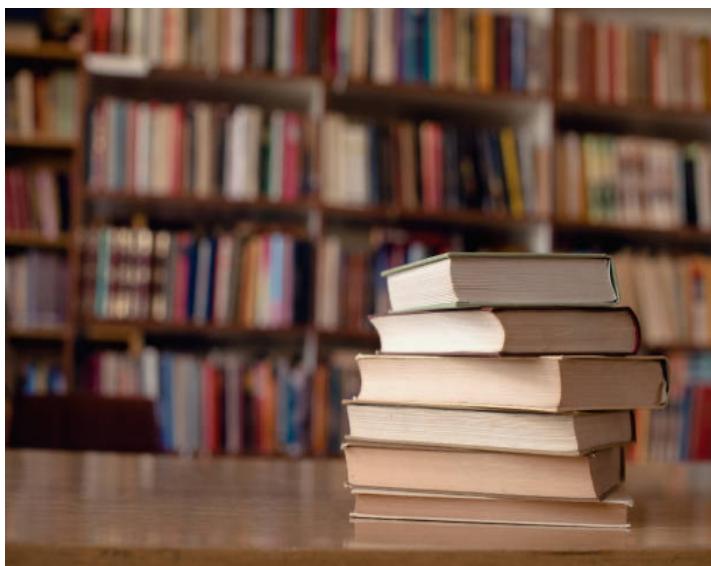
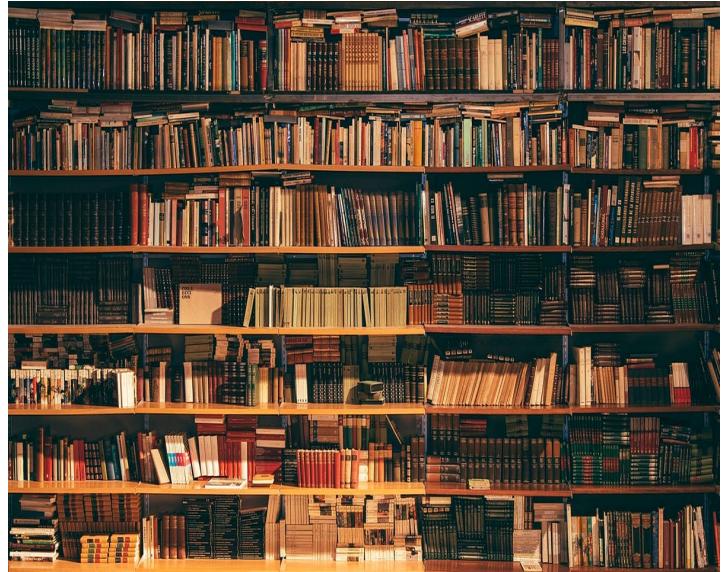


Library Management System



Submitted By:
Vatsal Patel
Samir Khadka
Prince Yadav
Yousouf Shaik

Member's Registration Form

Date: _____

Name : _____

Street Address : _____

State : _____

City : _____

Zip-Code : _____

Email : _____

Phone Number : _____

Book Addition Form

Date: _____

ISBN : _____

Title : _____

Author Name : _____

Publication Year : _____

Genre : _____

Publisher : _____

No. of Copies : _____

Loan Book Form

Date: _____

Member ID : _____

Name : _____

ISBN : _____

Title : _____

Return Date : _____

Loan Date : _____

Place Reservation Form

Date: _____

Member ID : _____

Name : _____

ISBN : _____

Book Title : _____

Reservation From : _____

Reservation Till : _____

Publisher : _____

Author : _____

Renew Loan Form

Date: _____

Loan ID : _____

Member ID : _____

Member Name : _____

ISBN : _____

Title : _____

Author : _____

Updated Return Date : _____

Overdue Books Report

Gives the report of all the loans where ReturnDate is before a particular date.

Loan ID	Member Name	Book Title	Loan Date	Due Date
L-601	John Smith	The Lord of Rings	2024-02-01	2024-03-01
L-342	Jane Doe	Pride and Prejudice	2024-02-04	2024-02-22
L-603	Carlos Mathew	Divergent	2024-01-10	2024-02-28
L-789	Jason Berendoff	The Da Vinci Code	2024-02-22	2024-03-01
L-990	Kyle Jamson	Into the Wild	2024-02-04	2024-03-03

Member Borrowing History Report

Lists all Loans for a specific Member.

