COMP-699B-FA25 Final Project Proposal

Project Name

Book Recommendation Platform

Full Name

Lakshmi Narayana Manukonda

Motivation

Although books are a great way to learn, relax, and develop, many readers have trouble finding books that match with their interests. Those searching for specialized genres or instructional content are not helped by the majority of current platforms, which either promote sponsored content or make recommendations based only on bestsellers. My goal is to develop a free, user-friendly book recommendation system that is simple for instructors, students, and casual readers to use that makes recommendations based on user preferences.

Challenges

Creating an effective recommendation algorithm that finds a balance between personalization and popularity, making sure the dataset is large enough to cover a variety of genres, and managing duplicate or erroneous book entries are some of the difficulties I foresee. Making the interface user-friendly enough for regular users while still offering advanced alternatives for professional readers will be another challenge. Additionally, I have to make sure the platform functions properly without requiring expensive services or complex setup.

Novelty and Originality

In comparison with popular systems that only show bestseller lists or ratings, my version will include educational value and flexibility. Users can input their preferred authors or genres, and the platform will use similarity scoring and filtering to suggest new works. Additionally, users will be able to track books they have finished, keep track of their personal reading lists, and receive study-related recommendations (e.g., academic references for students). Seeing reading progress and genre distribution will be entertaining thanks to visual dashboards.

Functional and Non-Functional Requirements

Functional Requirements

➢ Books can be searched by category, author, or title.
➢ Personalized suggestions are given by the system according to user preferences.
➢ A "to-read" and "completed" list can be kept up to date by users.
➢ The website displays book information, including author, rating, and description.
➢ The ability to filter results by language, genre, or degree of difficulty.

Non-Functional Requirements

➢ All age groups should be able to easily use the design, which should be clear and simple.
➢ With little setup, it should work perfectly on laptops.
➢ Errors (such "book not found") should be handled carefully and data should load rapidly.
➢ No private or sensitive information should be gathered.
➢ Future improvements, such community reviews or audiobook recommendations, should be supported by the system's flexibility.