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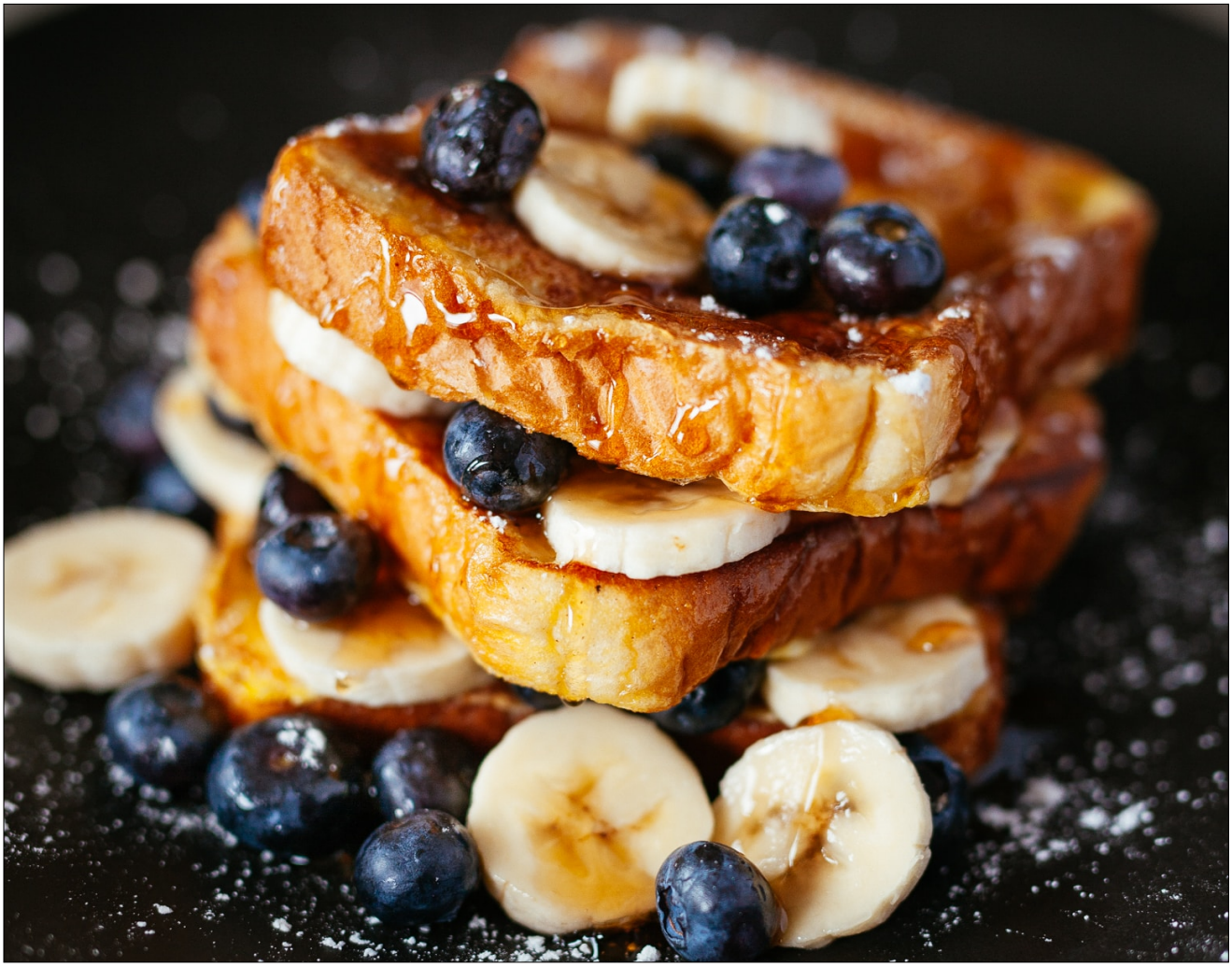

RECIPE WEB APPLICATION

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Proposal number: 01

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EXECUTIVE SUMMARY

OBJECTIVE

Build a database driven website. This website will be powered either off of an external API or an API the developer builds themselves. The website will incorporate all of the full stack skills the developer has developed. The developer should implement unique features to the website to make it stand out.

GOALS

- build a full stack web application
- select an app idea that will allow me to showcase full stack skills
- define app features and functionality
- decide on building a custom API or implementing an already existing API
- discover APIs and data I may implement for app features and data

THE PROPOSED APP IDEA

I will build a recipe website. I will define my own API and I will use APIs to program additional features like sharing recipes and voice assistance.

