Java OO Concepts Unit

Lesson 01: Lab 03 Simple Calculator

Coding Bootcamp

SOFTWARE GUILD

Lab 03 Simple Calculator

Objective:

The objective of this lab is to practice designing and implementing programs that have more than one class.

Requirements:

- Design a class (no main method) that performs basic math operations (addition, subtraction, multiplication, division) on 2 operands.

- Create a JUnit test and test all methods in this class.

- Create another class that presents a simple console calculator UI to the user. This second class should handle all user input and console output and must use the first class to perform all of the math operations.

    - The UI should give the user a choice of operations — one of the choices should be to exit the program.

    - After the user selects an operation, the UI should ask the user for 2 operands and then display the result of the calculation.

    - The UI should then display the menu of choices again.

    - When the user chooses to exit the program, the UI should print a thank you message.

Before coding, you must create a flowchart and class diagram (in Dia) for your program.

Please show the diagrams to the instructor before coding.