Student Management System

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Project Description:
>In our project *Student Management System* has Following features:

1. Student Login: The username of the student will be his *Roll No* and password will be his *Phone number*.
* *Attendance Generator*: which displays the attendance of the students.
* *Fee Status Checker*: which displays the Fee status of the student i.e., Paid, Unpaid, and Remaining.
* *ID card*: This displays the ID-Card of the student with unique *Barcode*.
* *Marksheet*: This displays the Marksheet of the Student and displays Grades respectively.
* *Exit*: This will return to the main Homepage of the Student Management System.

2. Employee Login: The username will be **12345** and Password **admin**.
* (Note: this username and password are just taken as sample)
* *Manage Marks*: Which manages the Marks of the Student i.e. (Allows the employee to edit the marks).
* *Manage Attendance*: Which handles the attendance of all the Students.
* *Manage Fee Status*: Which handles the Fee status of the Student.
* *Register Student*: Which register the new student and also creates his ID-Card.
* *Exit*: Which exits from the Employee System.

Packages:
Installing tkinter using the following command.
```
pip install tk
import tkinter as tk
```

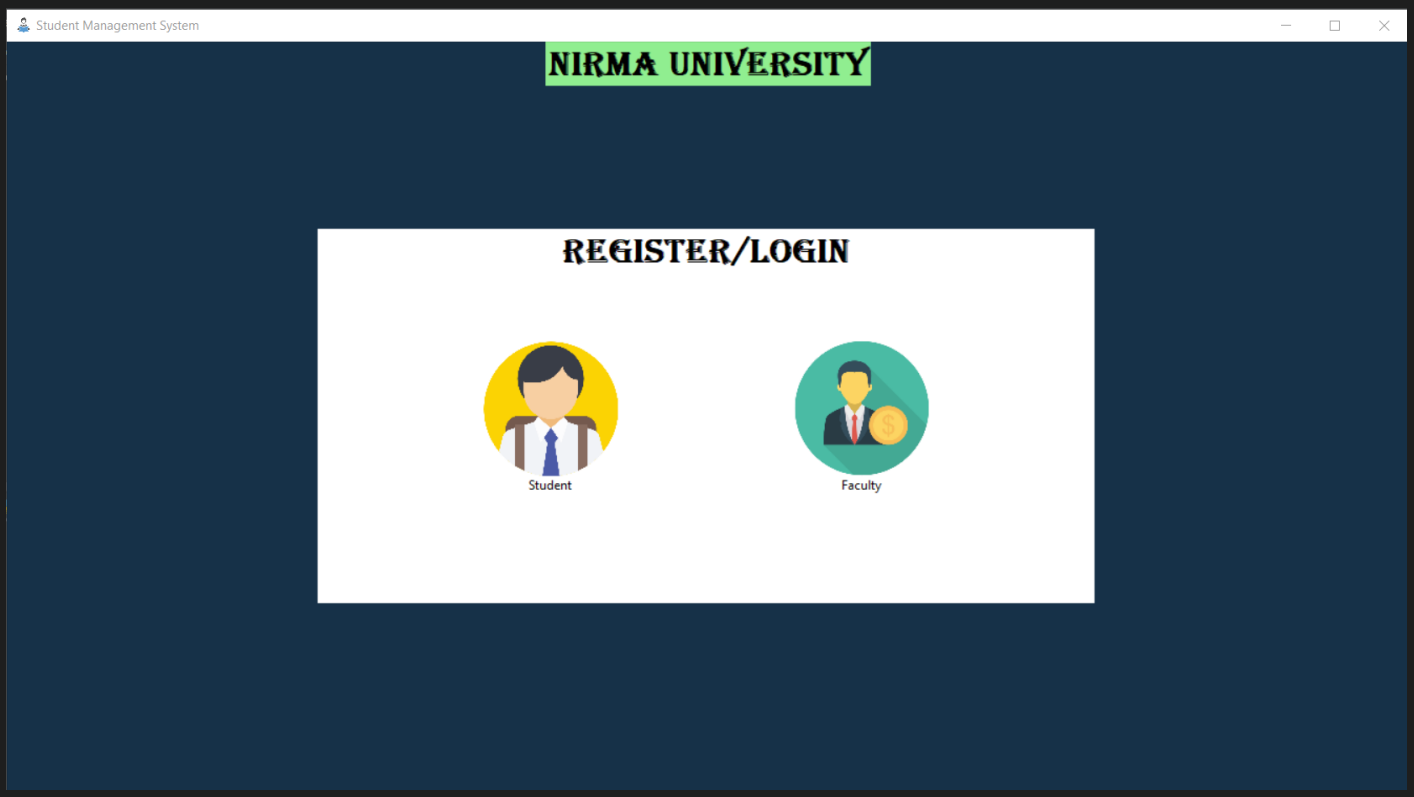
Installing PIL.
```
pip install pillow
import PIL
```

Importing Sqlite3.
```
pip install pysqlite3
import sqlite3
```

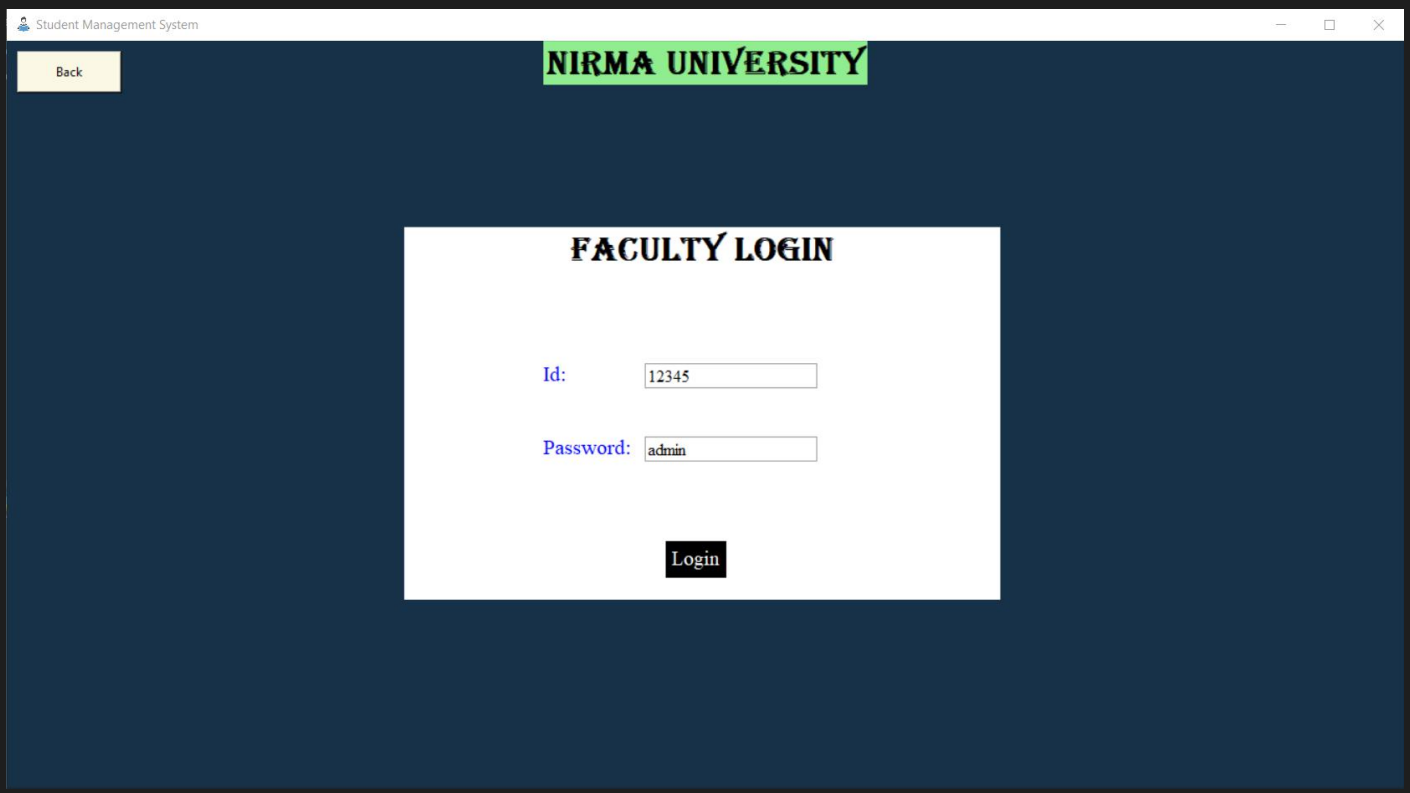
Installing Qrcode.
```
pip install qrcode
import qrcode
```

