

A decorative graphic consisting of numerous colored dots in shades of green, teal, blue, and purple, arranged in a circular pattern around the text.

Nutrition Intelligence

CS3377-001

Professor: Dr.Smith

Camryn McPhaul, Alex Kao, Evan Hennes:
WOW (Tuesdays/Thursdays, 12:20pm, in-person, text/call, Fondren Library)
February 6, 2025

Team Profile



Camryn McPhaul, I
am a junior majoring
in Computer Science
B.S

Have a love for
karaoke and good
food



Alex Kao, majoring in
Computer Science B.S.
and Music B.A. (Oboe)

Have a love for books
and good food



Evan Hennes,
majoring in Computer
Science B.S.

Have a love for music
and balisongs

User Story (Setup)

Alex Kao

- User will be able to register an account with an account name, username and password.
 - Upon registering, user will be prompted in a new window to input their primary goal(s) for their generated meals.
 - System will store the primary goal(s) and use them when querying the AI.
 - After inputting their primary goal(s), user will be prompted to (optionally) fill out the rest of their profile (in the same window) with the following:
 - Height
 - Weight
 - Allergies
 - Intolerances
 - Gender
- User will be able to log in to their account with that username and password.
- User will be able to click a button to view a tab with their profile.
- User will be able to click a button to edit their profile.
- User will be able to edit their username, password, account name, height, weight, allergies, intolerances, and gender in the “edit profile” page

User Story (Frontend)

Evan Hennes/Camryn McPhaul

- › **As a user, I want to be able to:**
 - List ingredients I have on hand into the inventory tracker
 - See my progression of the meals that I login
 - List my desired macros
 - Choose the desired meal based on duration and difficulty level
 - Specify my desired difficulty level
 - Designate meals that I have eaten
- › **System will:**
 - Provide a recipe based on the user's specified ingredients, macros, difficulty level, etc.
 - Adjust recipe as needed based on the user's specifications
 - Display user's total macros for the day based on meals that they have prepared
- › **Solution will be:**
 - Responsive
 - Accurate
 - Intuitive

User Story (ChatGPT API/Backend)

Camryn McPhaul/Evan Hennes

› System will be able

- To have efficient data storage for profiles, preferences, dietary restrictions, saved recipes, and meal logs that can be retrieved in real-time when asked commented in the AI chat by the user.
- To use ChatGPT (nutritional) databases information for fast querying.

› System will perform

- Recipes suggestions generated based on user input, preferences, and past logs using AI or rule-based systems.
- Nutritional analysis for meals that have been logged manually is calculated and displayed to the user.
- The app recommends meals with missing nutrients based on a user's goals.

› Solution look and feel

- Responsive and engaging to ensure a seamless experience across devices.
- Clear and intuitive design to easily navigate through the menus and dashboard.

› Admin will be able

- Update the ChatGPT database with new recipes, ingredients options.
- To manage user's data by viewing their meal logs, preferences and engagement metrics
- Track API performance and integration issues.
- Manage flagged or inappropriate user comments or reviews.

Tech Stack

- Swift
 - *Apple's application development software*
- Python w/ ChatGPT API
 - *Simple & efficient way to utilize ChatGPT's API for AI aspect of the application*
- Pandas
 - *Efficient, powerful, reliable database management library in Python*
- Firebase
- *For redundancy and guaranteed compatibility with Swift*
- iOS Compatibility



Project Schedule

January

- Jan 26th First Meeting – All
- Jan 28th Complete User Story — All
- Jan 30th Complete Wireframes/Database – All
- Feb 6th Mobile Application Part 1 Due

February

- Feb 10-14: Backend Setup & API Integration — Evan
- Feb 10-17: Build Authentication (Sign Up & Login) — Alex and Camryn
- Feb 18-24: Start Meal Logging Feature — Alex
- Feb 25-28: AI-Powered Meal Suggestions — Evan and Camryn
- Feb 28th Mobile Application Part 2 Due

March

- March 1-3: Improve Meal Logging — Evan
- Mar 5-15: Nutrition Insights Page — Alex and Camryn
- Mar 16-31: Final Debugging & Fixes — All

