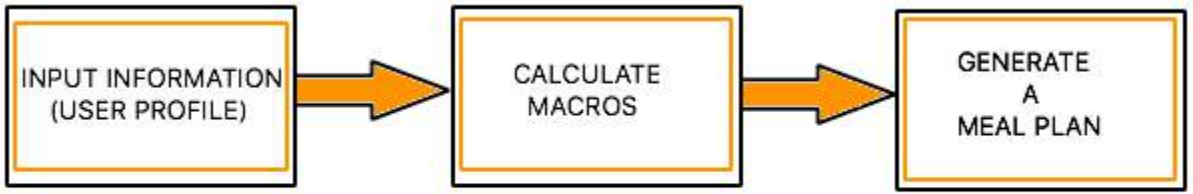
Ian Hogan, Aastha Anand, Sam Arwood, Yannan Bai, You Han

https://github.com/hoganic/FitnessApp

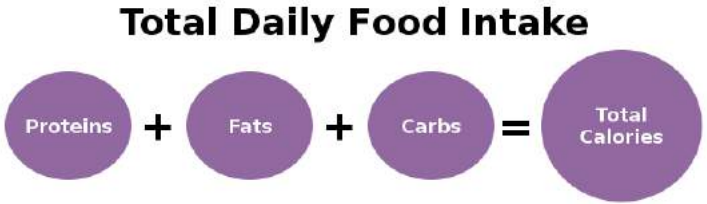
https://trello.com/b/BujO59gy/fitness-app-fitgo

Description of project:

Our Project is to create a Fitness Application to calculate Macros and help the User create a meal plan based on their desired goals

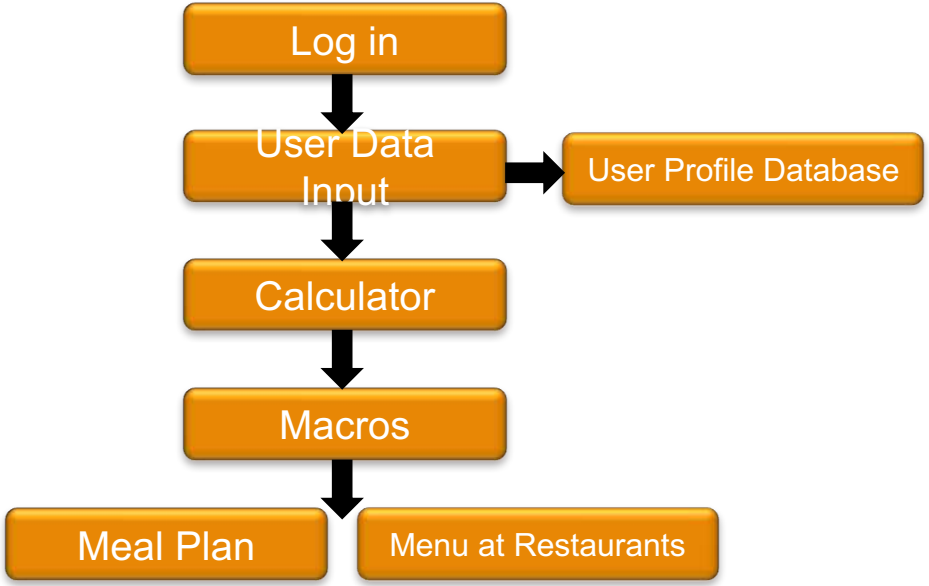


Main use cases



- Users will be able to input personal info into a calculator and receive a list of macros (Protein, Carbs, Fat) corresponding to their personal goals
- Users will be able to create and store a personal profile
- Users will be able to create a meal plan to match their macros, guided by the application
- Users will be able to find meals at restaurants that match their macros

System Diagram:

