

Project Title:

Web Calculator with Currency Conversion

Introduction:

As a small business owner, I frequently need a reliable tool for both everyday and advanced calculations, along with the ability to convert currencies for international transactions and planning. I am seeking a web-based calculator application that is accurate, user-friendly, and ready for real-world business use.

Requirements:

- The calculator must support basic mathematical operations, including addition, subtraction, multiplication, and division.
- It should also provide advanced mathematical functions such as square root, exponentiation, percentages, sine, cosine, and tangent.
- The application must offer unit conversion features, enabling conversions between common units (for example, kilometers and miles, kilograms and pounds). This functionality can rely on built-in formulas and does not require external APIs.
- A currency calculator function is required, allowing for conversion between different currencies using real-time or recent exchange rates. This will require integration with an external API to ensure exchange rates are current and accurate.
- Users should be able to view or recall a history of recent calculations within the application.
- The web interface should be clean, intuitive, and accessible, supporting both keyboard and mouse input for convenience.

Additional Expectations:

- The calculator should operate reliably in all modern web browsers without the need for special plugins.
- The application must handle invalid input gracefully, such as division by zero, incomplete expressions, or invalid currency codes.

- All features must be thoroughly tested, and documentation should be provided to demonstrate the solution's reliability.

Conclusion:

I am looking for a scalable, professional solution that is easy to use, robustly tested, and ready for immediate deployment. Accuracy, reliability, and clear documentation are my highest priorities. If anything within these requirements is unclear, please reach out for clarification during the design or development process.

Thank you for your attention to these requirements and for delivering a high-quality web calculator with currency conversion capabilities suited to my daily business needs.