Additional Assignment AC22007 ONLY (Not required for AC12001 Students)

Java GUI (Swing or Java FX)

Assessment Details

This assignment is to be tackled on your own and is worth 9% of the AC22007 module. This assignment should be completed in your own time and submitted any time by the end of the teaching semester (Friday April 3rd).

Aim

Add a GUI to one of the programs that you created for one of the previous AC12001 assignments or lab practicals. We explored many of the building blocks for GUIs in the Week 7 lectures. This could be a useful starting point along with the examples / sample code that you will find in the Week 7 materials too. Feel free to use whichever Java GUI framework you wish to use (e.g. Swing or Java FX). Please speak to Iain if you are unsure about any aspects of this assignment.

Requirements

- 1. Add a Java Swing or Java FX Graphical User Interface to one of your previous labs or assignments.
- 2. Replace all text user interface methods with a GUI equivalent (i.e. get rid of Scanner and System.out.println methods, your text-based Menu etc.).
- 3. *[Optional]* Anything you like that would improve your program; e.g. more advanced GUI features or adding some file reading-writing logic to save and load data from the program, or other features. Just make clear in your report what you have attempted / completed.

Method

Work through the Week 7 Lab Practical to get familiar with the Java Swing examples, then update your existing practical with a GUI.

Marking Scheme

| Requirements 1-4 | Report & Designs (pseudo code and/or flowcharts), user | |
|------------------|--|-------------|
| | interface designs, test plans and test results, summary or | out of 20% |
| | requirements implemented and self-evaluation. | out 01 2070 |
| | GUI functionality, e.g. menus, buttons, edit boxes, etc. | out of 30% |
| | Integrating your previous practical to your GUI (hooking up your | out of 30% |
| | program to the GUI functionality) | |
| | Optional extras (anything you like that improves your program) | out of 20 % |

Please note that well-written code, commenting and a JAR file have not been specifically allocated marks. This is because it is expected that you will include these in all assignments and that marks will be deducted for any type of bad practice (e.g. poor use of static keyword, lack of commenting or Javadoc comments, badly written code or no runnable JAR file).

Submission

You must submit your lab by the deadline given in a zip file via the link on My Dundee. The link can be found under Assignments: "AC22007 ONLY GUI assignment" Your .zip file will be labelled with your surname, first name and the assignment name, e.g. rickets_ian_gui.zip

This file will include:

- A (single) written report which will include:
 - o An introduction stating the problem
 - o A summary of the requirements saying which you were able to tackle and which were successful
 - Your designs using including pseudo code (don't forget your class design)
 - User interface designs, e.g. sketches of how you planned your interface before implementing it. This could be drawings on paper or you can use any software that supports making mock user interface designs.
 - Your test plans & completed test sheet results
 - An evaluation of the lab detailing problems and how you tried to solve them, stating anything you couldn't fix
- All the JAVA source files you have used for your project, if you are using Eclipse, please include the full Eclipse project folder, if you are using another IDE, please ensure that you include all the java source code files used.

This lab contributes 9% of your coursework marks for AC22007

Remember to SUBMIT whatever you have done by the deadline, rather than overrunning and handing it in late - this should avoid you getting behind.