

Advanced Java

Lab Project: 06
Points Possible: 125
Due Date: Nov. 16, 2016 (11:59pm)

Objective:

Create a Java FX GUI program that allows the user to insert data into a database.

Grading Table:

Task	Points
Programming Guidelines are followed and Documentation report is created	25
Database is created according to specifications below (include file with SQL)	25
At launch, program reads data from database and populates a ListView	25
Program validates form data and inserts into database	25
ListView is updated as new data is inserted into the database	25
TOTAL (Points Possible)	125

Instructions:

The goal of this project is to write a basic Java FX GUI database program. The program should have a list component which on launching the program shows the contents of the database. Also the program should present the user with a form of TextFields for capturing data to insert into a database (use the CPU database you created in previous projects). The form should also have a submit button which will attempt to create a new record in the database. The data should be validated first (numbers, text, blank, etc.). If the data is invalid nothing should be inserted into the database and a warning message should be presented to the user via a Label component. If a record is inserted into the database the List should be updated to include the new record.

Note: For help with SQL commands and info:

[w3schools](#)

Note: To compile and run your project at the command prompt you will need to manually set the classpath (all on one line):

```
javac -cp .;C:\path-to-desktop\mysql-connector-java-5.1.22-bin.jar YourProject.java

java -cp .;C:\path-to-desktop\mysql-connector-java-5.1.22-bin.jar YourProject
```

Where "path-to-desktop" is the path to your desktop where you placed the database connector jar file and "YourProject" is the name of the class file that contains your main method. If you are using an IDE, consult your documentation for adding jars to a project.

Note: For this assignment, submit your Java source code and class files, and the documentation report. Please do not send me your database or connector.

Turn In:

1. Create a jar file as demonstrated in class (see the class Blackboard site for notes) that contains your source code and class files named "project06LastName.jar" (the jar file does not need to be executable)
2. Create a short documentation report (doc, docx, or pdf) containing screen shots that either demonstrate your program meeting the specifications in the above grading table or show the error messages that might occur when attempting to compile or execute your program. Include a brief description (1 paragraph is fine) documenting your work and describing the functionality of your program. If there are errors, discuss them (what is your best guess as to what is going wrong). In the report, include the version of your Java Compiler (at the command line run "javac –version") and any other development tools you used.
3. Submit the resulting jar file and documentation report to Blackboard

If you have any questions email me early and often at: george.patterson@tulsacc.edu