padding: 0;
}

/* Body Styling */
body {
    font-family: Arial, sans-serif;
    background-color: #f4f4f4;
    color: #333;
    padding: 20px;
}

/* Header */
header {
    background-color: #007acc;
    color: white;
    padding: 20px;
    margin-bottom: 20px;
```

```
border-radius: 8px;  
}
```

```
/ Class and ID Selectors /
```

```
#main-title {  
    font-size: 2em;  
}
```

```
.tagline {  
    font-style: italic;  
}
```

```
/ Section Styling /
```

```
.about, .projects {  
    margin-bottom: 20px;  
    padding: 15px;  
    background-color: white;  
    border: 1px solid #ccc;  
    border-radius: 5px;  
}
```

```
/ Project Cards with Float /
```

```
.project-card {  
    float: left;  
    width: 45%;  
    margin: 2.5%;  
    padding: 10px;  
    background-color: #e0e0e0;  
    border: 1px solid #999;  
    border-radius: 5px;  
}
```

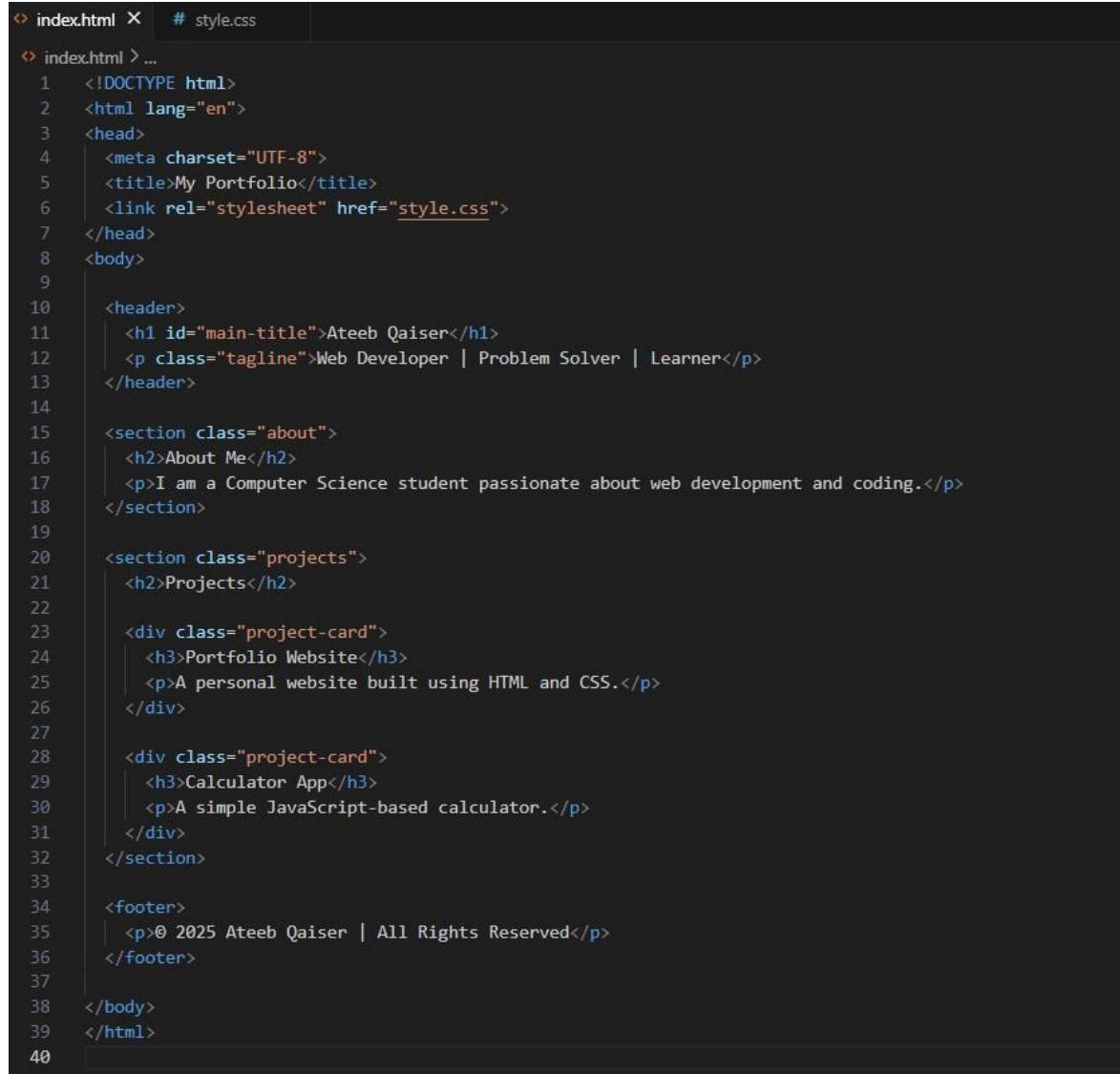
```
/ Clearfix /
```

