Product requirements: Movie Tracking App

SCOPE OF THE PROBLEM: -

1. Book Discovery and Recommendations: This feature provides users with customized book recommendations based on their reading tastes, ratings, and reading history.

2. Book Organization and Cataloguing:

Enabling users to arrange and classify books they've read, intend to read, or are reading at the moment by creating virtual bookshelves.

3. Book Reviews and Ratings:

Offering a forum where users may rate books and submit and read book reviews.

4. Reading Challenges and Goals:

Encouraging and monitoring users' reading progress by letting them create and participate in reading challenges.

5. Community Engagement:

Encouraging reader connection by facilitating book club creation and membership, leading debates in groups, and encouraging readers to follow their favorite writers.

6. Author and Publisher Engagement: This feature gives publishers a platform to interact with readers while also giving authors the opportunity to set up profiles, interact with readers, and market their books.

7. Literary Events and News: To keep consumers up to date on the book world, information about author appearances, book signings, newly released books, and literary news is shared.

END USERS OF THE SYSTEM: -

• **Avid Readers:** Individuals who have a strong interest in reading and enjoy reading a variety of genres, always searching for new and updated book recommendations.

• **Writers and authors:** Writers who want to interact with their audience, market their works, and hold conversations with them.

• **Book Clubs and Reading Groups:** These are organizations or clubs centered around certain books, genres, or themes to discuss books and exchange reading experiences.

• **Librarians:** People who work in management and provide library services.

FUNCTIONAL REQUIREMENTS: -

1. Book tracking: As a user, I would like to be able to maintain a record of all the books I have already read.

2. Reviewing: As a user, I would want to give books a rating of 1 to 10.

3. Miscellaneous: As a user, I'd like to take part in reading challenges to demonstrate my proficiency with words.

4. Make Friends: As a user, I want to follow friends and writers and locate others who share my interests in books.

5. Track Progress: I want to share my reading progress and participate in reading clubs as a user.

6. Share: As a user, I wish to tell people about the books I've read and my to-read list.

NON-FUNCTIONAL REQUIREMENTS: -

AS A USER: -

1. Loading time: As a user, I want your application to load as fast as possible

2. Privacy: As a user, I want to control what information about me is accessible to other people.

I want to be able to choose who may see and follow my reviews and profile as a user.

3. Compatibility: As a user, I would want to run your program in both IOS and Android devices

4. Language: I would like to be able to use your program in my native language as a user.

AS A DEVELOPER: -

1.Cost and Security: As a developer, I would want every user's data to be safe and secure, and I would ask them for permission before accessing any important information.I want my system to be reliable and affordable.

2. Performance: As a developer, I want my system to load in less than two seconds and have a quick response time.

3. **Scalability:** In my capacity as a developer, I want my software to support millions of people worldwide.

6. FEASIBILITY OF THE PROJECT

- **Technical Feasibility:**

Infrastructure: We will ensure a robust technical infrastructure, including servers, databases, and web applications. The platform will handle a large volume of data such as user reviews and book information.

Scalability: We will accommodate a growing user base and expand our features over time.

- **Operational Feasibility:**

User Interface and Experience: We will provide a user-friendly interface, making it easy for users to navigate, search for books, and engage with the platform's features.

7. FINAL PROBLEM STATEMENT

The lack of a common platform for avid book readers to discover, engage and interact with like-minded readers and authors and find personalized book recommendations. There needs to be a platform that can cater to these requirements to the interests of the book reading community world-wide and overall improve user's reading experience.

USER REQUIREMENTS, SYSTEM REQUIREMENTS:

- **User Requirements-**
  Book Tracking:
  Ability to add books to a virtual bookshelf or multiple shelves (e.g., "To Read," "Read," "Currently Reading")
  Tracking of reading progress and dates started/finished for each book.
  Review and Rating:
  Option to write and publish book reviews.
  A rating system to express user opinions on books.
  Book Discovery:
  A user-friendly search feature to find books by title, author, genre, etc.

- **System Requirements-**
  Hardware:
  64-bit operating system,8 GB RAM,12th Gen Intel(R) Core(TM) i5-12500T

Platform Compatibility:
Web-based platform accessible from popular browsers (Chrome, Firefox, Safari, etc.).
Database Management:
Efficient database management for storing and retrieving book data, user profiles, and social interactions.
Third-Party Integrations:
APIs for seamless integration with external platforms and services.

8. Ambiguities, inconsistencies, incompleteness from the requirements gathered
Requirement: " As a user, I want your application to load as fast as possible."
Ambiguity: The term "fast" is subjective. It would have been better to specify a particular duration
Requirement: " Scalability: In my capacity as a developer, I want my software to support millions of people worldwide.
Inconsistency: The scalability requirement needs clarification regarding how scalability will be achieved

Project Plan-

- Defining Objectives and Scope:

The platform offers a comprehensive set of features to enhance the reading experience for users. Personalized book recommendations based on individual preferences and reading history enable users to discover new titles. Users can efficiently organize their reading lists through virtual bookshelves, categorizing books they've read, plan to read, or are currently reading. The platform fosters community engagement by providing a space for users to rate and review books, participate in reading challenges, and connect through book clubs and group discussions. Additionally, the platform promotes author and publisher engagement, allowing them to interact with readers, set up profiles, and market their works. Overall, the platform creates a dynamic and interactive space for readers, authors, and publishers alike.

- Defining functionalities and features:

The platform facilitates comprehensive book tracking, allowing users to maintain a personalized record of their reading history. Users can rate books on a scale of 1 to 10, contributing to a dynamic reviewing system. Engaging in reading challenges is encouraged, providing users with

an opportunity to showcase their literary proficiency. The platform's social aspect allows users to make connections by following friends, writers, and like-minded individuals who share similar book interests, fostering a sense of community within the platform.

Analysis:

The Book Tracking feature enables users to organize their reading experience efficiently by adding books to virtual shelves such as "To Read," "Read," and "Currently Reading." It includes the capability to track reading progress and record dates started and finished for each book. The Review and Rating functionality allows users to express their opinions by writing and publishing book reviews, along with providing a rating system for user-generated assessments of books. Additionally, the Book Discovery feature enhances the user experience with a user-friendly search feature, facilitating easy exploration and discovery of books by title, author, genre, and other criteria.

The hardware specifications include a 64-bit operating system, 8 GB RAM, and a 12th Gen Intel(R) Core(TM) i5-12500T processor. The platform is compatible with web-based access through popular browsers such as Chrome, Firefox, and Safari. Efficient database management is implemented for storing and retrieving book data, user profiles, and social interactions. The system is designed for seamless integration with external platforms and services, facilitated by the use of Application Programming Interfaces (APIs).

Design-

For designing the front end user interface we will be using html, css (bootstrap) ,java script. For the database we would use SQL. For backend we will utilize python (flask and tkinker)

Implementation-

We will write the code for the project and make sure all the functions and features are working properly. Make sure that the books added by the user is visible on the database. At the end ensure that the app is working on all different platforms. Also apply unit testing.