

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
```

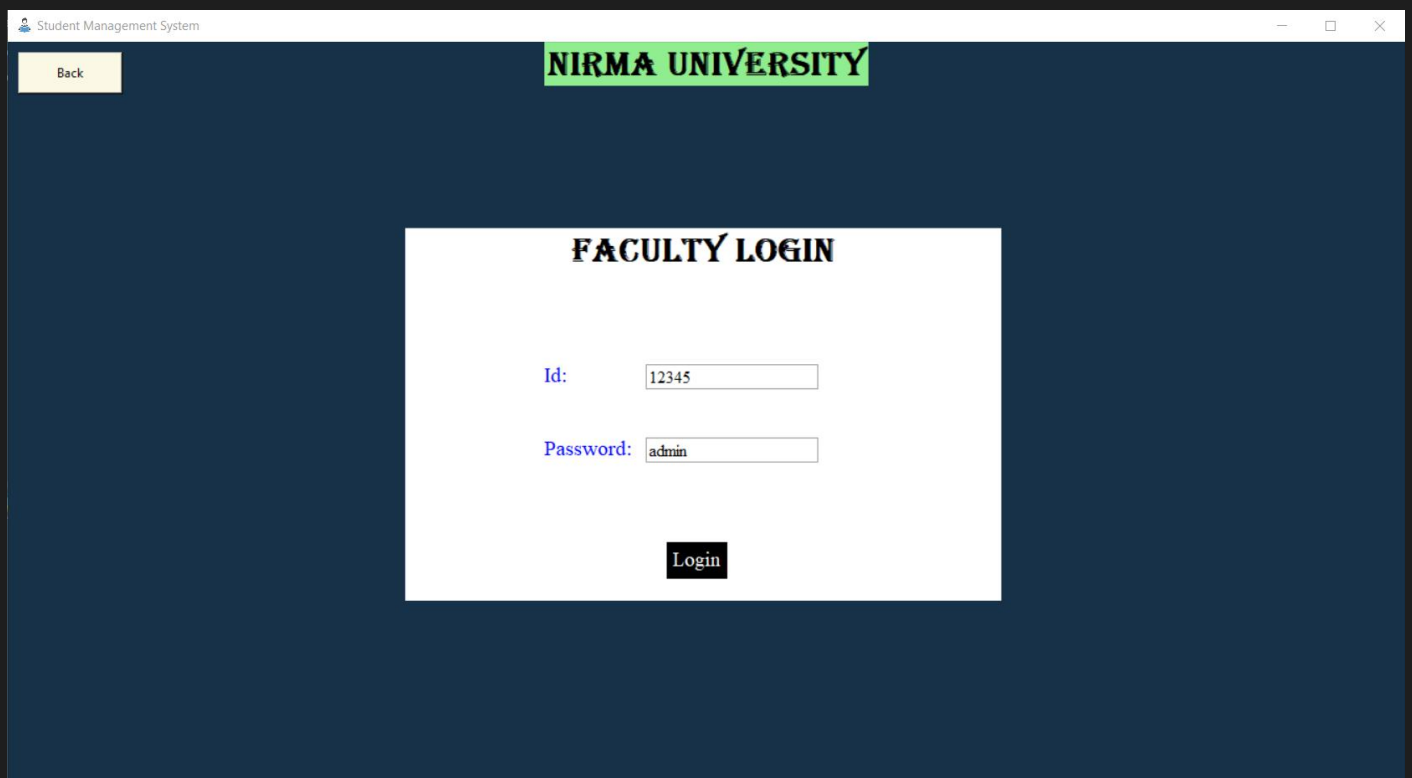
Running the files:

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**.

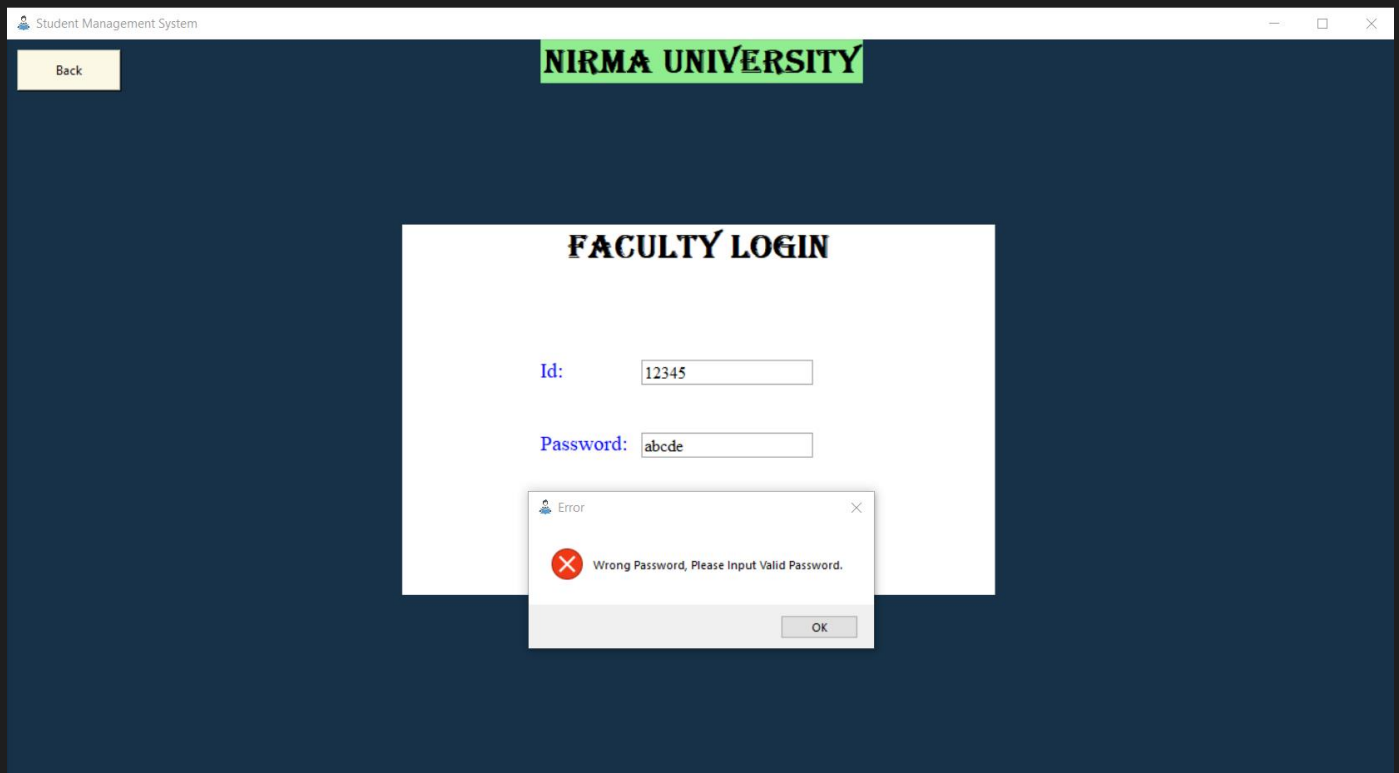


2. Let's first understand the features of faculty side, here we have set only one id-password for faculty.

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.

Student Management System

Back

STUDENT MANAGEMENT SYSTEM

Manage Students

Roll No

Name

Email

Gender

Phone

D.O.B

Address

ADD

UPDATE

DELETE

CLEAR

Search By

Search

Show All

Roll NO.	Name	Email	Gender	Phone	DOB	Address
1	Sarthak	sp@gmail.com	Male	9409636172	12-Jun-2001	India
2	Jinil	jk@gmail.com	Male	9409548424	31-Aug-2001	Suryoday Complex
3	Yash	19bce220@nirma	Male	9998887776	15-May-2001	Bodakdev, Ahmedabad

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.

Student Management System

Back

ATTENDANCE GENERATOR

Enter Your Roll No.

1

Check It!!

Mark Present/Absent

☐ Present

☐ Absent

OK

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

