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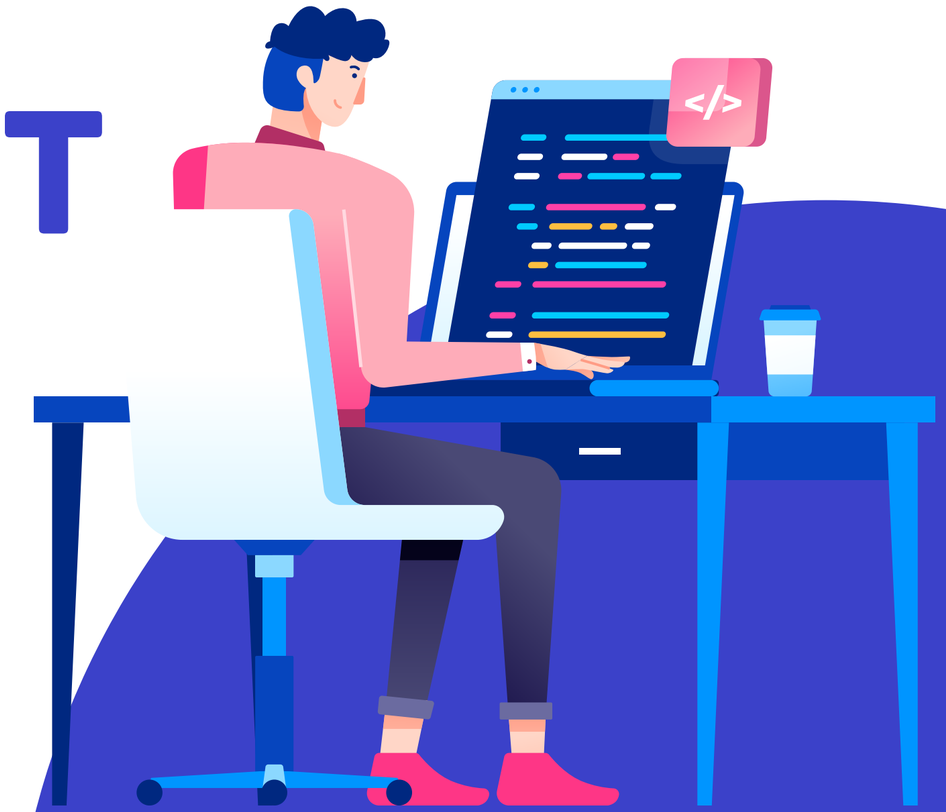
LIBRARY MANAGEMENT SYSTEM

