



Modern PHP Calculator Project

A Simple Yet Efficient Web-Based Calculator

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Introduction

- • Overview of the project
- • Purpose: To create a modern, user-friendly calculator using PHP
- • Features: Basic arithmetic operations, user interface, and responsive design



Technology Stack

- Front-End: HTML, CSS, JavaScript
- Back-End: PHP
- Database (if applicable): MySQL (for history/logging operations)
- Frameworks: Bootstrap (for UI styling)



Features of the Calculator

- • Basic arithmetic operations: Addition, subtraction, multiplication, division
- • Responsive design for mobile and desktop use
- • User-friendly interface with buttons and display
- • Error handling for invalid inputs



Project Structure

- index.php (Main interface for the calculator)
- style.css (Styling and design)
- script.js (JavaScript for front-end interactions)
- calculate.php (Handles backend calculations)



User Interface

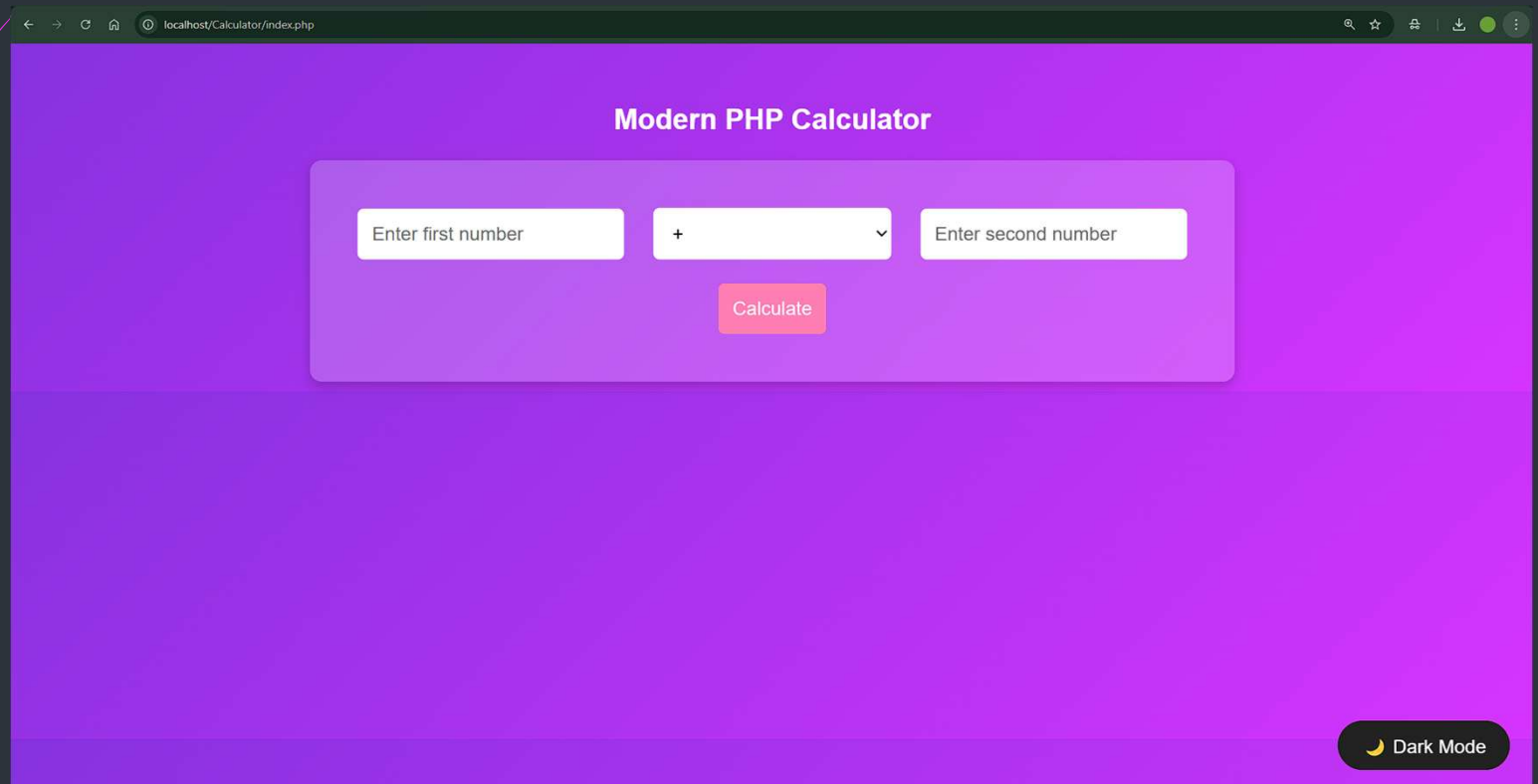
- Screenshot of the calculator
- Explanation of the layout and buttons

Code Snippet (PHP Calculation Logic)

```
➤ if (isset($_POST['calculate'])) {  
➤     $num1 = $_POST['num1'];  
➤     $num2 = $_POST['num2'];  
➤     $operator = $_POST['operator'];  
➤  
➤     switch ($operator) {  
➤         case '+': $result = $num1 + $num2; break;  
➤         case '-': $result = $num1 - $num2; break;  
➤         case '*': $result = $num1 * $num2; break;  
➤         case '/': $result = $num2 != 0 ? $num1 / $num2 : 'Error'; break;  
➤         default: $result = 'Invalid Operator';  
➤     }  
➤     echo "Result: $result";  
➤ }
```

Demo & Working

- ▶ • Live demonstration of the calculator
- ▶ • Step-by-step usage explanation



The screenshot shows a web browser window with the address bar displaying 'localhost/Calculator/index.php'. The page has a dark blue background with a light blue gradient. At the top center, the text 'Modern PHP Calculator' is displayed in a bold, sans-serif font. Below this, there is a light blue rounded rectangle containing the calculator interface. The interface consists of three input fields: 'Enter first number', a dropdown menu with a '+' sign and a downward arrow, and 'Enter second number'. Below these fields is a red button with the text 'Calculate'. In the bottom right corner of the page, there is a dark blue button with a moon icon and the text 'Dark Mode'.



Challenges & Solutions

- Challenge: Handling division by zero → Solution: Added error handling
- Challenge: Maintaining responsiveness → Solution: Used Bootstrap for flexible layout



Future Enhancements

- • Adding scientific calculator functions (sin, cos, tan, log)
- • Storing calculation history in a database
- • Improving UI with animations and themes



Conclusion & Q&A

- • Summary of the project
- • Open floor for questions