PROJECT OUTLINE

The Capstone Project steps are listed below. Each step contains a link with detailed instructions:

- Step One: Initial Project Ideas
  - Propose up to 3 ideas to your mentor and slack community, and explore potential APIs.
- Step Two: Project Proposal
  - Write a proposal for the app you want to build to help your mentor further understand your idea.
- Step Three: Source Your Data
  - Define the app's database schema and its data source after your mentor approves of your idea.
- Step Four: Coding User Flows
  - After figuring out what's going to be built, write the code to build it and think about the user's experience.
- Step Five: Polishing Your Application
  - After programming the core functionality, enhance the UI and styling, and implement bells and whistles.
- Step Six: Documentation and Submission
  - Create a README.md, organize the GitHub repo, and submit the finished project.

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PROPOSAL INDEX

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THE STACK

TECH STACK

I will program the backend of my recipe web app with the recommended language: Node. I will program with Node.js and Express. I selected Node.js over Python so I may utilize a sql driver instead of an ORM to make queries to the database. This will leave no abstract layers within queries from my app to the database. Using Node's Express framework, I will be able to parameterize user input before I make database queries and this will allow me to protect my database data from bad actors.

I will program the frontend of my recipe web app with the recommended language: React. React.js will allow me to make a modular frontend app for all the backend routes. React.js will allow me to define reusable components for visual pieces and match url routes to specific components.

THE STACKS I WILL FOCUS ON

I will focus on the full stack with equal focus. I want to display my skills for backend and frontend stacks.

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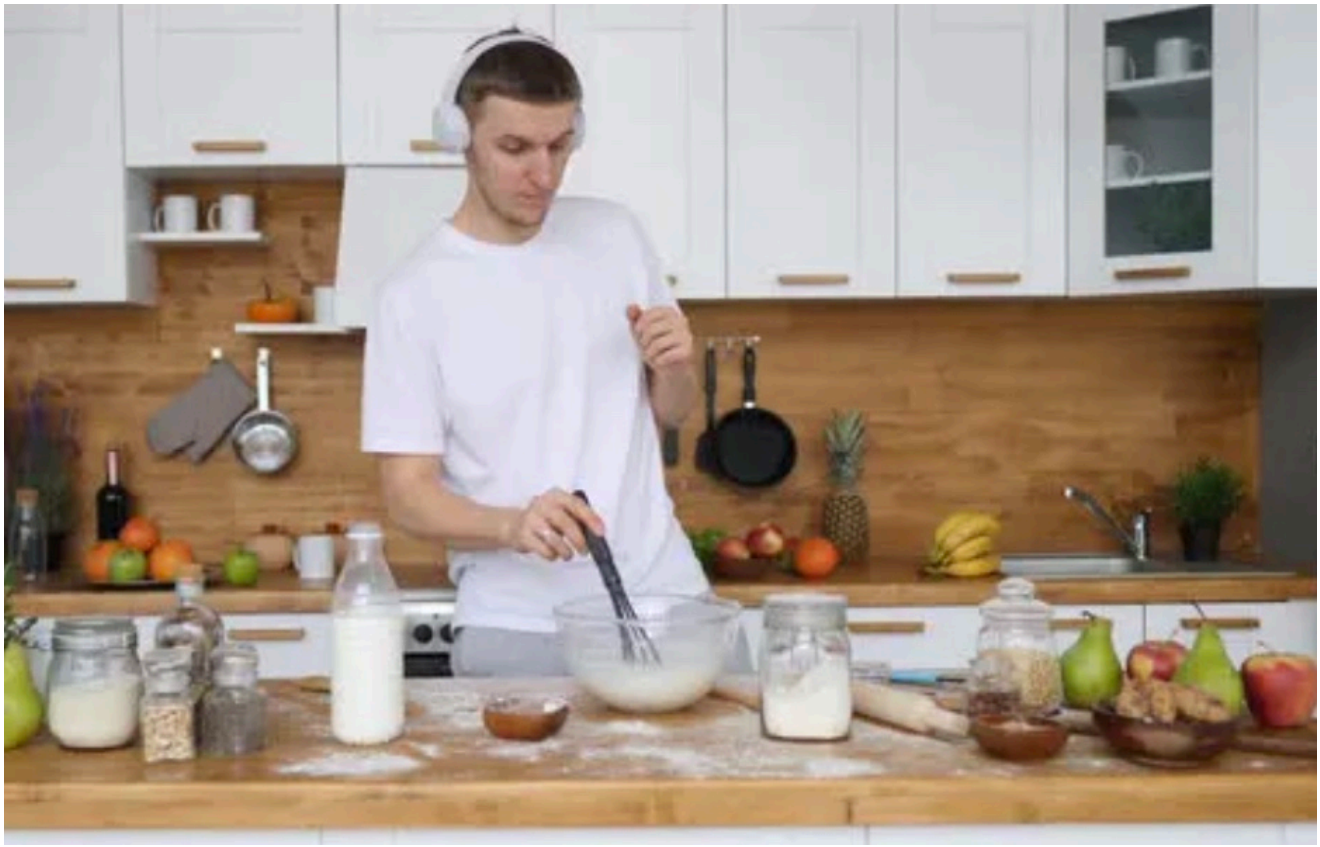
THE APP

