



SRM INSTITUTE OF SCIENCE AND  
TECHNOLOGY



SCHOOL OF COMPUTING

DEPARTMENT OF DATASCIENCE AND BUSINESS SYSTEMS

18CSC303J Database management Systems

MINI PROJECT REPORT

**Title – Library management system**

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## **Library-Management-System**

GUI project of Library Management System in Python using Tkinter and SQLite

### **Functionalities**

- add books
- delete/update books
- search books
- issue book
- return book
- student activity

### **Installing dependencies and packages**

Install the following packages in cmd before use if your system doesn't have them or are corrupted.

- *pip install python-tk*
- *pip install pillow*

### **Techs used**

- ✓ Python
- ✓ SQLite3
- ✓ Tkinter

### **Steps to use**

- open the lms.py file in your favourite code editor.
- Go to line number 464
- fill the values as per your need in : VALUES('Your Name', 'password')
- Save the changes.
- run the lms.py file as python

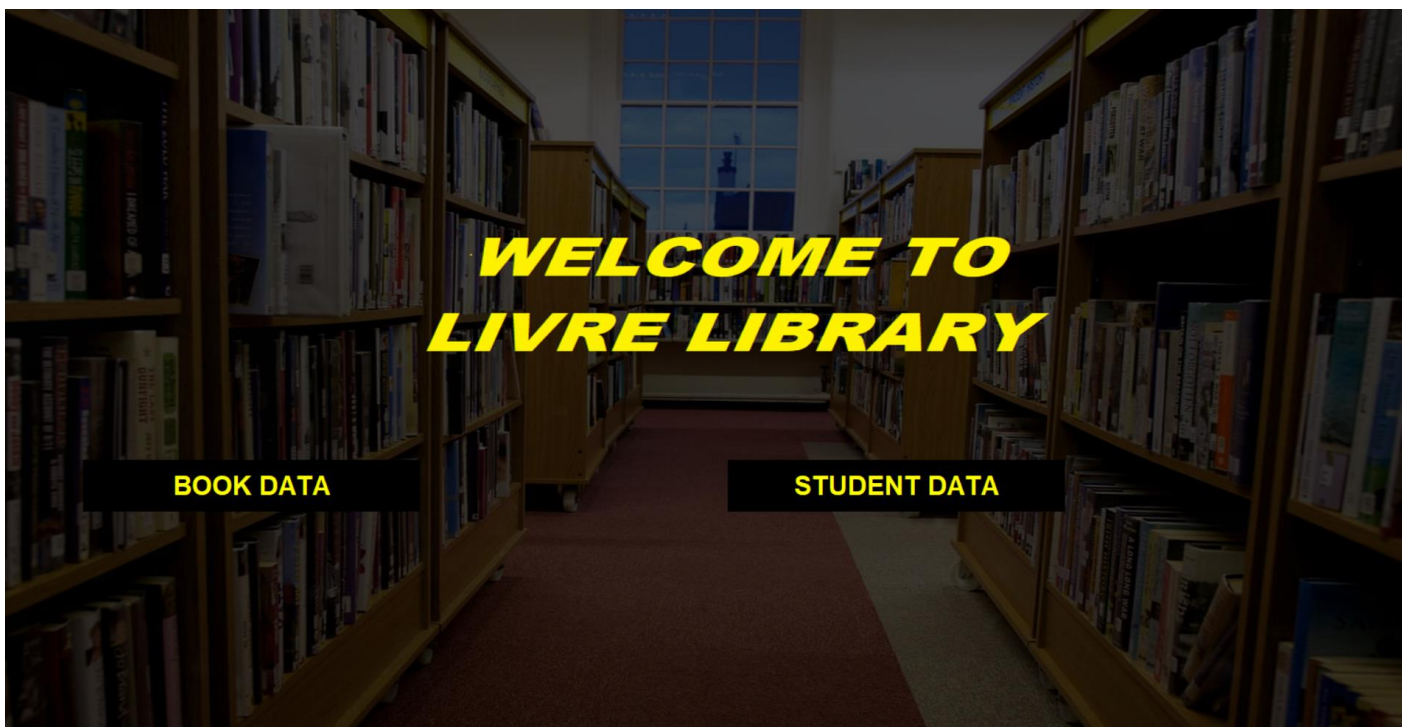
## Screen shots

Screenshot of final project where every component is shown

### ❖ Login Screen



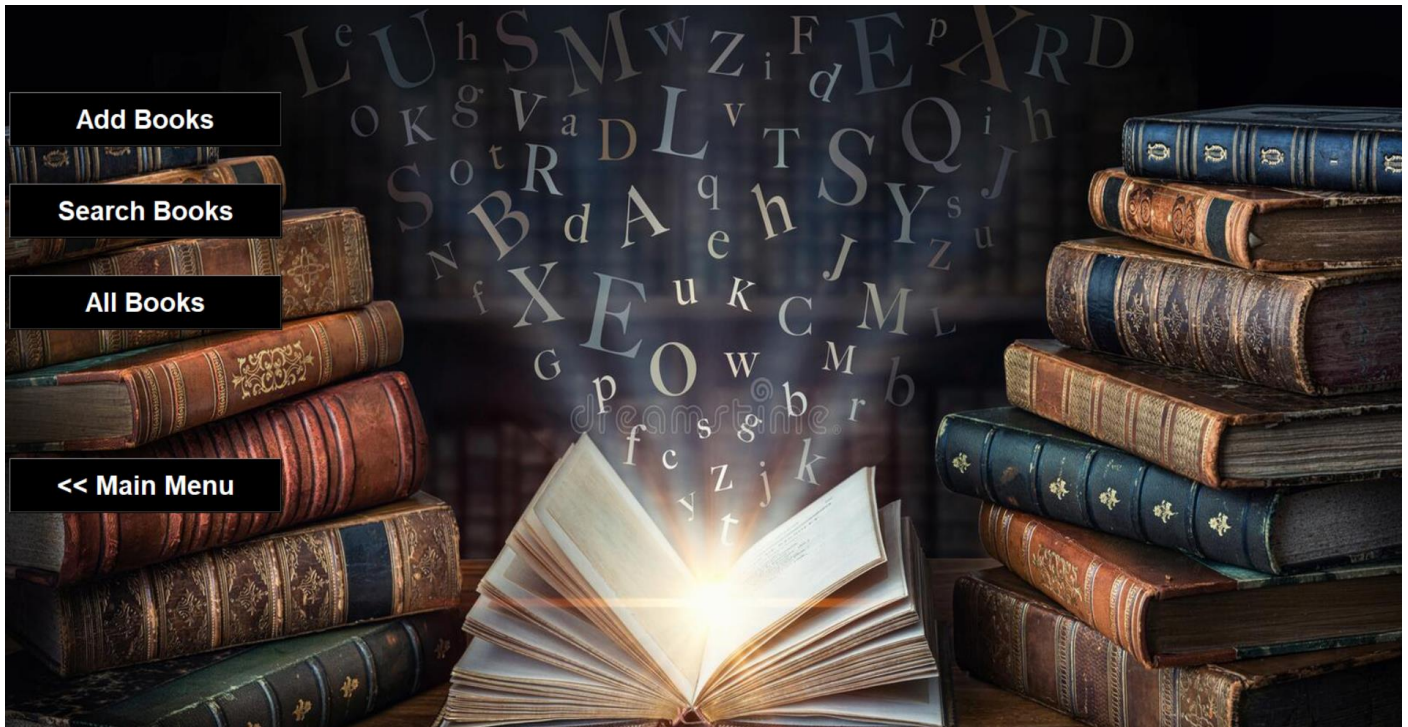
### ❖ Home Screen





## ❖ Book addition Section

### ▪ Home screen

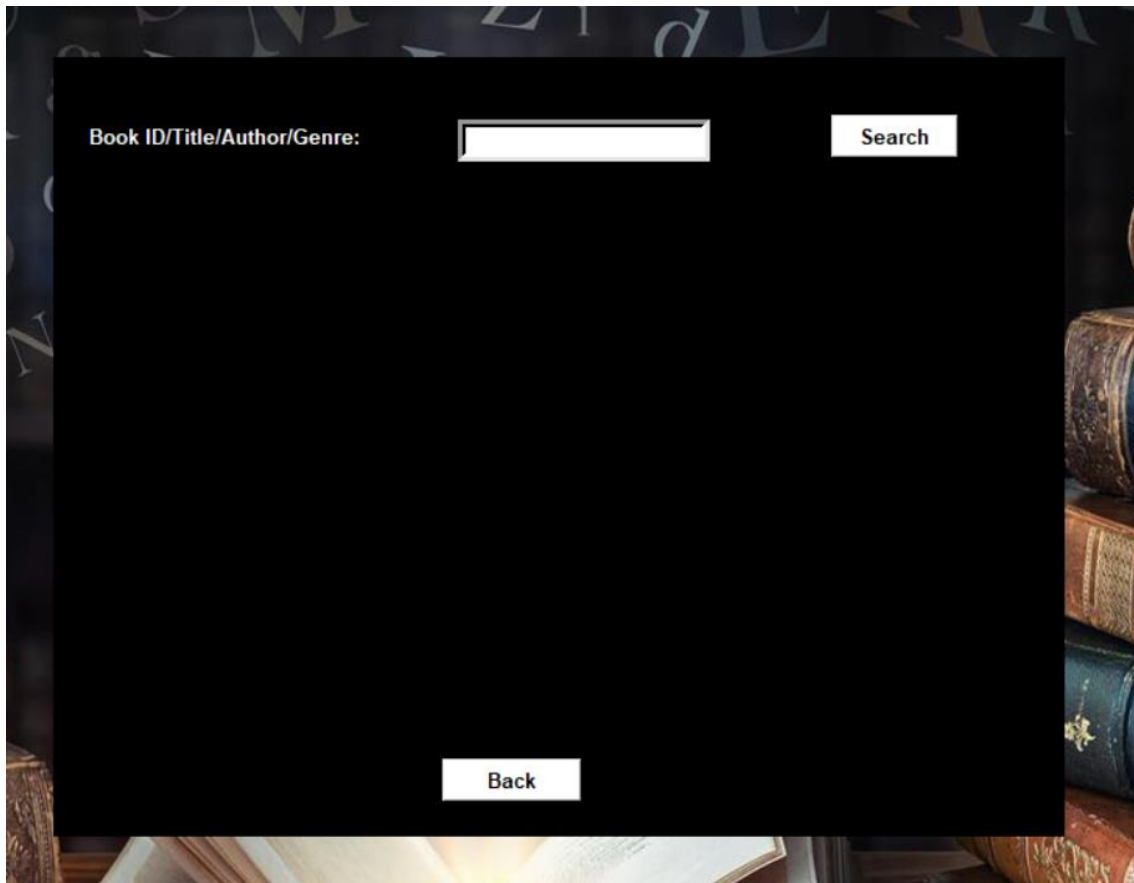


### ▪ New book data Addition

The image shows a form for adding new book data. The form is set against a dark background with a faint, repeating pattern of letters. It contains six input fields, each preceded by a label: "Book ID :", "Title :", "Author :", "Genre :", "Copies :", and "Location :". The "Copies" field has the number "0" entered. At the bottom of the form, there are two buttons: "Add" and "Back".

Book ID :	<input type="text"/>
Title :	<input type="text"/>
Author :	<input type="text"/>
Genre :	<input type="text"/>
Copies :	<input type="text" value="0"/>
Location :	<input type="text"/>
<div><input type="button" value="Add"/><input type="button" value="Back"/></div>	