PYTHON

First Presentation - Project Overview



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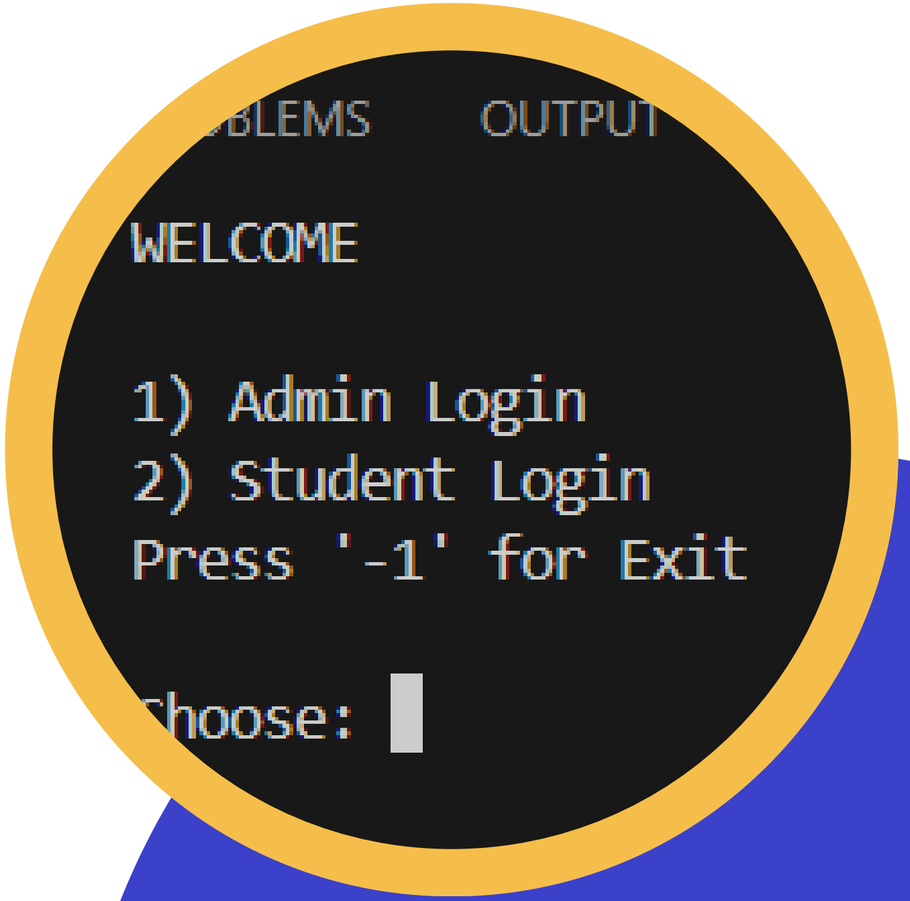
INTRODUCTION

A Python-based library management system with a MySQL backend.

To manage library books and student records efficiently.



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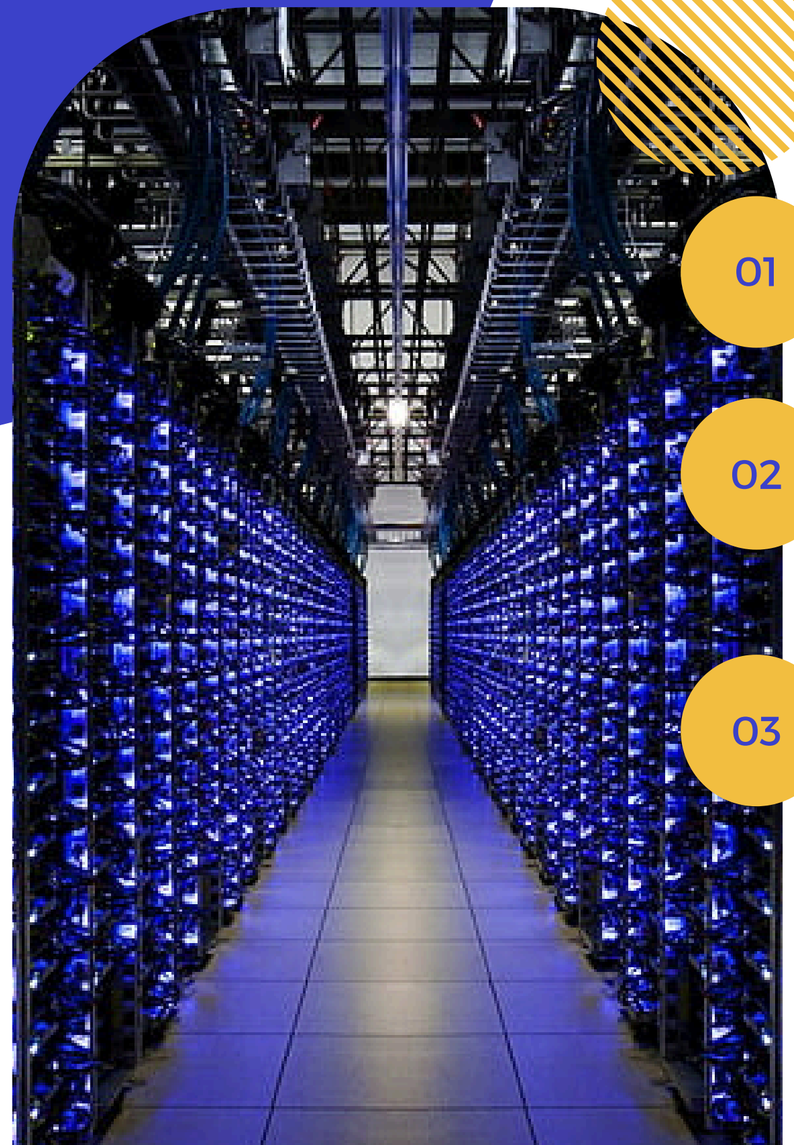

