Project Report

Library Management System

Name: *Lakshya Jain*

Roll No*: 22F2001138*

Student Email: *22f2001138@ds.study.iitm.ac.in*

Description:

The Library Management Application consists of two main panels: one for general users to explore books, read them, send requests to the librarian, and engage with books through comments, and another panel for librarians to oversee the entire platform. Librarians have the ability to add, delete, and update books and sections. They can also check which user is currently reading a book and for how many days the book has been requested.

Technologies Used:

Frontend: HTML/CSS, Bootstrap

Backend: Python Flask (with SQLAlchemy)

Template Engine: Jinja2

Database: SQLite

Data Visualization: Matplotlib

Features of the Application:

Librarians:

Read Books: Librarians can read books available in the library.

Delete Books: They have the authority to delete any book from the platform.

Manage Sections: Librarians can view and delete any section within the library.

View Statistics: Librarians can access statistics regarding the application such as total sections, total books in each section, etc.

Users:

Read Books: *Users can read books available in the library.*

Comment on Books: Users can leave comments on books to share their thoughts or provide feedback.

Search for Books: Users have the ability to search for specific books based on titles.

Request Tracking: Users can view how many requests they have sent and how many of those requests have been approved.

Conclusion:

The Library Management System provides a user-friendly platform for both librarians and users to manage and access library resources efficiently. With features such as book browsing, commenting, request tracking, and statistical insights, the application enhances the overall experience of managing and utilizing library services. The use of Flask and SQLAlchemy ensures robust backend functionality while HTML/CSS and Bootstrap contribute to an appealing and responsive frontend design.

video link:

https://www.loom.com/share/*cafff682b8a9479f99891abc4117c364*?sid=4b3e7955-c3ce-4291-9bec-9ac92afca08c

DATABASE Schema :