Lab worksheet 7: GUI and EventDriven Programming

Instructions

1. Create a folder and name it using your student number in the format **“CT_2021_XXX”.**
2. Create a Java project in IntelliJ inside your folder and name it using the Lab worksheet number in the format **“LW_XX”.**
3. Create separate Packages for each question and name them with their question number in the format **“Q_XX”.**
4. Create a Word document and name it using your student number and the lab worksheet number in the format **“CT_2021_XXX_LW_XX”**.
5. Add a screenshot of your outputs for each question in the Word document, along with the codes for each question.
6. Create a repository in your GitHub and name it using your student number, and upload your project files and the Word document.

Questions

1. Write a Java program that inputs three integers and outputs their sum. Use the JOptionPane class for both input and output routines.

2. Write a Java program, define a subclass of JFrame, and name it MyFrame. Set the subclass so its instances will be 400 pixels wide and 450 pixels high and will have a blue background. The program terminates when the Close box is clicked.

3. Write a Java program, define a JFrame subclass with one pushbutton. When a button is clicked, display the message You clicked! using JOptionPane. Closing the frame window terminates the program.

4. Write a Java program, define a JFrame subclass with one pushbutton and one text field. When a button is clicked, change the title of the frame window to the text in the text field. Closing the frame window terminates the program.

5. Write a Java program, define a JFrame subclass that has one pushbutton. Initially, the background color is Green and the button’s text is OFF. When the button is clicked, the background of the frame changes to Red, and the text of the button changes to ON. If the button is clicked again, the frame returns to the initial state (OFF button text and Green background color). Closing the frame window terminates the program.