Running the files:

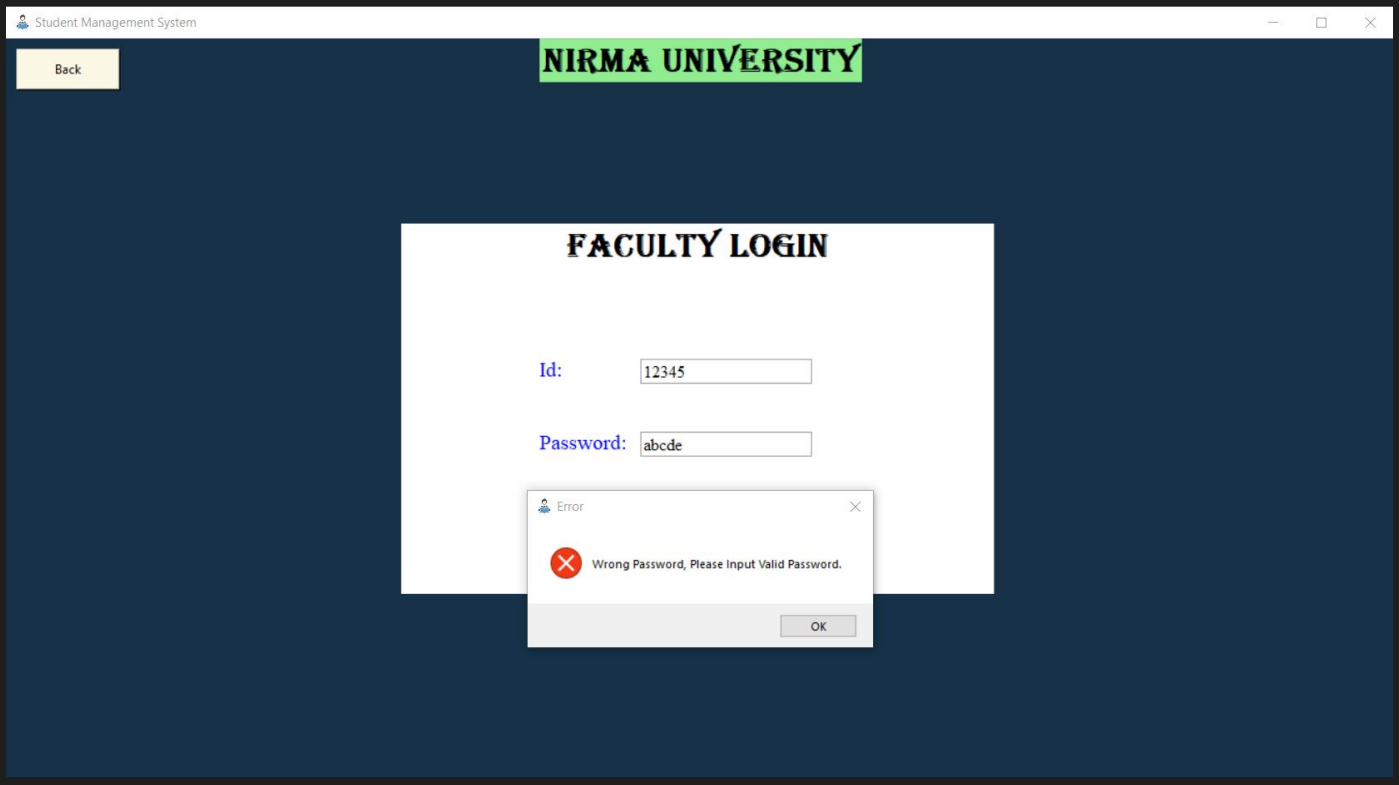
1. To run the *Student Management System*, we have to first run ***StartingFile.py*** which opens the home page showing two Login features: *Student* and *Employee*.



2. Let's first understand the features of faculty side, here we have set only one id-password for faculty.
Note: You can set it by opening database in *command prompt* and insert value by sql query.
Here, default id is "**12345**" and password is "**admin**".



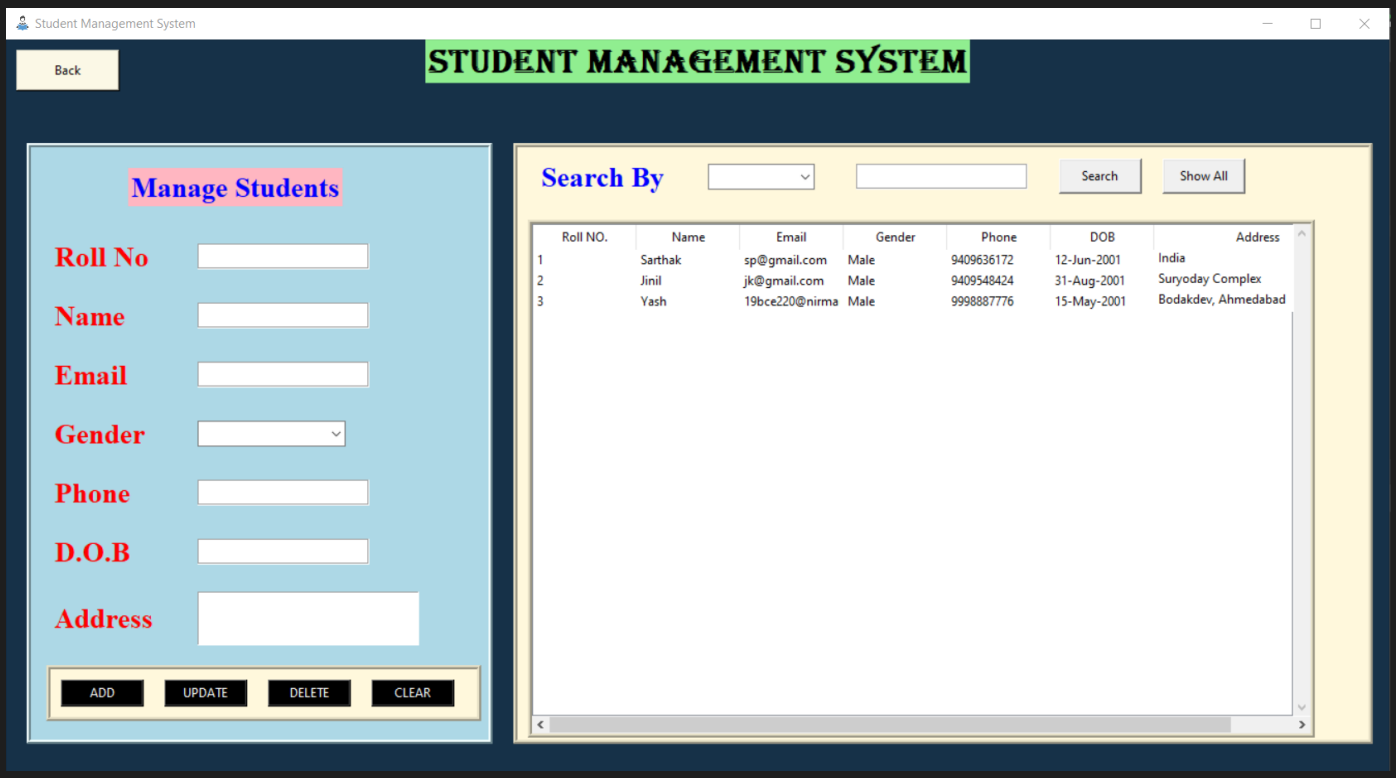
3. If the password entered is incorrect which is not in database of *employee* table, then error will be displayed as below:



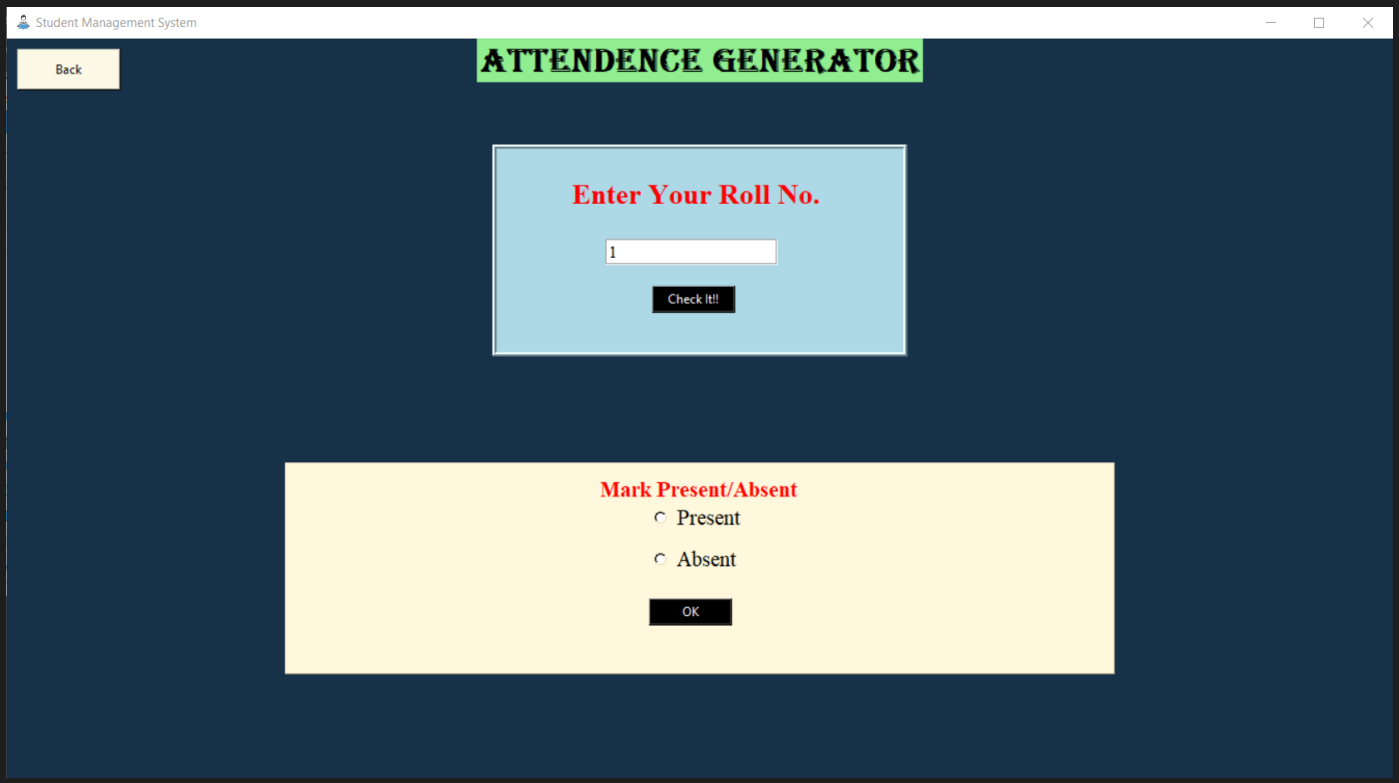
4. After entering correct password as given above, you will have a *Menu* containing 5 items as below:

1) *Manage Student data.*
2) *Manage Attendance.*
3) *Manage Marks.*
4) *Manage Fee Marks.*
5) *Exit.*

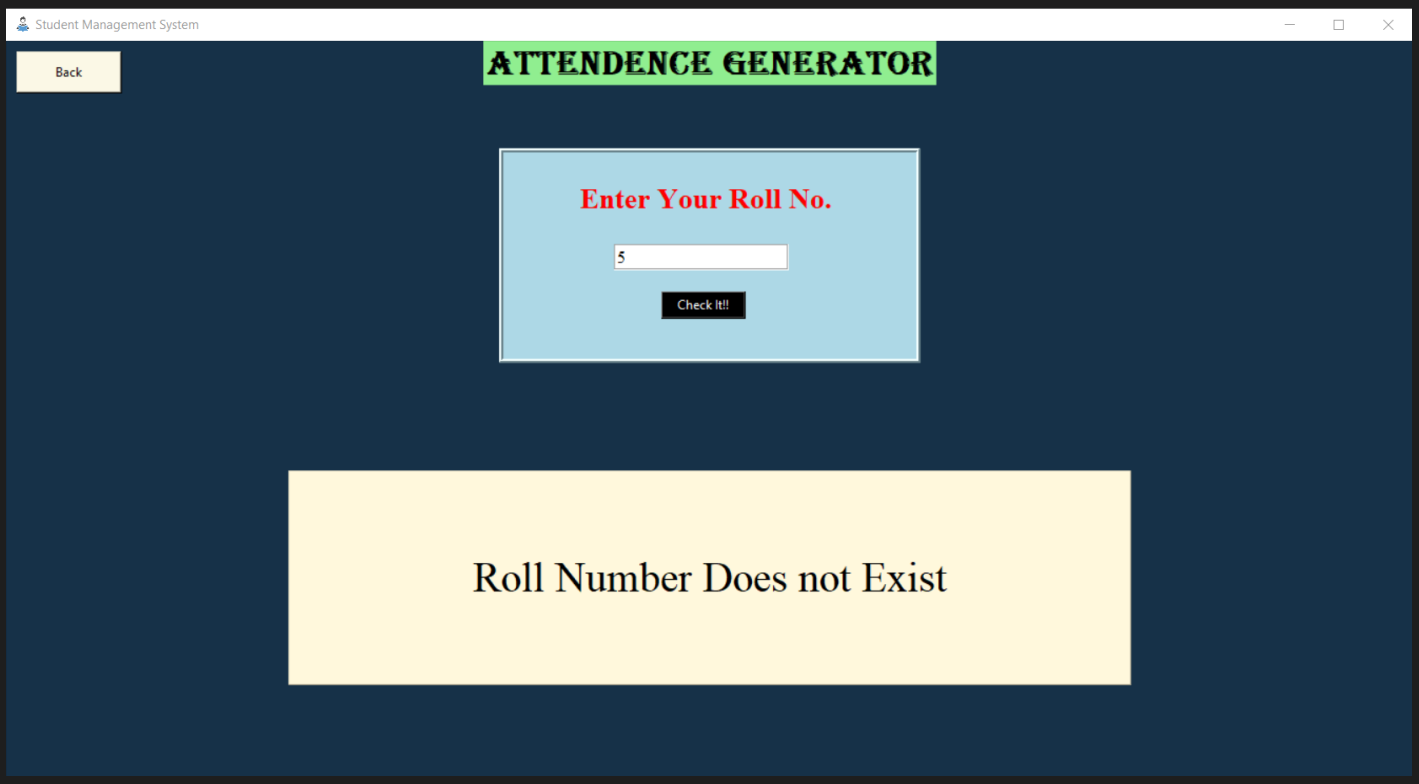
5. Click the *Manage Student*, and you will have screen as below where you can *add, delete* and *update* the data of any student with the details containing roll number, name, gender, email, phone and address, etc. You can also search the data by name, roll number, etc in the tree view.



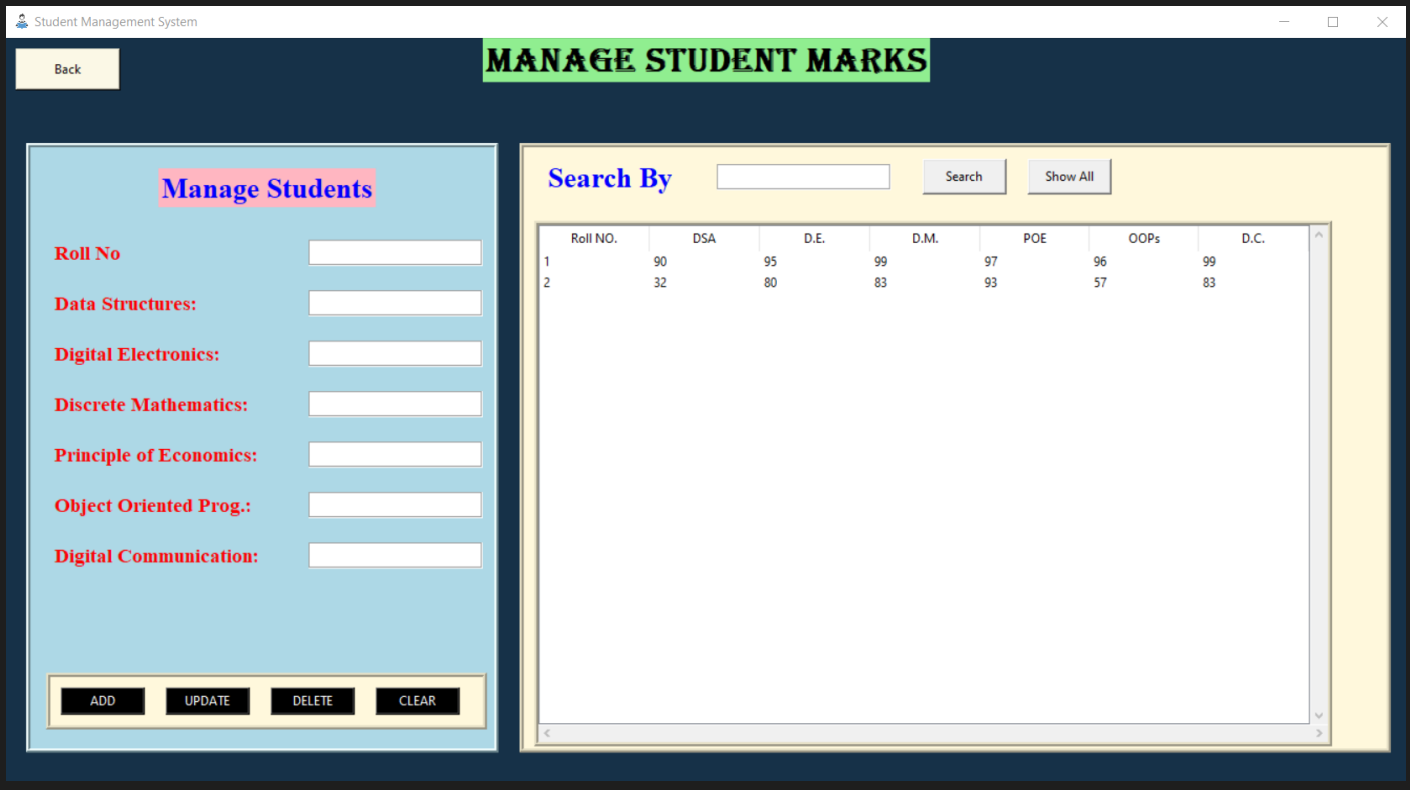
6. Click the *back* button and go to the *Manage Attendance* page where you have to enter the *roll number* in the text box and click the *Check it* button after that you can enter the attendance of that student by one *radio button*, which contains value of *present* and *absent*, then click *ok* after entering your choice.