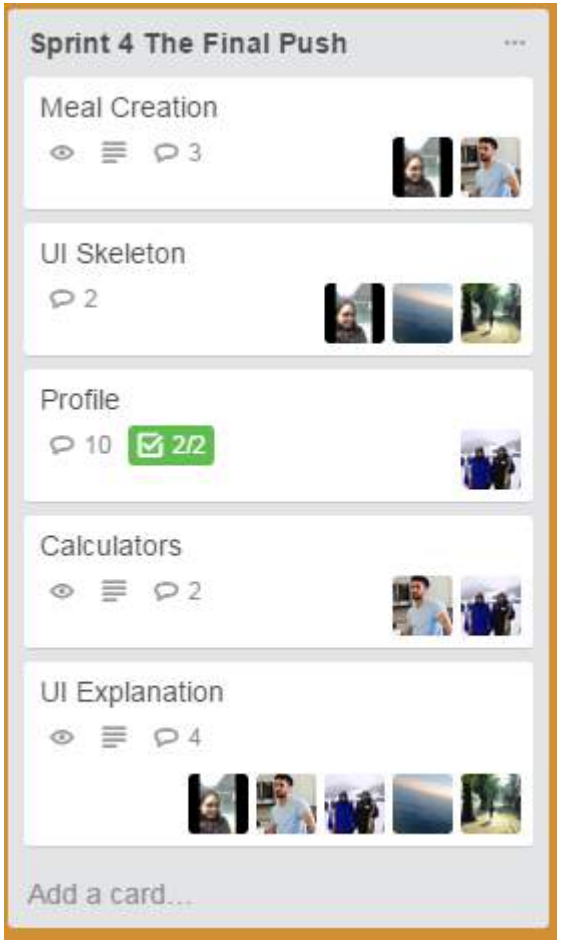


Research on our project

- Most Popular Similar App: myfitnesspal
  - Current competition can count macros and add food
  - Lacking guidance to consistently meal plan
- Research:
  - Food/Nutrition Databases, Possible Recipes Database
  - Application: App vs Web
    - Web Application with Mobile friendly site
    - Advantage: Simplicity and Resource Priority

System Sprint 1

1) Host Data and profiles on AWS
2) Allow Users/Team to login using Facebook login
3) Develop Macro Counter in HTML for web based use
4) Investigate usage and manipulation of Database APIs



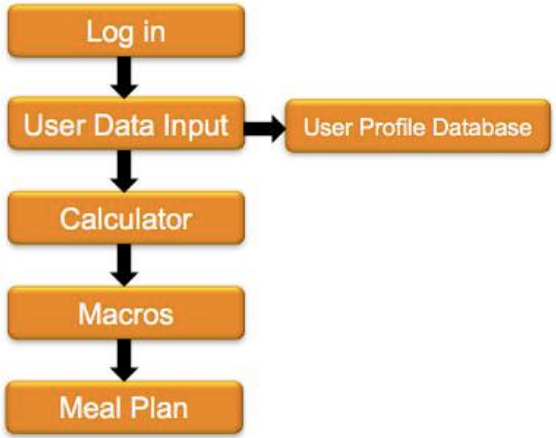
TASKS (Last sprint):

- **Redesign Graphic User Interface (GUI)**
- a) Visual Aspect
- b) Website User Pathing
- **Linking pages to User via Database:** Connecting the User's Macros (from macro calculator) and the User's Meals
- **Completion of Meal Planner**
- **User Interface Instruction:** Added methodology and instructions to various pages (Based on feedback received from classmates)

Accomplishments :

- **Database:** Upon User Profile creation databases are dynamically created to hold User data such as macros and meal planning data
- **Macro Calculator:** User Interface, Sidebar (Pathing), Links to User Database, and User instruction added to the Female and Male pages
- **Meal Planning:** Added a change of units dropdown option for food queries, User instruction, Links to User Database, Added updated GUI
- **Front Page:** The front page has been redesigned to be more visually appealing and increased functionality with Facebook Login
- **About Us Page:** Added About Us Page displaying the team and information about what is included in the site for Users

SYSTEM DIAGRAM



Struggles & Challenges:

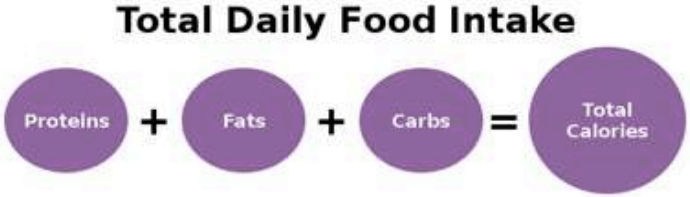
- **Working with Database:** Linking the user profile, linking the male/female calculator information (macros and calories) to the user's database
- Linking the Users macros to the Meal Planning Page
- Utilizing the Nutritionix API and creation of a dynamic Meal Planning table for the user to be able to choose their own meals for the day according to the macros and calories output from the respective calculators
- Combining each part and form a single unit to function together

DEMO

http://ec2-54-187-168-33.us-west-2.compute.amazonaws.com/

Results/Final:

Main use cases



- ✓ Users will be able to input personal info into a calculator and receive a list of macros (Protein, Carbs, Fat) corresponding to their personal goals
- ✓ Users will be able to create and store a personal profile
- ✓ Users will be able to create a meal plan to match their macros, guided by the application

Future Expansion

- Users will be able to find meals at restaurants that match their macros

Summary:

- Starting with **no previous knowledge** in Databases, Web Application Design, or Coding(PHP, HTML, Java, CSS)
- Outcome results in a basic functioning website able to:
    1) Create a User Profile linked to Facebook
    2) Calculate Macronutrients required to reach a personal goal
    3) Use a vast API searching for matching food Queries
    4) Compile food entries into meals in a table format for Users

Future Expansion/To Go Live:

- While the basics of the website are functioning the website would not be able to go live at this point, to go live the following functions would need to be added:
    1) Protection of User Inputs from incorrect inputs
    2) Charge User's for meal creation
        - Due to API pulls being limited we would have to upgrade (which would cost money per API call (Nutritionix)
    3) Refinement of the User Interface and Instructions of Meal Planning and Macro Creation
- Add functionality to search for restaurant food items
- Better usability and design for mobile User's

Thank you