# Introduction

With the existing challenges on library management using the manual systems, the internet-based Library Management System will serve as a comprehensive tool for managing library processes and user interactions. It will also offer flexibility and scalability, allowing for easy adaptation to different library settings and the incorporation of new features as needed.

## Purpose

The purpose of the Library Management System is to make it easy to keep track of books and library members using computers. It also wants to make it simple to borrow and return books and create different kinds of reports. The document also mentions how everything should look, like the titles and the text, using specific fonts and sizes.

## Scope

Library Management System is basically updating the manual library system into an internet-based web application so that the users can know the details of their accounts, availability of books and maximum limit for borrowing and many more features.

The project is specifically designed for the use of librarians and library users. The product will work as a complete user interface for library management process and library usage from ordinary users. Library Management System can be used by any existing or new library to manage its books and book borrowing, insertion and monitoring. It is especially useful for any educational institute where modifications in the content can be done easily according to requirements.

The project can be easily implemented under various situations. We can add new features as and when we require, making reusability possible as there is flexibility in all the modules. The language used for developing the project is Html, Bootstrap and php and mysql for backend. In terms of performance, tools available, cross platform compatibility, libraries, cost (freely available), and development process these languages are pretty compatible.

# System Overview

The paper covers the aspects involved in the transition from a manual library system to an internet-based application called the Library Management System (LMS).

## System Objectives

With its main focus being to provide users with access to their accounts, book availability, and borrowing limits through an intuitive interface.

* Automate the process of members’ registration and management.
* Provide real-time access to Library services and books availability.
* Ensure proper management of books reservation, renew and return.
* Generate official report for all aspects of library and membership management. .
* Integrate with supporting systems like Mail server and sms gateways to send alerts related to reservations and late returns of books.

## System Users

* **Administrators**: Responsible for system configuration, user management, and overall system maintenance.
* **Librarians**: acts as an admin in a Library management system, can add or remove a book as well as modify the status of members or books, also issue and return books.
* **Members**: this is the library client, can search, reserve, renew or return a book and modify its library membership.
* **System**: can send alerts related to reservations and late return of books.