```
.projects::after {  
    content: "";  
    display: table;  
    clear: both;  
}
```

```
/ Footer */
```

```
footer {  
    text-align: center;  
    padding: 10px;
```

```
background-color: #ddd;  
border-radius: 5px;  
}
```



The screenshot shows a code editor with two tabs: 'index.html' and '# style.css'. The 'index.html' tab is active, displaying the following HTML code:

```
<!DOCTYPE html>  
<html lang="en">  
  <head>  
    <meta charset="UTF-8">  
    <title>My Portfolio</title>  
    <link rel="stylesheet" href="style.css">  
  </head>  
  <body>  
  
    <header>  
      <h1 id="main-title">Ateeb Qaiser</h1>  
      <p class="tagline">Web Developer | Problem Solver | Learner</p>  
    </header>  
  
    <section class="about">  
      <h2>About Me</h2>  
      <p>I am a Computer Science student passionate about web development and coding.</p>  
    </section>  
  
    <section class="projects">  
      <h2>Projects</h2>  
  
      <div class="project-card">  
        <h3>Portfolio Website</h3>  
        <p>A personal website built using HTML and CSS.</p>  
      </div>  
  
      <div class="project-card">  
        <h3>Calculator App</h3>  
        <p>A simple JavaScript-based calculator.</p>  
      </div>  
    </section>  
  
    <footer>  
      <p>© 2025 Ateeb Qaiser | All Rights Reserved</p>  
    </footer>  
  </body>  
</html>
```

```
index.html # style.css X
# style.css > ...
1  /* General Reset */
2  * {
3    box-sizing: border-box;
4    margin: 0;
5    padding: 0;
6  }
7
8  /* Body Styling */
9  body {
10    font-family: Arial, sans-serif;
11    background-color: #f4f4f4;
12    color: #333;
13    padding: 20px;
14  }
15
16  /* Header */
17  header {
18    background-color: #007acc;
19    color: white;
20    padding: 20px;
21    margin-bottom: 20px;
22    border-radius: 8px;
23  }
24
25  /* Class and ID Selectors */
26  #main-title {
27    font-size: 2em;
28  }
29
30  .tagline {
31    font-style: italic;
32  }
33
34  /* Section Styling */
35  .about, .projects {
36    margin-bottom: 20px;
37    padding: 15px;
38    background-color: white;
39    border: 1px solid #ccc;
40    border-radius: 5px;
41 }
```

Ateeb Qaiser
Web Developer | Problem Solver | Learner

About Me
I am a Computer Science student passionate about web development and coding.

Projects

Portfolio Website
A personal website built using HTML and CSS.

Calculator App
A simple JavaScript-based calculator.

© 2025 Ateeb Qaiser | All Rights Reserved

◆ Step 2: Use Selectors and Layout Techniques

- **ID Selector:** #main-title
- **Class Selector:** .tagline, .project-card
- **Descendant Selector:** section .project-card
- **Float and Clear:** Used for .project-card and .projects::after
- **Modern Alternative:** You can replace float with **Flexbox** or **Grid** for responsive layouts.

Selector Type	Example in Code	Meaning / Use
ID Selector	#main-title	Styles an element with a unique ID
Class Selector	.tagline, .project-card	Styles multiple elements with the same class
Descendant Selector	section .project-card	Targets .project-card only inside a section
Float	.project-card { float: left; }	Makes elements align side-by-side
Clearfix	.projects::after	Clears floats to avoid layout breaks
Modern Option	Use Flexbox or Grid instead of float for responsive design	

Flexbox Alternative (Optional, Modern Layout)

