Application Plan – Online Library

Application:

Online Library and Book Reviews – A web platform for users to browse, review, and borrow books from an online library collection.

Dataset:

I am going to user Faker to create a Fake Book, User and Reviews datasets, the datasets will look like

* **Books** - fields such as title, author, genre, cover image and availability status
* **Users** - fake user profiles including names, email addresses, and hashed passwords
* **Reviews** - fake reviews for the books, providing a realistic distribution of ratings and review texts.
* **Borrowed Books** – fields including book, user who has borrowed the book, return date, borrowed date etc.

# Functionality:

Core Features for All Users:

* Browse books in a paginated interface with options to navigate to the next and previous pages.
* Access detailed information about a specific book and read user-submitted reviews, sorted with the most recent first.

Additional Features for Authenticated Logged-In Users:

* Borrow available books and track due dates.
* Return books and view borrowing history.
* Submit reviews for books they have read.
* Update their own book reviews.
* Remove their own previously submitted reviews.

Exclusive Features for Administrators:

* Add new books to the library’s catalog.
* Update details of existing books in the catalog.
* Remove books from the library’s catalog.
* Manage user accounts and review user activities.