01

02

03

SYSTEM MODULES

DATABASE CONNECTION

Our system connects to a MySQL database, which stores all the data related to books and student transactions.

ADMIN PANEL

The Admin Panel is where all administrative tasks are performed. This includes viewing all issued books, editing book records, and managing student information

STUDENT PANEL

The Student Panel provides students with options to issue new books, return books they have borrowed, and view the books currently issued under their name

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MYSQL INTEGRATION

DATABASE CONNECTION

The system connects to MySQL using Python's mysql.connector module.

ERROR HANDLING

The system prompts the user for corrections and provides instructions for fixing common issues.

DATABASE MANAGEMENT

If the specified database does not exist, the program automatically creates it and sets it up for use

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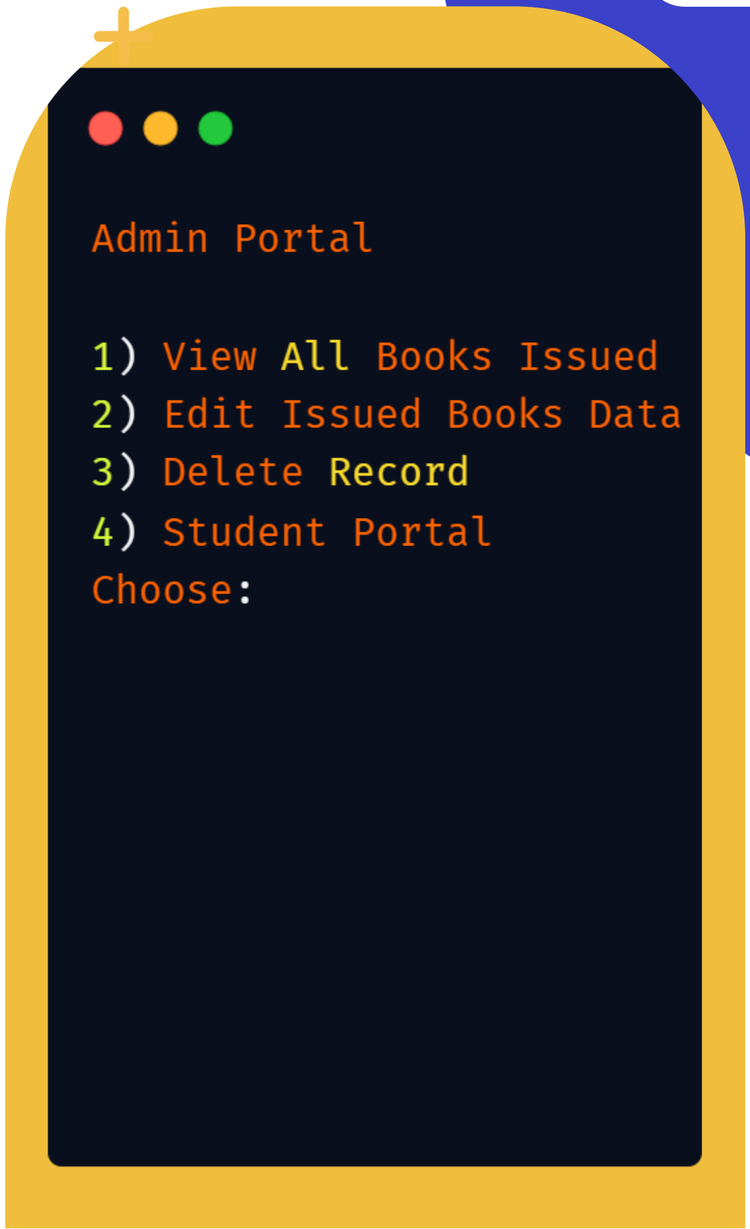
USER INTERFACES

ADMIN PANEL

- **View All Issued Books:** Administrators can see a list of all books currently issued, along with the student details.
- **Edit Book Data:** Administrators can edit the data associated with a book, such as updating the book ID or student information.
- **Delete Records:** The admin has the ability to delete records of returned books or incorrect entries.



