Individual Weekly Report for Ayush Mehta

AI Powered Cooking Assistant Web App

July 28, 2025

# Accomplishments

* Presented the Slide Show 2
* Worked on the frontend prototype

# Weekly Activities

| Activity / Task / Work | Hours | Status |
| --- | --- | --- |
| Class time | 2.5 | Complete |
| Work on project:   * Frontend prototyping. * Tested different styles of buttons * Working on the backend * Integrated Google Vision API * Integrated Hugging face API | 18 | In progress |
| Worked on weekly report 5 | 1 | Complete |
| Meeting with Professor | 0.5 | Complete |
| Worked on contract draft | 1 | Complete |
| Finished on the career assignments – create questions for interview | 1 | Complete |
| **Weekly Total** | **24** |  |
| Previous Weekly Cumulative Total (Carry Over) | 86 |
| **Current Cumulative Total** | **110** |

# Plans for Next Week

| Activity / Task / Work | Est Hours |
| --- | --- |
| Continue working on the backend of the project | 15 |
| Find an API or database to help validate food ingredients typed by user or detected by Google vision API | 3 |
| Work on 1 or 2 career assignments | 2 |

# Response to Feedback

Over the past week, I received valuable feedback during both the slideshow presentation and my meeting with the professor.

Feedback from professor:

* The professor recommended adding a calorie-counting feature to the recipe display. This would enhance the usefulness of the app by informing users of the total calories in a given recipe, supporting healthier decision-making.

Feedback from peers:

* One suggestion was to use a Trie algorithm to check whether an ingredient exists in the database. This would improve performance and also enable autocomplete functionality when users type in ingredient names.
* Another peer pointed out the need to distinguish between ingredient names and brand names (e.g., recognizing when a user types “Jello”). This could prevent misclassification and enhance search accuracy.
* Additionally, I received a helpful tip on handling typos. For example, if a user types “appel” instead of “apple,” the system could display a correction suggestion similar to Google’s “Did you mean…” feature. This would significantly improve user experience and usability.

Feedback provided to peers:

* I suggested adding a dark mode feature to the MedTrack app to improve user experience during nighttime use, especially for users who may be accessing the app in bed.

# Other Reflections

This week, I focused on building a working prototype. I developed a clean, user-friendly interface, and received positive feedback regarding the design and overall visual appeal of the website. Functionally, I have successfully integrated both Google Vision API and Hugging Face models, allowing users to input ingredients and receive relevant recipe recommendations.

# I particularly appreciated the peer feedback, as it provided insights into potential edge cases and implementation improvements from a developer’s perspective.

# Comments, Issues, Notes, Anything Else?

No comments or issues as of now.

# Evidence of Work

Below is the screenshot of the backend code and prototype that I have worked on this week.

These two screenshots are of the main recipes.py controller file

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

This screenshot is of recipe generation through Hugging Face API

A screenshot of a recipe

AI-generated content may be incorrect.

# Interaction Report

Interaction Type: Instructor

Interaction Date: July 21th, 2025

Attendees: Dawn-Marie Oliver, Ayush Mehta

## Summary of Interaction

## During my meeting with Professor Oliver, we discussed the progress I have made on my project over the past couple of weeks, including updates from my meeting with an expert. I also showed the frontend prototype of my application, which I plan to showcase during the class slideshow presentation. The professor provided valuable feedback, specifically suggesting that I include a total calorie count feature for each recipe to enhance the user experience and provide more nutritional context.

## Action Items

## Research free and reliable calorie count APIs that can be integrated into the application.

## Begin planning the implementation and UI design for displaying calorie information alongside each recipe.

## Reflection on the Interaction

This meeting was very productive and encouraging. Presenting my prototype and receiving constructive feedback helped me better understand how to make the app more practical and user focused. The calorie count feature is something I had not initially considered, but I now see how it could add meaningful value for users who are health-conscious or track their nutrition.