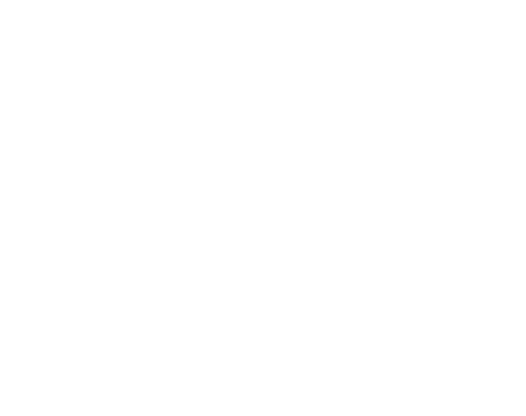


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| **PROJECT PROPOSAL**  **PROJECT GROUP NO: ACADEMIC YEAR: 2024-25** | | |
| **A. Proposed Title of the Project** | | |
| **TOPIC: LIBRARY MANAGEMENT SYSTEM** | | |
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| **B. Introduction** | | |
| A **Library Management System (LMS)** is a software application used to manage and organize the functions of a library, such as managing books, users, and transactions. It simplifies the process of cataloging books, issuing and returning them, and keeping track of the library's inventory. This project is typically built using a **Database Management System (DBMS)**, which is used to store and retrieve information efficiently.  In this mini project, the **Library Management System** is designed to help both the librarians and the users (students, teachers, etc.) interact with the library database. It aims to automate tasks that would otherwise be done manually, such as issuing books, searching for books, and managing overdue books. | | |
| **C. Literature Review** | | |
| A Library Management System (LMS) is an essential tool for managing the operations of a library efficiently. Various studies and existing systems have contributed to the development of LMS, focusing on automation, user accessibility, and improved book tracking. This literature review explores past research, existing LMS models, and advancements in database management systems (DBMS) that have influenced library management. | | |
| **D. Objectives**   * Book Management – Store, add, update, and delete book records. * User Management – Maintain student, faculty, and staff details. * Issue & Return – Track book borrowing and returning. * Search Books – Find books by title, author, or ISBN. * Overdue & Fine – Monitor due dates and calculate fines. * Report Generation – Generate book and user reports. * Security – Implement authentication and access control. * Scalability – Support future enhancements and expansion**.** | | |
| **E. Workplace** | | Address of Other Institute / Industry (if any): |
| College | | \_\_ |
| **F. Requirement Details** | | |
| 1. Hardware | * Computer/Server * Monitor & Input Devices * Barcode Scanner (Optional) * Printer (Optional) * Power Supply. | |
| 2. Software | * Operating System * Database * Programming Language * Frontend * Backend * IDE/Text Editor * XAMPP/WAMP | |
| 3. Skill sets | * Database Management * Programming Knowledge * Frontend Development * Backend Development * Problem-Solving Skills * Version Control (Git) * Debugging and Testing * Report Generation | |
| 4. Others | * Communication Skills * Teamwork & Collaboration * Time Management * Analytical Thinking * Documentation Skills * Adaptability & Learning * Attention to Detail * Project Management | |
| **G. Figure(s)/Drawing(s)** | | |
|  | | |
| **H. Methodology** | | |
| * Requirement Analysis – Identify system needs, including book management, user authentication, and transaction tracking. * System Design – Create ER diagrams, database schema, and user interface layout. * Database Development – Implement database tables using MySQL, PostgreSQL, or SQLite. * Frontend & Backend Development – Develop the user interface and connect it with the database using a backend framework (e.g., Django, Flask, Java). * Implementation & Integration – Integrate modules like book search, issue/return, and fine calculation. * Testing & Debugging – Perform unit and system testing to ensure functionality and fix errors. * Deployment – Install and configure the system for real-world usage. * Maintenance & Future Enhancements – Update the system for scalability and new features**.** | | |

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| **I. Flowchart (Plan of Action)** | | | | |
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| **J. Expected Outcome of the project** | | | | |
| * **Efficient Book Management** – Store, update, and manage book records easily. * **Automated Issue & Return System** – Track book borrowing and returning without manual effort. * **User-Friendly Search & Retrieval** – Quick search options based on title, author, or category. * **Overdue Tracking & Fine Calculation** – Monitor due dates and automatically calculate fines. * **Secure User Authentication** – Ensure access control for students, staff, and admins. * **Report Generation & Analytics** – Generate reports on issued, returned, and overdue books. * **Reduced Manual Work & Errors** – Minimize paperwork and human errors in record-keeping. * **Scalability for Future Enhancements** – Allow future upgrades like cloud storage and AI recommendations. | | | | |
| **K. Estimated cost** | | | **Source of Fund** | |
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| **L. References** | | | | |
|  | | | | |
| **M. Project Batch members** | | | | |
| **S.No.** | **USN** | **Name** | | **Signature with date** |
| 1. | 4MW23CS101 | PRATHEEKSHA P RAO | |  |
| 2. | 4MW23CS103 | PRATHVI | |  |
| 3. | 4MW23CS114 | RAKSHITHA S | |  |
| 4. | 4MW23CS128 | SAHANA SHETTY | |  |
| **N. Accepted/Rejected:** | | |  | |
| **O. Suggestions for implementation:** | | | | |
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|  | | | | |
|  | | | | |
| **P. Guidance** | | | | |
| Guide (s) allotted | | | Guide Name and Signature (s) with date | |
| **1. Guide** | | | **Mrs. PREETHI M** | |

**Q. Review Comments/Suggestions**

**Accept/Modify/** **Reject**

**Reviewer Signature &**

**Name**