# **Business Requirements Document (BRD)**

### **Project Overview**

The Library Management System (LMS) is designed to oversee and streamline the processes of managing library operations and enhance user experience. The system will provide an easy-to-use platform for librarians to perform tasks such as manage books, members, and borrowing/returning processes and for library members to search for books, borrow and return them, view borrowing history and receive notifications about overdue items.

### **Project Goals and Objectives**

* **Goal:** To implement a comprehensive Library Management System that helps automate the process of managing books and library members.
* **Objectives:**
  + Streamline the cataloging and tracking of library resources.
  + Enable borrow functionality for users.
  + Enable registration, log in, and easy book search for users
  + Allow users to borrow, return books and track their borrowing history.
  + Allow librarians to manage member data and issue/return books.
  + Integrate a notification system for overdue books.
  + Alert users regarding overdue books.

### **Stakeholders**

* **Library Members (Users):** Students, faculty, or the general public who borrow books and other resources.
* **Administrator (Librarians):** Main users of the system for managing inventory, checking out books, and managing membership.
* **Developers:** Responsible for the design and implementation of the system.

### **Scope**

#### ***In Scope:***

* **User Authentication:** Ability for users to create, update, and deactivate member accounts.
* **Book Search:** Advanced search based on title, author, ISBN, etc.
* **Book Borrowing and Returning:** Track the status of books and manage due dates.
* **Book Management:** Creation of a digital catalog for books, journals, and magazines.
* **Overdue Notifications:** Automatic email/SMS reminders for overdue books.

#### ***Out of Scope:***

* **Multi-branch management:** The system can support other branches information not part of this version of the system.
* **Book Reservations:** Book reservations are not part of this version of the system.
* **Integration with Third-party APIs:** The system does not support integration with third-party APIs (example external parties' registration for book meets).
* **Reporting:** Detailed reports for librarians and administrators on book circulation and user activity.

### **Assumptions and Constraints**

* **Assumptions:**
  + Users will have basic knowledge of using computers and the internet.
  + The implementation for frontend uses React 18
  + The implementation for backend uses Spring Boot
  + The database uses MySQL 8+
* **Constraints:**
  + The data security is simplified for learning purpose.
  + Integration with external systems (e.g., third-party APIs) is not within scope.