

## Workshop 2

**Description:**

This assignment lets you practice concepts such as Object Serialization, and Swing GUI.

In this assignment, you will be working with some objects of an **Account** class (which should be serializable.)

This class has fields such as **account** (int), **firstName** (String), **lastName** (String), and **balance** (double). Please provide constructors, getters, and setters, where appropriate.

In the second class, you will need to enter some information for some account objects from the console and save these account objects in a file.

And finally, in the third class of this project, you need to read those account objects from the file, and then show their info in the console, to verify that they had been saved (and serialized) correctly.

Lastly, design a Swing GUI-based Java application to do the same job. It could be as simple as (at least) a **JFrame** with four **JTextFields** and a **JButton** (to let the user enter the information of the accounts and save them), and a **JTextArea** and another **JButton** (to let the application to read the information of all saved accounts from the file and show them to the user.)

**Marking criteria:**

Please note that you should:

- a- have appropriate indentation.
- b- have proper file structures and modularization.
- c- follow Java naming conventions.
- d- document all the classes properly.
- e- not have debug/useless code and/or file(s) left in assignment.
- f- have good intra and/or inter class designs.

in your code!

1. Task 1: Doing the task in console: **5 marks**.

2. Task 2: Doing the task using Swing GUI: **5 marks**.

**Deliverables:**

You are supposed to deliver your project (run the solution and/or answer related Qs) in lab 6 (after the break).

In case you don't show up in the labs to deliver the required segments/tasks, you could submit your final solution (described below) but note that there would be a 50% penalty!

In this case, you should zip *only the Java files* to a file named after your Last Name followed by the first 3 digits of your student ID. For example, if your last name is **Savage** and your ID is **354874345** then the file should be named **Savage354.zip**. Finally email your zip file to me at [reza.khojasteh@senecacollege.ca](mailto:reza.khojasteh@senecacollege.ca)

**Reminding Some Important Notes:**

- Each assignment should be submitted before/on its due date. The deduction for late submission will be 10% each day or part of it. No assignment will not be accepted after week 12.
- All the assignments should be done satisfactorily to pass the course. Moreover, to obtain a credit in this course, a student must achieve a weighted average of 50% or better on workshops.
- Students are encouraged to talk to each other, to the instructor, or to anyone else about any of the assignments, but the final solution may not be copied from any source.