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| Software Engineering Project |
| LMS(Library Management System) |
| [Document subtitle] |

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**User Requirements:**

* Proper user interface to guide users of system.
* Library Management System required to store information about its users and books.
* Library Management System shall store databases for members and books.
* Member could be a student or teacher.
* Student database should store information about students roll no, name, course and semester.
* Teacher database should store information about teachers name, id and department name.
* Book database should store information about a book, title, author, and publisher.

**Functional Requirements:**

FR01-01: System shall user to Sign up

**Functional Requirements – User Login**

FR01-02: System shall allow user to Login

FR01-03: System shall get Username from user

FR01-04: System shall get password from user

FR01-05: System shall authenticate user when he/she submits username and password on login button

FR01-06: System shall allow user to reset his/her username and password when he/she clicks on reset button

FR01-07: System shall allow user to remember his/her password by entering into the checkbox

FR01-08: System shall allow user to get reset his username and password

**Manage books by user.**

FR02-01: Books Issued System shall display list of books along with data of return

**Search**

FR02-02: System shall get ISBN number of book.

FR02-03: System shall display list of books.

**Issues book**

FR03-1: System shall search the book user want to search.

FR03-2: System shall conform for book issue and apology for failure.

**Renew book**

FR04-1: System shall get the ISBN of book that to be renewed.

FR04-2: System shall confirm about book renewal.

FR04-3: System shall tell if book is kept by another user and reserve it for present.

**Return**

FR04-1: System shall get the ISBN number of book to be return.

FR04-2: System shall update the new available books.

**Reserve book**

FR05-1: System shall get the name of book to be reserved.

FR05-2: System shall tell about book reservation.

FR05-3: IF book is reserved by another user. System shall tell the user and reserve it.

**Add books**

FR06-1: System shall get the details of books such as names, author, edition, quantity.

FR06-2: System shall confirm about addition of books details.

Remove books

FR07-1: System shall get the name or ISBN number of book to be deleted.

FR07-2: System shall update the available book.

**NON-FUNCTIONAL REQUIREMENT:**

1: The product should be used by people with no training

2: Any interface between a user and LMS should have a minimum response time

3: The LMS should provide databases modification only for librarians and system administrator after authorization procedures

**Use Cases**

**Use case:** Add member.

# Primary actor: Students, Teachers.

**Pre-conditions:** Students and Teachers have submitted their registration form.

**Trigger:** Student or Teacher decided to register their self.

**Scenario:**

1. Student/Teacher goes to Registration Page.
2. Student/Teacher enters their information.
3. Student/Teacher submit the registration form.
4. System stores the information into respective databases.

**Use case:** Add Library Record.

**Primary actor:** Librarian.

**Pre-condition:** System must be fully configured; appropriate user ID and passwords must be obtained.

**Trigger:** Librarian decided to add record.

**Scenario:**

1. Librarian opens the application to access the services.
2. He/she tries to sign up.
3. He/she provides information to store in the record.
4. System record the information in respective databases.