Student Management System

Under The University of Calcutta

Under the supervision of
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INTRODUCTION

A Student Management System is a software that manages the students records of an institution , thus helping in maintaining the data in a efficient way and extract meaningful information form that data.

Product Function:

An Administrator can login into the system and perform any of the available operations,

- ❑ Can edit student information to the database.
- ❑ Can make search for a specific student.
- ❑ Can access all the details of the student

A Student can login into the system and perform any of the available operations,

- ❑ Can check their details
- ❑ Pay their fees

Motivation :

- To meet a solution , that provides an effective way to manage students records for , small institutes and , Edu-tech startups , large and medium scale tutions, small schools .
- To overcome existing problems faced , in manual record handelling and maintainance .

Software Development Model

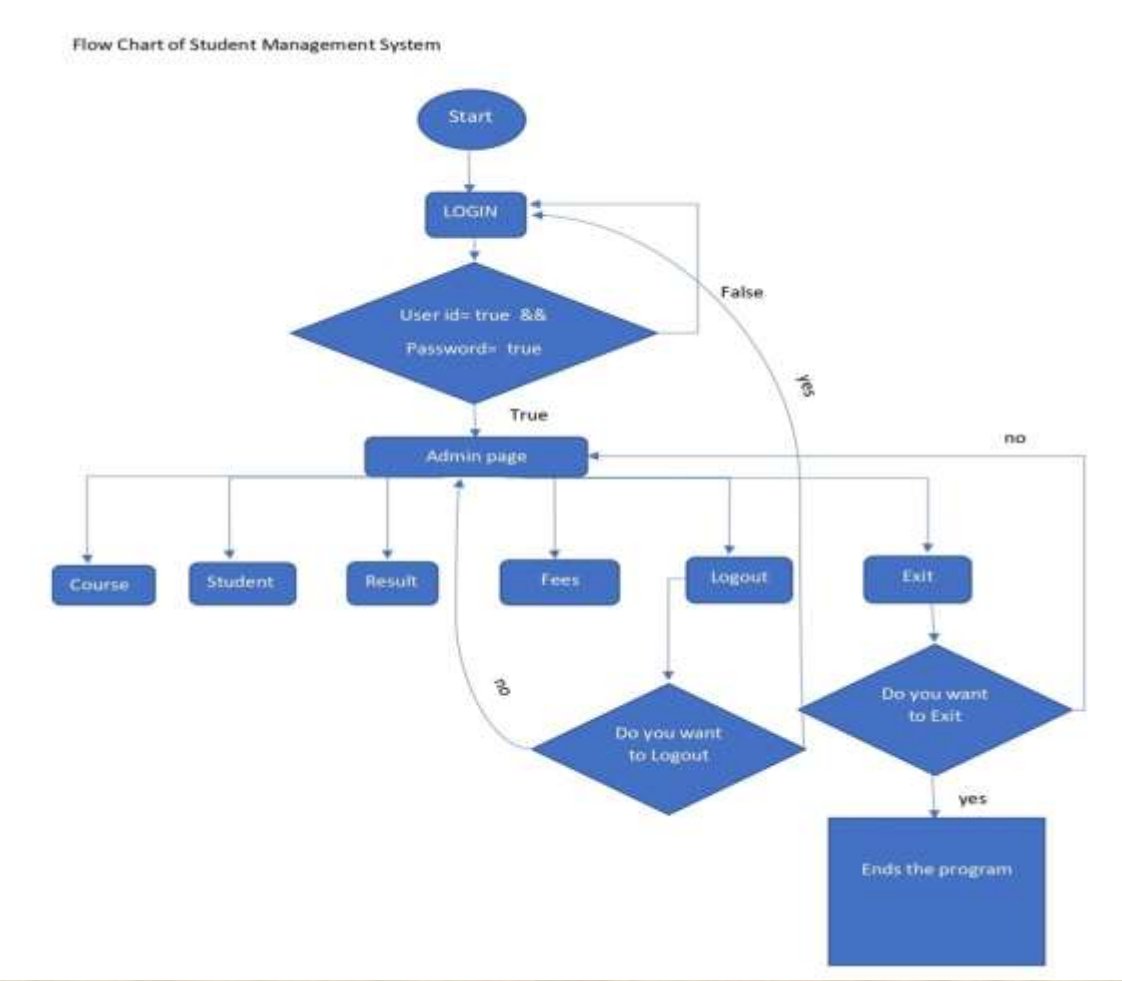
Spiral Model

We have used the spiral model for its , effectiveness , as expertise was less and the project requirements are subject to change as per customer requirements , we decided to follow the spiral model of development .

Instead of customer feedback we used team feedback , after completion of each release and gradually the software came into form,

For this quick development we used python and in the Web front we used JSP technology as JVM is very reliable .

