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## Project Proposal Document

My project, titled PureDine, is planned to be a React-based website hosting strong API use combined with small Firebase interactions to allow for personal account website access. The main idea behind the website is to be a site that sorts restaurants and dishes based on a person's dietary restrictions or allergies in their local area or beyond. The user will have the ability to put in an address and, with the use of APIs like the Yelp or Zomato API, find any restaurant in their area that is listed on their services. Once done, another API, such as the Edamam API, can be used to look at their menus and sort specific ingredients. Based on this, tabs can be selected where common allergies can be selected either via checkboxes or on a personal account, and the website will tell what dishes are safe to eat and what will be harmful to the consumer. Firebase can also allow for users to leave possible reviews and recommendations for restaurants and be able to leave their own recommendations for places that apply to certain dietary restrictions. This is similar to sites such as AllergyEats and FoodAllergy.org that do a similar thing, but I want to make it so PureDine allows for a more personal experience with each user that signs into the site. The website will currently only support Google account sign-in through the Firebase backend but may expand to add more over time. This should be a general website application that can be used by anyone but is aimed at people who have allergies in particular.

The choice of project is appropriate for my history in computer science because I have past work with the React platform and Firebase as a whole. This will also allow me to expand my knowledge with APIs and allow me to improve my use of them throughout my future projects. This project can also be developed in a reasonable time, having a majority of the ideas able to be done by the end of the Spring 2025 semester. The software to make this project is also easily accessible and free to use across the internet, including certain areas of Firebase and the many APIs supporting this endeavor. This project is also interesting to me personally because I see it as a chance to help some friends and family that deal with allergy issues and have had allergy attacks near me throughout their daily lives.