The screenshot shows a web application window titled "Student Management System". The main heading is "ATTENDANCE GENERATOR". On the left, there is a "Back" button. In the center, there is a light blue box with the text "Enter Your Roll No." and a text input field containing the number "5". Below the input field is a "Check It!!" button. At the bottom, a large yellow box displays the message "Roll Number Does not Exist".

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*.

The screenshot shows a web application window titled "Student Management System". The main heading is "MANAGE STUDENT MARKS". On the left, there is a "Back" button. The page is divided into two main sections. The left section, titled "Manage Students", contains a form with the following fields: "Roll No", "Data Structures:", "Digital Electronics:", "Discrete Mathematics:", "Principle of Economics:", "Object Oriented Prog.:", and "Digital Communication:". Each field has a corresponding text input box. At the bottom of this section are four buttons: "ADD", "UPDATE", "DELETE", and "CLEAR". The right section, titled "Search By", contains a search input field, a "Search" button, and a "Show All" button. Below the search section is a table with the following data:

Roll NO.	DSA	D.E.	D.M.	POE	OOPs	D.C.
1	90	95	99	97	96	99
2	32	80	83	93	57	83

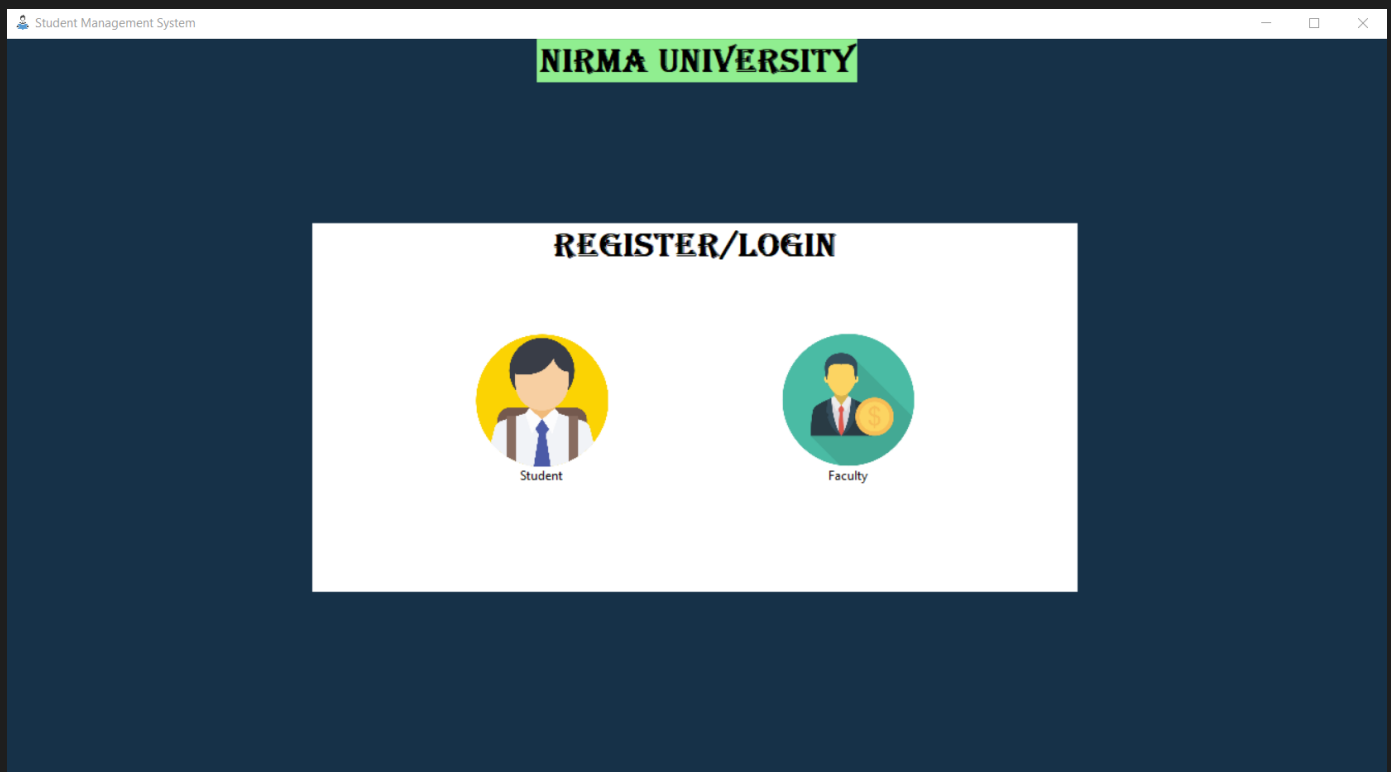
9. Click the *back* button and go to the *managing fees status* where you will have to enter the *roll number* of a student. If, it is present in data, you can enter his fees status and click the ok button.

The screenshot shows a web application window titled "Student Management System". The main heading is "MANAGE STUDENT FEES". In the top left corner, there is a "Back" button. The central part of the interface features a light blue box with the text "Enter Your Roll No." in red. Below this text is a text input field containing the number "1" and a "Check It!!" button. Below the light blue box, there is a yellow box containing two text input fields. The left field is labeled "Enter Fees Paid" and the right field is labeled "Enter Fees Remaining". Below these fields is an "OK" button.

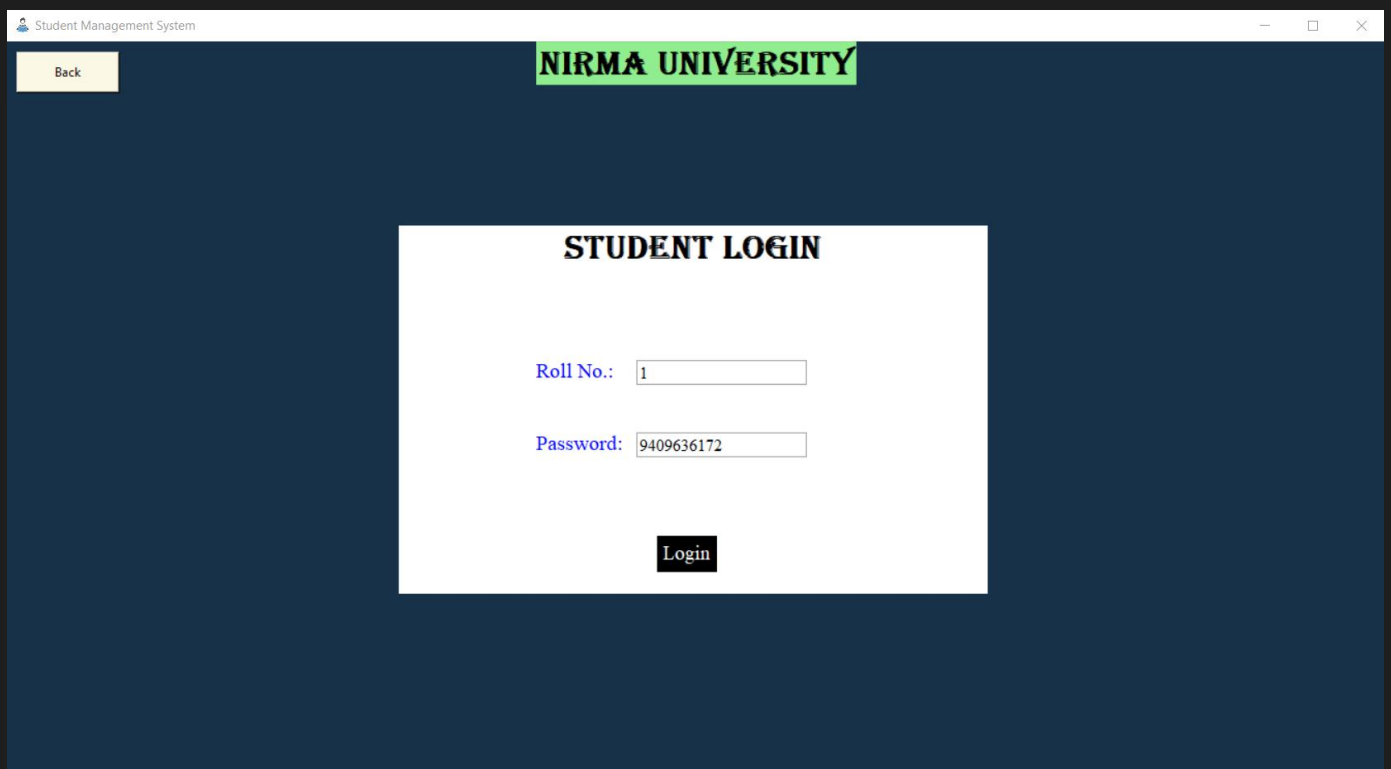
10. If the entered roll number is incorrect, it will show the frame as below:

The screenshot shows the same web application window. The "Enter Your Roll No." form now has the number "5" in the input field. Below the form, a yellow box displays the message "Roll Number Does not Exist".