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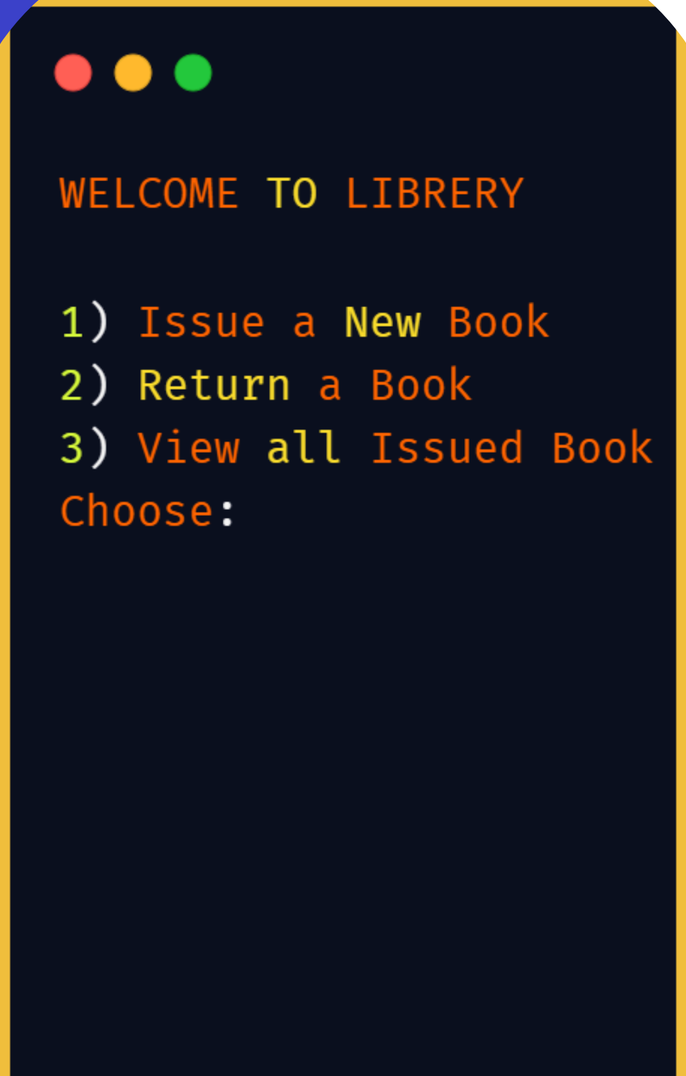

USER INTERFACES

STUDENT PANEL

- **Issue a New Book:** Students can issue a new book by providing their student ID and the book's unique code.
- **Return a Book:** Students can return a previously issued book by confirming their student ID and the book ID.
- **View Issued Books:** Students can view a list of all books they have currently issued.

