Library Management System Task(Python)

Completion of the task is not mandatory. What matters most is your approach, problem-solving skills, and how you think through the requirements

Overview:

Create a backend with APIs using any SQL database for a library system. The system should allow a librarian (admin) to manage users and book requests, and library users to request and view book borrowing details. Code should be in Python language.

As part of this task, **you must design and create the database schema yourself** to support all the required functionality.

For enquiry please mail on **prathish@fotoowl.ai**

You have to upload the code on your github account and mail the link to akshay@fotoowl.ai, prathish@fotoowl.ai

---

API Requirements:

1. **Librarian APIs**:
    - Create a new library user with an email and password.
    - View all book borrow requests.
    - Approve or deny a borrow request.
    - View a user's book borrow history.
2. **Library User APIs**:
    - Get list of books
    - Submit a request to borrow a book for specific dates (date1 to date2).
    - View personal book borrow history.

Key Rules:

1. A book cannot be borrowed by more than one user during the same period. (There can be multiple books of same name but each book will be considered as unique)
2. Use **Basic Authentication** for all APIs.
3. Handle all edge cases, such as:
    - Invalid or incomplete requests.
    - Overlapping borrow dates.
    - Requests for non-existent users or books.

Database Schema:

- You are expected to **design and create the database schema** required to support the functionality.

Bonus Features:

1. Allow library users to **download all their data** (borrow history) as a CSV file.
2. Implement **JWT-based authentication** instead of basic authentication.
3. Create clear and detailed **API documentation** (e.g., using Swagger or Postman).