Member ID	Member Name	Loan ID	ISBN	Book Title
M-9382	Jason Smith	L-978	123456789	The Maze Runner
M-9382	Jason Smith	L-911	987654321	Insurgent
M-9382	Jason Smith	L-1009	123412341	Long walk to Freedome
M-9382	Jason Smith	L-1232	567856785	Life of Pi

Popular Books Report

Lists the most loaned Books within a specified date range.

Rank	ISBN	Book Title	No. of Loans
1	123456789	Harry Potter	198
2	987654321	Soul on Ice	170
3	1212121212	Spare	150
4	4545454545	The Great Game	144
5	8787878787	Snakes in the Ganga	140
6	6453765738	Life of Pi	136
7	9099362921	The 3 mistakes of my Life	120

Available Books Report

Lists all Books currently available for loan.

ISBN	Title	Author	Genre
123456789	Atomic Habits	James Clear	Personality Development
988948492	Art of War	Sun-Zu	Military Strategy
637355223	My Gita	Devdutt Pattanaik	Mythology
277493864	Rich Dad Poor Dad	Robert Kiyosaki	Personality Development
998069995	Harry Potter	J.K. Rowling	Fantasy
336484839	The Lord of Rings	J.R.R. Tolkien	Fantasy

Genre Popularity Report

This report categorizes the number of loans by genre within a specified date range.

Rank	Genre	No of Loans
1	Fantasy	2800
2	Mystery	2789
3	Non-Fiction	2569
4	Science Fiction	2400
5	Romance	2000
6	Biography	1980
7	Children's	1789

Member Activity Report

This report lists members with the most loans within a specified date range.

Rank	Member Name	No. of Loans
1	John Smith	18
2	Jane Doe	15
3	Michael Brown	13
4	Alice Johnson	12
5	David Miller	11
6	Sarah Jones	10
7	Emily Williams	7

Least Borrowed Books Report

This report lists the Books with the fewest loans.

Rank	ISBN	Title	Author	No. of Loans
1	828748546	My Early Life	Winston Churchill	19
2	263547689	Jane Eyre	Charlotte	15
3	100985467	Black Beauty	Anna Sewell	12
4	198745367	La Vida Loci	Luis Rodriguez	11
5	154672890	Born Standing Up	Steve Martin	9
6	758492012	Just Kids	Patti Smith	5
7	606973561	Rosa Parks	Rosa Parks	0

Active Reservations Report

This report lists all Books with current Reservations exceeding a certain timeframe.

ISBN	Title	Author	Reservation Date
387461894	The Lord of Rings	J.R.R. Tolkien	2024-02-01
657390987	To Kill a Mockingbird	Harper Lee	2024-01-15
433627819	Harry Potter	J.K. Rowling	2024-02-10

Inactive Member Report

This report identifies members who haven't borrowed any books within a specified timeframe.

Member ID	Name	Last Loan Date
M-988	William Anderson	2023-01-01
M-645	Charles Davis	2023-03-10
M-662	Elizbeth Taylor	2022-01-28
M-932	Jane Diana	2021-09-09
M-343	Will Smith	2022-12-12
M-635	Jason Wills	2023-09-17

Routine Transactions

1. A librarian wants to check out a book to a member who also has an overdue book.

- **Input Screens:**
 - **Member Check:** Librarian enters member ID or name. System displays member information and a list of any overdue Loans associated with that member.
- **Output:**
 - Member details and overdue book information (ISBN, Title, Due Date).

2. Librarian scans the book's ISBN or selects it from a list. System verifies book availability (no outstanding Loans).

- **Output:**
 - Book details (ISBN, Title, Author) and confirmation message if available.

3. Get Member's Details.

- **Input:** Member ID ad Name.
- **Output:** All the member details including name, address, and contact details

4. List of all Books Available.

- **Input:** Enter the date.
- **Output:** Will show all the available books on a particular date.

5. List of overdue books.

- **Input:** Enter the date.
- **Output:** It will give all the details of books along with member ID, whose return date is more than the date entered.

Assumptions

1. Unique identifiers: Each Member, Book, Loan, and Reservation has a unique identifier (MemberID, ISBN, LoanID, ReservationID).
2. Book availability: A book is considered unavailable if there is an outstanding Loan record for that book.
3. Loan duration: A default loan duration can be set (e.g., two weeks) and can be overridden during checkout for special cases.
4. Reservations: The system can handle placing reservations on unavailable books.
5. Members can make reservation through their member ID at least 2 weeks before the start date of reservation.
6. Fines are applied for late return of book as well as if the condition of the book deteriorates.