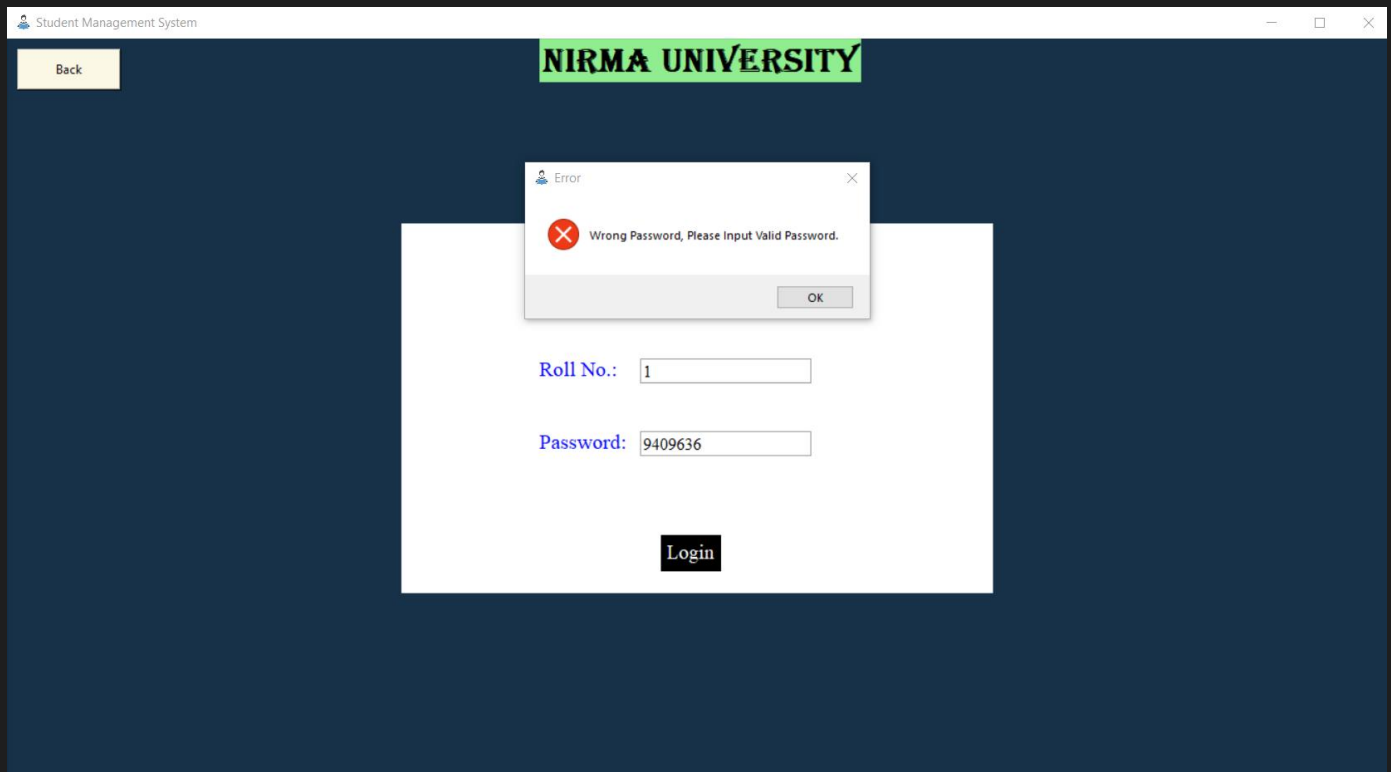
11. On clicking the exit button, you will be on the screen where you have started named as *HomePage*, where you can get two choices as *student* and *faculty*.



