Course: Advanced Programming
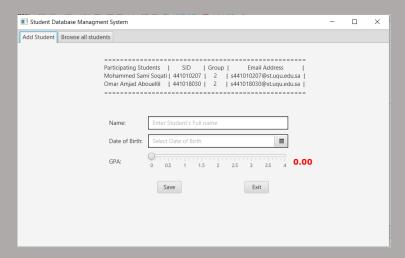
Subject: Project 2 report

Group number: 2

Name	SID
Omar Amjad Abouellil	441018030
Mohammed Sami Soqati	441010207

Database and table creation:

```
1   create database StudentsDB_GUI_Abouellil_Soqati;
2   use StudentsDB_GUI_Abouellil_Soqati;
3
4   create table StudentsTBL_Omar_Mohammed(
5   ID  integer NOT NULL AUTO_INCREMENT,
6   FullName varchar(40) NOT NULL,
7   DateOfBirth date NOT NULL,
8   GPA float NOT NULL,
9   PRIMARY KEY (ID));
```
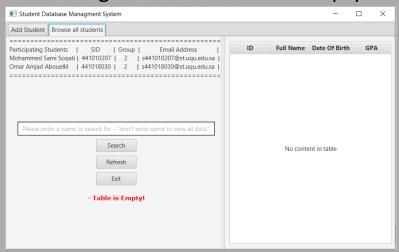
Program's Main Menu:

Assumptions:

- The user will start in the Add Student tab.
- a database and table is already made for the user.

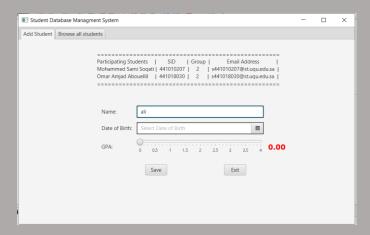## Viewing the table while it's empty:
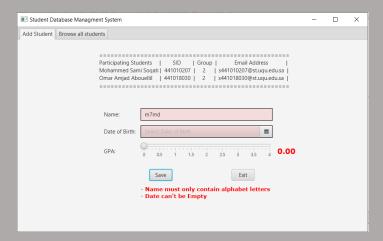
Inserting a record into the table(Add Student Tab)

Assumptions:

- The User will be presented with an empty Name Textfield and DatePicker and a Slider for the GPA value initialized to 0.
- If the user inputs any numbers or special characters in the Name TextField or leave it empty they will be presented with a special error message Label for the issue at the bottom once they click Save and the text field's background will become red.
- If the user picks a date in the future or dosen't pick anything at all they will be presented with a special error message for the issue they made at the bottom once they click Save and the text field's background will become red.
- The GPA slider can only accept values from 0.0 to 4.0 and depending on which GPA value is chosen the color will change
  Red(0.0-1.0)/Orange(1.01-2.0)Yellow(2.01-3.0)/Green(3.01-4.0)
- If the user inputs Everything correctly and click save they will get a message at the bottom telling them the Student has been added to the table successfully.
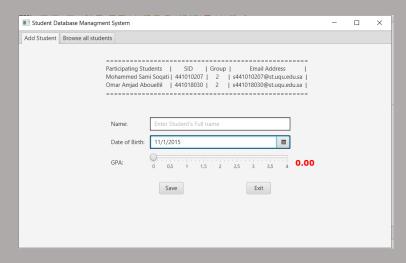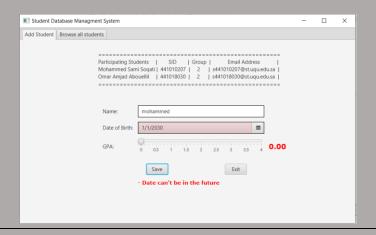
User Inputs name:
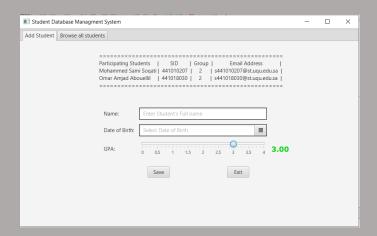