- Search book

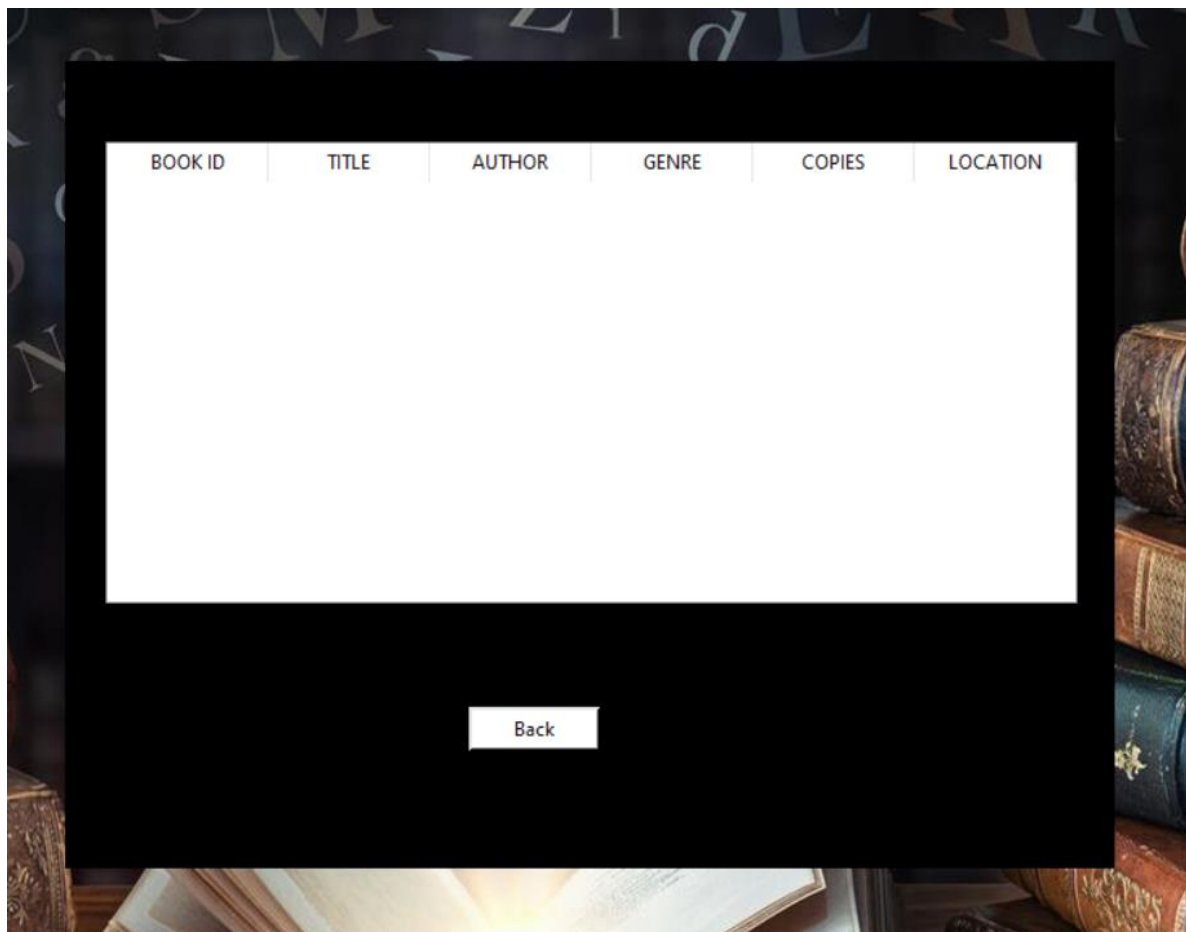
A screenshot of a web application interface for searching books. The background is a dark blue pattern with faint white letters. On the right side, there is a vertical stack of old, leather-bound books. The interface consists of a black rectangular box. Inside this box, at the top left, is the text "Book ID/Title/Author/Genre:". To its right is a white rectangular input field. Further right is a white button with the text "Search". At the bottom center of the black box is a white button with the text "Back".

Book ID/Title/Author/Genre:

Search

Back

- Display book Data

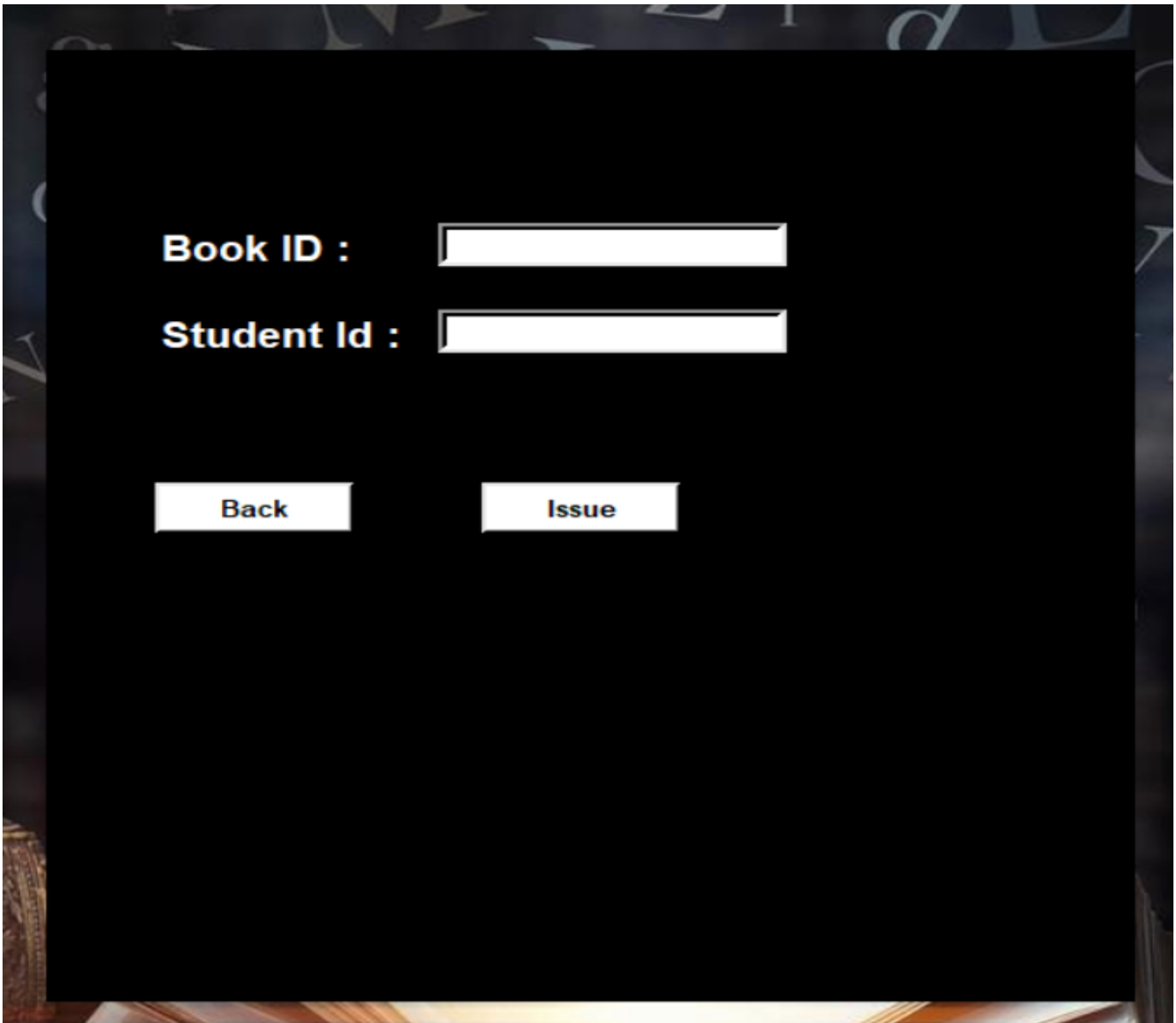
A screenshot of a web application interface for displaying book data. The background is the same dark blue pattern with faint white letters and a stack of old books on the right. The interface consists of a black rectangular box. Inside this box, at the top, is a white table with six columns. The columns are labeled "BOOK ID", "TITLE", "AUTHOR", "GENRE", "COPIES", and "LOCATION". Below the table is a large white rectangular area, which is currently empty. At the bottom center of the black box is a white button with the text "Back".

BOOK ID	TITLE	AUTHOR	GENRE	COPIES	LOCATION
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Back

## ❖ Student Data

### ▪ Issue page



Book ID :

Student Id :

Back Issue

Issue page is important on user part as the system issues this to the student and adds the book and student details into the database.

Once a book is issued the no of copies decreases automatically and also if a book is out of copies the system is obliged to give error message.

Note that the book ID is important at the time of issue as that is the key, we are using to find the book in the book data.

▪ **Past issue data of Student**

The screenshot shows a software interface with a dark background. At the top, the text "Book/Student ID :" is followed by a white rectangular input field. Below this is a large white rectangular area containing a table. The table has four columns with headers: "BOOK ID", "STUDENT ID", "ISSUE DATE", and "RETURN DATE". The table body is currently empty. At the bottom of the interface, there are three white buttons labeled "Search", "All", and "Back".

BOOK ID	STUDENT ID	ISSUE DATE	RETURN DATE
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**GitHub link for project**

<https://github.com/Avi-2362/DBMS-MINI-Project>