

LIBRARY MANAGEMENT SYSTEM

Overview of Project:-

This project is made to help the library staff in the daily library tasks like add book, add member, borrowing the book etc. In order to save time of the library staff and increase their productivity.

Features:-

It allows the library staff to do the following tasks:-

- 1. Add Book***
- 2. Add Member***
- 3. Borrow Book***
- 4. Return Book***
- 5. List All Books***
- 6. List Available Books***
- 7. List Borrowed Books***
- 8. List All Members***
- 9. Remove Book***
- 10. Remove Member***

Technologies used:-

- 1. Python 3.12***
- 2. Google Colab***
- 3. GitHub***

Steps to install and run the project:-

- 1. Copy the code in your VS Code or Google Collab Notebook or any other preferred coding platform***

2. Import required libraries

3. Input the file URL when asked

4. You are ready to go

Steps for testing the program:-

1. Run the Code Cell: Execute the code cell that defines the Book, Member, Library classes, and the run_library_system function.

2. Start the System: The program will prompt you to "Enter the name of the library:". Type a name (e.g., My Public Library) and press Enter.

3. Navigate the Menu: You will then see the "--- Library Menu ---" with options (1-11). Enter the number corresponding to the action you want to perform and press Enter.

Add Books: Select 1, then provide the title, author, and ISBN when prompted.

Add Members: Select 2, then provide the member's name and ID.

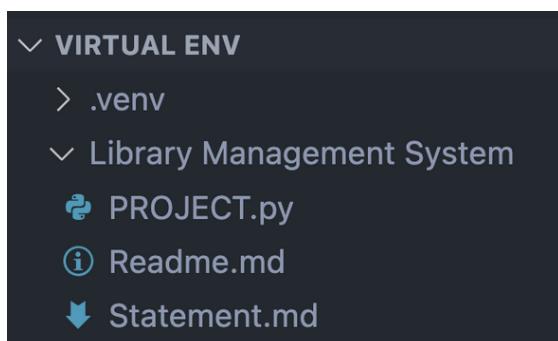
Borrow/Return Books: Select 3 or 4, then enter the member ID and book ISBN.

List Items: Select options 5 (All Books), 6 (Available Books), 7 (Borrowed Books), or 8 (All Members) to view the current state of the library.

Remove Items: Select 9 (Remove Book) or 10 (Remove Member) and provide the necessary identifier.

4. Exit: To finish testing and exit the program, select 11 from the menu.

Screenshots:-



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● (.venv) arjunmishra@ARJUNs-MacBook-Air-2 Virtual Env % "/Users/arjunmishra/Documents/Python/Virtual Env/.venv/bin/python" "/Users/arjunmishra/Documents/Python/Virtual Env/Library Management System/PROJECT.py"

Execution of program starts from here :

Enter the name of the library: XYZ LIBRARY

--- Library Menu ---

1. Add Book
 2. Add Member
 3. Borrow Book
 4. Return Book
 5. List All Books
 6. List Available Books
 7. List Borrowed Books
 8. List All Members
 9. Remove Book
 10. Remove Member
 11. Exit

Enter your choice: 1

Enter book title: Harry Potter

Enter book author: JK Rowling

Enter book ISBN: 123456789

Added book: Harry Potter

--- Library Menu ---

1. Add Book
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 7. List Borrowed Books
 8. List All Members
 9. Remove Book
 10. Remove Member
 11. Exit

Enter your choice: 11

Exiting Library Management System. Goodbye!

(.venv) arjunmishra@ARJUNs-MacBook-Air-2:~ Virtual Env %