

Java Application Required scenarios and Query sets

Your team will be responsible to complete the implementation and demonstrate the application behavior for the following 3 Scenarios functionalities in the application.

Please Note: For the application UI, I will not include complete screenshots here as I want each group to think how they want to present their application. Main screen UI Sample is provided as well as some others

Figure 1: Main Menu interface option

```
*****
                        *****
                        Welcome to the
International Student Information System
                        *****
*****
                        1. Current Students
                        2. Graduated Students
                        3. International Rules & Laws
                        4. Updates
                        5. Quit
Type in your option: 4
Enter User ID: raj
Enter password: raj
*****
```

Scenario 1

In Figure 1: Option 4 is used for database administrative functions. When the user choose **option 4 (Updates)** from the Main Menu interface “Figure 1”: The user should be prompted to enter the admin login information-- username and password. The application verifies the information and if correct, that means this person is an admin and he/she is authorized to do updates on the database. If username or password is incorrect the user will be prompted to try again with the valid admin login info or quit to the main screen.

Once the user successfully logs in, the application will show a new UI with the options below

1. **Option A: Insert new information** which includes 4 new sub options
 - Add new student information
 - Add new course information
 - Add new department information
 - Register a student in a course
2. **Option B: Delete some information** which includes 4 new sub options
 - Delete specific student information

- Delete specific course information
 - Delete department information
 - Withdraw a student from a course
3. **Option C: Update current information** which includes 4 new sub options
- Update specific student information
 - Update specific course information
 - Update department information
 - Update a student Course registration

For this Scenario, the team is responsible to implement and demonstrate the functionality for **only Option A (Insert new information)** and all **the 4 sub options**. The video recording should show how the application can be used to insert one example of each sub option under option A.

Also, in the case of registering a student in a course, after completing the registration a confirmation message will show and it should include how many credits the student has been registered in so far. In case this number is fewer than 12 credit hours for an undergraduate student, display a message notifying the user that the student is enrolled for fewer than the required number of credits.

Scenario 2

Figure 2: Current Students option interface

```
*****
Welcome to the
International Student Information System

1. Current Students
*****
1. Academic information
2. Contact information
3. visa status
4. Quit

Type in your option:
```

When the user chooses *option 1 (Current Students)* from the Main Menu interface “Figure 1”. It will show a new UI similar to Figure 2.

Implement and demonstrate the application behavior for the following options in **Figure 2**

1. When the user chooses *option 1(Academic information)*: It should take you to a new UI interface that gives the option to retrieve the following:
 - a. **Option A (Educational history for a student)**: This option should prompt for the social security number or student ID of a student and returns that student’s educational history (the name of the schools attended, degree earned, GPA, etc.).
 - a. **Option B (Collage Students information)**: This option should prompt for the name of a college and returns a list with the social security numbers and names of the undergraduate students enrolled in this college. If your system is designed for only one college then show the information for a department.
2. When the user choose *option 2 (Contact information)* from the main interface it should take you to a new UI interface that gives the option to retrieve the following
 - a. **Option A (All student contact details)**: It should return the list of the social security number, name, address, major department, and college for all the undergraduate students.
 - b. **Option B (Student from a Country)**: It should prompt for the name of a country and returns a list consisting of the social security numbers, names and addresses of the undergraduate students from this country
 - c. **Option C (Working students contact information)**: It lists the social security numbers, names, and addresses of undergraduate students who are currently working, and for each student, report the number of working hours per week
3. When the user chooses *option 3 (Visa Status)* from the main interface it should take you to new UI interface that gives the option to retrieve the following:

- a. **Option A (Visa Status Report)**: It should Report the following information about the visa status of each international student: visa type and starting date and expiration date of the visa. Group this information by student social security number and name.
 - b. **Option B (F-1 visa)**: List the social security numbers, names, and nationalities of the undergraduate students holding a F-1 visa.
4. When the user chooses ***option 4 (Quit)***: It should return the application to the main interface in figure 1

Scenario 3

When the user choose ***option 3 (International Rules & Laws)*** from the Main Menu interface “Figure 1”. It should allow the user to list through the regulations and laws related to international students with a brief description of the regulation/law