

Technologies



Health Tracker/Meal Recommendation Application



Terrance Miller
Computer Science



Chau Tran
Computer Science



Trung Nguyen
Computer Science



Boyang Wang
Project Advisor

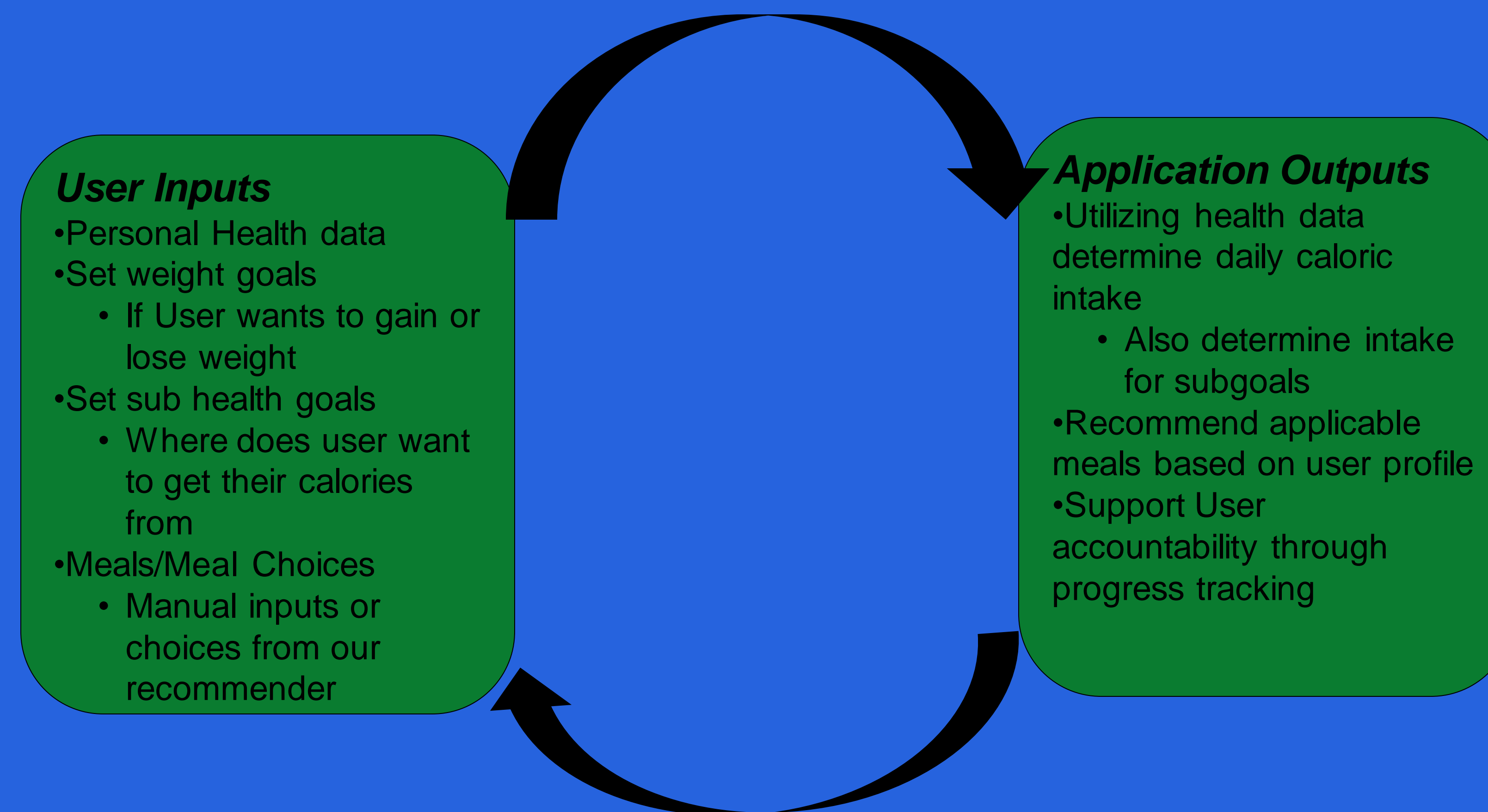
Project Description

Our team set out to build a health lifestyle application that allows you to track your meals and daily nutritional intake. What separates our application from other health tracking applications is we utilize machine learning for our built-in meal recommender to help users meet their health goals.

