



SYNOPSIS

ON

Book Library System

Submitted By:

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Title of the Project:

Book Library System

A book library system is a user-friendly software solution that helps librarians efficiently manage library resources and member interactions. It simplifies tasks like cataloging books, processing checkouts and returns, and generating reports.

Objective:

The overall objective is to have a Library Management System that can handle & manage the activities involved in a library in an efficient & reliable way.

Scope:

The scope of a library system project includes defining what features and functionalities the software will have, such as book management, member services, search capabilities, and reporting. The scope of the project of library management system typically covers the following aspects:

- **Book Management**: The system should cover tasks related to book acquisition, cataloguing, and organization within the library.
- **User Management**: Creating and managing user accounts, handling patron information, and providing authentication for library services.

Methodology:

- **Project Planning**: Gather requirements for the applications. Create a project plan, timeline.
- **Front-End Development**: HTML/CSS/JS - These languages used for creating the application's interface, styling and creating interactive features.
- **Backend Development**: Languages like node.js is commonly used for backend development due to their robustness and flexibility.
- **NoSQL Database**: Depending on the scalability requirements, NoSQL databases like MongoDB used for handling unstructured or semi-structured data.

Proposed System:

- User Registration: Users will have to register on a platform, creating personal profiles with their basic information.
- Step-by-Step Wizard: After login, the application will help users to input relevant details in a structured manner.
- Book Management: Librarians can easily add, edit, and delete book records.
- User Interface: The system will feature a user-friendly interface with intuitive navigation, search functionalities, and personalized recommendations for members.

Features:

1. Book Management.
2. Member Management.
3. Search and Discovery.
4. User interface.
5. Reporting and analytics.

Implementation Plan:

Step 1: Planning and Requirements Gathering (1 week)

Step 2: Design Phase and Architecture (1 week)

Step 3: Development (4-5 weeks)

Step 4: Testing and Quality (Ongoing)

Step 5: Continuous Improvement (Ongoing)

Team Members:

1. Parul Upmanyu – Front-End and Back-End.
2. Pooja Jain – Front-End and Back-End.

3. Sneha Agrawal – Front-End and Back-End.
4. Tanya Sharma– Front-End and Back-End.

Resources Required:

- Software:
 1. Development Tools: Integrated Development Environment (IDE) such as Visual Studio Code for coding
 2. Version Control System: Git for managing source code and collaboration among team members.
 3. Database Management System (DBMS): MySQL, MongoDB for storing and managing library data.
- Hardware:
 1. Development Workstations: High-performance computers with sufficient RAM, storage for development tasks.
 2. Web Servers: Servers for application, typically running on Windows Operating Systems.
- Special Equipments:
 1. Mobile Devices: To test mobile responsiveness and functionality.

References:

- Online Courses: Courses from platform like Udemy for comprehensive learning.
- Online resources: Google and AI
- GitHub

Expected Outcomes:

By the end of the book library system project, the primary objective is to deliver a fully functional and user-friendly software application that effectively meets the needs of both librarians and library members.

Project Supervisor:

Mr.Akash Chaudhary

Conclusion:

Our book library system project aims to simplify library management, improve user access, and enhance overall satisfaction. Through automation and user-friendly design, we strive to create a seamless experience for librarians and patrons alike, fostering a thriving community of readers and learners.