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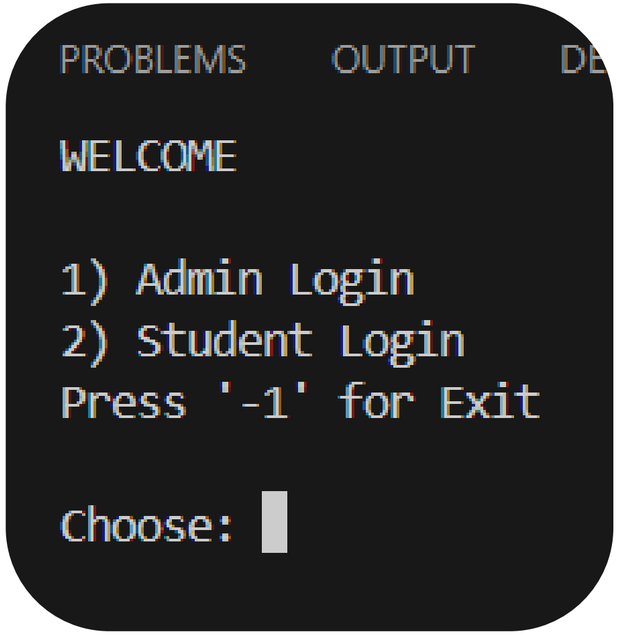
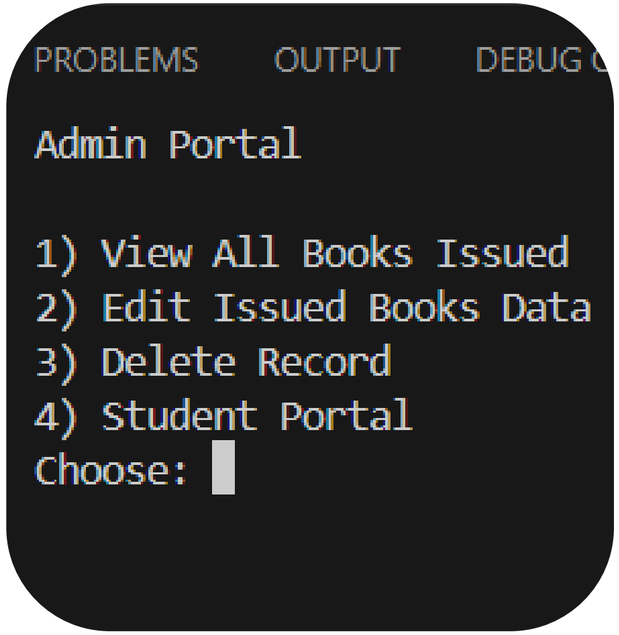
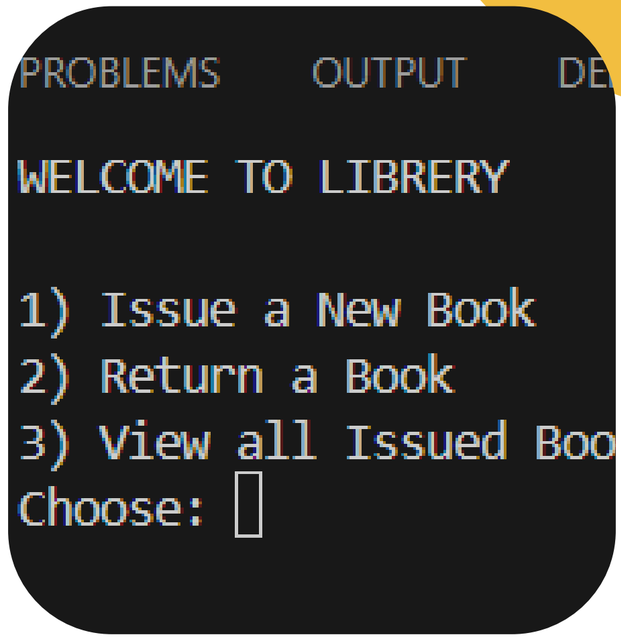
PROGRAM FLOW