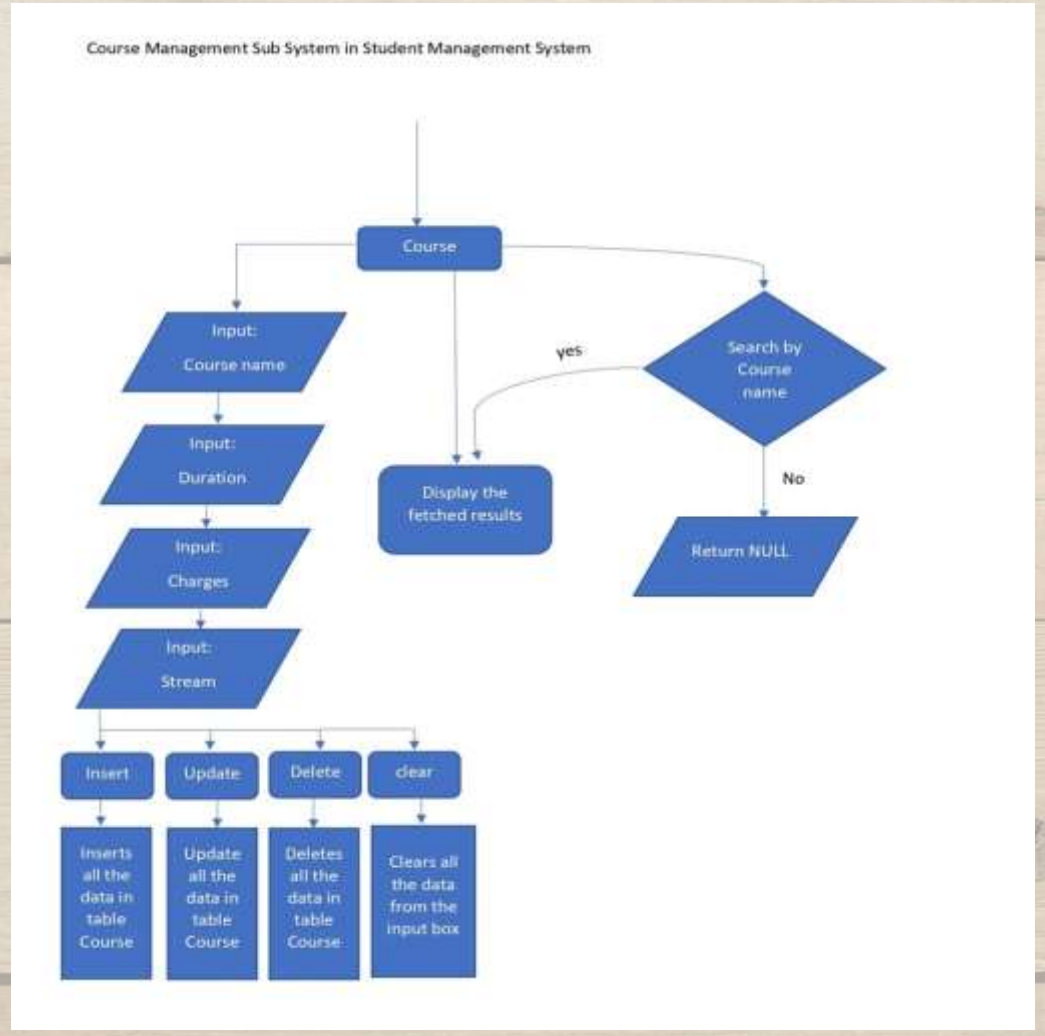
Admin side flow chart



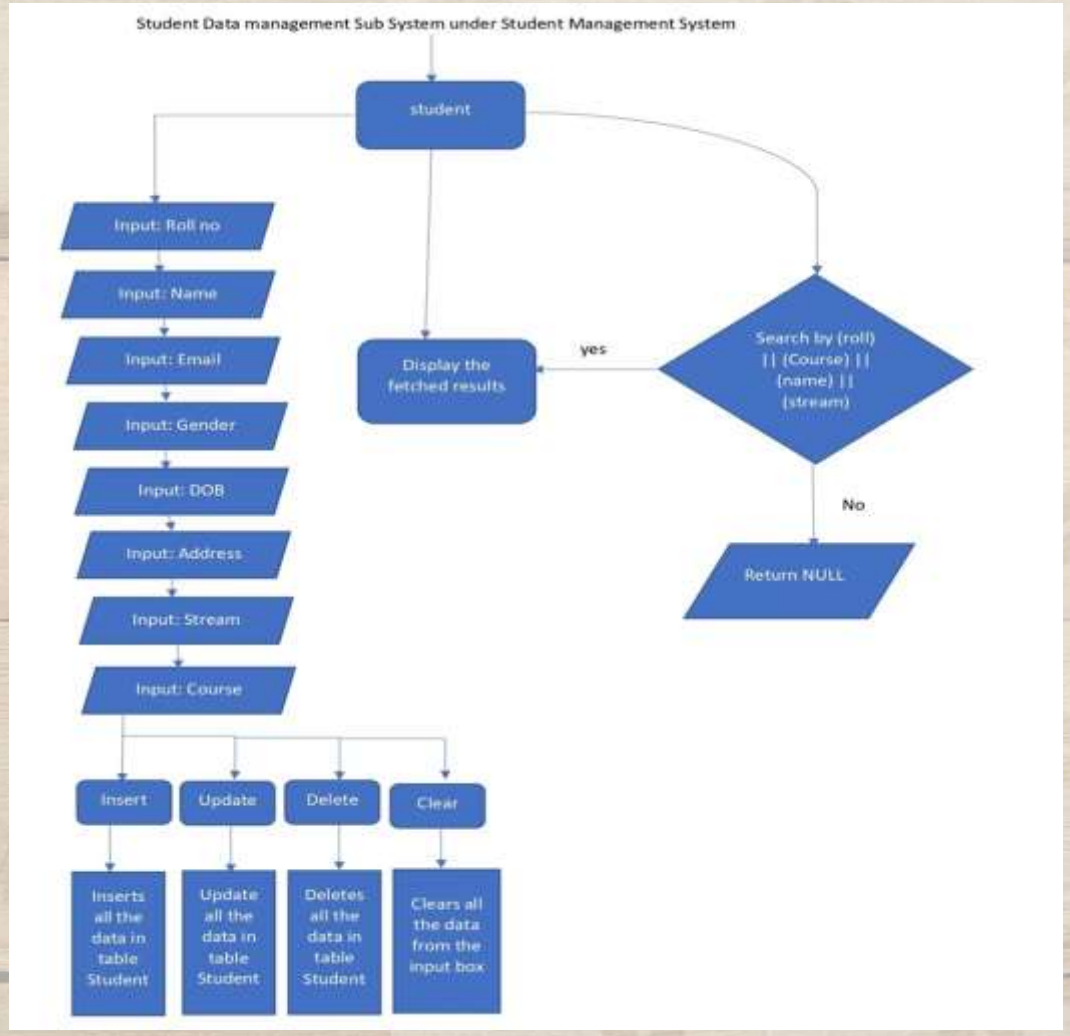
Login systems
And other
Sub-systems

ADMIN

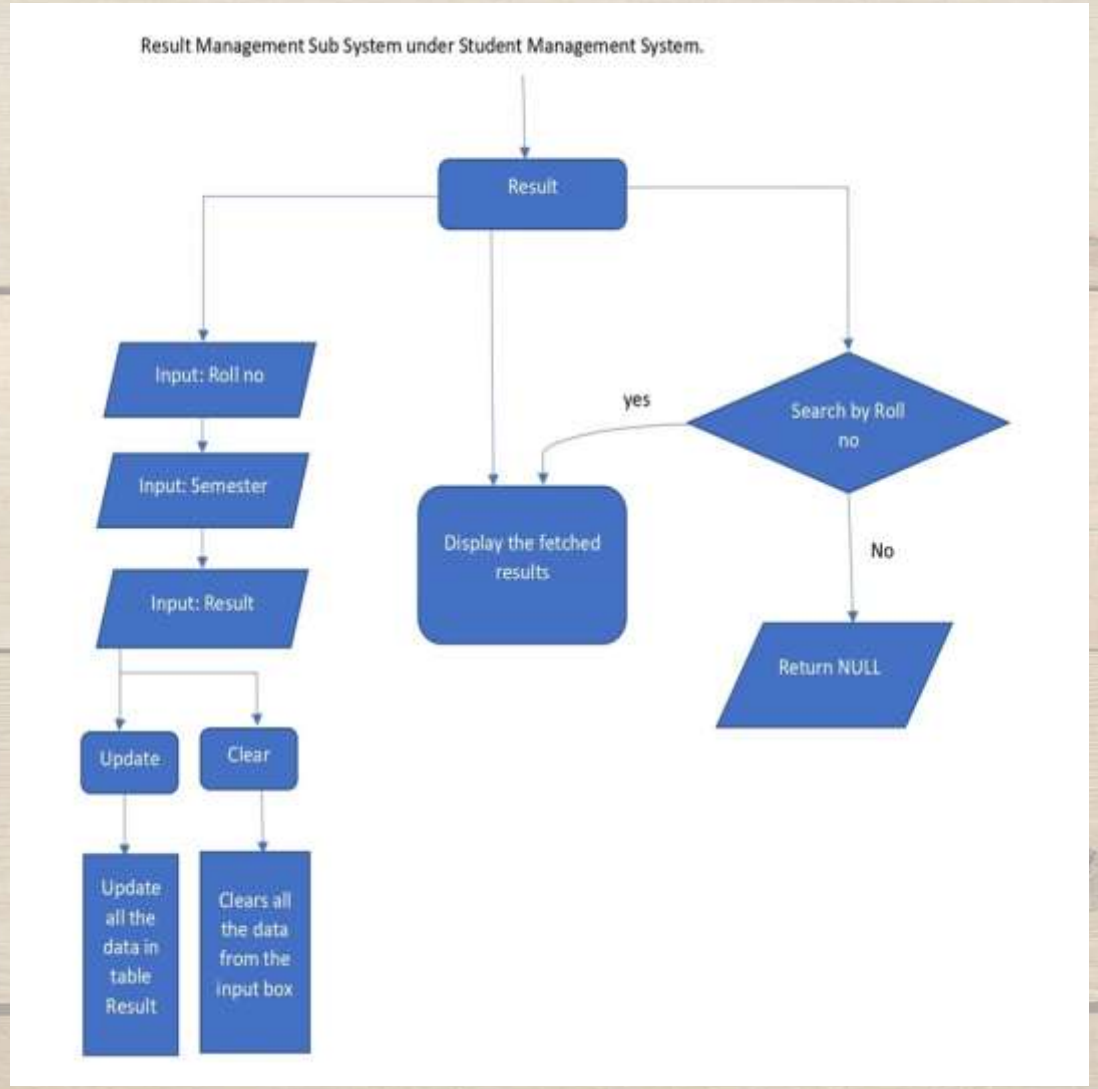
Course management system



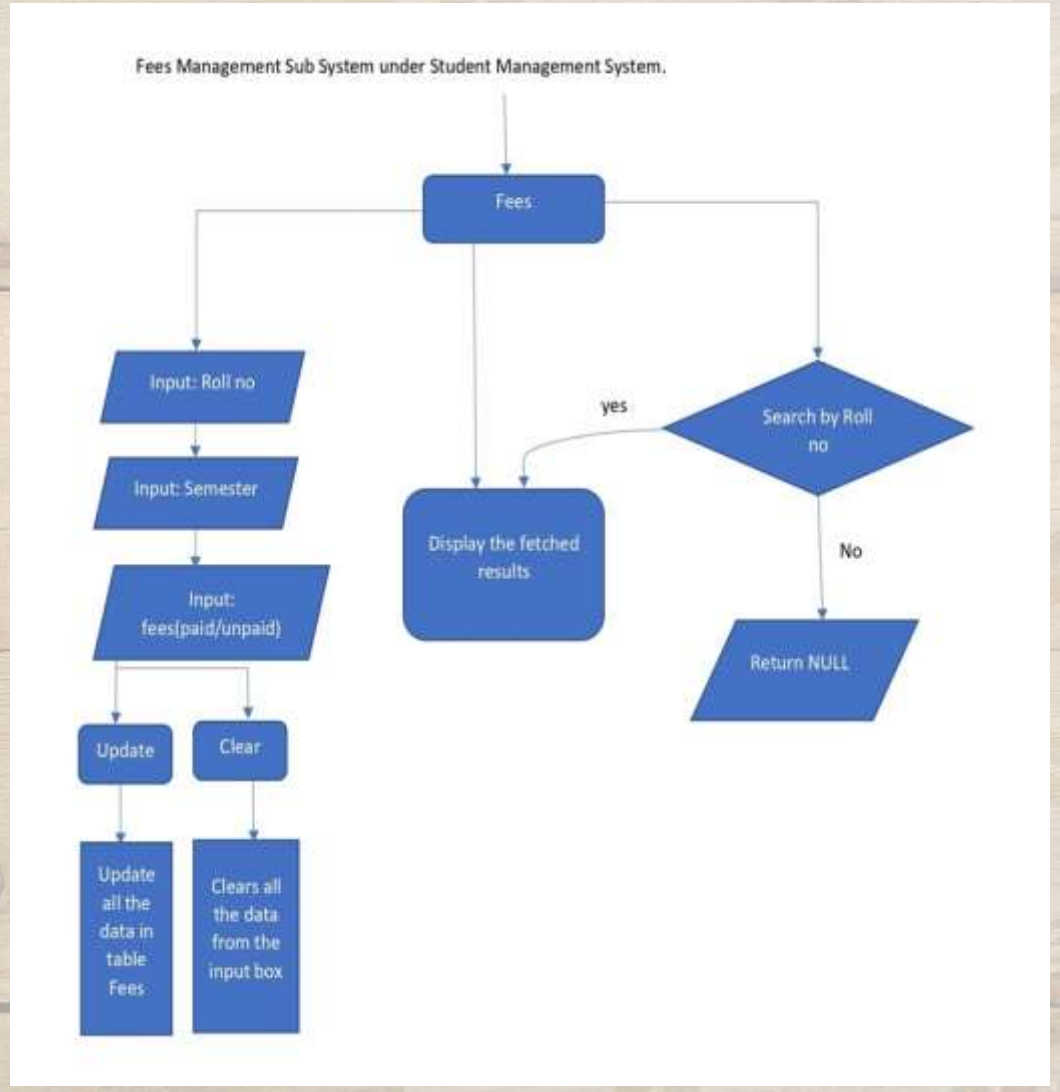
