

GUI CALCULATOR

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Project Overview

- This is a **graphical calculator** built using **Tkinter**, Python's GUI toolkit.
- It supports **basic arithmetic operations** (+, -, *, /) with a responsive design.
- Designed with a **sleek black theme** to enhance user experience.
- Error handling ensures **smooth functionality** without crashes.
- The interface is **intuitive**, making it accessible for all users.

Key Features & Uniqueness

- ✓ **Modern & Minimalist UI:** A clean black theme with stylish buttons.
- ✓ **Dynamic Button Generation:** Ensures flexibility and compact design.
- ✓ **Error Handling:** Prevents application crashes due to invalid inputs.
- ✓ **Fixed Window Size:** Maintains a consistent layout for better usability.
- ✓ **Efficient Performance:** Optimized for speed and reliability.

Challenges & Learning Experience

Challenges Faced:

- Ensuring **real-time updates** in the display without lag.
- Managing **Tkinter layout constraints** while keeping the UI attractive.
- Handling **invalid inputs and exceptions gracefully**.

Lessons Learned:

- Enhanced problem-solving and **debugging skills**.
- Improved understanding of **event-driven programming in Tkinter**.
- Gained knowledge in **UI/UX design principles** for a better user experience.

- This project was a great learning experience, and I look forward to further improvements.

THANK YOU