01 **USER SELECTION**

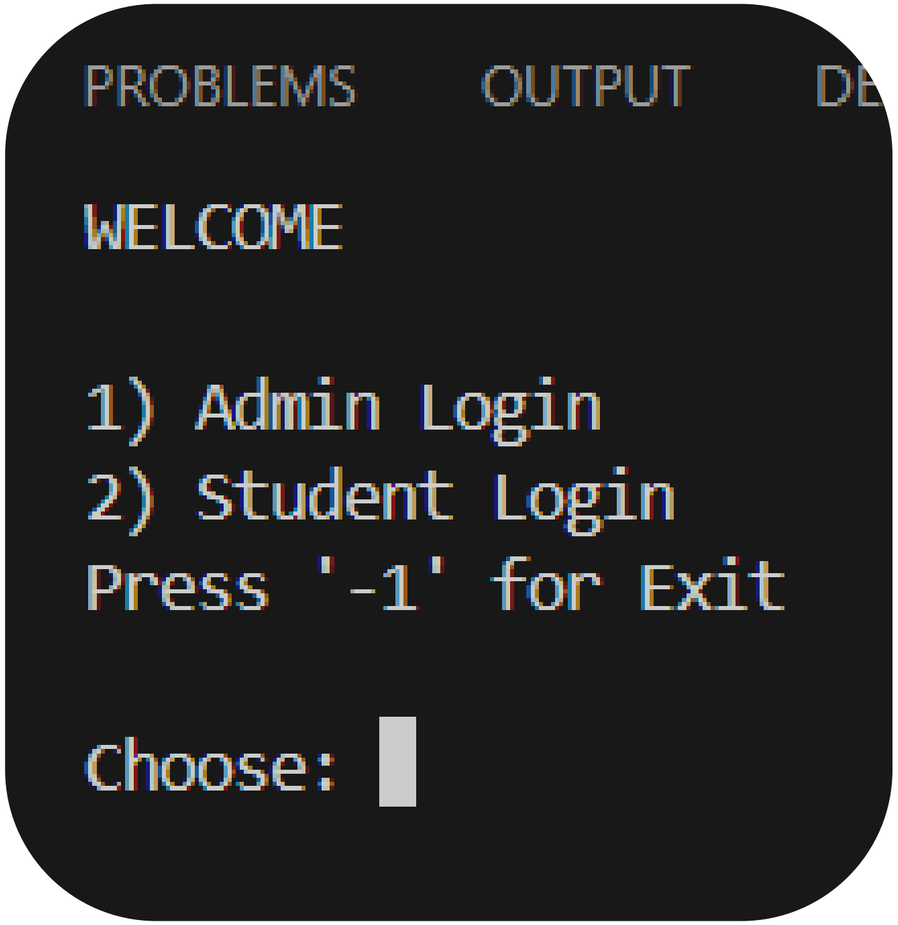


02 **ADMIN PANEL FLOW**



03 **STUDENT PANEL FLOW**

PROGRAM FLOW



01 USER SELECTION

The program begins by displaying a welcome screen where the user is prompted to select their role:-

- Admin Login
- Student Login

Users also have the option to exit the program.

