

# CSCI 5839 Project Pitch

Project Name:

Daily Calories Calculator

Team Members:

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Elevator pitch:

The project aims to help people maintain a healthy diet habit, especially for househusbands/ housewives. Users could calculate calories by input what they eat to the app/website. Then the app/website will tell the user if he/she needs to take more/less calories.

Target User Group:

This app is designed for people who wish to have a healthy diet. For example, people try to lose weight, the daily calorie intake for them cannot exceed the daily calorie consumption. They could use this app to track their daily calories intake. Also, it would be beneficial for househusbands/ housewives, they could use this app to ensure all family members have a healthy diet habit.

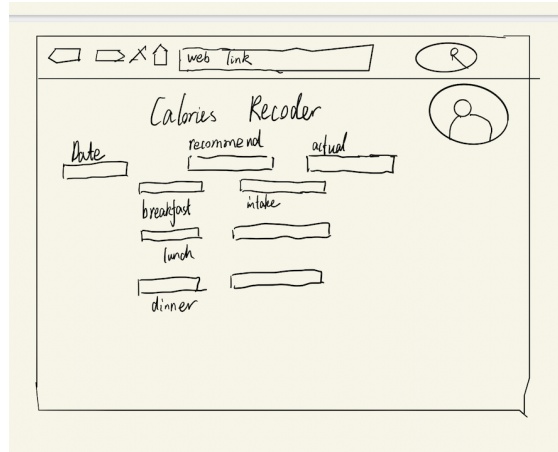
Version:

1. Web Version (prototype):

a. Calories Calculating Page

A hand-drawn prototype of a web browser window. The browser's address bar contains 'web link' and a refresh button. The main content area has the title 'Food Calories Calculator'. Below the title are three input fields labeled 'Food', 'Amount', and 'Cook Method'. At the bottom right of the content area, there is a label 'Total calories:' followed by a horizontal line for the result.

b. Calories Recording Page



## How this project meets the theme:

This project will record users' daily calories intake. The app will have foods' calories data in its backend. Users will be able to check their calorie intake by inputting the amount they eat. Then the app will record the calories intake in the user's personal data. After the user finishes one day's record, this app will use this data to tell if he/she has eaten excessive calories.

## Interaction Design Challenges

1. Same food with different calories.
  - a. It is common that the same food could have different calories because of different ways of cooking. For example, mashed potatoes and fries are both potatoes, but their calories are quite different. The calories of mashed potatoes is 88 calories per 100g which for fries is 312 calories (Get the data from google). Therefore, calculating calories without a cooking method could cause big calories errors.
  - b. Solution to that problem:
    - i. The app will ask users to input how the food is cooked. For example, the cooking method for fries is frying and for mashed potatoes, the cooking method is boiling.
2. Food mixing brings difficulties to calculation
  - a. For most dishes, many foods are mixed with other foods. For example, a simple cheese burger contains lettuce, tomato, beef and bread. It will be very complicated for users to input all the ingredients to the app. Also, it is possible that there is more complex food mixing for other dishes.
  - b. Solution to that problem:
    - i. To simplify the problem we could pre-process different kinds of food data in the backend. So that users only need to select the food and the amount they eat.

- ii. We could access the food api that allows users to search the dishes and has its calories.

Food API potentially use: <https://platform.fatsecret.com/api/>

3. Different calories recommendations for different people

- a. Based on the age and daily active level, people will have different calories recommendations. For example, for male age between 19 to 30 in moderately active, the recommended calories intake is between 2,600-2,800, with the same conditions for females, the recommended calories intake is between 2,000-2,200 (Data get from:

<https://www.webmd.com/diet/features/estimated-calorie-requirement>).

- b. Solution to the problem:

- i. Ask users about their gender and age when registering to the app
- ii. Let users decide how active they are today, and give recommendations based on those data.