Capstone Project 2 Proposal: Reel Friends

Tech Stack	What tech stack will you use for your final project? We recommend that you use React and Node for this project, however if you are extremely interested in becoming a Python developer you are welcome to use Python/Flask for this project.	For my project's tech stack, I will be using React for the frontend, Node.js for the backend, PostgreSQL for the database management, and the OMDb API as my API.
Stack Focus	Is the front-end UI or the back-end going to be the focus of your project? Or are you going to make an evenly focused full-stack application?	I will be making a more evenly focused full-stack application. The frontend will require a lot of work to create an engaging and functional user interface with React, however, the backend will also require significant work to handle user authentication, data management, and integration with the API.
Туре	Will this be a website? A mobile app? Something else?	This would be a website application that can be accessed via a desktop/laptop computer and mobile browsers. I believe this would also work very well as a mobile app, however the current iteration of the app will be a website.
Goal	What goal will your project be designed to achieve?	The central goal of my project will be to create a social media where people can connect over a shared interest in movies. Movie critics are often disagreed with so this platform can be a place where people can see reviews from other regular moviegoers, select their favorite movies and participate in discussions. This will hopefully foster a community where users can connect, make friends, share suggestions and reviews, plan movie outings and discover new films. I would even like to work out a way for users to select movies that they have seen so it can suggest similar movies.
Users	What kind of users will visit your app? In other words, what is the demographic of your users?	The primary demographic for this application would be movie enthusiasts from ages 18-40. This app would be suitable for movie enthusiasts for all cultures, races, genders and movie preferences as users will be able to add information about their favorite movies and be able to add movies. The target users will be people who are already using social media platforms but who maybe want to meet friends over shared interests in movies.
Data	What data do you plan on using? How are you planning on collecting your data?	I am using the OMDb API to gather information about movies. The API will provide information such as the movie title, release date, genre, cast and ratings of a particular film. We will also be collecting user data to create and store user profiles. This will include their basic information, such as their name, email,

username, password, etc. The password will be hashed before being stored in the database. We will set up authentication routes on the backend to manage the user session for a seamless experience. We will also store their friend connections, any movie ratings/reviews they have submitted, their seen movies, their top 5 movie list, movie suggestions sent or received and planned movie outings. This information will be provided by the user so they can utilize the app's features.

Additional information:

- 1. What does your database schema look like?
- What kinds of issues might you run into with your API? This is especially important if you are creating your own API, web scraping produces notoriously messy data.
- 3. Is there any sensitive information you need to secure?
- What functionality will your app include?
- 5. What will the user flow look like?
- 6. What features make your site more than a CRUD app? What are your stretch goals?

- My database schema will consist of a user table, friends, table, movie reviews table, perhaps a ratings table, a movie events table.
- 2. I would need to decide between storing the movie data that is fetched from the API or if I would be dynamically fetching the data each time. If I fetch the data dynamically each time, I could run into issues with rate limits, slow performance and potential costs. Also if the API experiences any outages or downtime, we would not be able to retrieve certain data. Also since movie information doesn't really change over time, fetching the same data over and over can lead to unnecessary API calls. I can help navigate around this by storing certain frequently used or searched for data. I can also store information specific to each user and what they have interacted with
- 3. Passwords will need to be hashed. And you may not view someone's page unless you are friends with them.
- 4. Users will be able to log in, view the pages of their friends, write reviews, view information about movies, leave ratings/comments, create and join movie going events.
- 5. Users will access the landing page first. They will then either sign in or sign up. If they sign up, they will enter some information to fill in their profile. Once they are logged in, users will see their home feed which will be recent friend activity. This is where they can search for movies or see movie recommendations. They can search for movies and receive basic information about the movies. You will be able to add to your top 5 movies, write reviews, rate the movie and suggest the movie to friends. You can also view you and your friend's profiles and create events with them.
- I will try to create a simple algorithm to make movie suggestions based on genres and/or user ratings. This will provide a bit more of a personalized experience with the application.