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Weather the Trip

For my first Springboard Capstone project, I have decided to create a program that given a point A to point B map trip, can calculate whether the user should prepare for any weather phenomena along their trip along with other relevant information (where the weather phenomena will be, what times it will begin/end, etc.). My target audience for the program will be anyone going on a drive (more specifically, those going on longer drives/road trips) and would like to be as prepared as possible for blizzards/hail/rain etc. The program will contain data from a user defined travel route (probably from Google Maps API) as well as weather information from some kind of weather API (currently considering https://www.weatherbit.io/api?ref=apilist.fun).

My database will hold user information such as the current route they are on and what the weather api plotted for their route so that it can be updated if anything from the weather API changes. It may also contain other basic information about the user, but I do not know if that is truly necessary yet and as a data privacy advocate, I do not want to gather more information about users than necessary for the product to function efficiently.

I imagine that there may be a number of issues with my API as the nature of weather is notoriously inconsistent and humans can't be expected to always know the future of weather. However, if I finish the core functionality of getting initial projections on the trip, I may implement a feature that updates the information as the user embarks on their trip.

As for securing sensitive information, I would prefer not to store anything private, but in terms of something like a user password, I will be sure to encrypt that information utilizing bcrypt. I would also like to ensure that user trips are only stored in the database for as long as the driver is going along the trip (if such a feature is implemented).

The user flow will work something like this:

1. User opens the app to a map around their location and they are prompted to enter a route which is then calculated using Google Maps API and confirmed by the user.
2. The app calculates the weather information along the map and returns that information to the user in the form of a chronological list of where and when to expect weather phenomena. I may add a graphic to the map as well if I feel that would be beneficial.
3. The user then takes that information and begins their trip.
    a. May add a feature for the map to be updated as the weather API information updates.

Here is a link to the GitHub repository that will contain all information regarding this project moving forward.