CMPS 11 - Assignment 5

Submission deadline: March 16th, 2018 at 11:59 pm

Submission Instructions:

There is no Stepik submission for this assignment. You must submit only your Java source code files encapsulated in a zip file on Canvas. Source code files have an extension of .java and you must name them the same as what specified in each question. Do not submit .class files. The zip file must contain all of the source code files required to compile and execute the program. None of the files may include a package declaration.

If you are not sure what to submit and how to submit, please ask us in the labs, office hours, and lecture as well as on Piazza.

Calculator.java (50 points)

Write a program that simulates a very simple, but unconventional, calculator. The application's GUI should include two text fields F1 and F2 for numerical input and a label for output. So, to compute 23 + 56, a user enters 23 into F1 and 56 into F2. There should be four buttons labeled +, −, * , and /. When button B is pressed, the operation (F1) B (F2) is computed and the result displayed on the label. If a button is pressed and a field F1 or F2 is empty then the program should display an error message.

Include a button that copies the result of the computation to F1 and another that copies the result to F2. These buttons facilitate subsequent computation using the result of the previous computation.

A Quit button ends the program.

Listener.java (50 points)

Write an application with a GUI that displays a button labeled reverse and two text fields. The first text field accepts a string, and the second displays the string in reverse. The reverse string should be displayed either when the cursor is in the first text field and the Enter key is pressed, or when the reverse button is clicked. That is, your listener must handle events generated by either the text field or the button.

Bonus (5 points)

We will give extra 5% to **exceptionally** well-designed UIs.