The Quill

Greatreads

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Introduction

THE Project:

A book tracking social platform that will allow readers to explore books, track and rate what they have read, then see what their friends and people with similar interests are reading

THE Motive:

As readers, we were unsatisfied with the current state of Goodreads. We wanted an app that would give us all the features on Goodreads but also include more modern and advanced elements and an exciting UI.

THE Market:

The market for an app like this is there. A lot of people are looking for an app they like so that they can track their books, however we feel that so few accomplish this task.

Customer Value

| Voice of the Customer | THE Solution |
|---|--|
| "Half stars is all I'd really want to add" | Allow for half star reviews |
| "Dark mode I'm blinded when I open it" | Create a dark mode option |
| "I also wish you could go on a shelf, press add books and then search what you want and just check them off? it's such a pain now that you have to select the shelf every time" | Redesign the bookshelf, making for a better and more fun user experience. |
| "I think a tagging and search function would make the site a <i>lot</i> more useful to me" | Implement a more robust search function to allow for easier searching of similar books |

Technology

What will the software do?

Provide a user friendly platform for readers to track their books, write reviews and engage with other readers. It will improve upon existing book- tracking platforms with enhanced features.

THE Features:

- User authentication

- Reviews and half-star ratings

- Dark mode

- Book recommendation

THE Technology:

Front End: React

Middle Layer: C# + Entity Framework?

Back End: Node.js + Express Database: MSQL Server Book, genre, user tags

Team

Skills:

Yves: Backend OPC UA Server architecture

Maddie: Frontend with Angular, Middle Layer with C# and Entity Framework

Alyssa: UI/UX Design Silvia: Game Developer

- Though we have some skills that can be applied to the project, we ultimately decided to have each member of the team choose a role that forces them out of their comfort zone and outside their current expertise.

Roles:

- A. Auth & Routing Lead
- B. Book Data & Search Lead
- C. UI/UX & Theming Lead
- D. Reviews & Social Features Lead

Will the roles be fixed or rotating?

- Rotating

Project Management

Sprint 1 (Weeks 1-2) – Project Setup & Core Features

- Auth & Routing: Set up React, implement authentication (OAuth/local), and establish protected routes.
- **UI/UX:** Establish theme, dark mode toggle, and build site-wide components (NavBar, modals, buttons).
- **Search & Data:** Integrate Google Books API, create a basic search page, and display results.
- **Reviews & Social:** Outline the review system, user shelves, and basic profile structure.

Goal: Have a working skeleton with authentication, routing, basic UI, and book search results.

Sprint 2 (Weeks 3-4) – Functional Expansion

- Auth & Security: Finalize login, logout, and protected routes for user-specific features.
- **UI/UX:** Refine search results UI, implement full dark mode, and polish component consistency.
- **Search & Storage:** Add filters, sorting, and store selected book details in the back-end DB.
- **Reviews & Ratings:** Implement user reviews, star/half-star ratings, and display on book pages.

Goal: Users can log in, search books, add them to shelves, and leave reviews.

Sprint 3 (Weeks 5-6) - Advanced Features & Social Elements

- Auth & Routing: Improve authentication with potential edge cases (forgot password, etc.).
- UI/UX: Enhance mobile responsiveness, animations, and possibly add reading

progress graphs.

- **Search & Recommendations:** Introduce tag-based search and recommended books based on genre/author.
- **Social Features:** Enable following users, viewing friends' shelves/reviews, and compatibility rating.

Goal: App starts feeling like a social platform with personalized recommendations and user interactions.

Sprint 4 (Weeks 7-8) - Testing, Optimization, & Deployment

- Testing & Bug Fixes: Identify and fix UI/UX issues, perform integration testing.
- **Performance Optimization:** Improve load times, enable lazy-loading, and refine accessibility.
- Deployment: Host front-end (Vercel) and back-end (Render/Heroku).
- Final Features (If Time Allows): Advanced analytics (most-read books, yearly reading stats), notifications system.

Goal: Fully functional, polished, and deployed MVP ready for presentation.

When and how often will you meet? Face to face?

- Sunday evenings, Once a week for now

Constraints

Copyright: Use Google Books API legally, no scraping Goodreads/Amazon.

User Data: Secure authentication (OAuth/hashed passwords), comply with privacy laws (GDPR, CCPA) if storing data.

Book Covers: Use API-provided images, avoid copyrighted ones.

Ethical & Social

- Bias in Recommendations: Ensure diverse book suggestions, allow user-customized filters.
- Review Moderation: Add report/flag system, possibly upvote/downvote reviews.

Templates

- Use open-source UI templates (MIT, Apache, GPL) to avoid licensing issues.

Resources

- **API:** Google Books or Open Library

Descoping

- If the full functionality cannot be implemented, we will prioritize the necessary features for a functioning product.