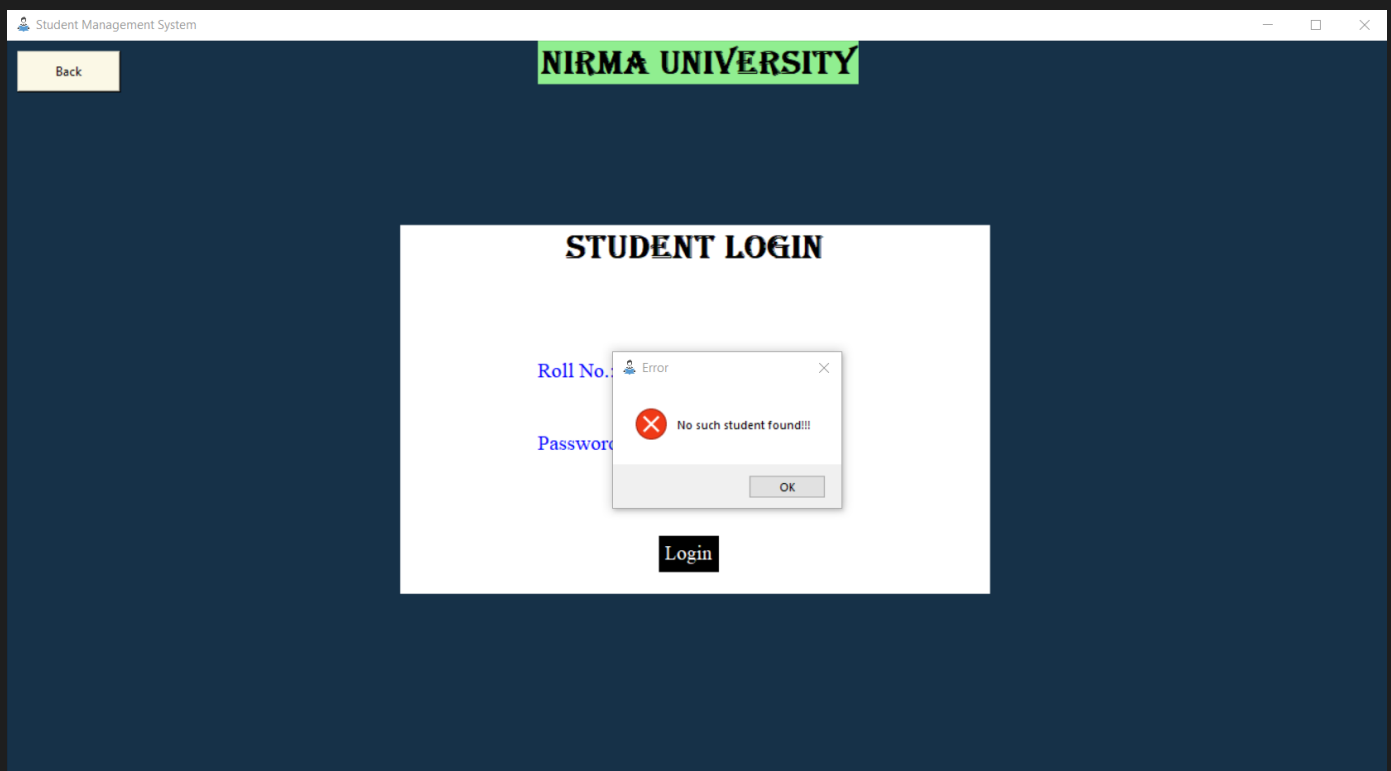
11. Click on the *student*, enter *password* and *id* where password will be your registered phone number while filling out the form.



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:

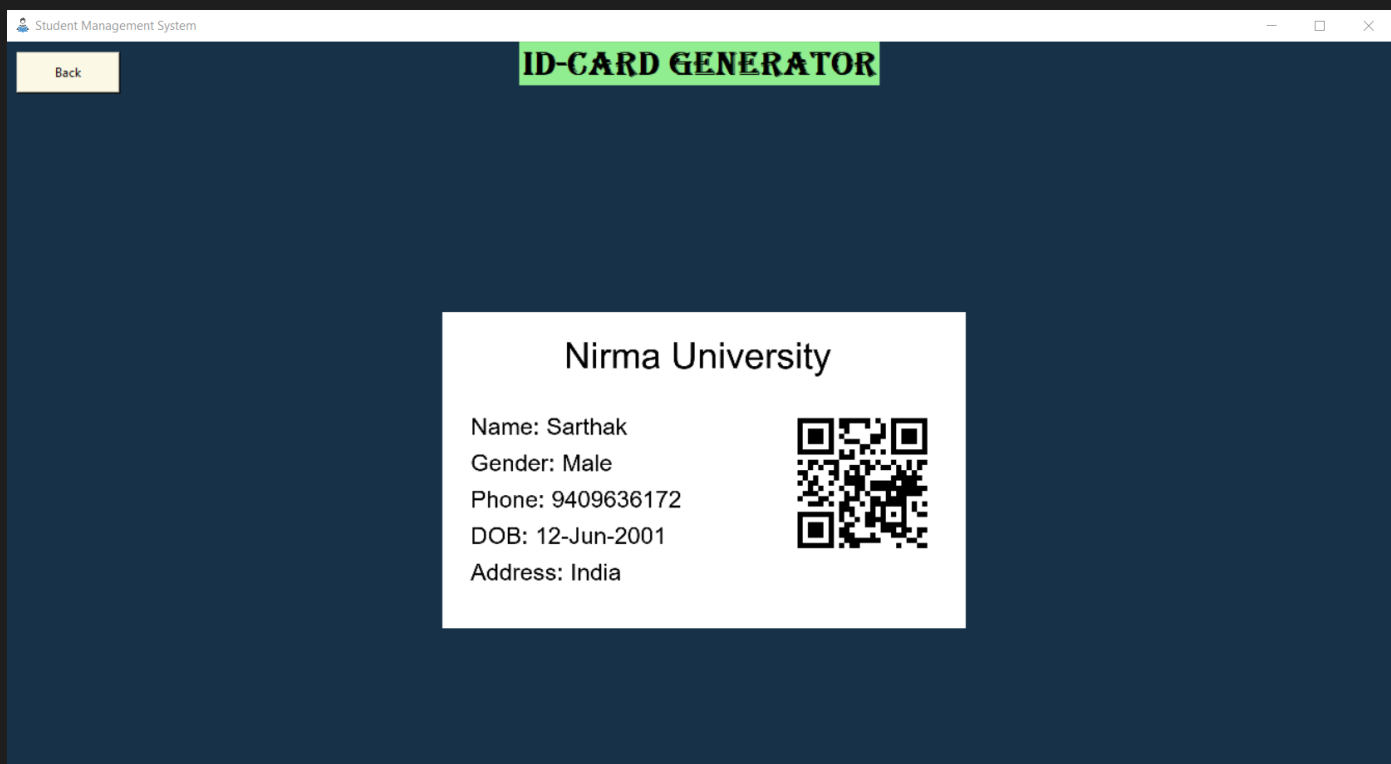