Student details management system



Results Management System

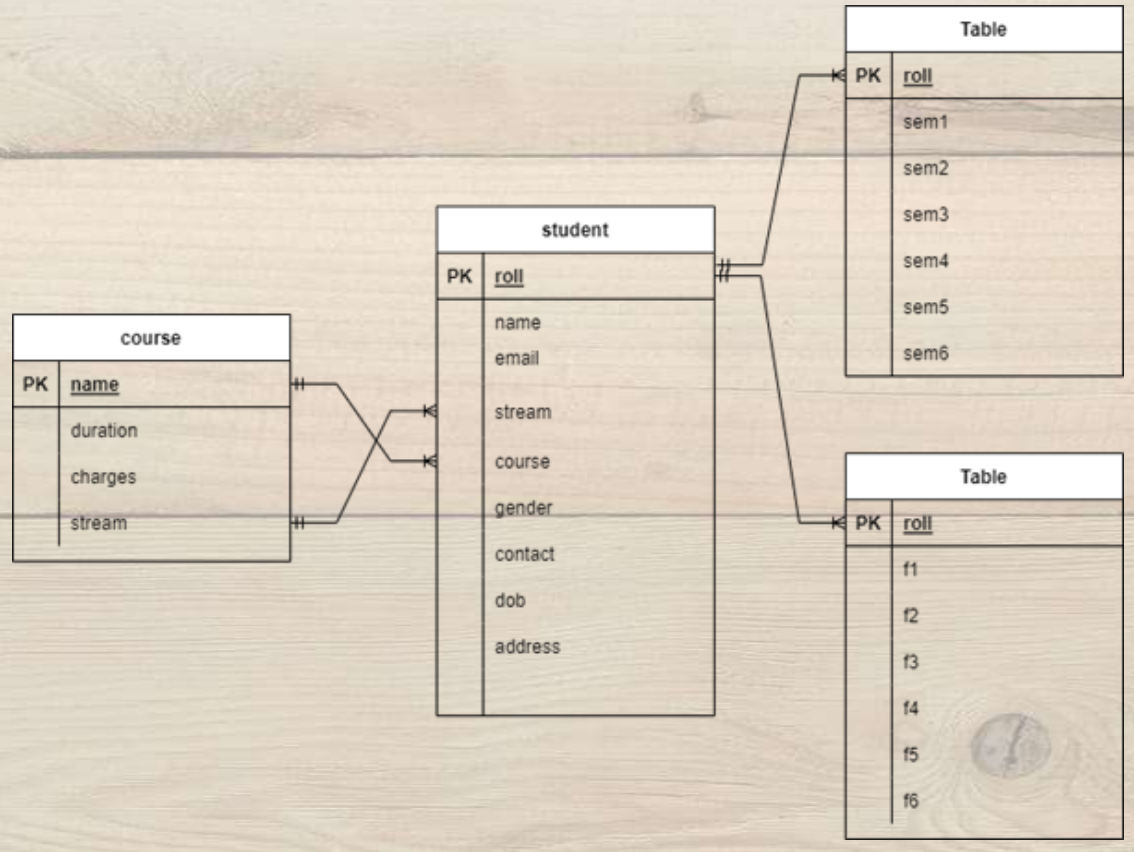


Fees Management System



Data Base MySQL

ER Diagram

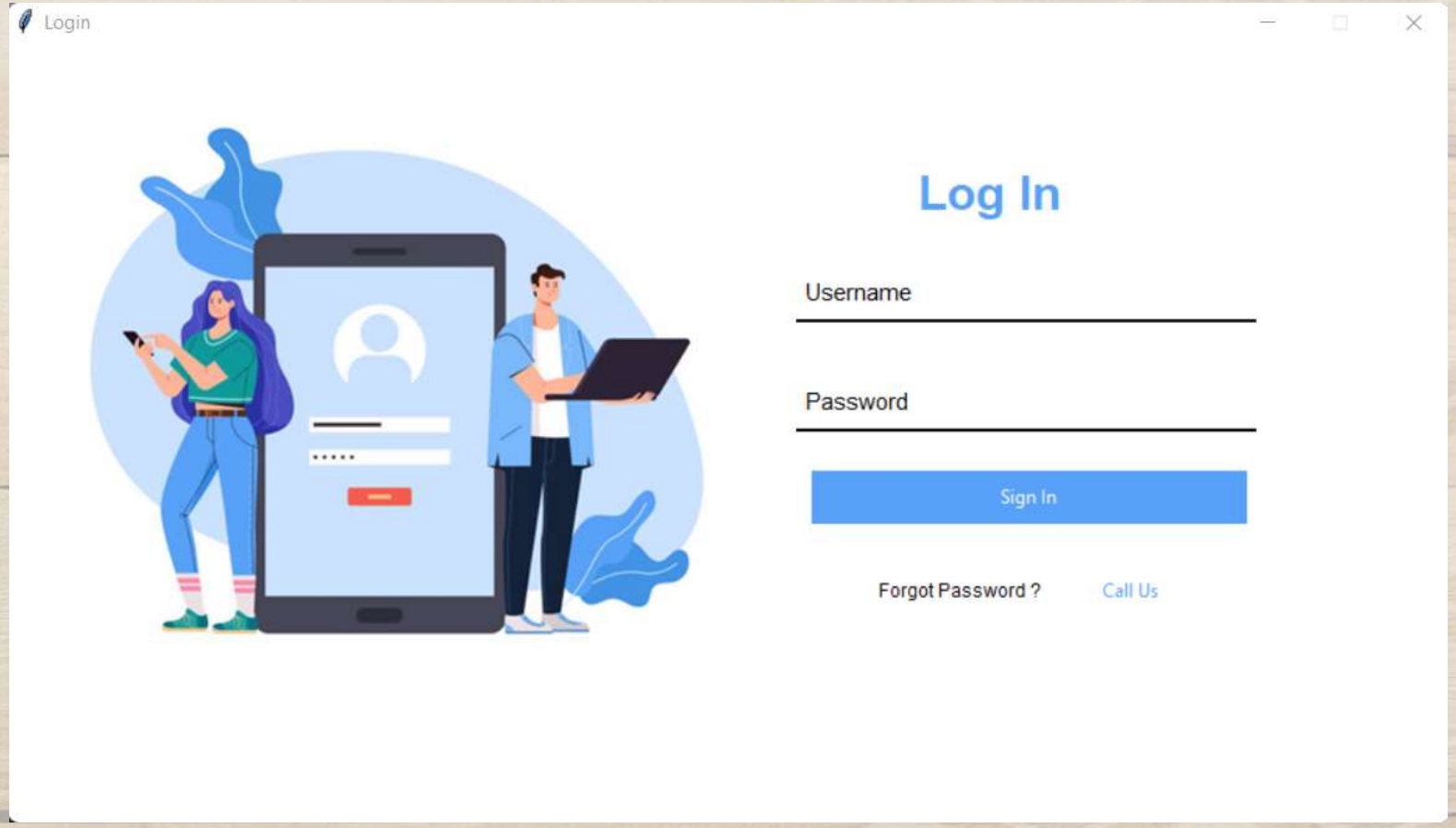


The Entity Relationship Diagram is used to define the workflow of a Data Base ,

