

CS540 Group Project Proposal

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What is the project? What problem is it trying to solve?

We're planning to build a multimedia review/sharing platform where users can review their favorite media, see their friends' reviews, and give and get recommendations. In short, micro-blogging social media + GoodReads + Letterboxd + more.

Who are the intended users?

We're intending to market the app/website towards a general audience, particularly existing users of services like GoodReads and Letterboxd. Anyone who wants to track their personal watch/reading/listening history, share media recommendations and reviews with friends, or discover something new.

What will the tech stack be? What programming languages will you use? What platform(s) will the project run on? What third-party systems/APIs/tools do you intend to use?

We'll initially be testing React Native for our frontend framework but will move to React if needed. Django or FastAPI will be used for our backend framework. The decision between these two will be made based on the results of the initial system design process. We're planning to build the initial system with a PostgreSQL database for user/review data, but we'll be considering the merits of migrating to graph database alternatives. Third-party APIs including the TMDb API will be used to identify media items and hierarchies and retrieve information about them. We're currently planning to use TMDb for movies/TV shows, Spotify/YouTube Music/Apple Music APIs for music, and Google Books for books, but these are subject to change.

What functionality will the project have upon completion?

In the completed project, users will be able to register an account on the website and log in/out. They'll be able to post personal reviews for multiple forms of media, and follow other users to see their reviews. Users will be able to see a chronological timeline of posts from accounts they're following, or search individual media items to look at their reviews. Additional features, like direct messaging and granular post visibility control, will be implemented if possible.

What is your plan if the project ends up taking significantly more or less time than anticipated?

If the app takes more time than expected we're planning to focus on achieving our core system functionality and minimum feature set. If the app takes less time than expected,

we're planning to complete all of our P3 roadmap items and test additional functionality like an improved recommendation system (which considers all indexed media).