Calculator Using GUI

For NextHike Solutions

INTRODUCTION OF   CALCULATOR

- Calculator are electronic devices used to perform mathematical calculations, ranging from basic to arithematic to complex scientific computations.

- There are basic calculators, scientific calculator, graphing calculator,and financial calculator.   .

Features of Calculator.

▶ Basic calculators can do only addition, subtraction, multiplication and division
mathematical calculation.

▶ However, more sophisticated calculators can handle exponential operations, square, square root and more complex calculations.

▶ With a calculator, we can solve problems in seconds that would take hours to complete manually.

▶ Calculator Provides accurate results every time, eliminating the margin of human errors.

Used Libraties - Tkinter

- The Tkinter module provides all the basic functionality for creating graphical user interface.

- Tkinter is the first option for a lot of learners and developers because it is quick and convenient to use.

- Tkinter is a python library that can be used to construct basic graphical user interface (GUI) application.

- In python, it is most widely used module for GUI applications.

Why Tkinter is more better ?

▶ **Tkinter is a solid choice for building a calculator because it's user-friendly, especially for beginners.**

▶ **It comes standard with python, so you don't need to install anything extra.**

▶ **It allows to create a simple, functional interface with buttons, a display, and the logic behind the calculations without a lot of complex code.**

What was challenges I have faced ?

- The main challenges in making a calculator include input parsing, handling different data types(integers, floating points), and ensuring the correct order of operations.

- Specifically parsing user input to understand the mathematical expression, managing the display, and implementing functions for various operations are key areas requiring careful design and coding.

- Needs to gracefully handle invalid input, such as division by zero or trying to calculate something with non-numeric value.

Thank you.