- ❑ **Course table**
- ❑ **Student table**
- ❑ **Result table**
- ❑ **Fees table**

Admin Side Software

Login page



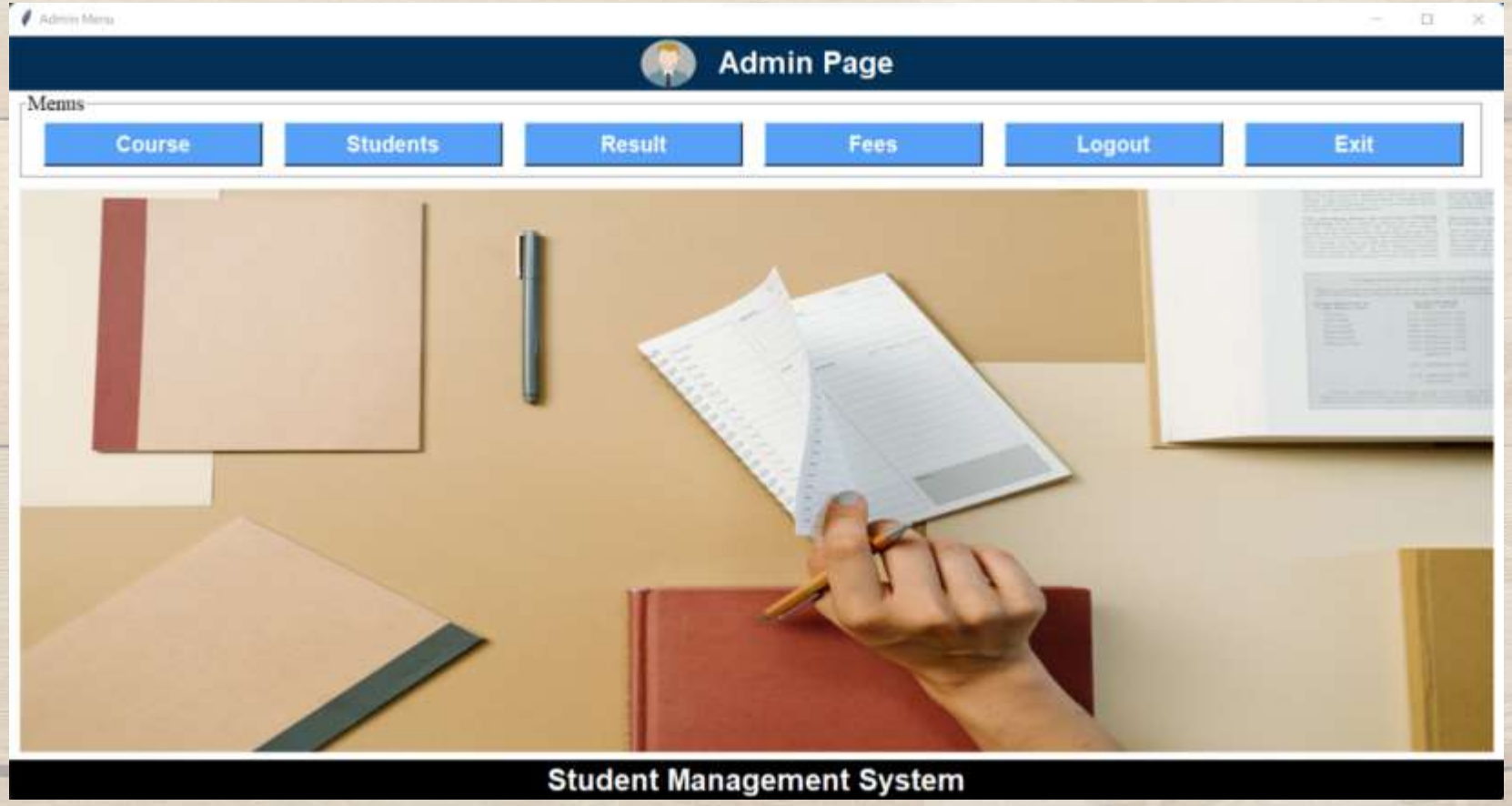
Python is used in this project for the admin side Work . Libraries used are

