**REQUIREMENT ANALYSIS AND UNDERSTANDING**

**Development of a Library Management System (LMS)**

**Objective**: This project is aimed at developing Library Management System (LMS) for the college library. This is an Intranet based application that can be accessed throughout the campus. This system can be used to search for books, reserve books, issue books and return books from the library. This is an integrated system that contains both the user component and the librarian component.

**Login Module:**

Login module is common for all the users of the system. There are two categories of people who would access the system viz. Librarian and Students

Basic functionality of module are as follows:

1. Taking login credentials from the user.

2. If given credentials are wrong show appropriate message.

3. If login succeeds user will be navigated to their respective homepage as per the role.

**Sign Up Module:**

If a user (librarian or student) wants to access the Library Management System then he/she will be asked to register.

Visitor will be asked to enter the following details:

1. User Name
2. Email Id
3. Password
4. Repeat Password
5. Librarian Or Student

Note: If the username already exists then the visitor will be asked to enter new username.

Assumptions: A repeat password field is given to confirm password before registering.

**Search Book Module:**

Books in Library can be viewed by librarian or a registered student..

* This module can be used by a librarian as well as registered user.
* If a user (who is not signed in) directly tries to access Book Inventory then he/she will be redirected to the sign up page
* If a user is already registered, he/she can login to the system and search for a particular book through its book Id or book Name or book Author Name, followed by displaying all the books available in the library for the particular book request.
* Student can place a request for a book or continue searching books.

Assumption:User is provided with the provision to place a request for a particular book from the book inventory in the same visit.

**Place A Book Request Module:**

* The user is shown all the books available in the library for the particular book request, after which he/she can place request for a book for which book registration id is generated and then that item will be added to the book Request List.
* Student can place a request for a book or continue searching books.

Assumption:Place Request facility is provided to the user to ensure that user wants to place the book request.

**Add Book Module:**

Librarian will add a new book in the book inventory (i.e. library).

Librarian will be asked to enter the following details:

1. Book Id
2. Book Name
3. Book Author
4. Year Of Publication
5. No Of Books

**Update Book Module:**

* Librarian will update an existing book.
* Librarian can update all the details mentioned in the Add Book module.

**Issue Book Module:**

* Librarian will view the book requests:
* Issue a book from book inventory depending upon the status of the placed request (Issued/Pending).

**Return Book Module:**

* Librarian will view the book return requests:
* Return a book to the book inventory depending upon the status of the placed request (Issued/Pending).
* Impose fine on the user based on the return date.

**Added functionalities**

* User Name is shown in every page with the help of Session attribute.
* Change password functionality is provided.
* Option for user to register directly from Homepage.