15. On entering the correct details of the student, the menu of that respective student will be opened, where the options are available as follows:

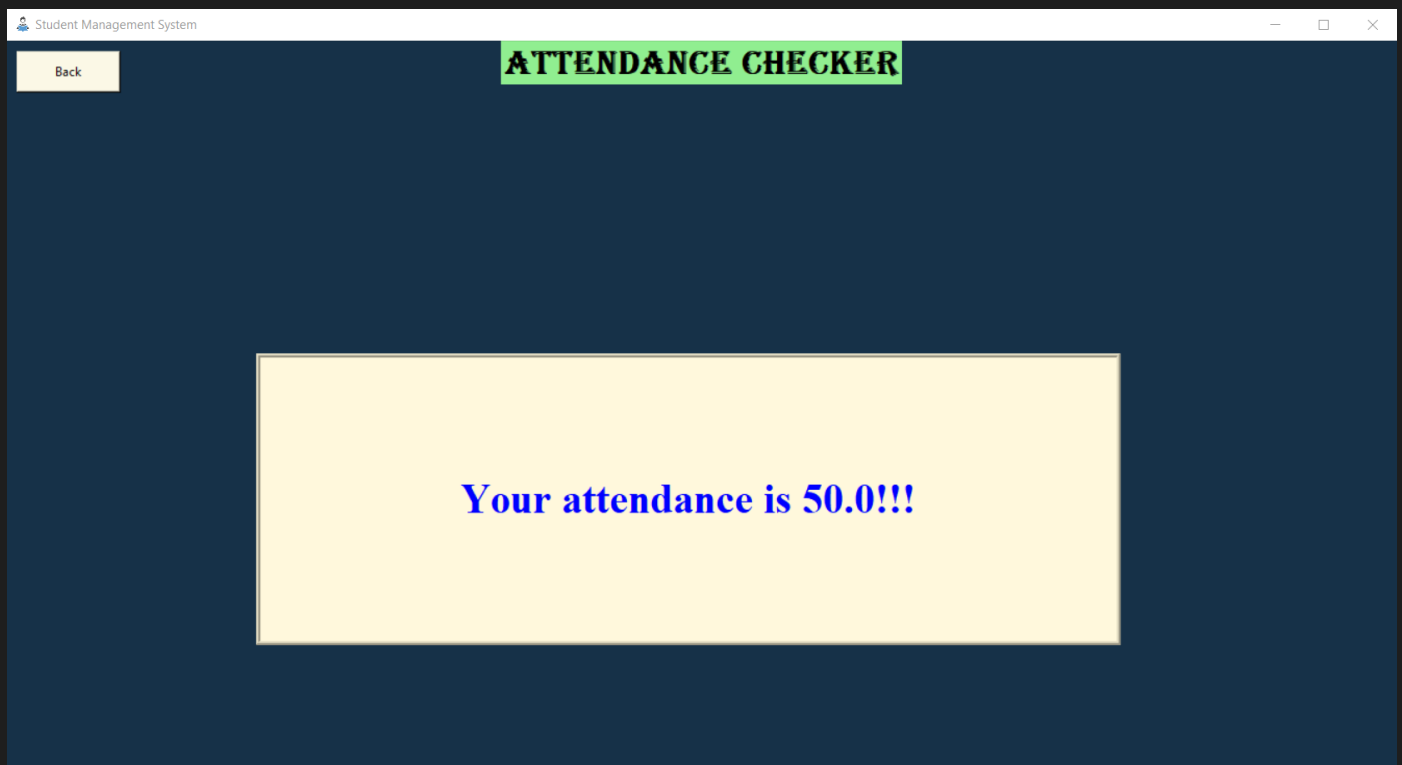
- 1) Generate ID Card.
- 2) Show Attendance.
- 3) Show Marksheet.
- 4) Show Fee Status.
- 5) Exit.