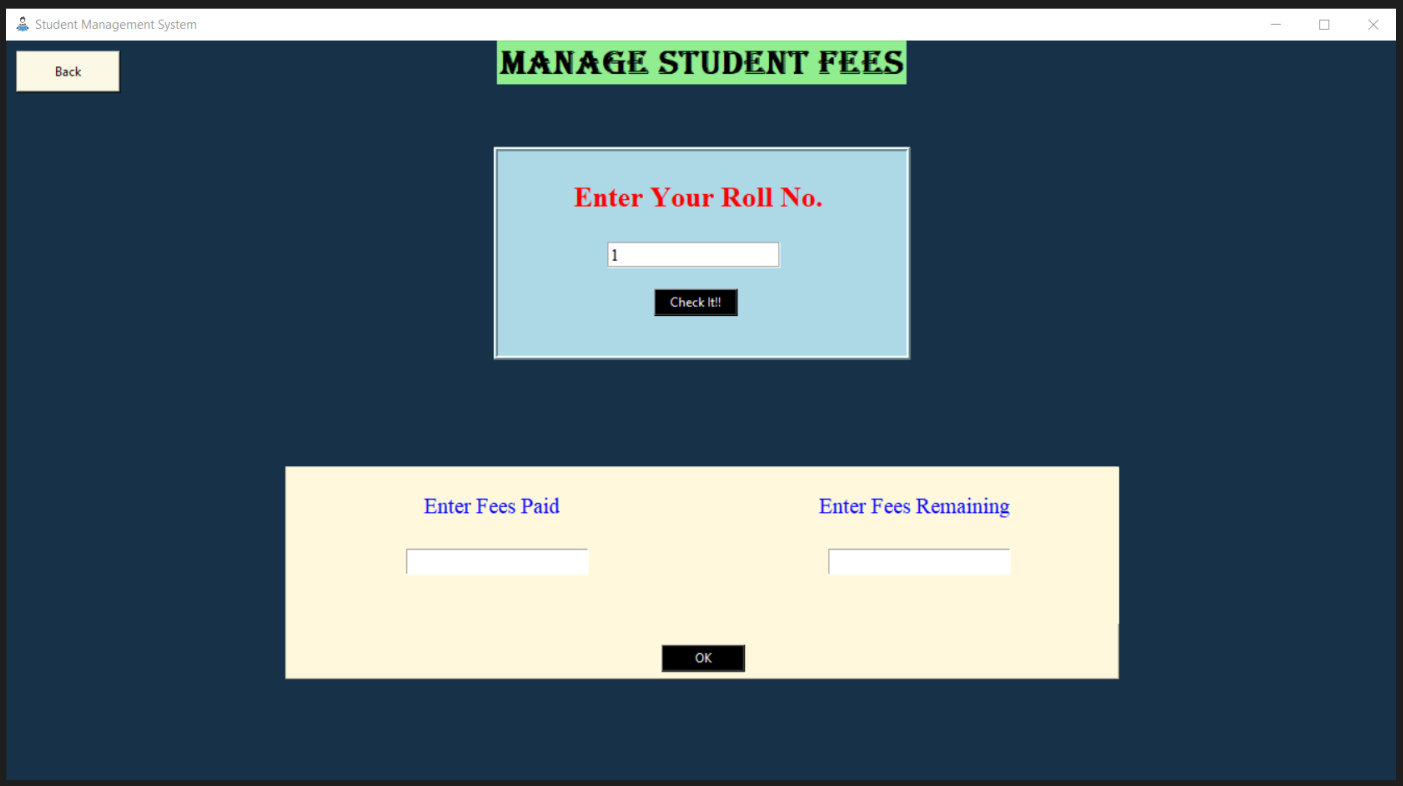
7. If you enter the *roll number* incorrectly, then you will a below screen:



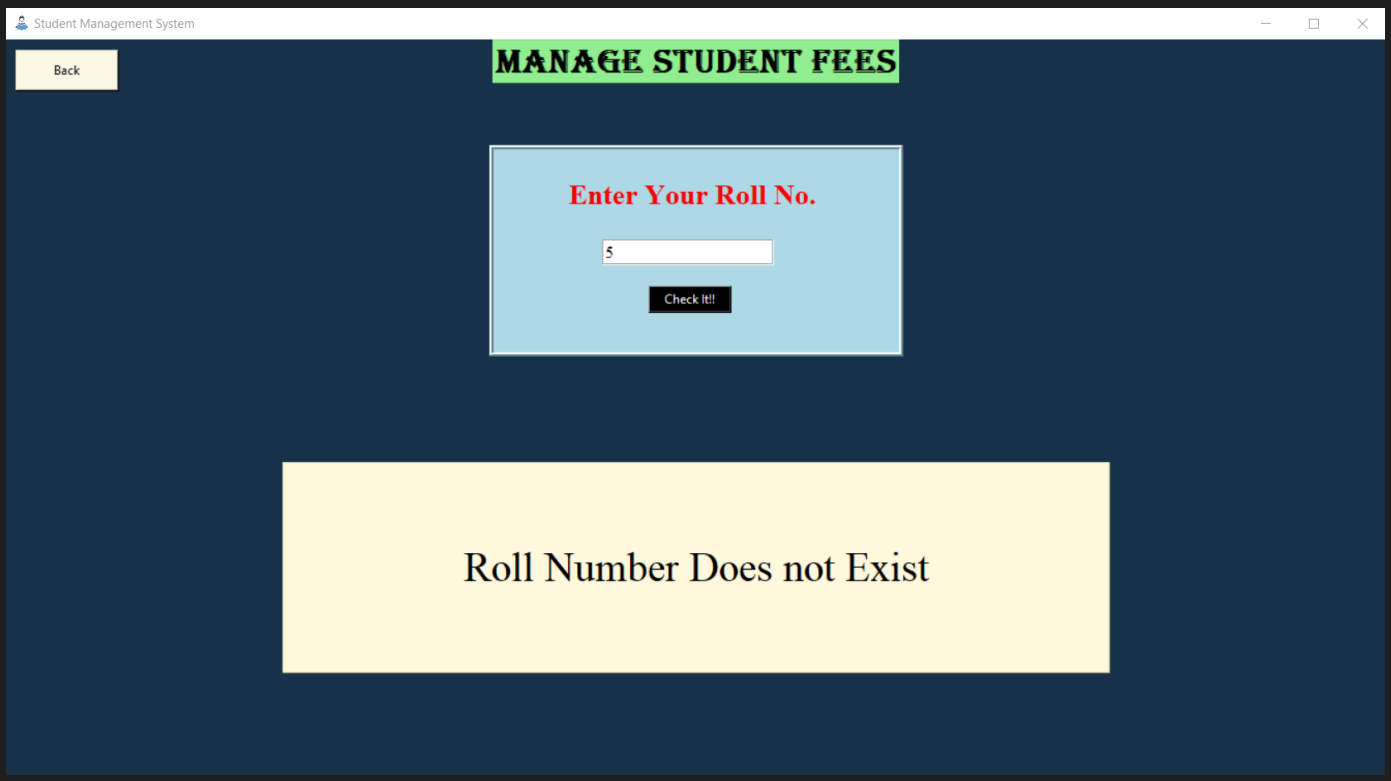
8. Click the *back* button and go to the *Manage Marks* where you can manage the marks of 6 subjects which are pre-defined as DC, DSA, OOPS, DM, POE, etc. It will add all the marks in database of *student_marks*.



