

INFO C210
Course Project Phase 2: Simple Banking System
Project Phase 2

1. Introduction

Consider the Bank Management System you implemented in Phase 1. You are asked to modify/enhance your system for performance and functionality.

2. Updated Specifications

1. You must ensure that all ten bank operators' tasks you implemented previously are working correctly. (This item should be completed immediately)
2. You are responsible for ensuring the uniqueness of bank account numbers and customer IDs. A customer may still have multiple accounts of the same type. (This item should be completed immediately)
3. Your system must handle common exceptions resulted from faulty user input (This item should be completed immediately after the end of Module 5)
4. You will have to enhance your system's interface by providing a Graphical User Interface (GUI) for the bank operator. The interface must provide a way for the bank operator to perform all the tasks performed by the system. You are free to design the interface the way you want, remember that a simple interface with command buttons and textboxes isn't what I am looking for. A system like this with all these functionalities is supposed to provide a more usable user interface. Moreover, your system should provide ways for displaying some kinds of reports of the accounts. The data is to be tabulated and displayed in a nicely formatted manner. (This item should be completed immediately after the end of Module 7)
5. (Extra Credit) Your system must implement a mechanism for long term retention of data by saving information between program runs. You may use Java's Serialization facilities for storing and retrieving objects and

structures using files. Alternatively, you may utilize the Java-based JDBC technology to store your data in a relational database. JDBC is not discussed in this class but it is a possibility for you if you are familiar with it. [\(This item is optional because it is based on Module 8 – Extra Credit\)](#)

6. Testing your project's functionalities is important for this assignment. Make sure to test your system thoroughly and document any known bugs. If I test your system and I find bugs that you didn't report I would assume that you didn't test your system good enough and therefore extra points maybe deducted.

3. Submission

Submit a zip archive of all your Java files (only the *.java files, no .class files) by the due date. Notice that, each phase should be submitted separately. A readme file should be included in the Zip archive with each phase.

Your project's readme file must include a complete description of your design and implementation. Things to consider when writing the readme file:

- Any design and implementation assumptions
- The objects in your system, what they do, and how they interact (including any patterns that you've used)
- Any challenges that you faced in the design or implementation of your program (this part is very important to me).
- Which parts you didn't do
- Known bugs (if I find bugs in your code that you did not report, I will assume you didn't test your code well enough to find the bug)
- Any specific procedures to running the system.

4. Questions about the Project

For any questions about this assignment, please post your questions in the Project's Open Discussion forum in Canvas. Please check this forum regularly and feel free to respond to other student's questions (I highly encourage and appreciate active participation in discussion forums). You are not allowed to include your entire code in the forum, if you feel that you must show your progress in a particular question, you can include your file(s) and submit that to me directly.