**Library Management System (LiMS)**

Group Number 1

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**Objectives**

* Project Understanding
* Approach used
* Project Execution
* Modules
* Learning
* Best Practices
* Opportunity for improvement
* Demo and Code Walkthrough
* Q&A

**Project Understanding**

* This project is aimed at developing Library Management System (LiMS) 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/magazines; reserve books, and issue/return books from the library.
* This is an integrated system that contains both the user component and the librarian component.

**Modules**

* Registration (for Librarian and Student)
* Login
* Add/Remove Books
* Manage Return/Issue
* Display List of Existing Books

1. **Registration:**

Registration module is common for all the users of the system

I.e. Librarian & Student. This module will create a new user.

* **Basic functionality of the login module are as follows:**
* Take username and password from the user.
* After validations, these will be stored in the users table in database.

**2. LOGIN:**

Login module is common for all the users of the system

I.e. Librarian & Student.

* **Basic functionality of the login module are as follows:**
* Taking login credentials from the user.
* If given credentials are wrong, show appropriate message.
* If login succeeds, user will be navigated to his/her respective page as per his/her role.

1. **Add/Remove Books:**

This module is for the Librarian to add/remove books which are available for issue.

* **Basic functionality of this module are as follows:**
* Adding new books into the inventory.
* Removing books from the inventory.
* Updating the database accordingly.

1. **Manage Return/Issue:**

This module is for the librarian to issue a book to student and also mark the return of the book issued.

* **Basic functionality of this module are as follows:**
* When student requests for a book and if it is available in the inventory then the librarian will issue this book to the student and mark the return date
* The return date & the fine fields are disabled for the student as they would be computed automatically.

1. **Display List of existing Books:**

This module displays the available books in book inventory and allows the user/students to place a request for a book.

* **Basic functionality of this module are as follows:**
* Display the books available on the screen
* Student is requested to enter the book id corresponding to the book required
* If the entered book id is present in the database then that book is issued to the student.
* If not then proper error message is thrown.

**Learning**

**1. Technical Learning:**

It lead to learning , implementing and improving the skills related to technical fields such as java 8.0,Spring 4.0,JSP-Servlets.

As we know that theory unless implemented practically is of no use, so doing such projects also helps in furnishing the technical skills and to work on our weak areas.

**2.Non-TechnicalLearning:**

It leads to development of several traits that lead to development of skills as:

* + Team work: It taught us to work in a team efficiently, communicate with team members efficiently as well as to understand each other’s aspect efficiently.
  + Work in time constraint: It taught us to work for a project/task in a time constraint i.e. to define and schedule our tasks according to time constraint, how to divide the task, etc.