

**CSD3444\_1 Project Part A and B: Emerging Technologies**

**Submitted To:**

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**Overview:**

To develop a GUI interface which has functionalities for different users such as Admin, Professor and Student. Three kind of users will be having an account in this system and with the help of their credential they will enter into the system and perform the functionalities which are accessible to them. On the login page the user has to select its type (admin, professor or student) and has to enter his username password after which the application would redirect him to his page. The Admin (Administrator) has authority to enter the data into the database, update the existing data and to delete data from database. The student will enter his name and can only see his information regarding grades. The professor user can only enter the grades of the student.

**User Type Screen:**

This screen comprises of three radio button (Admin User, Professor User and Student User) and the Username/Password entry field. User will select the kind of user he is among the three then he would enter username and password (for now any username and password is accepted but it’s mandatory to input) which would redirect him to respective user type screen. There are two buttons in this screen, the ‘Log In’ button is used for accepting the information whereas ‘Exit’ button is used for terminating the window.

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**USER TYPE CREDENTIALS WINDOW**

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**VALIDATING USERNAME AND PASSWORD**

If user enters valid information and then click ‘Log In’ then the application will redirect him to the respective user screen where he could do operations which that user has authority.

**Admin User:**

The Admin user window comprises of the information which admin would input, he has 3 option buttons ‘confirm’, ‘delete’ and ‘exit’. Confirm will enter his data to database, delete would delete record from database and ‘Exit’ would terminated this admin window.Admin user can further select whether he want to see students ,professors record and courses info.

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**ADMIN USER WHILE SELECTING USER TYPE AS STUDENT**

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**ADMIN USER WHILE SELECTING USER TYPE AS PROFESSOR**

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**ADMIN USER WINDOW WHILE SELECTING TYPE AS COURSE**

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**ADMIN USER WINDOW WITH USER TYPE AS STUDENT**

Admin user can enter, update or delete students’ details such as student number, student name, course number, grade, username, password and any optional information.

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**ADMIN USER WINDOW WHILE SELECTING USER TYPE AS PROFESSOR**

Admin can enter, update or delete professor’s credentials such as his name, number, username and password.

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**ADMIN USER WINDOW WITH COURSE INFO**

Admin can enter, update or delete course number or name.

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**PROFESSOR USER LOGIN SCREEN WINDOW**

**Professor User**

The professor user can enter grade of a student which will be updated in the student database. The professor need to fill all fileds to make updation to grade field in student database. The ‘Reset’ button will erase all the information entered in the window and reset it to empty again.Reset the ‘Exit’ button will make the window terminate and Submit will saves the inofrmation into the database.

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**PROFESSOR USER MAIN WINDOW**

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**Professor window before clicking Reset**

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**Professor window after clicking Reset**

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**STUDENT USER LOGIN WINDOW**

**Student User**

The Student user will enter his name on the window, and he will see all his grades which would be fetched from the database and will be displayed in the given format.

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**STUDENT USER WINDOW WITH CREDENTIALS**

Student user after login by entering his/her student number can see their credentials such as grades, course number, name, number and if there is some extra information.

Database and Tables:

A database named ‘mydatabase’ is created automatically when program runs first time and user enters ‘y’ first time. When user enters ‘y’ second time the tables named ‘students’, ‘course’, ‘professor’ and ‘credentials’ are created in the database. When the user press ‘y’ for the third time some dummy entries are inserted to each table.

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**Select query on credentials**

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**Select query on students table**

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**Select query on course table**

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**Select query on professors table**

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**Show database query**