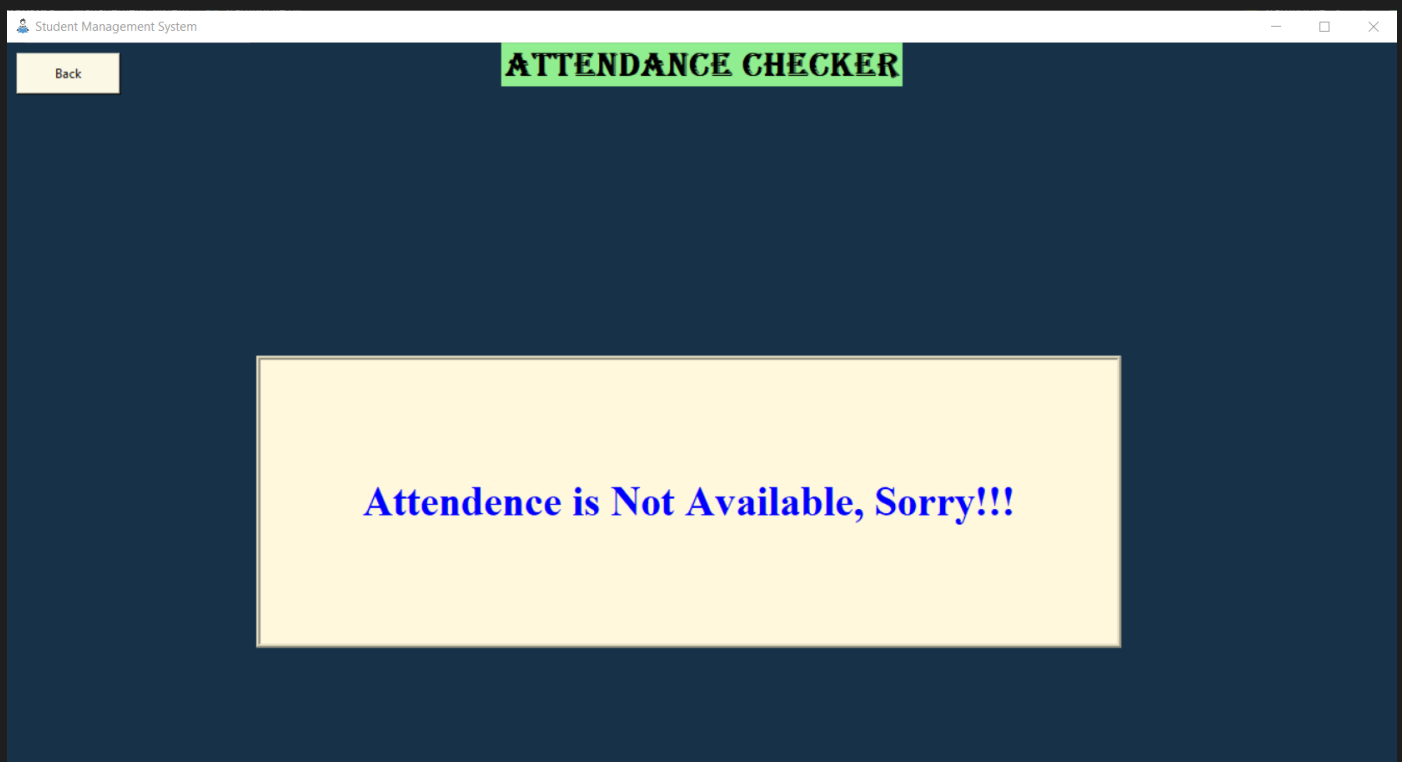
16. Click, the Generate Id Card, where ID Card will be generated for that respective student for which you have logged in.



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:



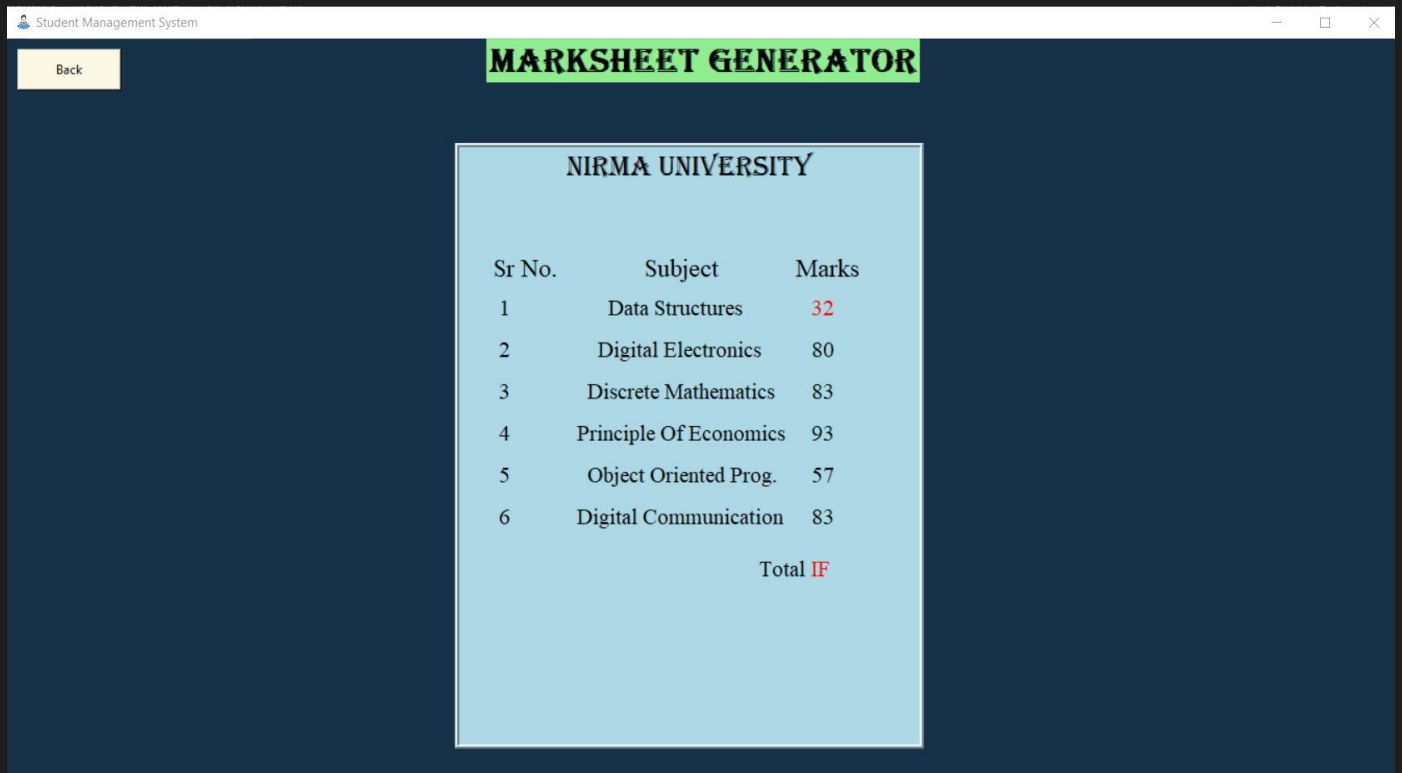
19. Click the *back* button, and go to the *marksheet* menu, where the student can get his/her marksheet as per the given marks by the faculty.