THE TYPE OF APP THIS WILL BE

The app will be a recipe/cooking web application. Users may use it through their web browser on their computer. It will not be responsive for mobile devices either. Mobile responsiveness is a feature that may be added after the app is deployed.

WHAT THE RECIPE APP WILL ACHIEVE

The goal of the recipe app is to give users access to recipes and features that will allow users to optimize them. The recipe app will connect users to thousands of recipes. Users may like/favorite/dislike recipes, make recipe lists for occasions, create custom recipes based off of recipes, share recipes, create shopping lists, review recipes, and view tips for recipes.



THE DATA I PLAN ON USING

I will create my own API. For the recipe data, I will use a recipe dataset. I will import the dataset into my relational database. My recipe app will incorporate a Twilio API to allow users to share recipes, and a voice assistance API to allow users to voice control recipes while they cook.

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USER DEMOGRAPHICS

HOME COOK
- ages 25-50
- eat home cooked meals 6 days/week
- food shop and cook
- have efficient cooking skills

WEEKEND COOK
- ages 35-60
- have home get togethers on the weekends
- like trying different recipes
- have efficient cooking skills

PROFESSIONAL COOK
- ages 35-60
- cook for a living
- like viewing recipes for inspiration
- cook for family and friend get togethers

HEALTHY COOK
- ages 20-60
- cook 7 days/week
- exercise every daily
- need recipes to fit their specific diet and nutritional needs

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PROJECT APPROACH

MY APPROACH TO BUILDING MY PROJECT

DATABASE SCHEMA

My database schema will be a normalized structure. I plan to make the following tables: users, recipes, favorite_recipes, saved_recipes, disliked_recipes, tried_recipes, recipe_comments, recipe_reviews.

API ISSUES

I will not run into problems with my API. When using already created APIs like Yelp API and Spotify API, issues exist. The biggest issue I have for these APIs is the API not having important data like links to restaurant menus or mp4s. They usually don't have important data or features and this creates an unwanted app experience.

SENSITIVE INFORMATION

My app will have passwords, tokens, and API keys.

APP FUNCTIONALITY

Register, sign in, sign out, delete account, search recipes, save recipes for later, share recipes, rate recipes, write reviews for recipes, favorite recipes, like recipes, dislike recipes, keep track of tried recipes, keep track of liked recipes, keep track of disliked recipes, write notes for each recipe, create recipe lists for certain occasions and events, write tips for recipes, write custom recipes based off of recipes, and voice control recipes.

USER FLOW

- User registers or signs in –> home page –> user searches recipes –> user favorites recipe –> recipe has fav icon
- User creates event –> user saves recipes to it
- User dislikes recipe –> recipe is added to disliked recipes list –> recipe has dislike icon
- User finds recipe –> user shares recipe
- User selects recipe –> user starts voice control to try recipe
- User tries recipe and likes –> user writes tips for recipe –> recipe has like icon
- User tries recipe and dislikes –> user writes review
- User finds recipe –> user has to leave site –> user saves recipe to view later
- User finds recipe –> user makes shopping list –> user shares shopping list
- User tries recipe and likes it –> user makes a custom version.

WHAT MAKES MY APP MORE THAN CRUD APP

Authentication/authorization, protected routes, recipe search filters, sharing recipes, data organization, pre filled drop down lists, custom messages, recipe tips, and voice control.