- **Tkinter**
- **PyMysql**
- **Pillow**
- **os**

Python was used to for quick development and deployment of the project

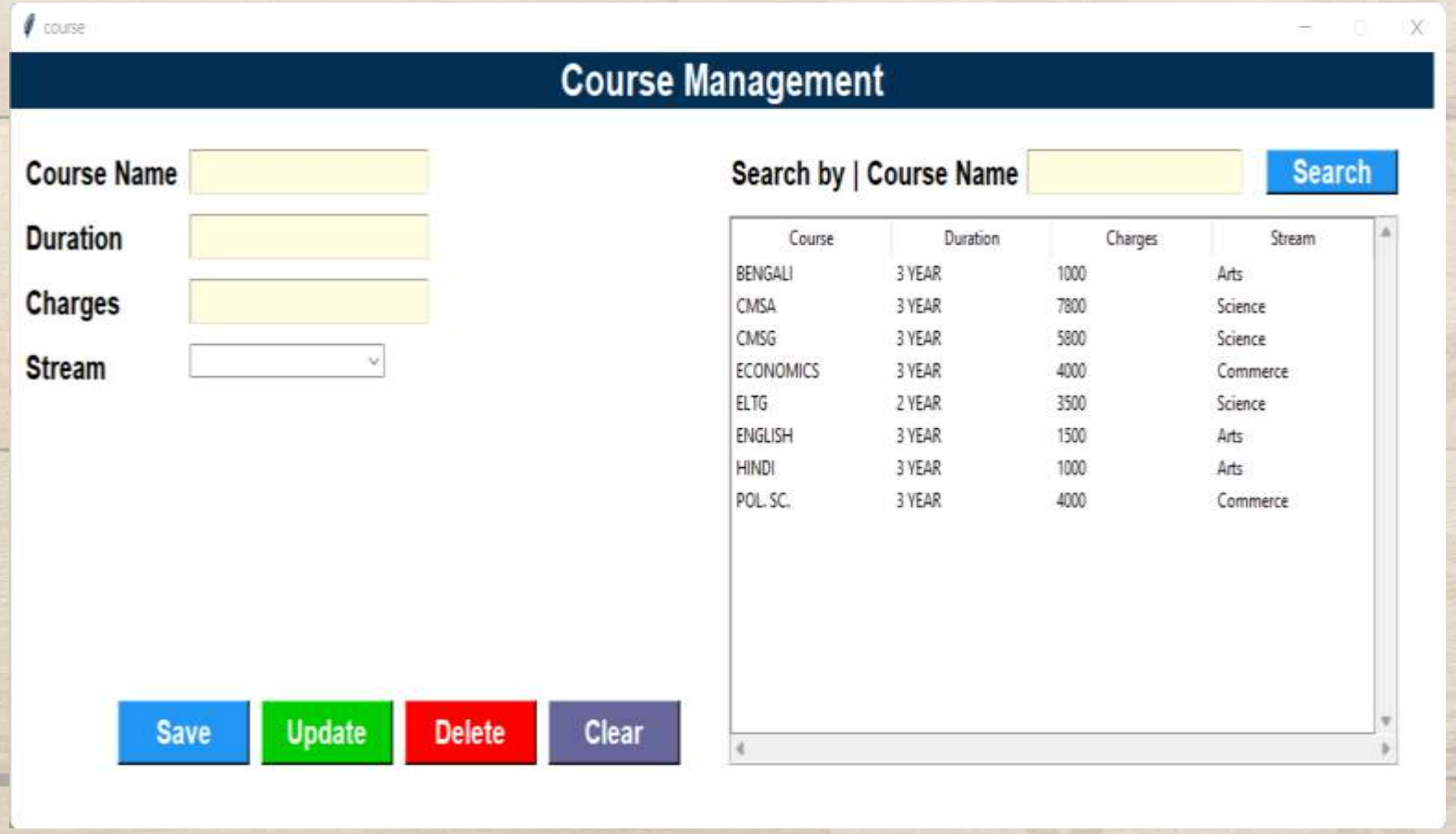
Admin page

- Admin has full control over the students details
- Admin can perform CRUD operations on students data



