Proposal Document Henry Benso

This project is a website for finding craft coffee shops with drinks and/or beans near a user's current location or around the world. Each shop entered will have a page with information such as drink ratings, bean ratings, and ratings of the vibe of the cafe(whether it's suited for studying, lively conversation, etc.), all coming from fellow users will be available. In addition, we will provide very specified details, such as what coffee they use for their espresso, what country their beans are sourced from, notes present in the beans to basic details, such as their hours or location. The closest this application is to be compared to would be Yelp. The difference is Yelp only provides generalized information for all types of places, while our application focuses solely on craft coffee shops and specific details about them.

Important Features include:

- owners can add their shop info and beans to our data set
- owners can create their account
- users can create an account
- users can interact with other users through a chat system
- users can enter their reviews of specific drinks and add tags to a shop, drink, and/or beans as to what it represents to them

The hardware required is

a computer

The software required will be

- App: Next.js, Node.js
- Frontend: React.js, TailwindCSS, HTML/CSS, RadixUI, FramerMotion
- Backend: Typescript, zod, prisma
- Database: PostgreSQL, Cloudinary, AWS
- Authentication: OAuth
- 3rd Party APIs: API containing Google search results

The justification lies in the following. As for applying and demonstrating what has been learned in other classes, a few to mention are efficient use of server-side rendering to reduce package size when loading pages, API development using Async/Await for communicating with our backend and 3rd-party APIs, proper usage of an allure of data types, validation of data from user input and corresponding error handling, use of components for organizing frontend code and optimizing performance, caching where possible to minimize requests to server, and authentication flow and handling access rights to certain resources. Extending what I have learned in other classes exists in the full-stack notion of the application with many moving parts and the implementation and optimization that goes into creating it. In addition, it includes details such as the optimization of queries catered to what users may search using the capabilities of Postgres. As this project is a full-stack application with a foundation already set, I will be looking to improve the current product by improving current features with further error handling and adding new features. Yet, the product will be far from complete by the end of the semester as the scope of a semester is not long enough to reach the point of deployment. As this is a continuation project from even before last semester, I do possess the skills required to achieve significant progress in all avenues of the application. Finally, I decided to make this project as I have a love for coffee and would like to create something that may be able to bring the

community of craft coffee lovers together. In addition, I find I can cater to a large variety of audiences from people who casually like to go to their local roaster for a cup of coffee to people who may have an espresso bar in their home. I find this a product that has yet to exist and will serve many of great uses.