9. Click the *back* button and go to the *managing fees status* where you will have to enter the *roll number* of a student. If, it is present in data, you can enter his fees status and click the ok button.

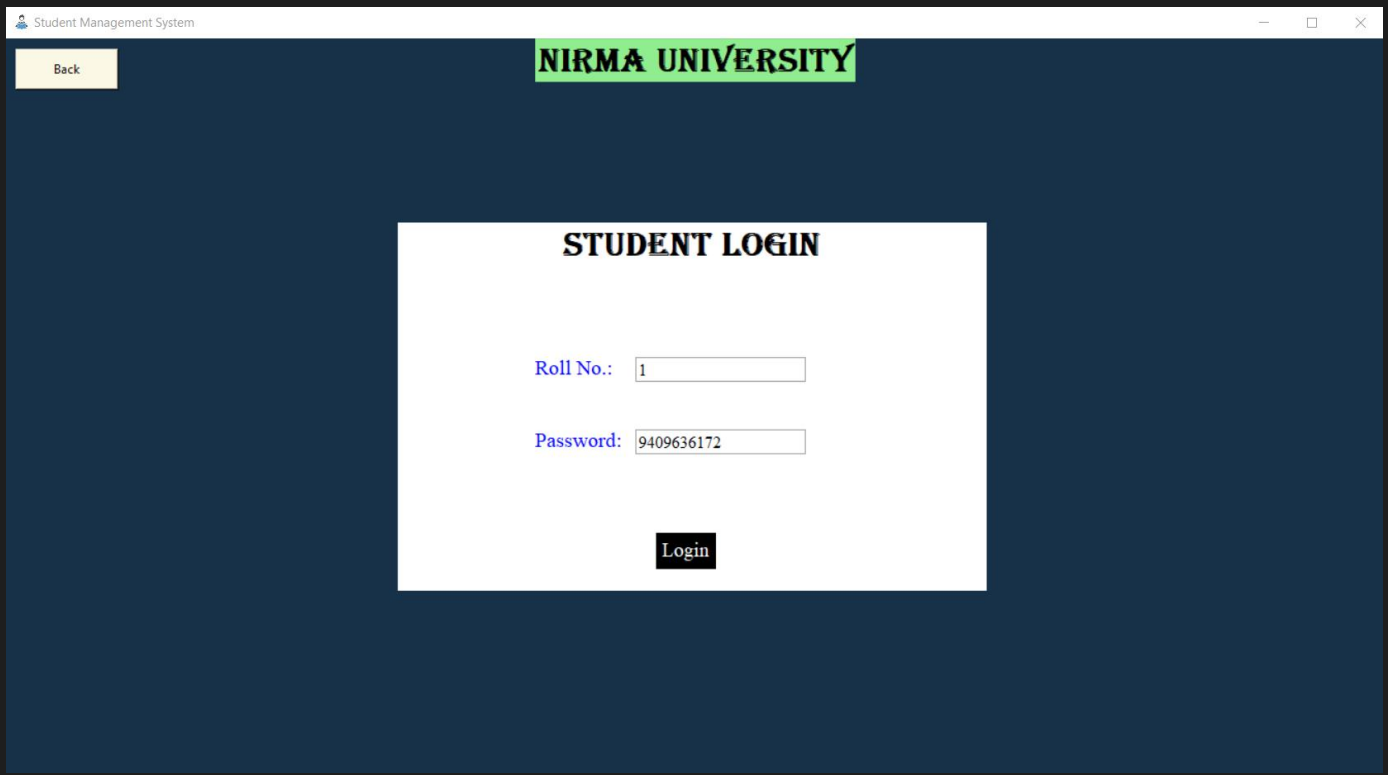


10. If the entered roll number is incorrect, it will show the frame as below:

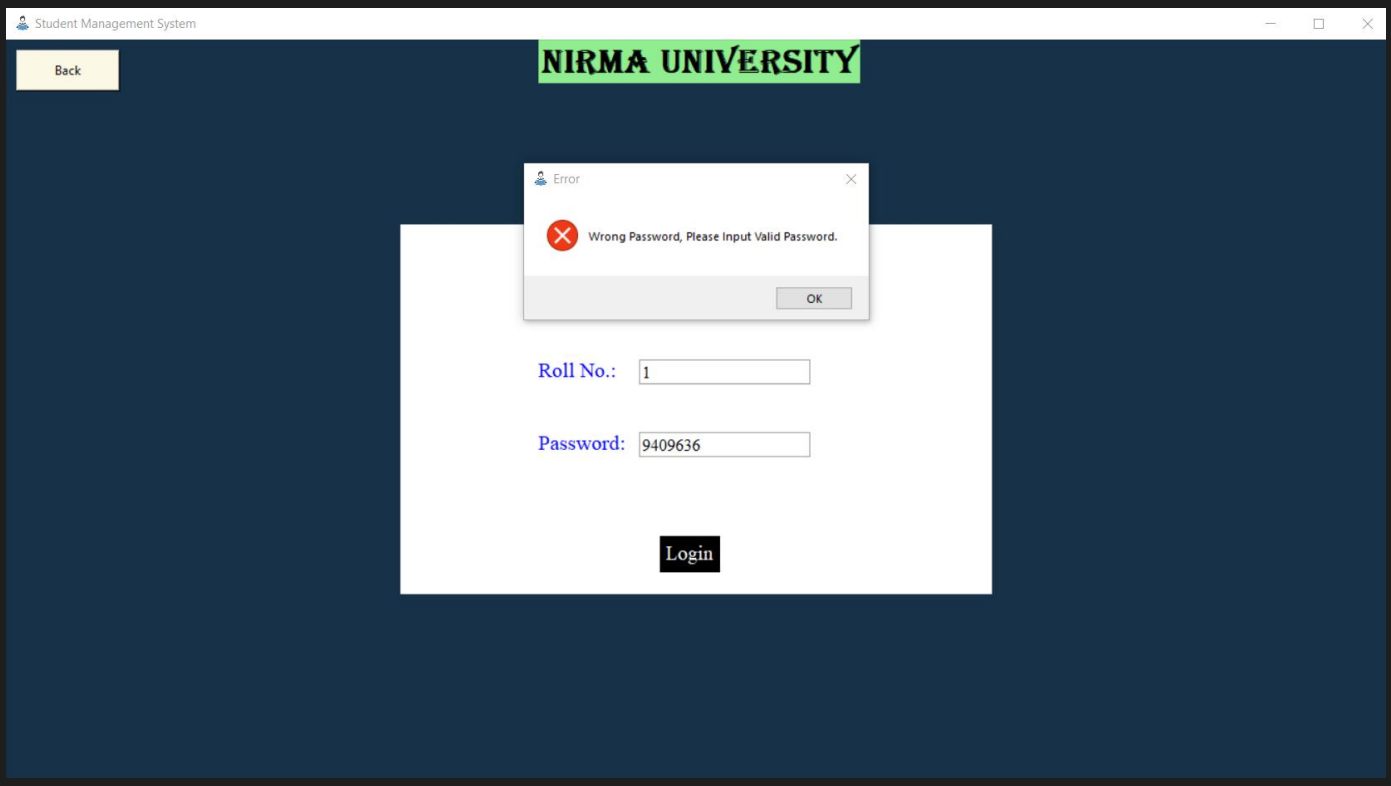


11. On clicking the *exit* button, you will be on the screen where you have started named as *HomePage*, where you can get two choices as *student* and *faculty*.