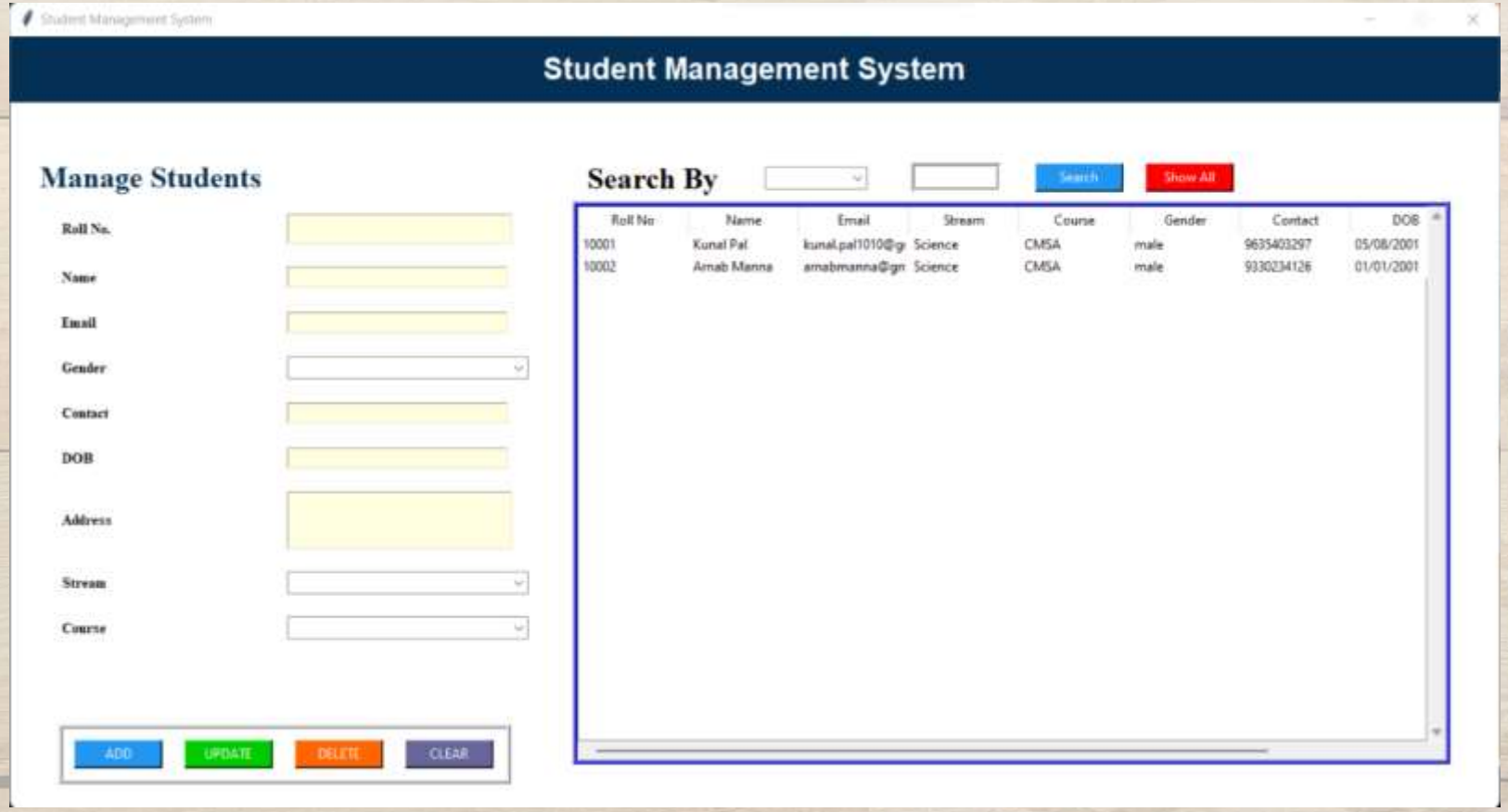
course page

- CRUD operations on courses can be performed



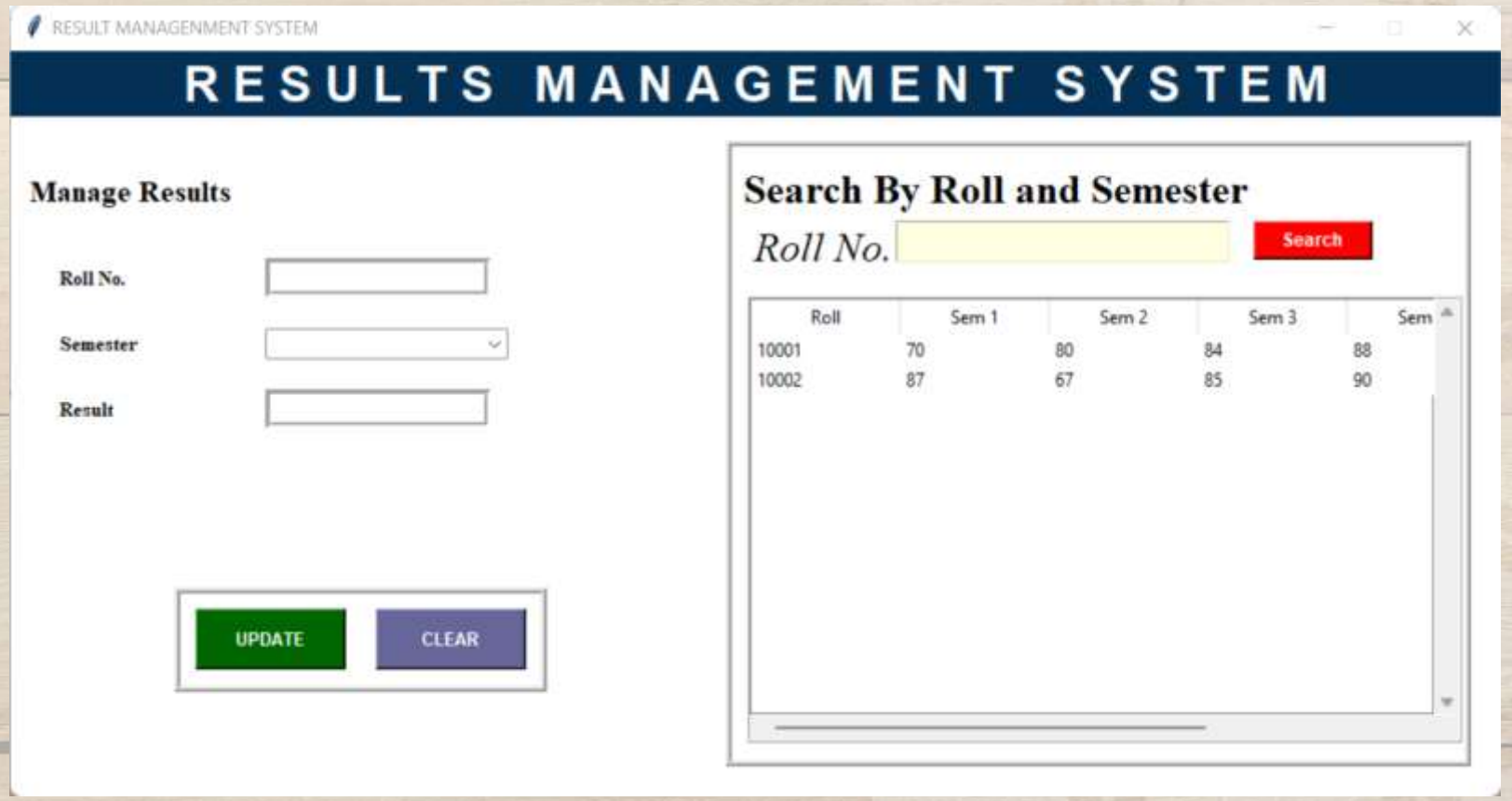
Student page

- CRUD operations on Student data can be performed



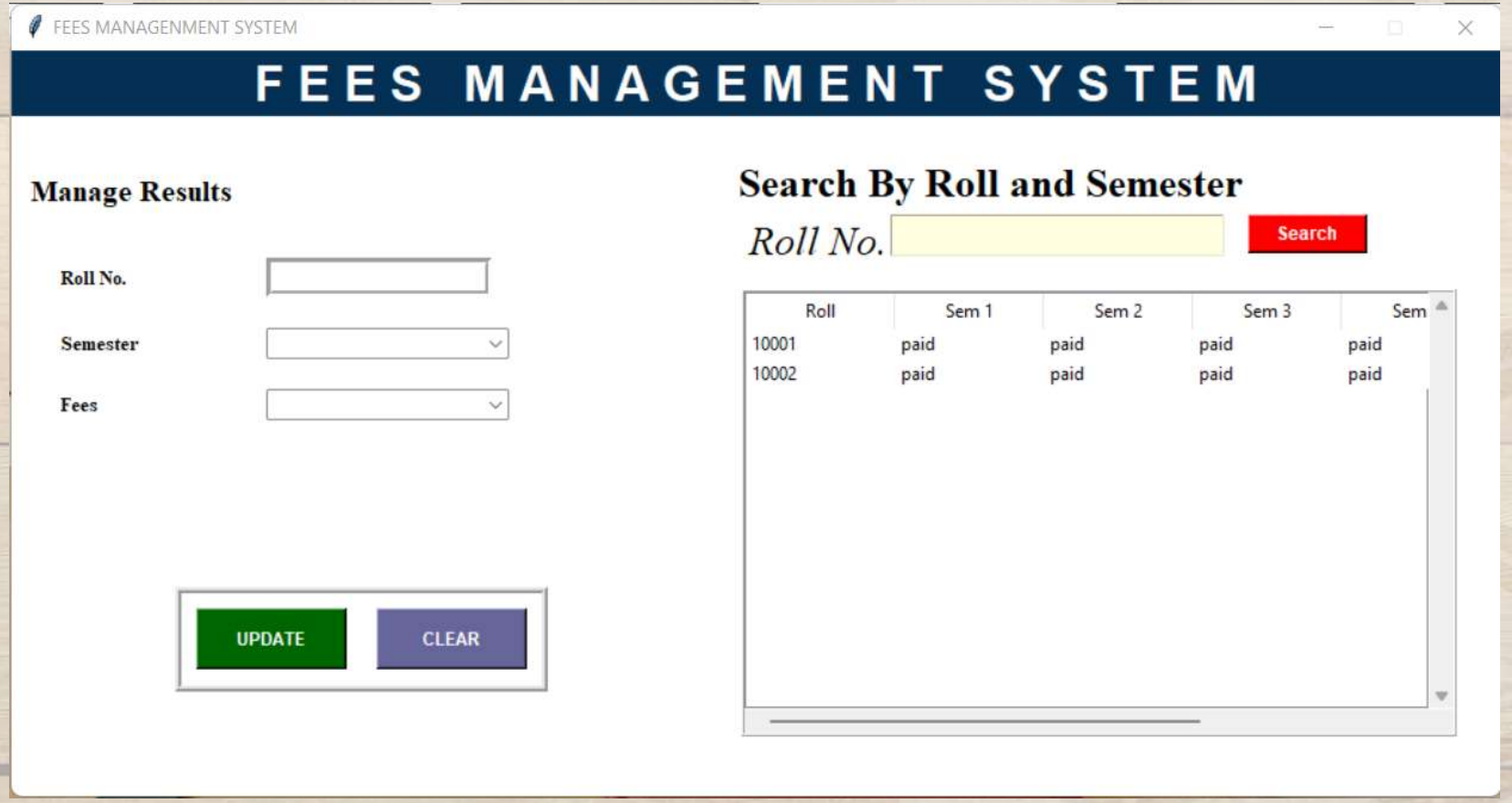
Result page

- CRUD operations on Students results can be performed



Fees page