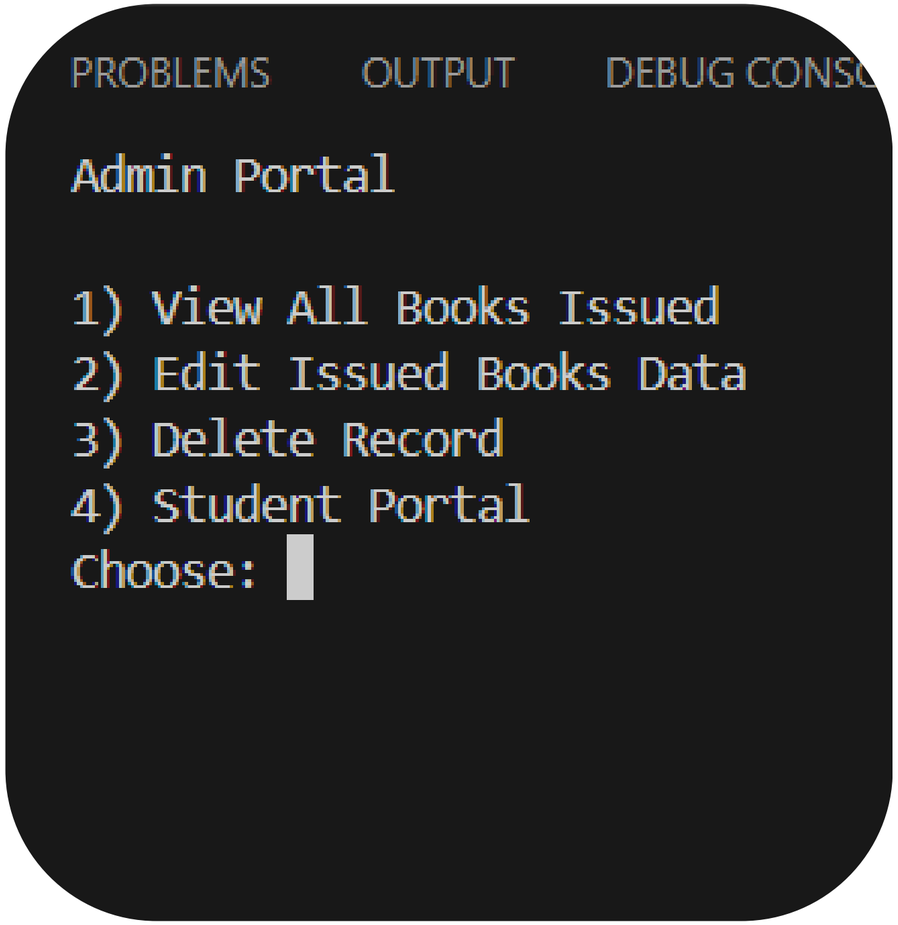
PROGRAM FLOW

02

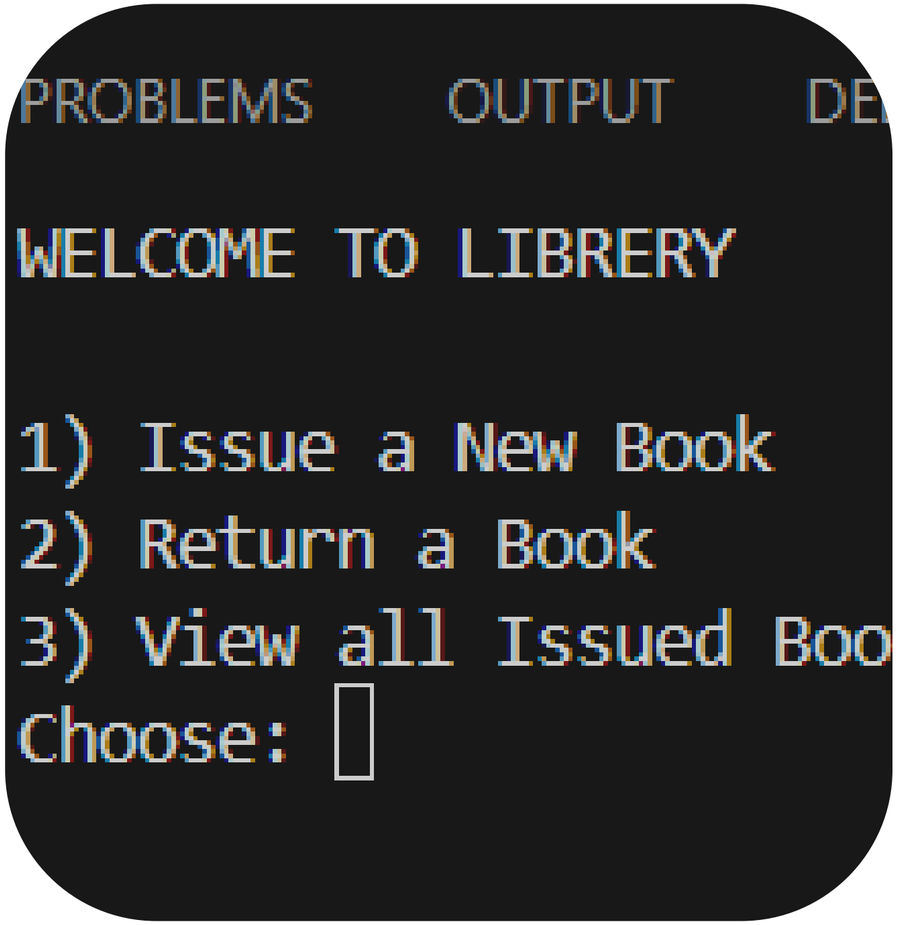
ADMIN PANEL FLOW

The Admin Panel allows the admin to:

1. View All Issued Books: Displays a list of all books currently issued to students.
2. Edit Issued Books Data: Allows the admin to update records if needed (for example, correcting a Book ID).
3. Delete Record: The admin can remove a student's issued book record from the database.



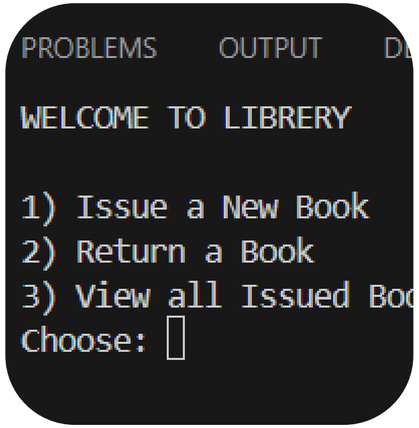
PROGRAM FLOW

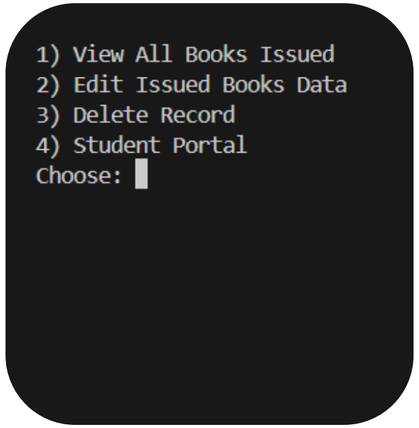


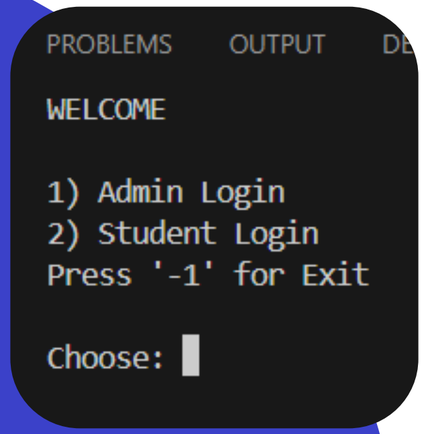
03 STUDENT PANEL FLOW

The Student Panel provides the following options:

1. Issue a New Book: The student enters their ID and the book's UPC code to issue a book.
2. Return a Book: The student can return a book by entering their ID and the Book ID.
3. View All Issued Books: Students can check which books they have currently issued.







UPCOMING WORK

NEXT STEPS

Feature Implementation: We will add more features to enhance the functionality of the system,

Testing and Debugging: We will continue testing the system to ensure it is robust and free from bugs.

Final Presentation: Prepare for the final presentation where we will demonstrate the complete system and submit the documentation.

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CREDIT & TEAM CONTRIBUTIONS

197
YASH GARG
Programming

252
DHRUV GUPTA
MySQL Integration

259
APURVA BANSAL
Interface Design

258
RITESH KUMAR SINHA
Admin & Student Panel Development

250
ANSHUL SIROHI
Error Handling

251
SAURAV AGRAWAL
Security Implementation

Special Thanks

We would like to extend our gratitude to our professors and peers for their guidance and support throughout this project.

CONCLUSION & Q&A

Summary:
In this presentation, we have provided an overview of our Python Library Management System, including its key modules, MySQL integration, and user interfaces. We have also outlined the program flow and credited the team members for their contributions.

Q&A:
We welcome any questions or feedback from the audience.

Thank you for your attention!

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THANK YOU

SEE YOU SOON