**✅ 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
   * Register new members
3. **Student Panel**
   * Login to check issued books
   * Search and request books
   * View history and due dates
4. **Database**
   * 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)