### **Business Requirements Document (BRD)**

#### **Library Management System (LMS) - Beginner Tier**

#### **1. Introduction**

* **Project Name**: Library Management System (LMS)
* **Objective**: Develop a basic web-based Library Management System using **Spring Boot (backend), React (frontend), and MySQL (database)** that allows users to register, add/view books, search books, and borrow books.
* **Business Need**: Libraries relying on manual tracking often face inefficiencies, misplaced books, and slow transactions. The LMS aims to automate these processes, ensuring better accuracy and user experience.

#### **2. Business Goals & Benefits**

* **Improve Efficiency**: Automate book management and borrowing processes.
* **Enhance Accessibility**: Allow members to search for books and track borrowing history online.
* **Basic Functionalities**: Implement a minimal viable product (MVP) focusing on user registration, book management, and simple borrow/return functions.

#### **3. Stakeholders**

| **Role** | **Responsibilities** |
| --- | --- |
| **Librarian (Admin)** | Add and manage books. |
| **Member** | Register, search for books, and borrow books. |

#### **4. Scope**

**In-Scope:**

* User Registration (Basic validation)
* Book Management (Admin adds/view books)
* Book Search
* Borrowing & Returning Books

**Out of Scope (For Now):**

* Membership validation rules
* Fine calculations
* Advanced search filters
* Mobile application

#### **5. Key Features**

| **Feature** | **Description** |
| --- | --- |
| **User Registration** | Members can register with basic details. |
| **Book Management** | Admin can add and view books. |
| **Book Search** | Users can search books by title. |
| **Borrow Books** | Users can borrow books and change book status. |
| **Overdue Notifications (Optional)** | Simple notification for overdue books (static date). |

#### **6. High-Level Requirements**

| **ID** | **Requirement** |
| --- | --- |
| BR-01 | Users must be able to register and log in. |
| BR-02 | Admin can add new books to the system. |
| BR-03 | Users can search for books by title. |
| BR-04 | Users can borrow books, updating the book status. |
| BR-05 | (Optional) Display notification if a book is overdue. |

#### **7. Assumptions & Constraints**

* System should be accessible via web browser.
* Database should store books and user details.
* Overdue tracking is static for now.
* Security features such as encryption and advanced authentication are not prioritized at this stage.

#### **8. Success Metrics**

* System successfully registers users and allows them to search for books.
* Admin can add books to the system.
* Users can borrow books, and the system updates their status.