Calculator In Java

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Introduction

My simple calculator is an application for use on computers, phones, and laptops. It is inexpensive and is easy to code and produce for many users. It is for people to do quick calculations at their comfort. It performs basic operation of arithmetic.

Project Purpose

The main purpose is to develop a simple calculator using java that does the following.

- It does arithmetic operation.

- The operations it performs is
    1. Addition '+'
    2. Subtraction '-'
    3. Multiplication '*'
    4. Division '/ '
    5. Clearing the content of the display 'Clear'
    6. Changes a number +/-
    7. It has off button to close calculator app

Project Preliminary Design (interface)

I in stalled Java and the Netbeans IDE. I choose java for this app because it is a multiplatform langue. It has a virtual machine so it can cross over to many different machines. So, by using java the app is versatile.

First, the interface is created by the swing library and its jfame tool. There will be a display (text box), and buttons for 0-9. In addition, a clear button, off button, equal button, and a button that inserts a decimal point. Finally, there is a equals button that performs calculations and has them displayed.

Project Preliminary Design

- There will be a function that will take in a string and be used in other button functions to display the char ('1', '2', ...) on screen.

- There will also be an operation function that will determine the operation

- The switch will do appropriate operations on the variables (doubles) num1, num2 and then store the value in result and display it on the screen of calculator.

Project Flow Chart
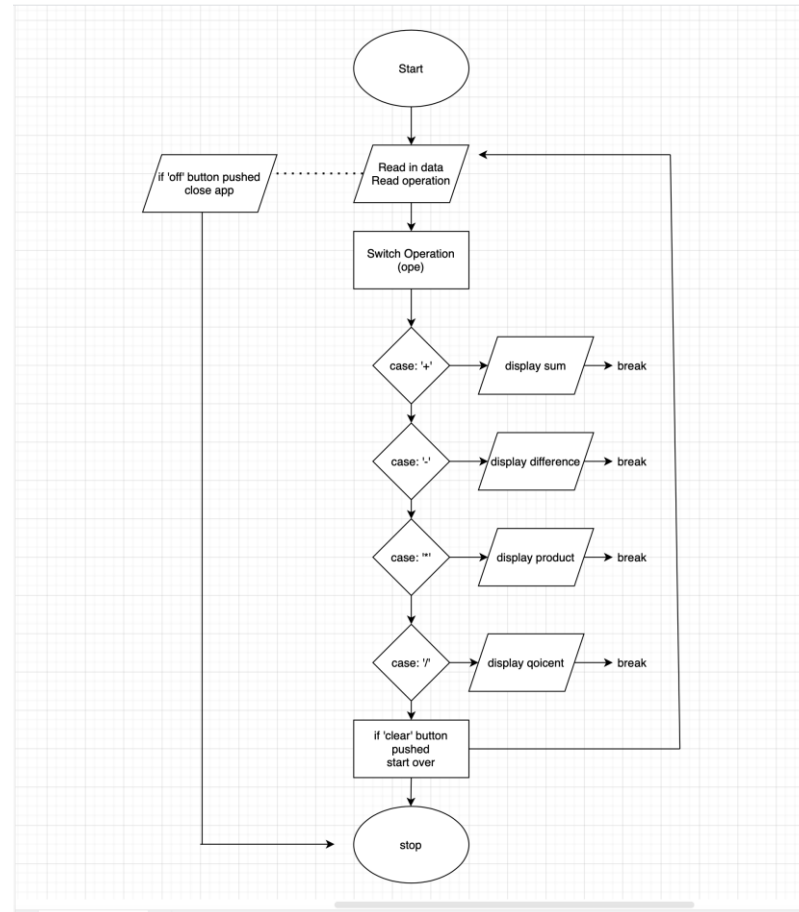
Project Flow Chart (explained)

- Step 1: program starts
- Step 2: program waits for data
- Step 3: program either gets data or exit program with 'off' button.
- Step 4: program uses event listeners to display data entered.
- Step 5: data entered is assigned to num1 a double type variable.
- Step 6: num2 is assigned value in the ope function
- Step 7: Operation is determined by switch. It calculates the value 'result' and displayed on screen.
- Step 8: if the 'Clear' button is pushed then user continues with another calculation, or they pushes 'off' button and exits app.