

# IITM-MAD 2

## Modern Application Development - 2

### Project report

#### Author:

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#### Description:

Name of project is "BookLuv 2.0", which is an advance version of my MAD-1 project. This is a web application project that facilitates request and issue of e-books through web. The application uses flask-python as framework, SQL Alchemy as database tool, flask security for making the platform secure, flask restful for designing Api and vue js for the frontend part of website. The application has various features such as advance security, RBAC (Role Base Access Control) section management, book management. Issue and request for e-books.

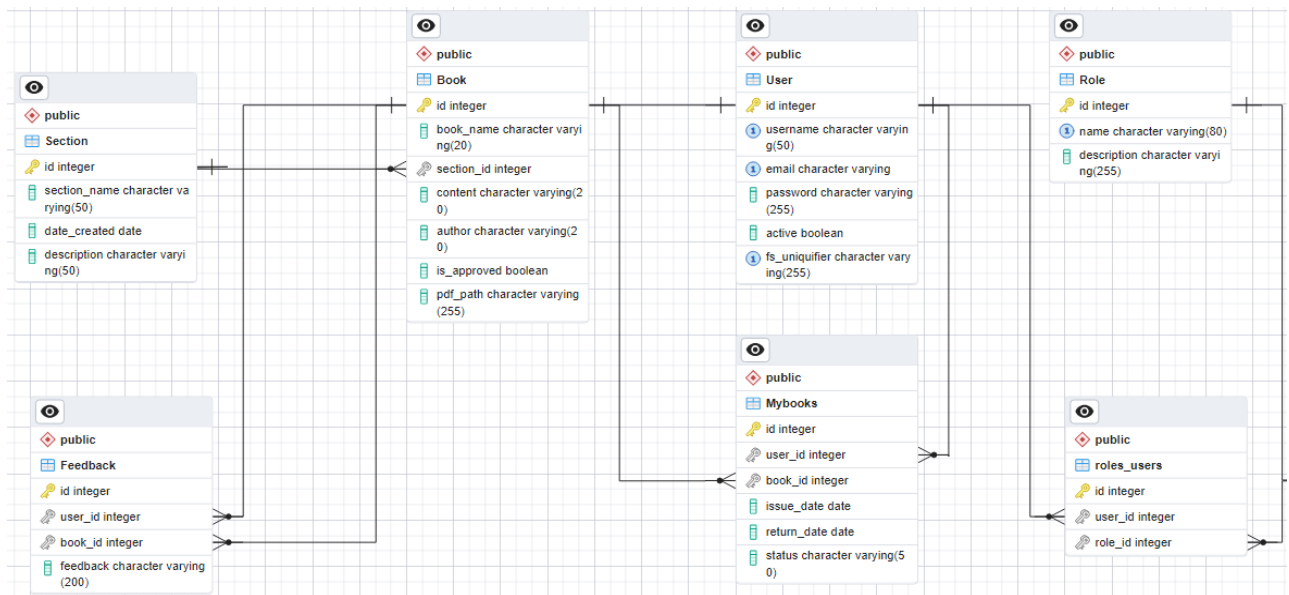
#### Framework Used:

Frontend	Backend	Other
Vue CDN	Flask (framework)	Mailhog
Vue	Flask-SQLAlchemy (ORM)	Redis
Vue Router	Flask RESTful (API)	
	Flask Security (Authentication)	
	Flask Cors (CORS)	
	Flask Caching (Caching)	
	Celery (Backend Async Jobs)	
	requests (Sending webhook requests)	
	Jinja2 (for email and report templates)	
	Matplotlib (for visualising stats)	

#### Video Presentation Link:

<https://drive.google.com/file/d/19RBBK73sCf41mx9tcZOW77eKZyWcPNm4/view?usp=sharing>

## DB Schema Design:



## API Design:

A REST API for the BookLuv 2.0 app was made with the Flask-RESTful module. It has endpoints for basic CRUD operations on users / books / sections. - Endpoints for requesting, approving, rejecting and managing book access for admin. - Other endpoints for frontend rendering.

## Architecture:

