# Project Proposal: Library Management System

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Abstract—With the improvement in technology, there is a great need for automation in every aspect of life. The traditional library can also be made more efficient using technology. Previously, the librarian used to keep the log of books using traditional methods. But now, we can use relational database to keep track of the books in the library that are being borrowed.

Index Terms—Database, Library Management System, PHP, HTML, CSS

# I. INTRODUCTION

Libraries have been part of the human civilization for centuries. The library stores knowledge and information in books. From ancient times, the libraries have designed ways of keeping the record of books. Previously, it was done in written form. But with the advancement in technologies, relational databases are used to track the books.

The library management system is a project that aims in developing a computerized system to maintain all the daily work of library. This system will include features like user management, book management, issuing books, calculating late fee and many more. This system will greatly help the library administration to maintain the records more effectively.

#### II. LITERATURE REVIEW

Extensive researches are being conducted in the area of Library Management. More advanced technologies are being used to make the system more efficient. Donghua Zhou has proposed an intelligent library management system that will utilize the help of RFID (Radio Frequency Identification) to improve the system in term of efficiency and cost effectiveness (Zhou, 2019).

#### III. PROPOSED METHODOLOGY

The proposed system will provide a complete Library management solution. It will include a user-friendly front end that will help the admin and users to interact with the system easily. The system includes a database that will keep record of the books and users. The backend will combine the front end and the database and will include functions like user authentication, registration, late fee calculation etc. The frontend will be designed using HTML and CSS. For system will be built using PHP and MySQL database.

### IV. CONCLUSION AND FUTURE WORK

There is a huge scope of improvement on this system. We can utilize computer vision to automatically issue a book when someone picks it from the shelf (Xi, Zhang, Hu & Xin, 2016). IOT devices can be used to keep track of books easily.

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