- CRUD operations on Students Fees can be performed



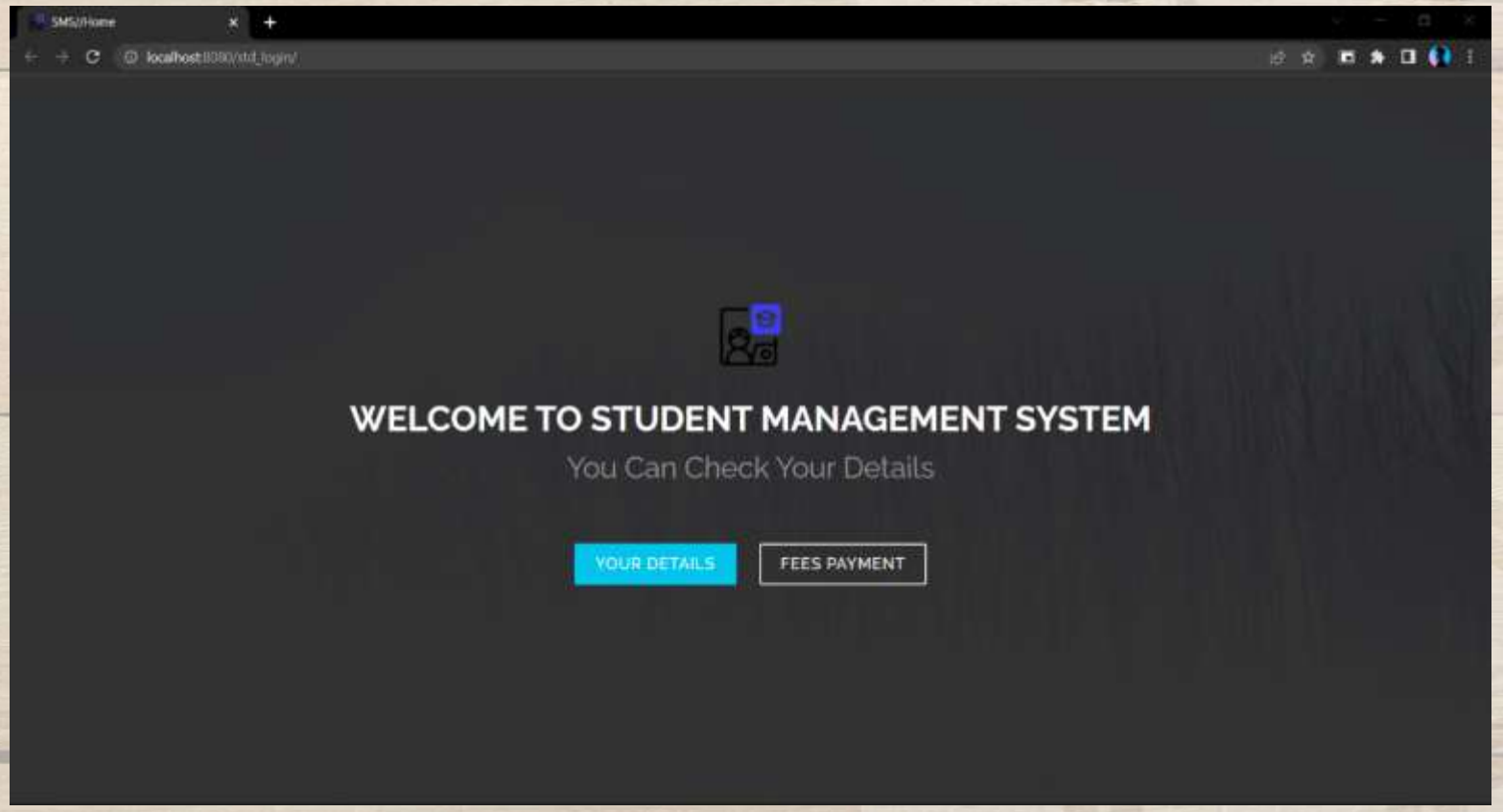
Student Side Software

Home page

Java is used in this project for the Student side Work . Because it's a web based system, for students to see their details,

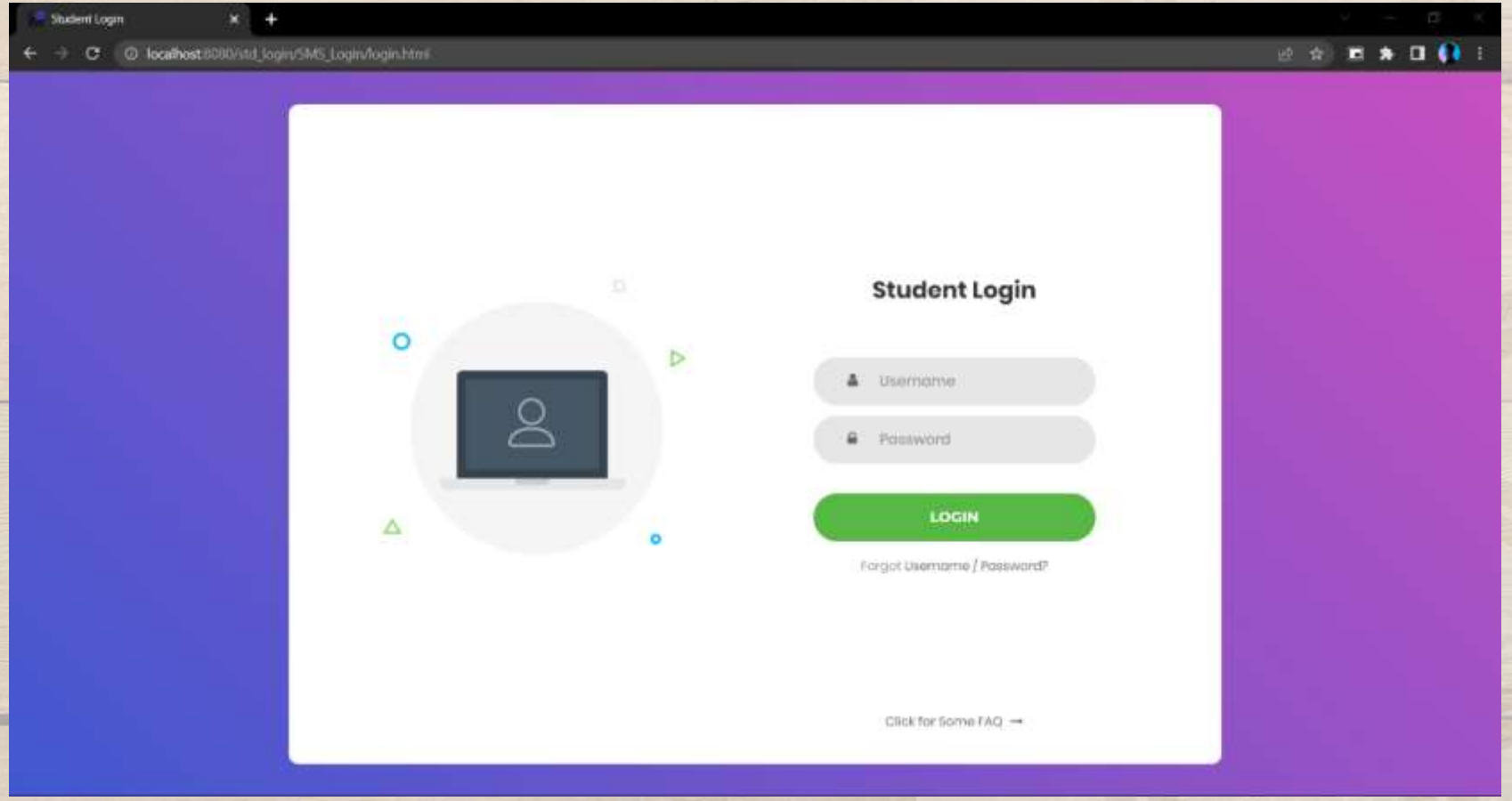
- JSP technology was used
- JS
- CSS
- Html
- Jdbc

