CMPSC 487 Project 1

You are asked to implement a desktop application for the SUN Lab access system that was discussed in class (also attached below). Your implementation must have the following properties:

- A database is required,
- Graphic User Interface (GUI) for the admin is required.

You are free to select the programming language and the database management system (Firebase is OK).

To show your implementation works, take screen shots or a video of how the operations are performed. All code and screenshots/video must be pushed to a Github repository.

What to submit:

Database system (e.g MySQL):	FireBase
Programming language (e.g Java):	Python
Github link:	https://github.com/as9219/SUNLAB-Card-Access/

Grading scheme:

All operations are functioning:

Some but not all operations are functioning:

The program does not run but the code is serious enough:

The program is far from complete:

Little or no efforts:

20 points

16-19 points

12-15 points

8-11 points

0-7 points

Problem description

The Computer Science program wants to hire you to develop a simple system to keep track of people that access the Student Unix Network (SUN) Lab. Their initial requirements are as follows.

- The lab door is always closed. Every time a student wants to get in or out, he/she must swipe
 his/her student card on the card reader device at the door. The student ID number and the
 timestamp will be sent to the system and saved to a database. These records will be stored for 5
 years.
- At any time, an authorized person must be able to see the history of the SUN Lab access, and to browse the list of students, filtered by date, by student ID, and by time range. There must be a GUI for the authorized person to perform the browse and the search.
- The system must be able to be extended in the future to support multiple types of users (students, faculty members, staff members, janitors) and the following additional operations: activate, suspend, and reactivate an ID.