

JAC444 Workshop 10: JDBC and GUI Programming

Due on: August 2, 2014 23:59

Value: 2% of final mark

Point: 10

Late Penalty: 10% per day up to 7 days. A one-week delay will result in 0 mark.

PROBLEM DESCRIPTION

You are asked to use Java Swing classes to build a GUI such that a user may request **five operations/commands**. The GUI has a button group of two radio buttons to **connect**¹ and **disconnect**² remote database access. It provides the user with three text fields for adding or deleting the address value, the x-coordinate and y-coordinate of a location. If the user has entered non-numeric values as x-coordinate and y-coordinate, the GUI must catch an exception and display an error message in a message dialog box. It also uses three buttons to perform three operations, namely **add**³, **delete**⁴ and **createReport**⁵. Finally it has a scrollable text area to display all the locations retrieved from a remote database.

You are given the freedom to design the layout of the GUI. The design should be user-friendly (in terms of ease of use) and elegant (in terms of symmetry and colors) if you want to receive grade A or A+.

Coding Requirements

1. Your code should include both named inner classes and anonymous inner classes.
2. Your JDBC code is not allowed to appear in GUI class; put them in a separate class.
3. You should use `System.out.println()` in your event handlers to demonstrate that your event handling logic is correct.

Submission Requirements for this Workshop

1. Use default packages.
2. Your workshop should be submitted as three JAR files.

The first JAR file is named as "ws10-source.jar."

It consists of the Java source files and the ReadMe.txt file for the workshop.

- a) All the Java source files must be documented with brief comments.
- b) In the ReadMe.txt file, you must list all the commands that should be used to compile, package and run your GUI-JDBC application.

(Warning: If I encounter errors in running your application, you will lose 20% immediately.)

The second JAR file is named as "ws10-GUI-JDBC.jar."

It consists of all the class files that must be used to run the GUI-JDBC program.

3. How to submit:

Compress all jar files into a ZIP or 7z file and submit the compressed file onto the Blackboard (where the workshop is posted). The compressed file should be named as <lastname.firstname>_ws10.zip or <lastname.firstname>_ws10.2z.