Project Report

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1. Introduction

This report outlines the projects I undertook during my internship with the Microsoft Learn Student Ambassadors (MLSA). The projects aimed to enhance my web development skills by creating a personal webpage and a simple calculator using fundamental web technologies such as HTML, CSS, and JavaScript.

2. Project 1: Personal Webpage

Introduction

The objective of this project was to create a personal webpage that showcases my profile, including a photo, a brief introduction, and links to my social media accounts. This project aimed to provide a platform for online visibility and networking.

Objectives

- Develop a responsive webpage that displays personal information.

- Include a professional photo and links to various social media platforms.

- Ensure the webpage is visually appealing and user-friendly.

Technologies Used

- **HTML**: For structuring the webpage content.

- **CSS**: For styling and layout.

- **JavaScript**: For any interactive elements, though primarily static in this project.

Project Description

The personal webpage features a clean layout with a prominent profile photo, a heading, and a brief bio detailing my academic journey and interests. The social media links are prominently displayed, allowing visitors to connect easily. The design emphasizes readability and ease of navigation, utilizing basic CSS for aesthetics.

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>My Personal Web Page</title>
</head>
<body>

    <div>
      <img src="img.jpg" alt="Profile Picture" width="320
" height="350">

      <h1>Siddharth Gautam</h1>
      <p>Hello! I'm Siddharth Gautam, currently pursuing my B.Tech in Computer Science and Engineering from KIET Group of Institutions,
          where I'm in my second year. I have a strong interest in machine learning and am proficient in Python, Java, and C.
          I'm always eager to learn new skills and am dedicated to maintaining a disciplined approach in everything I do..
          I love working on projects that bring together creativity and technology. Let's connect!</p>

      <p>Connect with me:</p>
      <ul>
        <li><a href="https://facebook.com/yourusername" target="_blank">Facebook</a></li>
        <li><a href="https://x.com/SiddharthG58894" target="_blank">Twitter</a></li>
        <li><a href="https://www.linkedin.com/in/siddharth-gautam-9249b3284/" target="_blank">LinkedIn</a></li>
        <li><a href="https://www.instagram.com/s._.iddharth/" target="_blank">Instagram</a></li>
      </ul>
    </div>

</body>
</html>
```

Results

The project successfully showcased my profile in an aesthetically pleasing manner. Feedback from peers indicated that the layout was effective and user-friendly. The project enhanced my understanding of basic web development principles and practices.

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3. Project 2: Simple Calculator

Introduction

The goal of this project was to create a simple web-based calculator that allows users to perform basic arithmetic operations. This project aimed to reinforce my knowledge of JavaScript and its application in developing interactive web applications.

Objectives

- Develop a functional calculator using HTML, CSS, and JavaScript.

- Ensure the calculator performs basic operations (addition, subtraction, multiplication, division).

- Provide a responsive and intuitive user interface.

Technologies Used

- **HTML**: For the structure of the calculator.

- **CSS**: For styling the calculator interface.

- **JavaScript**: For implementing the calculator logic and interactivity.

Project Description

The calculator features a straightforward interface with buttons for each digit and operation. Users can click on the buttons to input numbers and operations, with results displayed dynamically. The use of JavaScript allows for real-time calculations as users interact with the calculator.

```
89      <div class="calculator-container">
90        <h1>Simple Calculator</h1>
91        <div class="calculator">
92          <input type="text" id="display" disabled />
93          <div class="buttons">
94            <button onclick="clearDisplay()">C</button>
95            <button onclick="deleteLast()">DEL</button>
96            <button onclick="appendCharacter('/')">/</button>
97            <button onclick="appendCharacter('*')">*</button>
98
99            <button onclick="appendCharacter('7')">7</button>
100           <button onclick="appendCharacter('8')">8</button>
101           <button onclick="appendCharacter('9')">9</button>
102           <button onclick="appendCharacter('-')">-</button>
103
104           <button onclick="appendCharacter('4')">4</button>
105           <button onclick="appendCharacter('5')">5</button>
106           <button onclick="appendCharacter('6')">6</button>
107           <button onclick="appendCharacter('+')">+</button>
108
109           <button onclick="appendCharacter('1')">1</button>
110           <button onclick="appendCharacter('2')">2</button>
111           <button onclick="appendCharacter('3')">3</button>
112           <button class="equal-button" onclick="calculateResult()">=</button>
113
114           <button onclick="appendCharacter('0')">0</button>
115           <button onclick="appendCharacter('.')">.</button>
116         </div>
117       </div>
118     </div>
119     <script>
```

Results

The calculator functioned as intended, allowing users to perform basic arithmetic calculations. This project provided practical experience in JavaScript programming, improving my ability to manipulate the Document Object Model (DOM) and handle user input effectively.

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4. Conclusion

These projects during my internship with MLSA have significantly enhanced my web development skills. Creating a personal webpage helped me understand the importance of online presence and personal branding, while the calculator project reinforced my knowledge of JavaScript and its applications. Both projects demonstrated my ability to combine creativity with technical skills and laid a strong foundation for future web development endeavours.