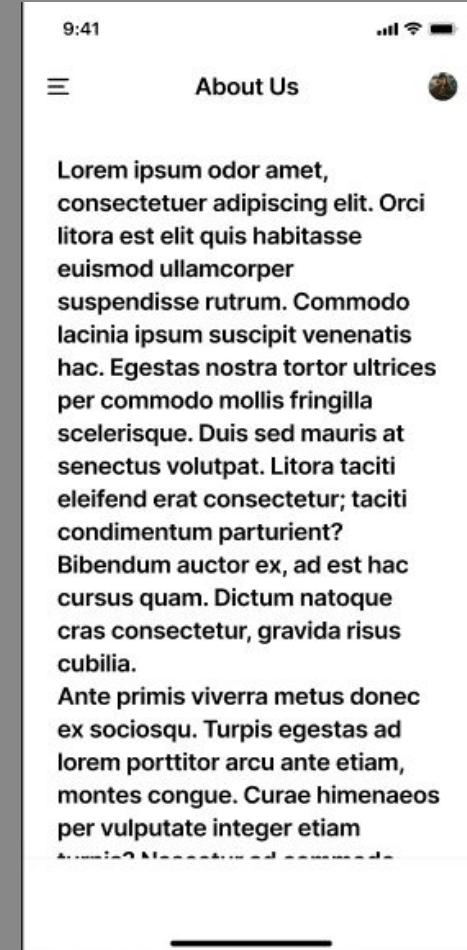
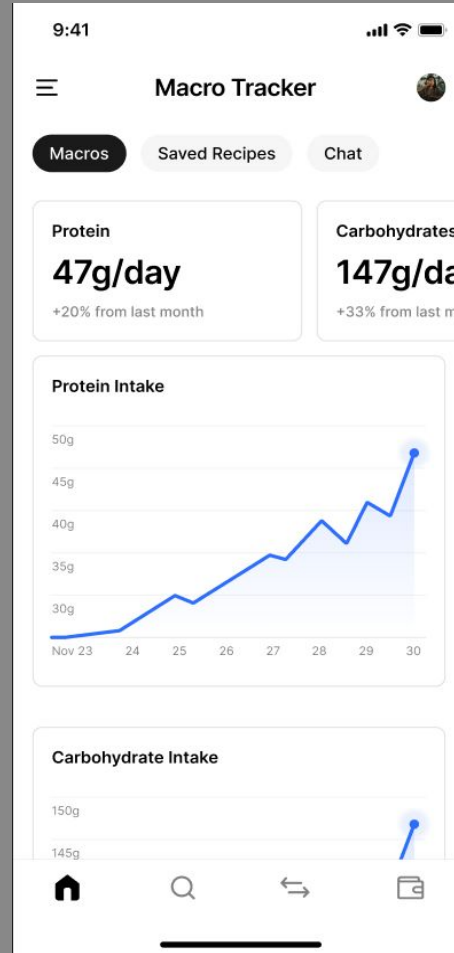
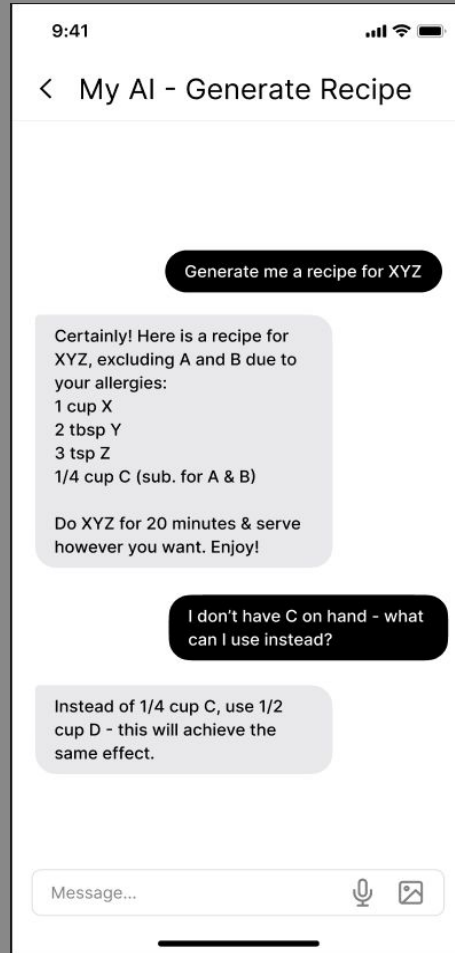
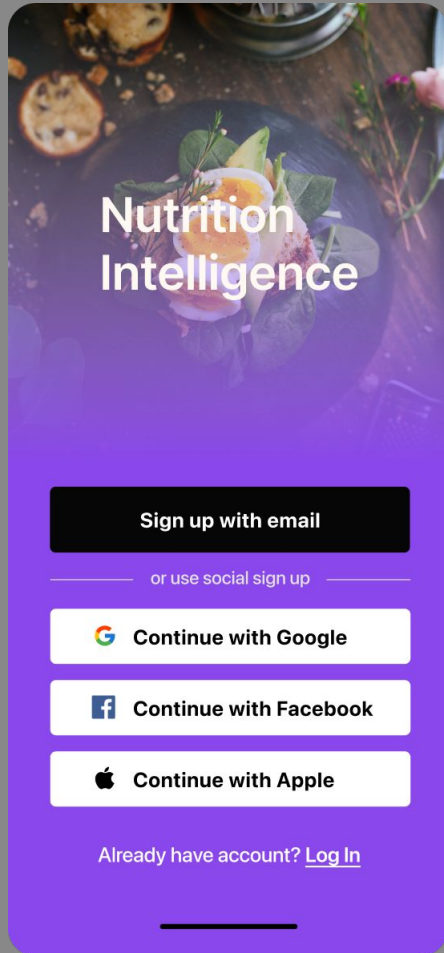
April

- Apr 1-3: Final Testing— All
- Apr 4th Mobile Application Part 3 Due

Deliverables

Group Number: 10	
Assignment	Deliverable
1	Profile page – All User Stories – All Tech Stack -- All Database Scheme– Evan Schedule – Camryn
2	
3	
4	

Wireframes



Wireframes

