# **LAB211 Assignment**

Type: Short Assignment

Code: J1.S.P0074

LOC: 100 Slot(s): 2

#### Title

Write a calculator program (from DCPS's project)

## **Background**

NA

# **Program Specifications**

Write a calculator program have functions: addition, subtraction, multiplication functions for matrix.

#### **Function details:**

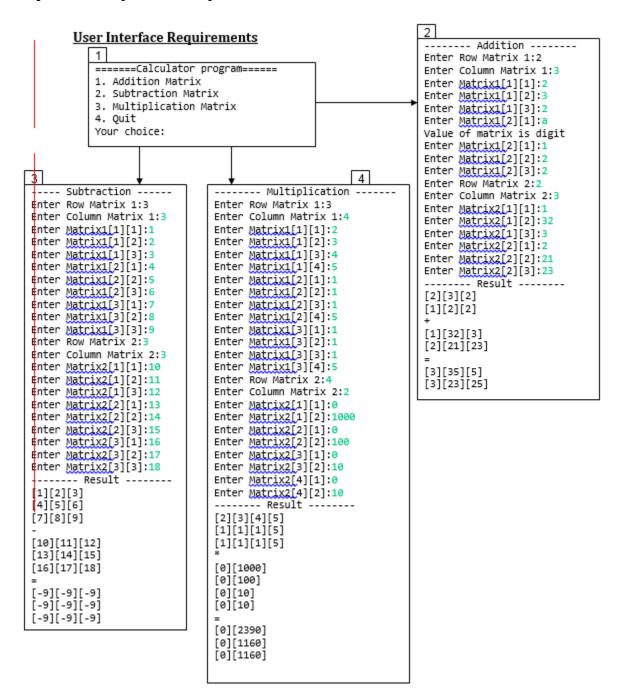
**Function 1:** Display a menu and ask users to select an option.

- Users run the program. The program prompts users to select an option.
- Users select an option, perform **Function 2**.

Function 2: Perform function based on the selected option.

- o Prompt users input number of row, number of column of 2 matrixes.
- Prompt users input values of matrixes must be the number. If users input values that are not a number, display notification on the screen: "Values of matrix must be the number".
- Option 1: Addition matrixes
  - Display result.
- Option 2: Subtraction matrixes
  - o Display result.
- Option 3: Multiplication matrixes
  - Display result.
- Option 4: Exit program.

# Expectation of User interface:



### **Guidelines**

Students need to create a Matrix class with row and column attributes and an array of m rows and n columns

#### Student must implement methods

additionMatrix subtractionMatrix multiplicationMatrix

in startup code.

#### Function 1: Addition matrixes

o Implement function: public Matrix additionMatrix (Matrix matrix2)

- Input:
  - matrix2: The second matrix.
- Return values: The result is a Matrix.

## Function 2: Subtraction matrixes

- o Implement function: public Matrix subtractionMatrix (Matrix matrix2)
  - Input:
    - > matrix2: The second matrix.
  - Return values: The result is a Matrix.

#### **Function 3:** Multiplication Matrixes

- o Implement function: public Matrix multiplicationMatrix((Matrix matrix2)
  - Input:
    - > matrix2: The second matrix.
  - Return values: The result is a Matrix.