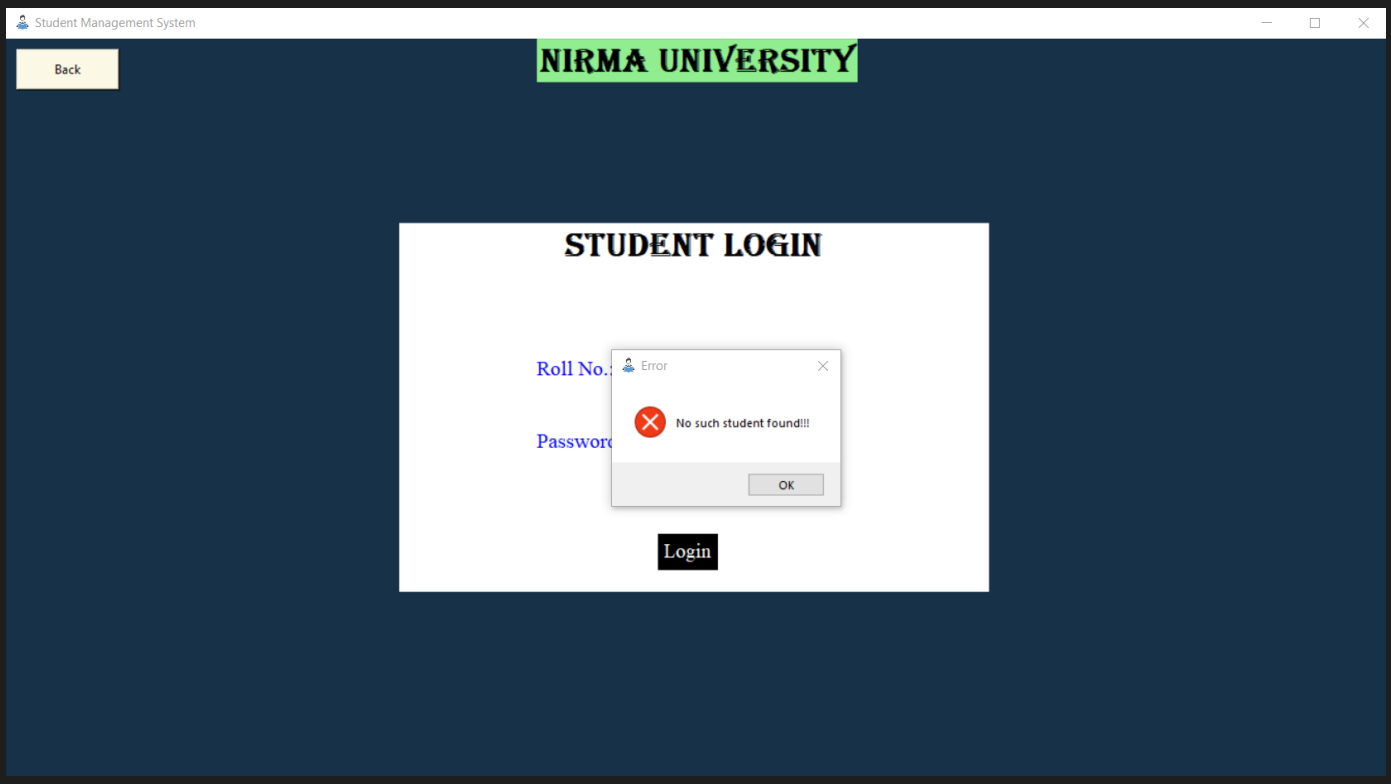
11. Click on the *student*, enter *password* and *id* where password will be your registered phone number while filling out the form.



13. If the *password* entered is incorrect, the following screen will be shown:



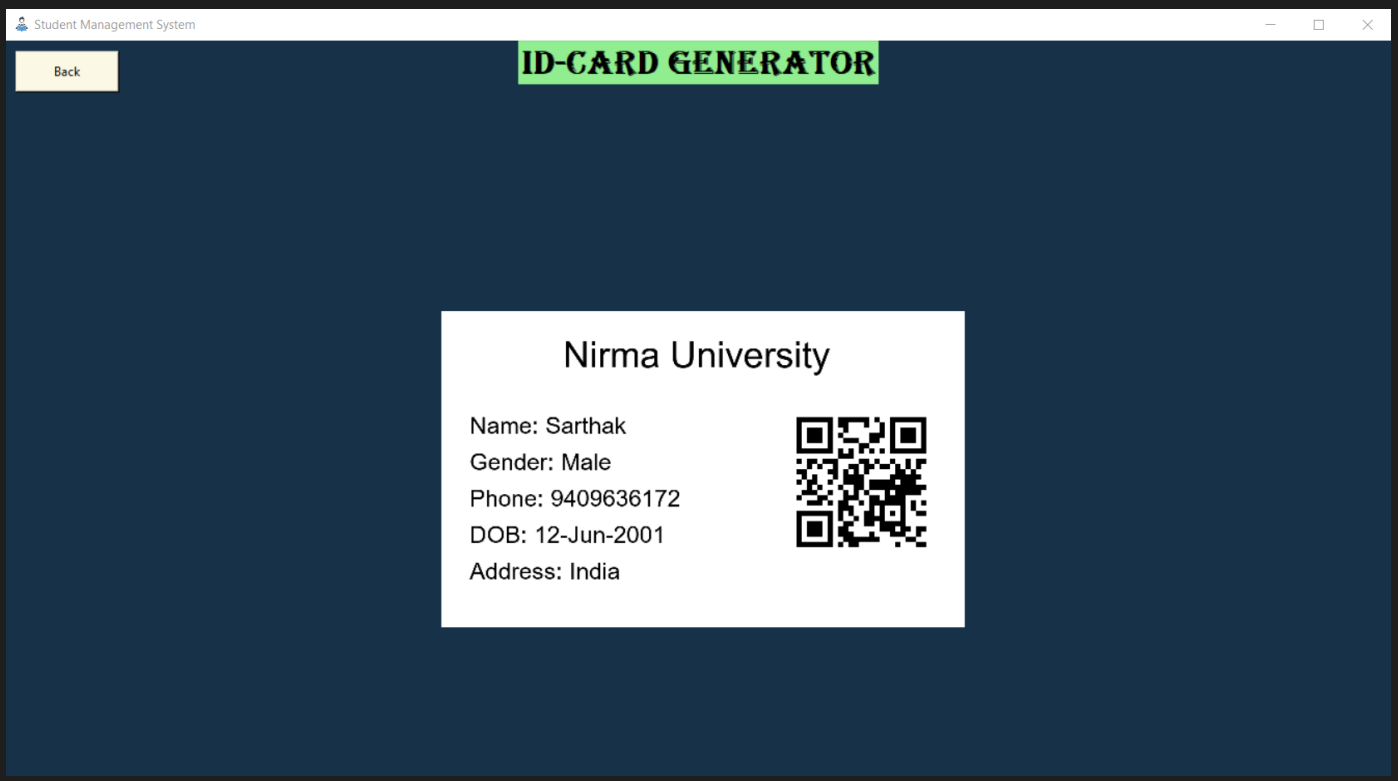
14. If the entered student roll number is not present in the database, then the following screen will be shown:



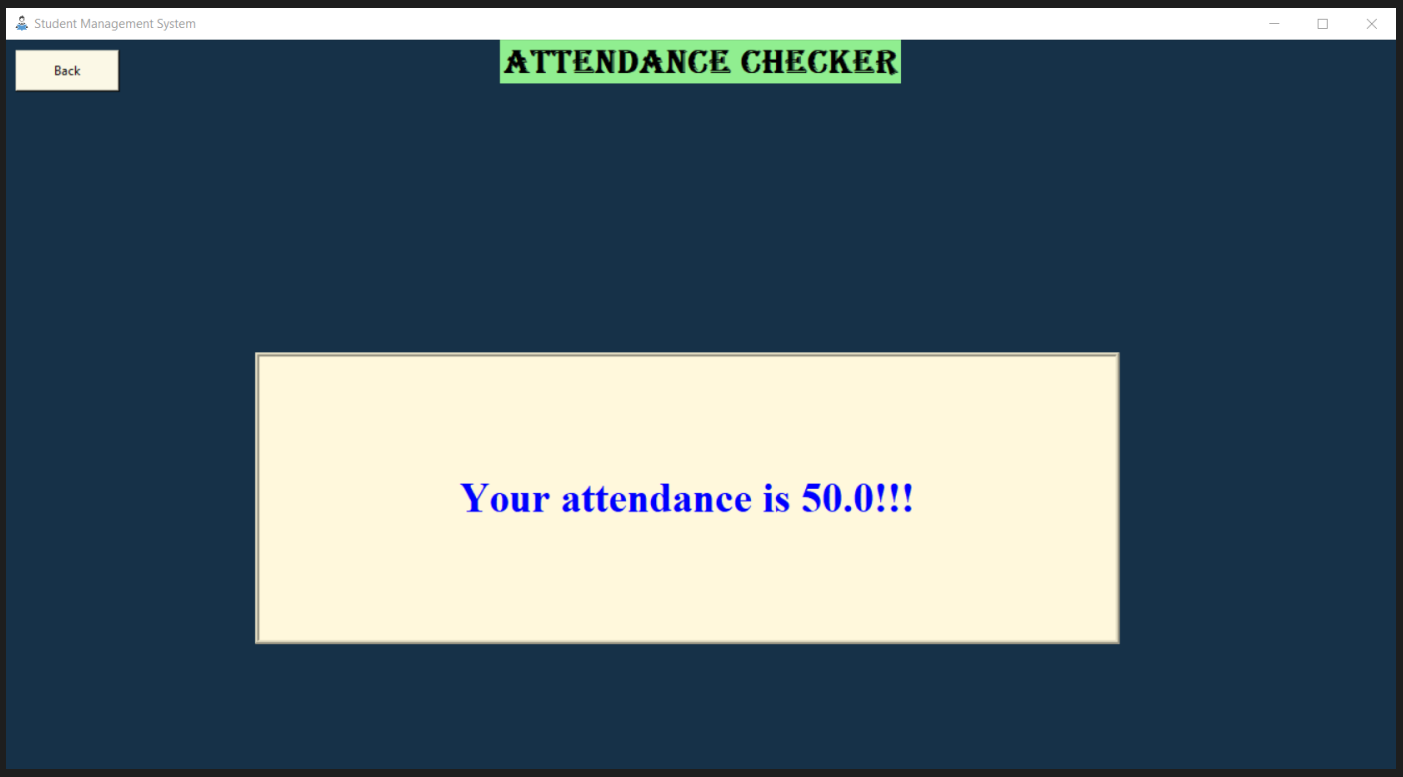
15. On entering the correct details of the student, the menu of that respective student will be opened, where the options are available as follows:

1) Generate ID Card.
2) Show Attendance.
3) Show Marksheet.
4) Show Fee Status.
5) Exit.

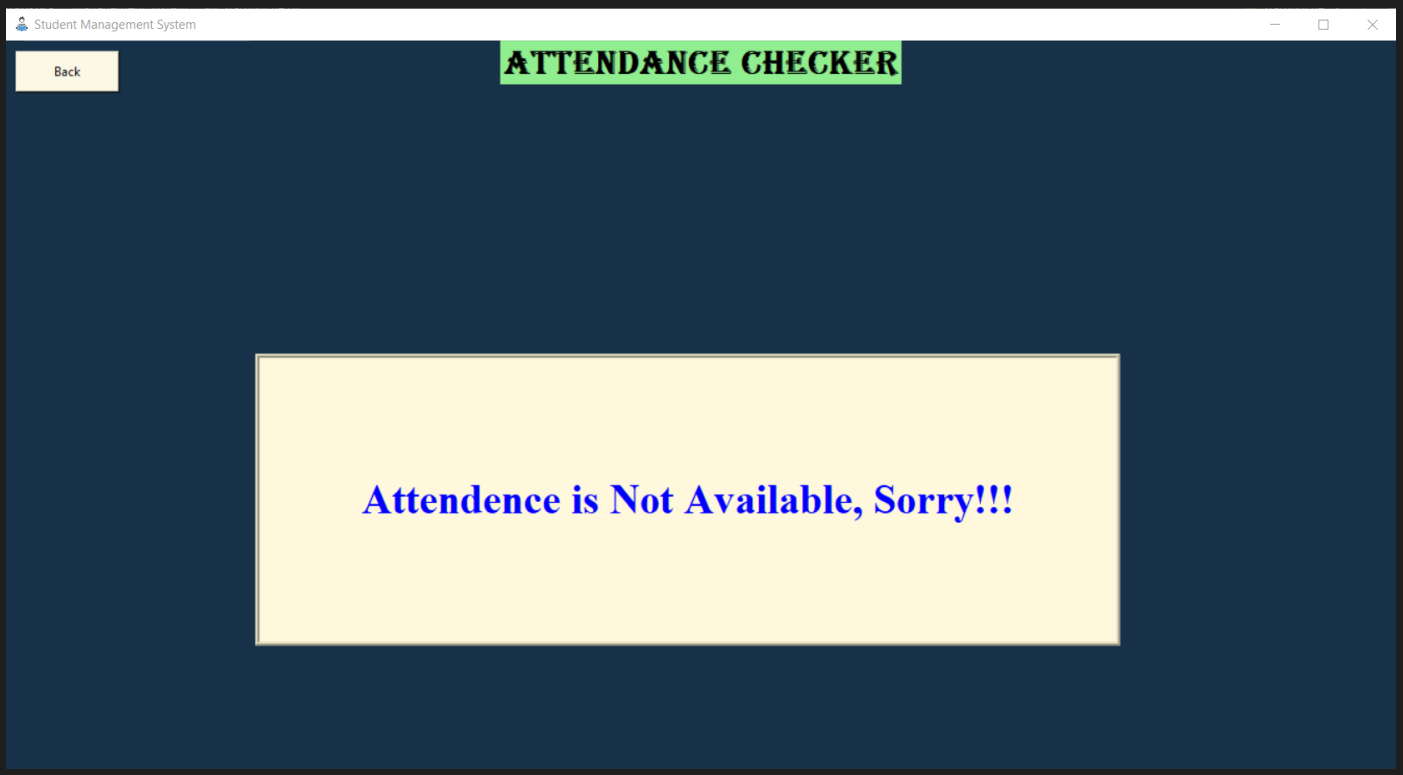
16. Click, the Generate Id Card, where ID Card will be generated for that respective student for which you have logged in.



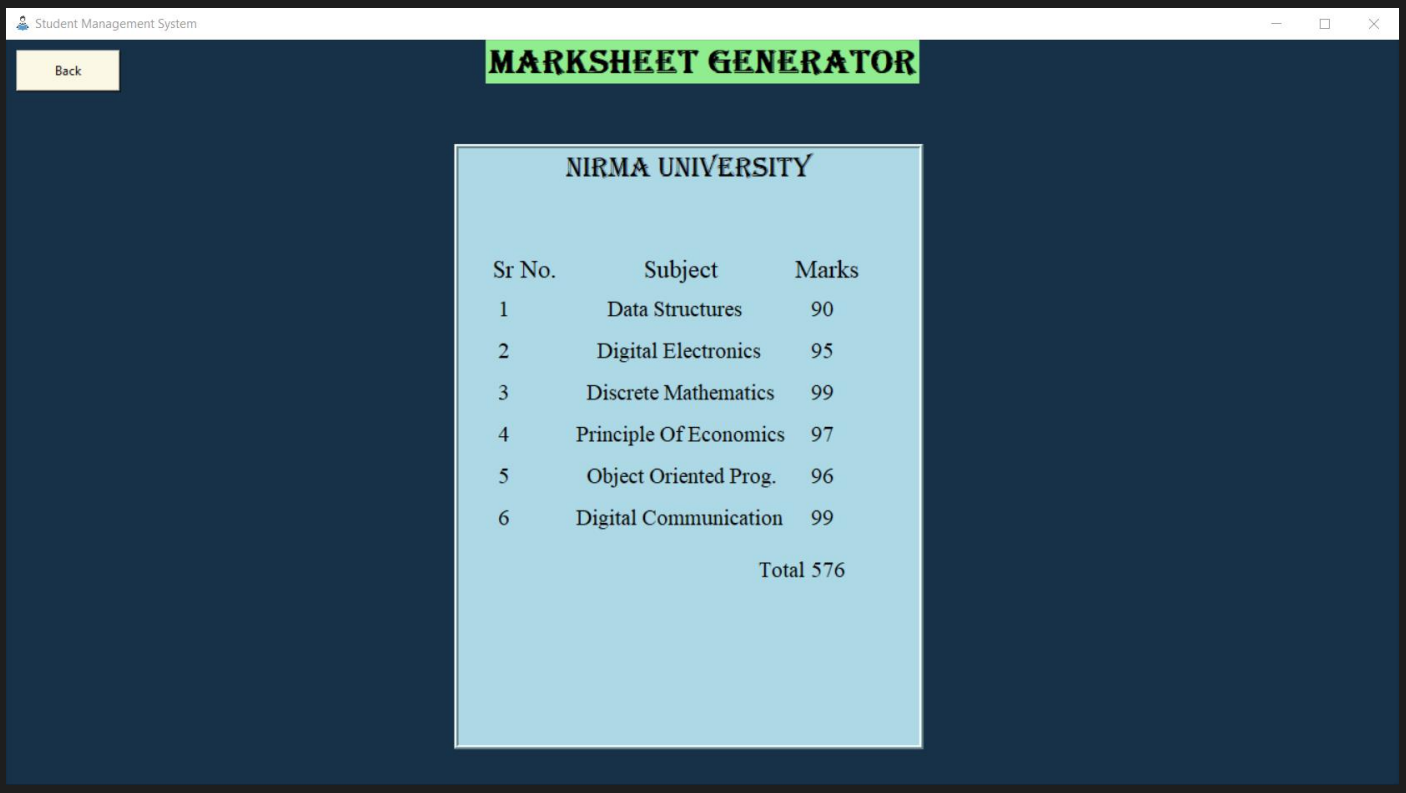
17. Click the back button, go to Show Attendance where you can check your attendance entered by the faculty.



