**TEAM – KIPP**

**(Kishor, Prabhas, Preetish, Puneeth, Meghan, Prasanna)**

**Library Management System Use Case Scenario**

**Introduction**

The purpose of the system is to allow for storing details of a large number of books and allow for add, search, borrow, return facilities separately to the Library staff and students. Different privileges are given to different types of users.

**Actors:**

1. Library Staff (Category Lib\_Members)

2. Students (Category Lib\_Members)

3. Faculty (Category Lib\_Members)

4. Other Staff (Category Lib\_Members)

Book (Attributes: Name, ISBN, Functions: add book)

Staff (Attributes: Name, ID, Email\_ID)

Student (Attributes: Name, ID, Email\_ID, School, Course)

**Use Cases:**

1. Search

Primary Actors: Librarian, Library Members

Pre-Condition: The book or student to be searched should have been registered in the database of the library management system.

Main Scenario:

1. The Library Members enters the book name or ISBN and presses search

2. If the search is successful then that book is displayed on the screen.

Alternative Scenario:

If the Book is not available in the database, the same should be informed to the user.

2. Transaction – Issue Book, Collect Back the Book

Primary Actors: Librarian, Library\_Members.

Pre-Condition:

To return or borrow any book it is important that the book to be borrowed is available with the library and that book data is available with the library.

Main Scenario:

1. Librarian should enter the Student ID.

2. Librarian should enter the Book Name or Book ISBN.

3. If the book is available it can be borrowed.

4. If no fine is pending the book can be returned.

Alternate Scenarios:

1. If the book is not present in the database, the Librarian must inform the student/user the same.

3. Add New Book

Primary Actors: Librarian

Pre-Condition: To add any book that book, all the corresponding details need to be present and to delete the book the book must be part of the library.

Main Scenario:

1. If the book is not currently available, it can be added to the book database.

Alternate Scenarios:

1. If a book is to be added and on search it is already found it should not be added again.

4. Change Add New Copies of Existing Book

Primary Actors: Librarian

Pre-Condition:

1. The Book must be present in the Database in order to add new copies of the same book

Main Scenario:

1. If the Book is found in the Database after searching, then the librarian edits the number\_of\_copies\_available in the Books Table and necessary changes are to be made to the corresponding tables like Assets, etc.

Alternate Scenario:

1. If the Book is not present in the database, then it must be first added to the database with all the appropriate details and then new copies can be added.

5. Users Recommend New Books

Primary Actors: Library\_Members, Librarian

Pre-Condition:

1. The Book Recommended by the User shouldn’t already exist in the Database

Main Scenario:

1. The User enters the Name of the Book, Name of the Author and Name of the Publisher. These details are processed and then stored in the table Book\_Recommendations.

2. If the Book that the user wants to recommend has already been recommended by someone else, then the count of the recommendation for that particular book must be increased by ‘1’.

Alternate Scenario:

1. If the Book already exists in the Database, then the same must be informed to the user with the Name of the Book and ISBN

6. Members rate and review the book

Primary Actors: Library\_Members, Librarian

Pre-Condition:

1. For a Book to be rated and reviewed, it must exist in the Database

Main Scenario:

1. The User enters their Name, then Rate the Book out of 5 and add their Review. These details are processed and stored as JSON document inside the Books Table

Alternate Scenario:

1. If the Book does not exist in the Database, the same must be informed to the user.