

MINI PROJECT REPORT: CALCULATOR

1. Title Page :-

- **Title** : Calculator
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2. Table of Contents :-

1. Introduction
 2. Objectives
 3. Tools & Technologies Used
 4. Methodology
 1. User Requirements
 2. System Architecture
 5. Features of the Application
 6. Screenshots
 7. Testing
 8. Conclusion
 9. Future Scope
 10. References
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3. Introduction :-

This mini project aims to create a simple and functional Calculator web application. The goal of the project is to help users perform basic arithmetic operations effectively by providing a user-friendly interface.

4. Objectives :-

- Develop a user-friendly interface for performing arithmetic calculations.
 - Enable users to perform operations such as addition, subtraction, multiplication, and division.
 - Ensure responsive design for usability across devices.
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5. Tools & Technologies Used :-

- **Language** : HTML, CSS, JavaScript
 - **Framework** : None (Pure Frontend)
 - **Database** : None (No data persistence required)
 - **Others** : None
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6. Methodology :-

User Requirements:

1. A user should be able to perform basic arithmetic operations.
2. The calculator should display the input and results clearly.
3. Users should be able to clear the display and delete the last entry.

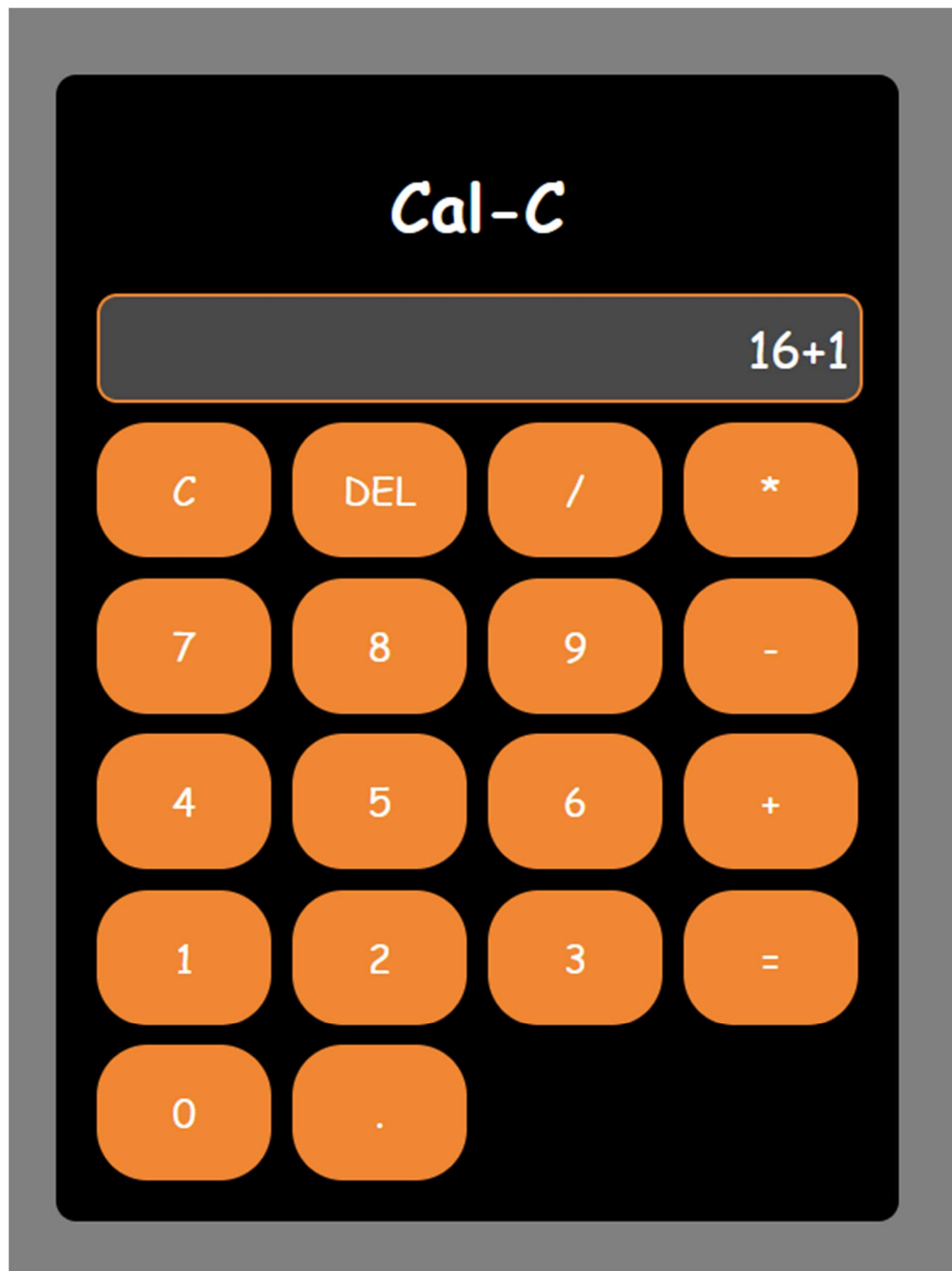
System Architecture:

- **Frontend**: HTML/CSS for structure and style, JavaScript for functionality.
 - **Backend**: None, as calculations are performed on the client side.
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7. Features of the Application

- **Addition**: Users can add two or more numbers.
 - **Subtraction**: Users can subtract one number from another.
 - **Multiplication**: Users can multiply two or more numbers.
 - **Division**: Users can divide one number by another.
 - **Clear Display**: Users can clear the entire display.
 - **Delete Entry**: Users can delete the last entered character.
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8. Screenshots :-



9. Testing :-

The application was tested across different browsers (Chrome, Firefox, Brave) and devices (desktop). It performed smoothly, and the calculations were accurate.

10. Conclusion :-

The Calculator project helped in understanding the basic concepts of web development, including HTML for structure, CSS for styling, and JavaScript for functionality. It demonstrated how front-end technologies can be used to build interactive applications.

11. Future Scope :-

- Add functionality for advanced mathematical operations (e.g., square root, exponentiation).
 - Implement a history feature to track previous calculations.
 - Improve the user interface with more themes and better accessibility.
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13. References :-

- **Mozilla Developer Network (MDN):** An excellent resource for advanced JavaScript techniques and comprehensive web development documentation.
- **Stack Overflow:** The goto community for HTML, CSS, and JavaScript questions, offering practical solutions and shared developer experiences.