

# Identifying Uses Cases & Actors

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## A. Objective

Develop a comprehensive system for managing a single library.

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## B. Actors

1. Librarian
  2. Member
  3. Library Staff
  4. Manager
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## C. Use Cases

### C.1 Librarian

The system should allow a Librarian:

1. To **manage the catalog of books**.
2. To **track book loans**.
3. To **manage member registrations**.
4. To **add a book to the catalog**.
5. To **update a book in the catalog**.
6. To **remove a book from the catalog**.
7. To **assign a book** to a member.
8. To **update the availability status** of a book.
9. To **manage fine payments**.
10. To **clear dues** when payments are made.
11. To **generate reports** on the library's **inventory**.
12. To **generate reports** on available books.
13. To **generate reports** on checked-out books.
14. To **generate reports** on borrowed books.
15. To **generate reports** on overdue books.
16. To **generate reports** on fines.
17. To **generate usage** statistics on most borrowed books.
18. To **generate usage** statistics on popular genres.
19. To **generate usage** statistics on member borrowing trends.

### C.2 Member

The system should allow a Member:

1. To **search for books**, by title, author, genre or ISBN.
2. To **reserve an available book**.
3. To **register for a library account**.

4. To **view their profile**.
5. To **update their profile**.
6. To **access their borrowing history**.
7. To **access their current loans**.

### C.3 Library Staff

The system should allow a Library Staff:

1. To **oversee check-ins**.
2. To **oversee check-outs**.
3. To **manage fines**.
4. To **generate detailed reports**.

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## D. Objects / Data

### D.1 Book

1. Title
2. Author
3. ISBN
4. Genre
5. Availability Status
6. Publication Date
7. Publisher
8. Brief Description about the book.

### D.2 Member

1. First Name
2. Middle Name
3. Last Name
4. House Number and Street Name
5. Suburb or Township
6. City or Town
7. Postal Code
8. Province
9. Phone Number
10. Email
11. Membership ID

### D.3 Loaned Book

1. Date Reserved.
2. Due Date.
3. Books ISBN
4. Member ID

## D.4 Librarian

1. First Name
2. Middle Name
3. Last Name
4. House Number and Street Name
5. Suburb or Township
6. City or Town
7. Postal Code
8. Province
9. Phone Number
10. Email
11. Librarian ID

## D.5 Library Staff

1. First Name
2. Middle Name
3. Last Name
4. House Number and Street Name
5. Suburb or Township
6. City or Town
7. Postal Code
8. Province
9. Phone Number
10. Email
11. Staff ID

## D.6 Overdue Book

1. Date Reserved.
2. Due Date.
3. Books ISBN
4. Member ID
5. Fine Amount (everyday that passes after the due date, a member gets charged at least R50 per day)
6. Number of days past due return.

## D.6 Borrowed Books History

1. Date Reserved.
  2. Due Date.
  3. Books ISBN
  4. Member ID
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