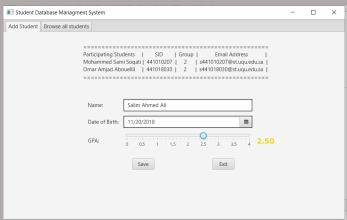# User uses Numbers or symbols in the name Input:

User Picks date:

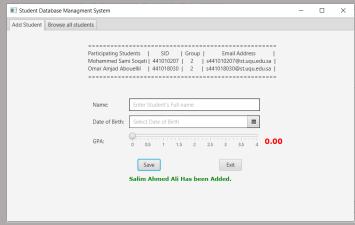# User Picks a date in the future:

User chooses GPA:

User Chooses a GPA and the color changes:

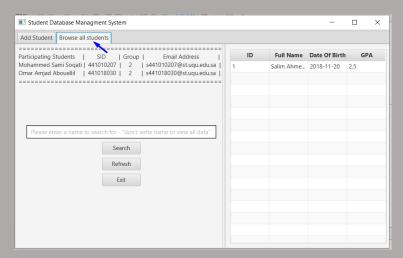# Adding a Student Successfully:

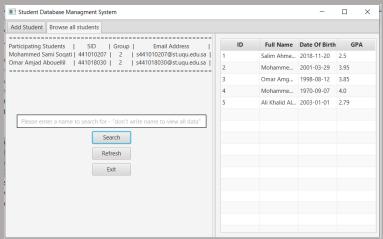## Displaying the table's content(Browse Table Tab)

Assumptions:

- Once the user enters the tab they will see the content of the table and if they change and comeback to the Tab it will be refreshed.
- If the User leaves the Search TextField empty and click the Search Button the table will refresh.

- If the user inputs any value that contains numbers or special characters and click Search they will get a message at the bottom telling them the input is wrong and the table won't search and the text field's background will become red
- If the user inputs a correct name and click the Search Button the table will refresh and show them any record that contained their entered value.
- If the user clicks refresh the table will refresh and display all content.
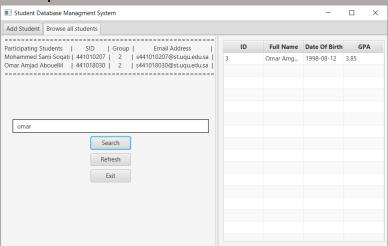
- If the user clicks exit the program will close.

Changing to Browse students Tab(table displays content):

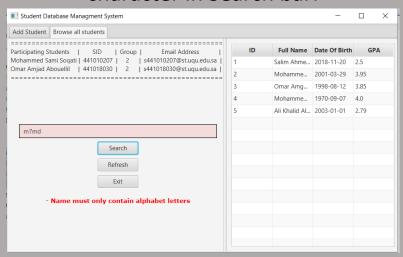User Clicks search without any input:

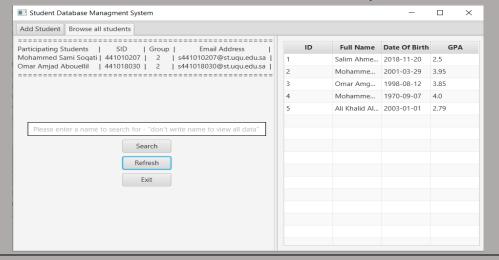User inputs a name that is found inside the table:

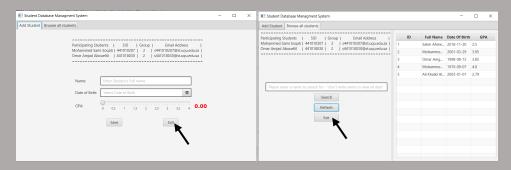## User inputs a name that isn't found inside the table:

User inputs a value containing a number or a special character in Search bar:

Clicking the Refresh button(Refreshes the database and rests search bar value):

Exiting the program:

Assumptions:

- When the user clicks the exit button on either tab the program will close.