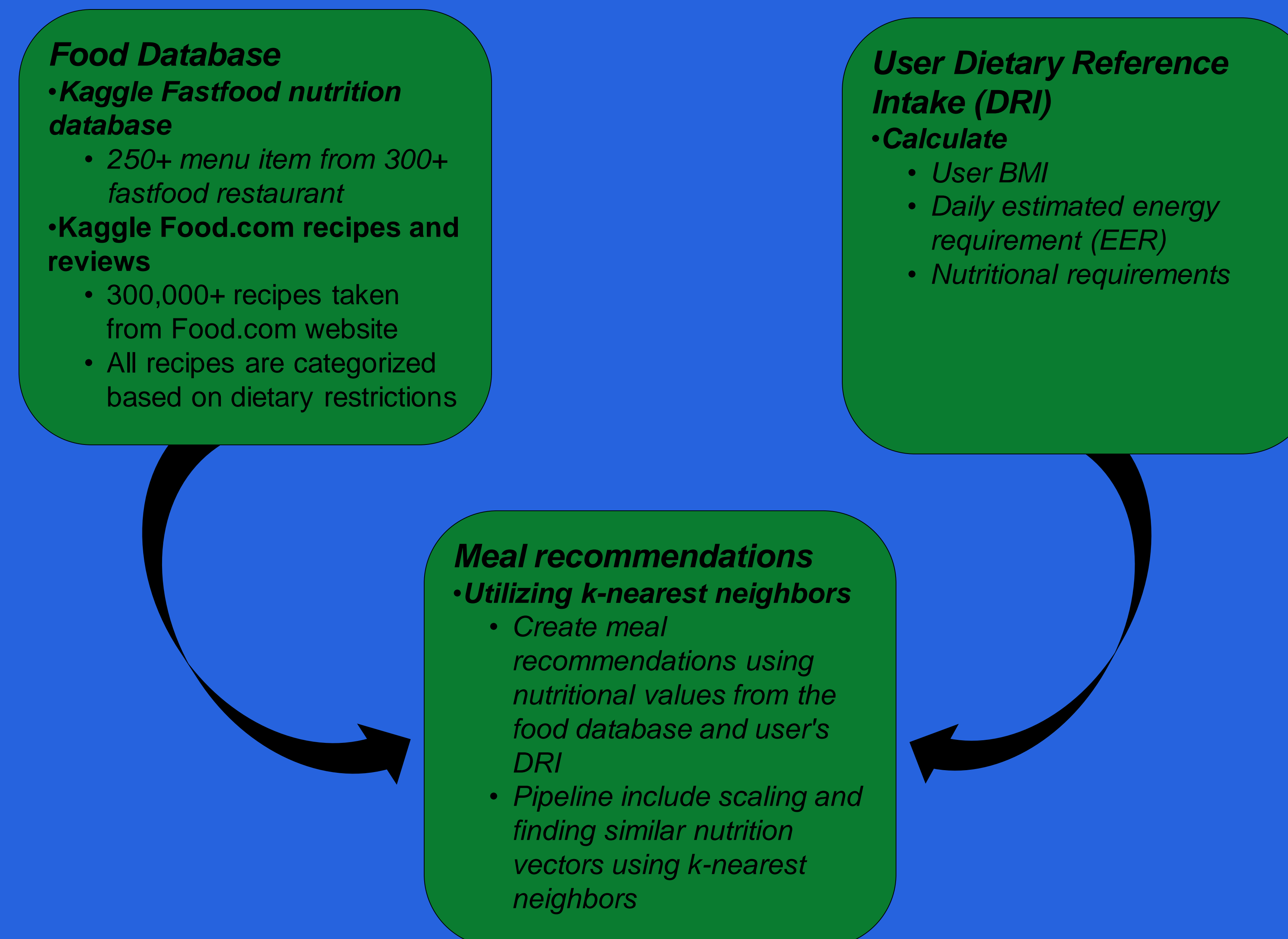
Meal Recommendation System Abstract

By utilizing public food datasets, we created a recommendation system using k-nearest neighbors. From your health data and diet options, our model provides recipes with instructions and nutritional information, personalized to the user. We take into account for dietary restrictions (low cholesterol, low fat, vegan, etc.).

APPLICATION WORKFLOW



MEAL RECOMMENDATION SYSTEM



Objective

The objective when creating this application was to make a health tracking application with the user experience in mind. Maintaining a healthy lifestyle is difficult and tracking it to help hold yourself accountable can be even harder. We aim to help with that through our meal recommending service. Through our service we research the healthy options for you, provide you with the nutrition data, and log the data for you all you need to do is set up your account, tell us your goal, and pick what meal sounds best.

Challenges

- Inexperience in database technologies, required additional research before technical work could begin
- Prioritizing what aspects to track for nutrition and meal recommendation
 - Allow user to choose which nutritional data is most important to them through sub goals
- Factor in allergies, financial restrictions, religious restrictions, ect.

Future Works

- It is our Ethical responsibility to have all dietary restriction options available and verified to 100% accuracy before offering this application to customers.
- Would like to also add workouts and a possible workout schedule recommender to create a well-rounded fitness application
- Add a mobile application to increase accessibility for users.