

# Library Management System

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**Abstract:** Using PHP provides a simple GUI (Graphical User Interface) for the Library Staff to maintain the records of the books and the whole LIBRARY MANAGEMENT SYSTEM digital. It is designed & develops for the receipt and Issuance of books in the library. In a non-computerize Library management system, when a book is issued or returned. It is noted down in a register after which data entry is done to update the status of the books. This process is a time-consuming and proper update of this information cannot be guaranteed. To show the comprehensive information for the intended purpose and about the system to be developed.

**Keywords:** Book tracking, Book management system, Time and attendance, Automated Library Management system, Database Management, Academic Institutions, Efficiency, Accuracy, Security, Reporting, Integration

## I. INTRODUCTION

These are those that specify some criteria that can be used to evaluate the performance of a system in some particular conditions

Anomalies in the update process can cause loss of books. So a more user-friendly interface that could update the database instantly has a great demand in libraries.

Firstly, they need to give an introduction to the project. Then, problems/ current situation, their objectives, tools, and techniques that have been used during the course of the project, their plans and schedules. Secondly, Users need to write tasks and activities problems and issues. The system developer needs to draw the ER diagram for their project and should take the screenshot for the report.

## II. PURPOSE

Traditional methods of communication, such as Student-Librarian Books, can be time-consuming and may not be practical for busy Librarian or Students. Through this system, the students or teachers and the librarian gets a way to ease their work. Through this system, the student can search and get the book issued easily. Also, less time will be needed to spend by the librarian to handle this. Therefore, the throughput is faster processing of the library management system.

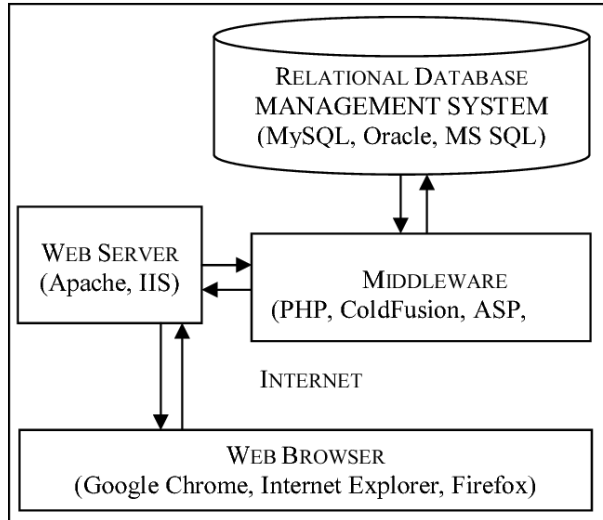
## III. OBJECTIVE OF SYSTEM

1. Library staff can provide daily update to Books of student.
2. To reduce paperwork.
3. Reduced operational time.
4. Increased accuracy and reliability.
5. Increased operational efficiency.
6. Data security
7. Reliable for student to create account and apply for Book issues.
8. New features can be added as per requirements

**IV. PROPOSED SYSTEM**

Keeps an Accurate and Comprehensive Record As mentioned, a library Management. Reduces Manual work and save the time. Reduce operating costs. Easier to user for both Ends.

**SYSTEM ARCHITECTURE**



- **Web Browser:** It Represents the client i.e. client can send request to server and see the response of request through web browser like Google chrome, internet explorer and Firefox etc.
- **Web Server:** It processes user request and send response to client through web browser in HTML format. Web Server like Apache, IIS etc.
- **Middleware:** Middleware refers to a layer of software that sits between the application and the server. Middleware is a frameworks to perform tasks such as authentication, logging, catching and modifying HTTP headers.
- **Database:** A database is a structured collection of data that is organized and managed for efficient storage, retrieval and manipulation. Databases like MYSQL,ORACLE,MS SQL.

**V. CONCLUSION**

The above-mentioned use case diagram depicts the functionality of the library management system in a brief and satisfactory way. In this diagram, the user has been shown more specifically as a student who will first login to the system, to get access to the application. After getting the authentication and being authorized, the user will use the system with ease and security.

There is a database maintained for storing the records of books that are available in the stock, books that have been issued to some user, then the return date of each issued book. After logging in the user will search for the books in the library using the subject code, book code, and therefore access to the rack number becomes easy, so ultimately using the rack number user finds the book, if it is available or not

**VI. ACKNOWLEDGMENT**

Once the book has been found, if wanted the book, the user can get it issued easily with their unique college or university id. Now since the book has been issued it needs to be returned after a defined duration of time as a part of the system procedure. At a regular interval of time user can check if there is any fine charged on him/her or not. The librarian will also monitor all these activities at its end. And along with this, there is some additional work for the librarian to be done like, adding new books in the rack, updating the book availability status from time to time, checking the user’s identity is valid or not for a particular time period.

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