## Project Title:

#### **Library Management System (LMS)**

## Project Concept / Overview:

The Library Management System is software that automates and manages the day-to-day operations of a library. It helps librarians and students track books, manage inventory, issue/return books, and maintain a searchable catalog. The goal is to reduce manual work, eliminate errors, and improve efficiency.

### Scope:

- Book management (add, update, delete books)
- User management (admin, librarian, student)
- Book issuing and returning
- Fine calculation for late returns
- Search functionality (by title, author, category)
- Inventory and availability status
- Report generation (monthly issue/return logs)

# **✓** Modules / Features:

#### 1. Admin Panel

- Add/remove librarians
- View system logs and reports
- Manage all users and books

#### 2. Librarian Panel

- Add/edit/delete books
- Issue/return books
- Track due dates and fine

o Register new members

#### 3. Student Panel

- Login to check issued books
- Search and request books
- View history and due dates

#### 4. Database

o Stores user info, book records, issue history, and fines

### Stakeholders:

- Library Administrator Manages users and system.
- **Librarian** Handles issuing, returning, and cataloging.
- **Students/Users** Search, borrow, and return books.
- **Developers** Design, develop, and maintain the system.

### Non-Functional Requirements:

- User-friendly interface
- Data security and access control
- Fast search and response time
- Backup and recovery system

# **✓** Possible Technologies:

• Frontend: HTML, CSS, JavaScript, Bootstrap

• Backend: PHP / Python (Flask or Django) / Java

Database: MySQL / SQLite

• Optional: Tkinter (for desktop app), Laravel (PHP framework)