

# MAD – I

## Project Report

### Library Management

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About me	I'm a mechanical engineer who has keen interest in programming and have ideas of venturing into IT Sector

### Description:

This project's problem statement gave me an idea of creating an app that can give view access of the same book to many users at the same time. I have also added an option to download by paying a certain amount.

### Technologies Used:

**Flask-SQLAlchemy** is used for defining and interacting with database models.

**Matplotlib** is used for generating statistical plots and visualizations.

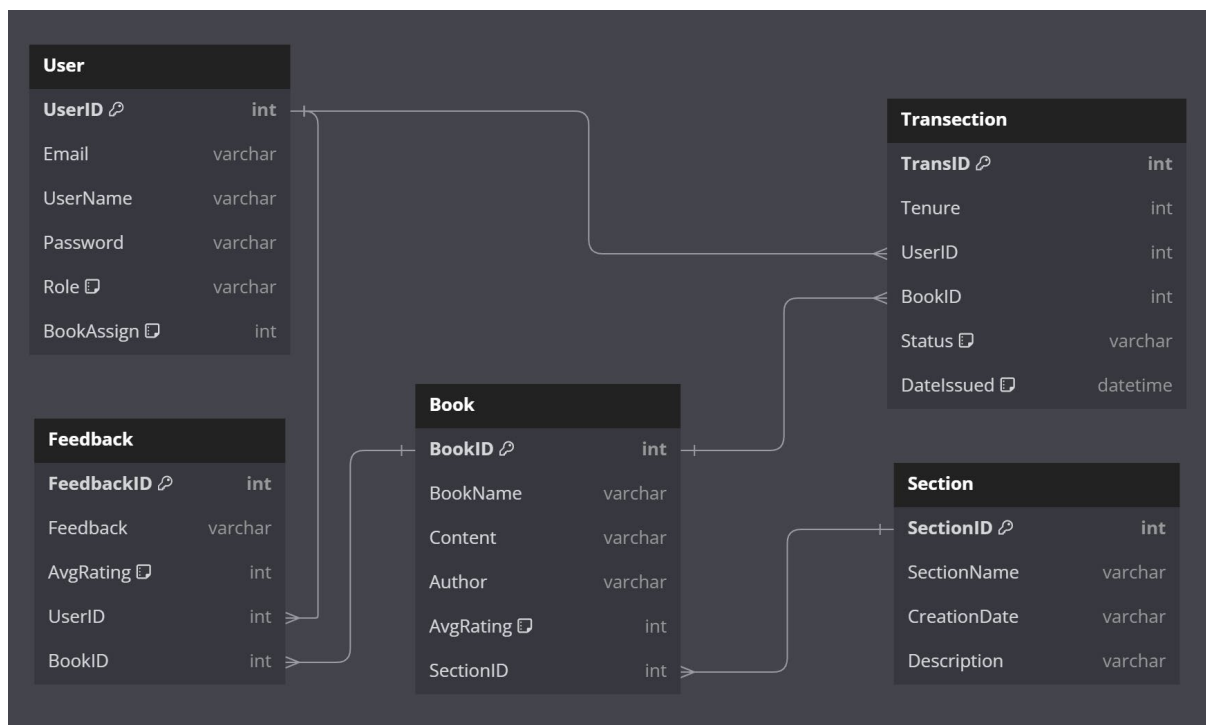
**DateTime** is used for working with date and time-related functionalities.

**Flask - Session** is used for managing user sessions, allowing users to stay authenticated across multiple requests.

**Werkzeug** is used for handling file uploads securely.

**Secure\_filename**: Secure\_filename is a utility function from the Werkzeug library used to securely generate a filename for uploaded files

## DB Schema Design :



## Architecture and Features:

I have implemented all my controllers, models and app in my app.py module. I have used Flask to create my app and the html templates are stored in the templates folder. I have used virtual environment and have saved all of my module names with its version in requirements.txt. I have some css files and some uploaded books in pdf format in my static folder and have used inline css for most of my html pages.

I have tried to implement all the basic requirements that the app was required too have with some aesthetics added to it. The admin has a stats page with the number of books being lent graphed to a histogram.

## Video Link :

<https://drive.google.com/file/d/1UsZ6DcYTVLZc6g65ozl9l5uhfzWide4E/view?usp=sharing>