Alexandria University
Faculty of Engineering
Specialized Scientific Programs
Spring 2021

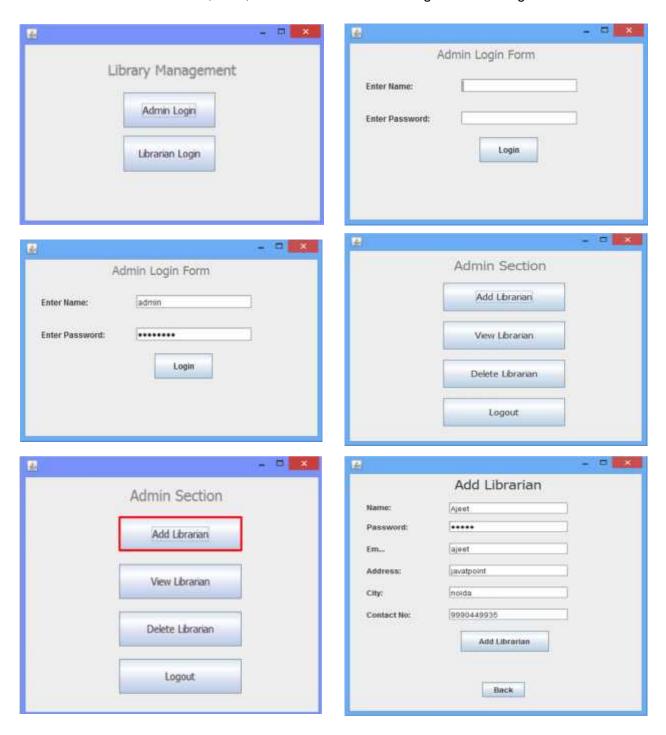


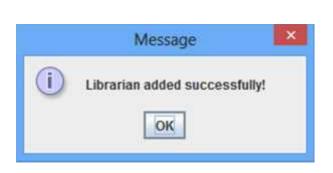
Computer and Communication CS272: Programming 2 Due: Saturday, 8 May 2021

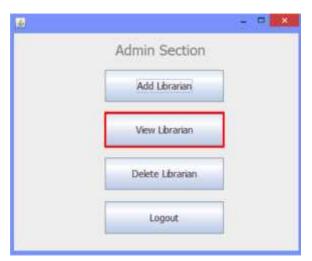
## Assignment II University Library System

## 1. Admin User Interface

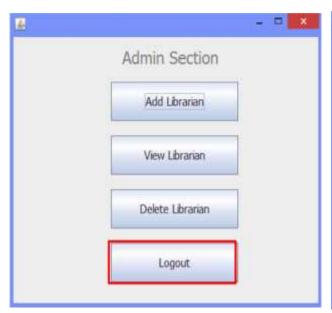
It is required to write a Java program with Swing interface to perform all the functions of the library system of an educational institute (e.g. university). The library has an admin and librarian. The admin can add, view, and delete librarians through the following user interfaces.







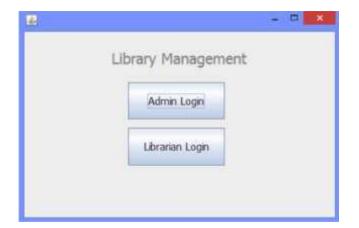


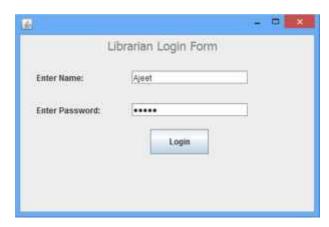




## 2. Librarian User Interface

On the other hand, the librarian can (1) add and view books. (2) issue books. (3) View issued books. (4) Return Books. He can use the following interfaces.



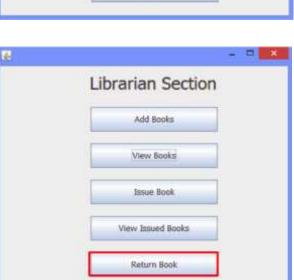




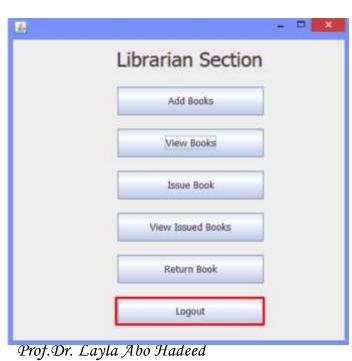




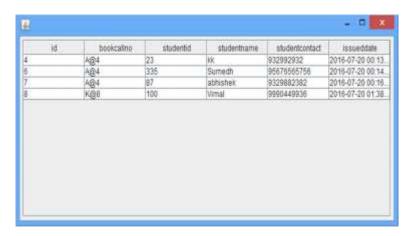


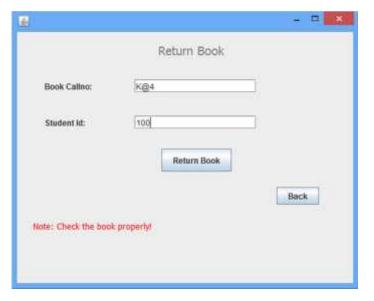


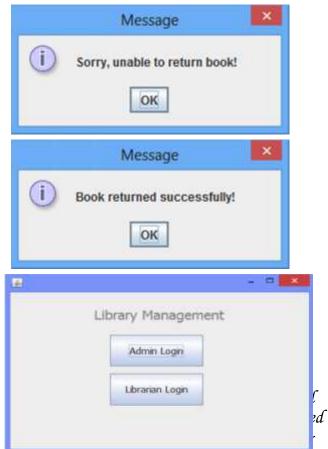
Logout



Dr. Mohamed kholief







## 3. Requirements

- 1. It is required to implement a java program for the online library system with the classes for Admin, Librarians, Students, and Books.
- 2. The front end for your program is required to be implemented using Swing java API.
- 3. The back end for your program is your choice. A simple files to store the information is enough. Simple is safe.
- 4. Assignment due date is Next Saturday.
- 5. Issue book (borrow book)
- 6. The student must borrow one or 3 books maximum (check it when the librarian borrows a book with the student) and thee librarian decrease the number of books after issue book operation automatic.
- 7. In view issued books the first column id (automatic id)
- 8. Assignment is group of two.
- 9. Please take into consideration that for any function taking an input from the user, you should test the validity of the data presented to it before committing the changes