JDK provide a rock solid support



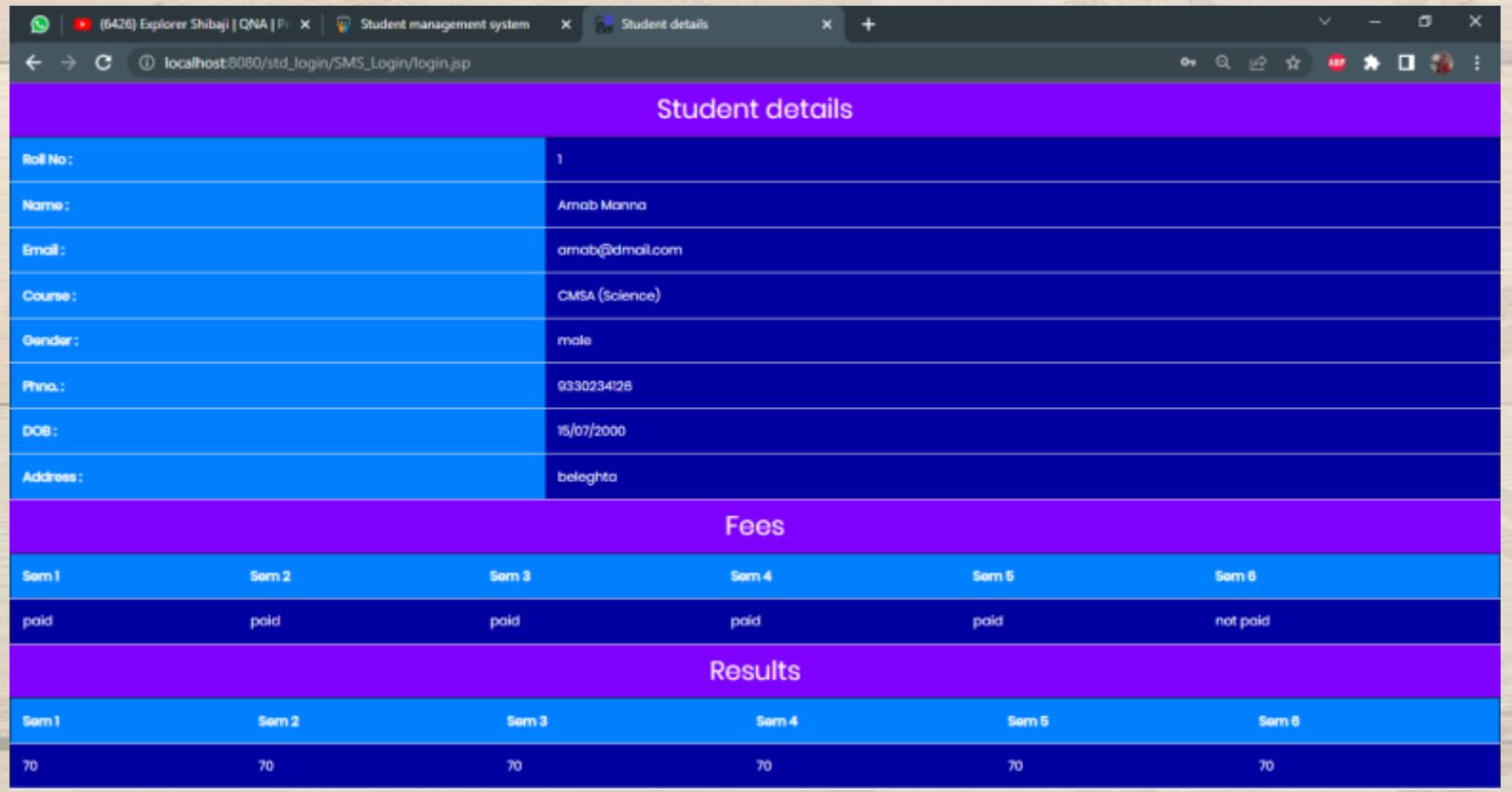
login page

- Students login.
- Username should be “email/roll”.
- Password should be phone number.



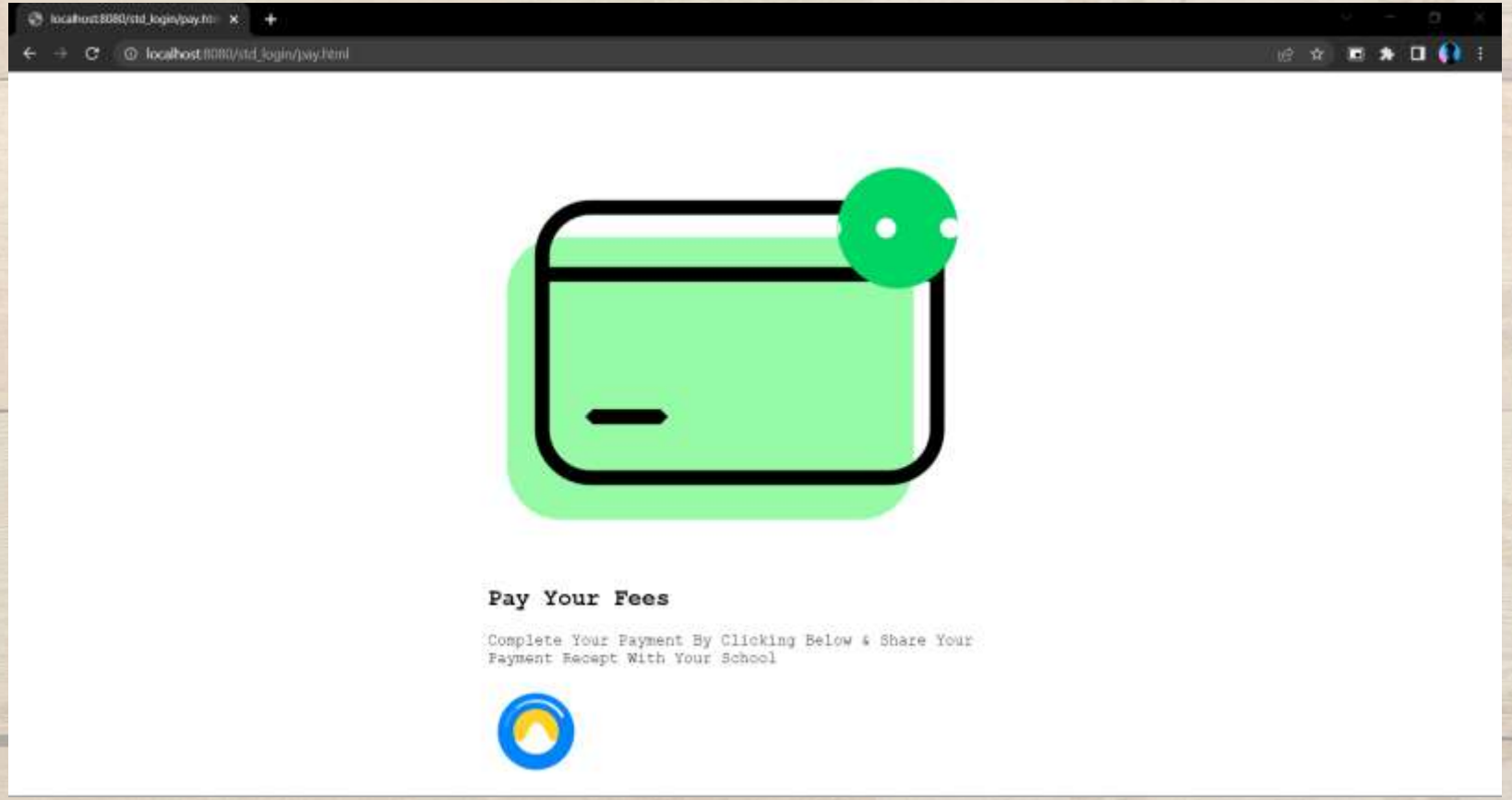
about page

- Students information is available when the student successfully login.



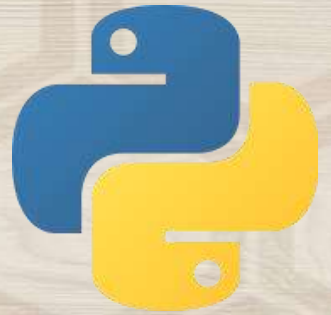
payment page

- Students can pay fees online,
- A payment gateway or upi gateway will be added in future ,



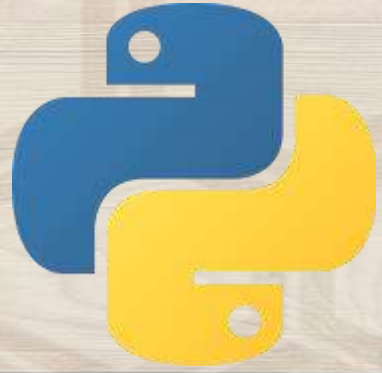
Conclusion

The results obtained from the experiments and testing ensures that the proposed method is efficient and user-friendly. As compared to existing methods of managing the academic institutions, this project which yields centralized software makes the work administration and management easier and provides detailed information about the topic of user's interest in just one mouse click.



Future Scope

- The Student Management System (SMS) can be enhanced to include some other functionality like online sick leave approve, attendance management.
- Talent management of students based on their performance evaluation can be added.
- Social networking can also be added wherein students can interact with each other.
- Online class functionality can be added.
- Can evolve as an online institution.
- Functionality of chat and messages can be added.
- Online exam functionality can be added.
- Online resume builder functionality can also be added.



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- https://lottiefiles.com/
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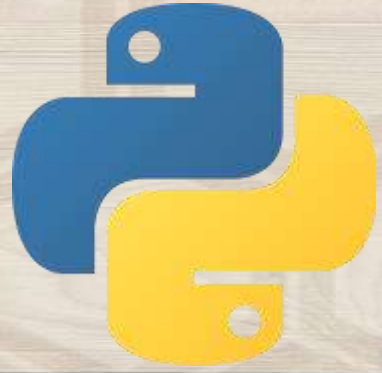

The End
Thankyou