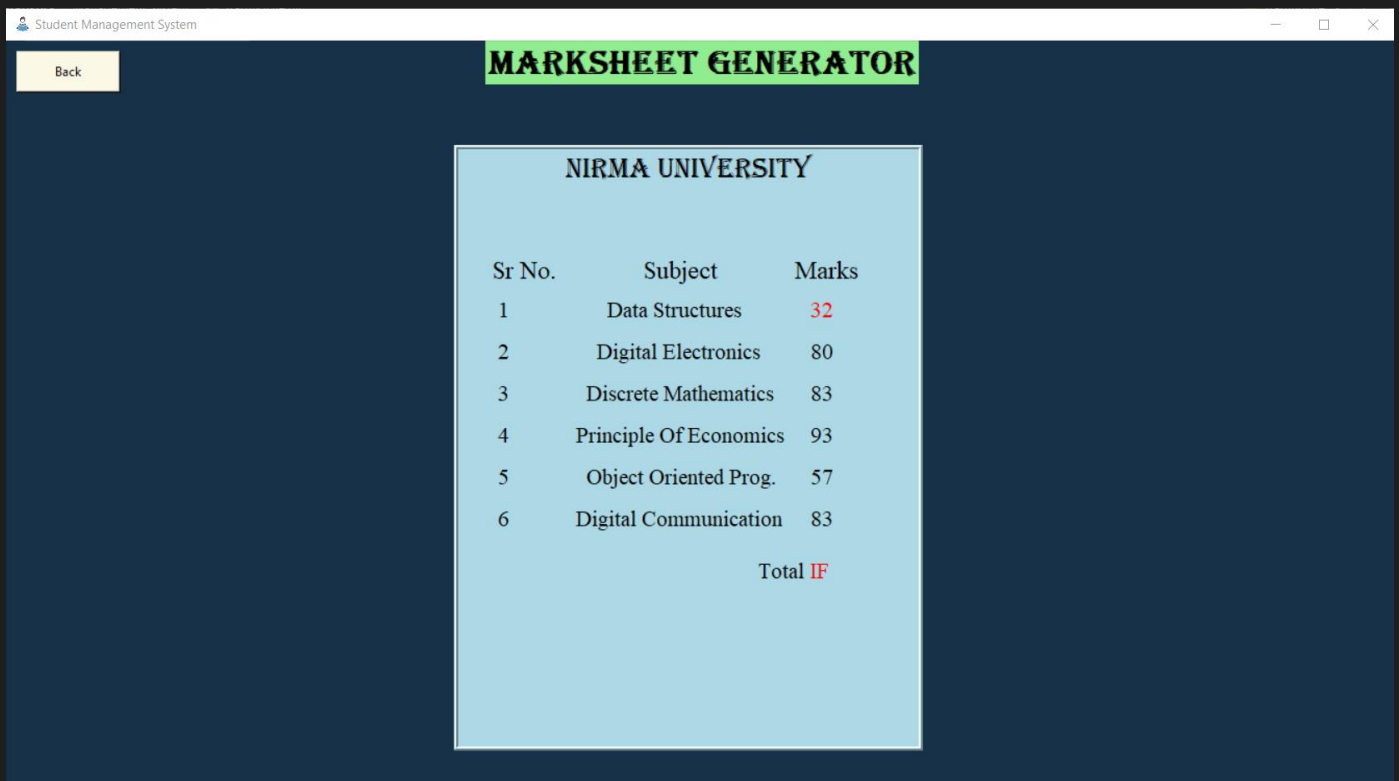
18. If no data has been entered till now by the faculty, the following screen will be shown:



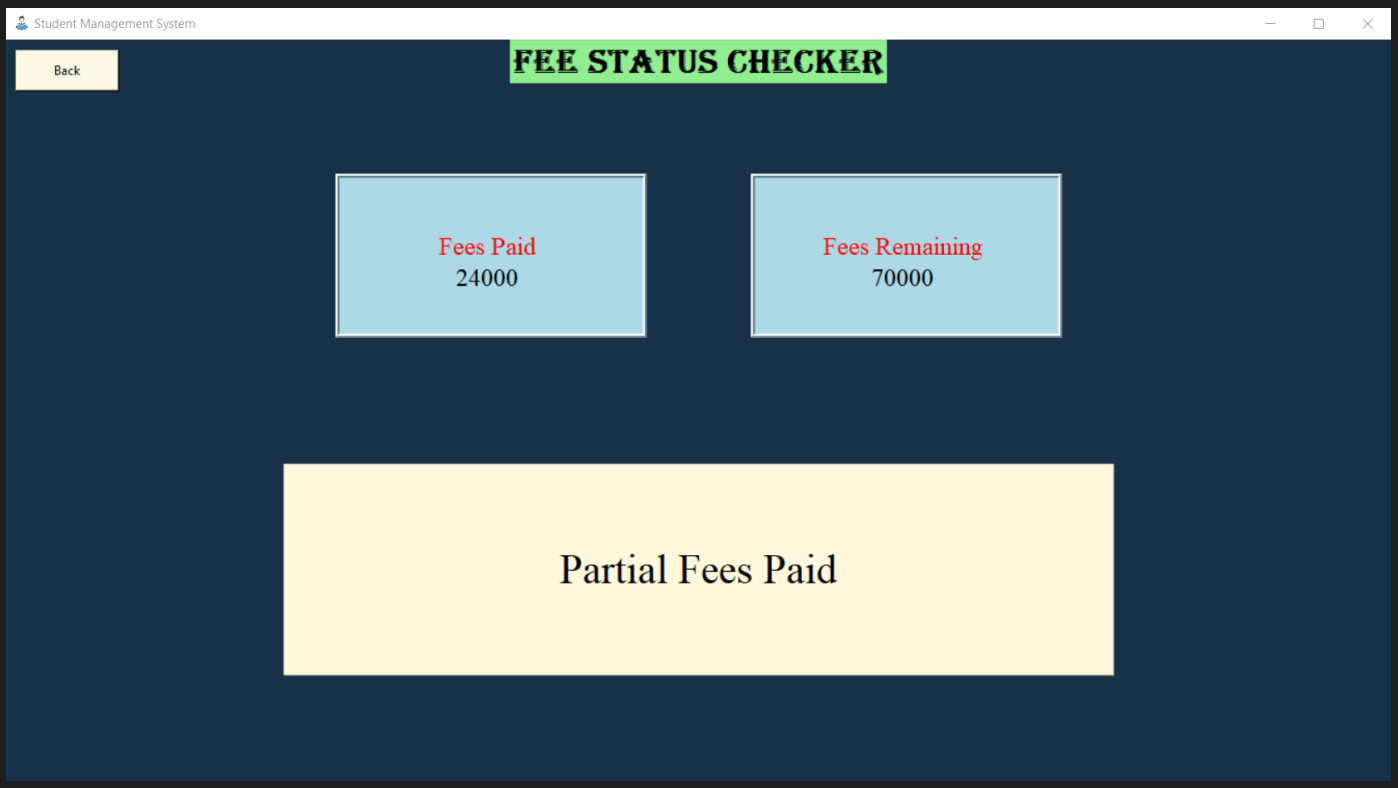
19. Click the *back* button, and go to the *marksheet* menu, where the student can get his/her marksheet as per the given marks by the faculty.



20. If the student is failed in any of the subject, then he will have red coloured marks, and even the total grade will be IF as shown in marksheet.



21. Here, fees details will be shown to the student as per the details shown below. We have also attached the functionality to check if the fees details are not entered by the faculty, then it will show the message that “Fees details are not available”.



Conclusion:-

Thus, this is the python based GUI project which shows the functionality of student management system developed with the help of tkinter, PIL, sqlite3 and qrcode.

THE END

THANK YOU