The screenshot shows a web application window titled "Student Management System". On the left, there is a yellow button labeled "Back". The main content area has a dark blue background. At the top center, there is a green banner with the text "MARKSHEET GENERATOR" in bold black letters. Below this, there is a light blue rectangular box containing the text "NIRMA UNIVERSITY" at the top. Inside this box, there is a table with three columns: "Sr No.", "Subject", and "Marks". The table contains six rows of data, and a "Total 576" is displayed at the bottom right of the table.

Sr No.	Subject	Marks
1	Data Structures	90
2	Digital Electronics	95
3	Discrete Mathematics	99
4	Principle Of Economics	97
5	Object Oriented Prog.	96
6	Digital Communication	99
		Total 576

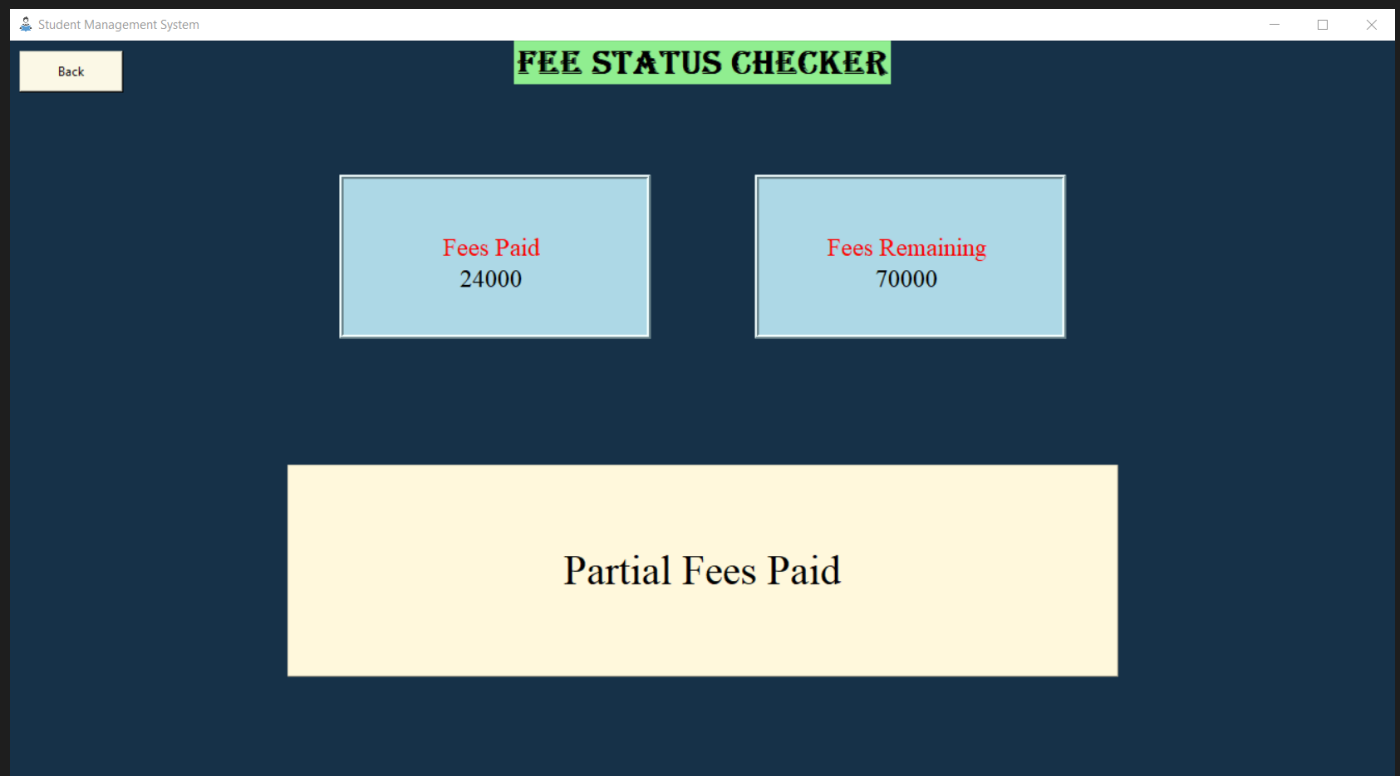
20. If the student is failed in any of the subject, then he will have red coloured marks, and even the total grade will be IF as shown in marksheet.



The screenshot shows the same web application window as before. The "Back" button is still present. The "MARKSHEET GENERATOR" banner is at the top. The light blue box contains "NIRMA UNIVERSITY" and a table with the same structure as the previous one. In this table, the marks for "Data Structures" (32) and the "Total" (IF) are highlighted in red.

Sr No.	Subject	Marks
1	Data Structures	32
2	Digital Electronics	80
3	Discrete Mathematics	83
4	Principle Of Economics	93
5	Object Oriented Prog.	57
6	Digital Communication	83
		Total IF

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

