# Library Management Application

## DEVELOPER

Name: Sanskar Rajput Roll number: 22f3000941

Student ID: 22f3000941@ds.study.iitm.ac.in

Project: library management application (MAD 1 project)

#### **DESCRIPTION**

This is my library management website with users authentication which will allowing users to read, request, return and rate books. Each user can read only the book to which he has access. Also Every user can give their feedback on each book. Users can also see all the sections of library.

There is only one librarian who can manage all the books and sections in the library. Librarian can see important statistics of the application like all readers, all books, all sections etc.

I have added API functionality for Books and Sections with all books in that section, through which we can CRUD operations on books and sections tables.

#### TECHNOLOGIES USED

These are some required libraries which are used in this application.

- > Flask Framework for application
- > Flask-Login For user login/logout & authentication
- > Flask-RESTful For adding API functionality
- > Flask-Migrate For making changes database schema
- > Flask- APScheduler For running a function in background
- > Flask-SQLAlchemy For creating and Interacting with database of app
- > Jinja2 For dynamically web page rendering
- > Flask-bcrypt Generating and matching hashed password

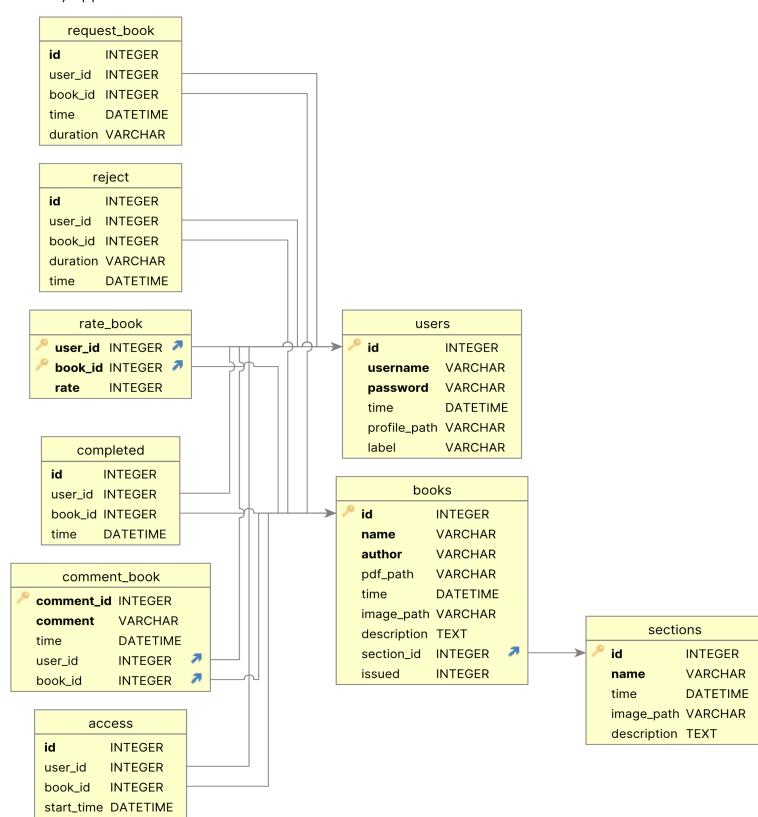
#### HIGHLIGHTS

- For each user access of a book for a specific period of time.
- > Access of books will automatically revoke after a specific period of time.
- > API for books and sections.
- > Text-to-speech functionality for every book.
- > Search functionality based on books and authors name..

#### DATABASE SCHEMA DESIGN

end\_time DATETIME

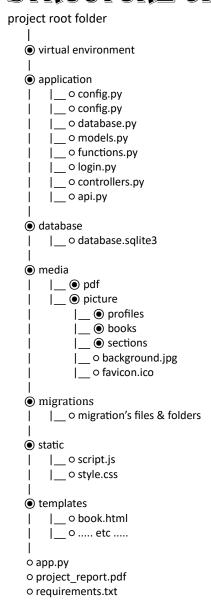
This is schema of my application's database.



## **HOW TO RUN**

- > Unzip the project folder.
- Open terminal in that folder.
- > Create a virtual environment activate that.
- > Install all the package written in requirements.txt
- And run app.py

### STRUCTURE OF APPLICATION



#### VIDEO

For more visit this link.

https://drive.google.com/file/d/1hrzqIREy-4ZB\_kALzOjHJTR2IUYQc3jr/view?usp=drive\_link

# SOME SCREENSHOTS OF WEBSITE