```
.projects {  
  display: flex;  
  gap: 20px;  
  flex-wrap: wrap;  
}  
.project-card {  
  flex: 1 1 45%;  
}
```

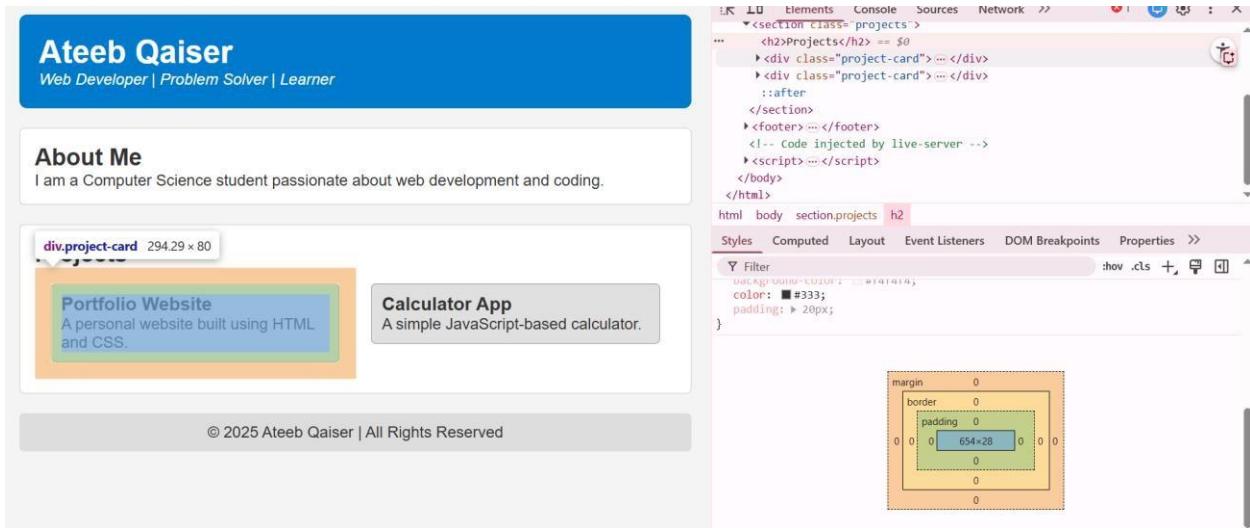
◆ Step 3: Use DevTools to Inspect Box Model

□ How to Inspect:

1. Open the page in a browser.
2. Right-click on any element (e.g., .project-card) and choose **Inspect**.
3. In the **Elements tab**, look at the **Box Model** section:
 - Check **margin**, **border**, **padding**, and **content**.

- Adjust styles live to fix layout issues.

Deliverable: Take screenshots of the DevTools showing the box model for at least one element.



Final Deliverables

- index.html – Portfolio page
- style.css – CSS file with styling and layout
- Screenshots of **DevTools** showing box model inspection

Would you like me to generate a downloadable ZIP file with these files or help convert the layout to Flexbox/Grid for modern responsiveness?

CONCLUSION:

This lab helped me learn how to create a well-structured HTML page using semantic tags and improve accessibility through proper headings, alt text, and links. I also understood the importance of validating HTML to ensure clean and error-free code.

RUBRICS:

Performance			Lab Report		
Description	Total Marks	Marks Obtained	Description	Total Marks	Marks Obtained
Ability to Conduct practical	5		Structure	5	
Data Analysis & Interpretation	5		Efficiency	5	
Total Marks obtained			Total Marks Obtained		

Instructor Signature _____