

# Diet and Nutrition Tracker App

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## Introduction:

- Student athletes often engage in inappropriate dietary strategies in attempt to regulate their body weight and form.<sup>1</sup>
- Disordered eating may lead to nutritional risks such as macronutrient and micronutrient deficiencies, dehydration, electrolyte imbalances, menstrual irregularities and decreased bone mass density.<sup>1</sup>
- Student athletes may resist professional help because they fear, professionals may not value the importance of sport in their lives.<sup>2</sup>

## Accomplishments:

### Personalized Profile

- User may create a profile that takes into account for:
  - Age
  - Gender
  - Height
  - Sport
  - Weight
  - Dietary Preference
- Information will be used for future purposes. For example, a personalized diet recommendations based on user's preferences and physical health.

### Food Log

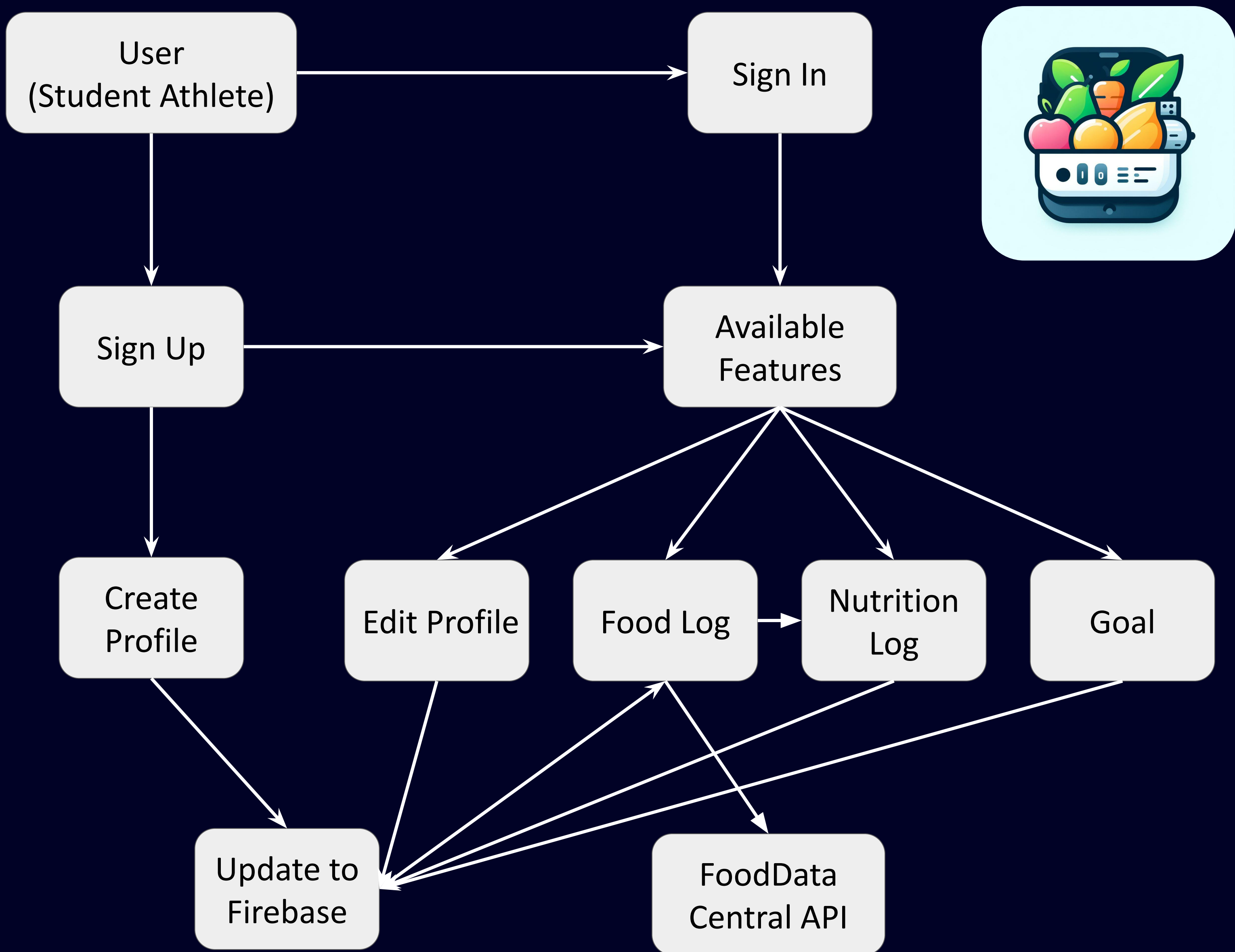
- Users are able to view, edit and log down the meals they have eaten on a daily basis.
- We have implemented FoodData Central API into our application, a reliable database of nutritional information for various foods.

### Nutrition Log

- Users are able to view the nutritional information for their meals once they have recorded them in the Food Log.
- Displays the total calories, carbohydrates, fats, and protein for each entry, normalized to a 100-g scale.

### Goal

- Users are able to set dietary goal such as daily calorie intake.



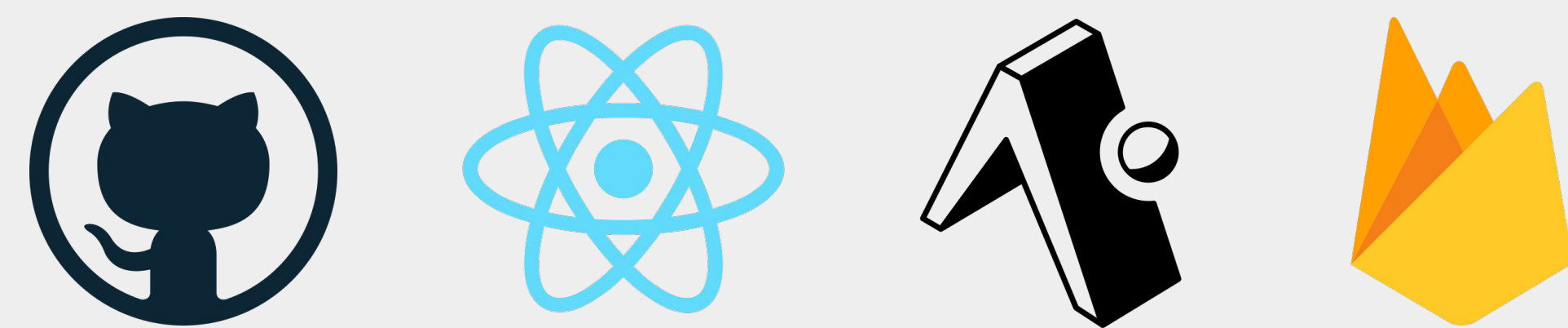
## Process:

**Starter:** As newcomers to app development, our initial challenge was grasping the concepts and effectively using the necessary tech tools. We utilized Expo Go to run the app on our mobile devices, and React Native was our choice for coding. We used Firebase for our backend services and integrated the FoodData Central API to provide detailed food and nutrient information within the app.

**Meetings:** We conducted two weekly online meetings: one with our sponsor via Discord and another with the core team on Zoom, scheduled for Tuesdays at 1 pm and Wednesdays at 2 pm, respectively. These timings were later adjusted by an hour to align with Daylight Saving Time changes.

**Assigning Tasks:** In the first two weeks, we focused on familiarizing ourselves with the tools at hand, followed by a gradual implementation of the app. Our tasks included creating sign-in/out features using Firebase, developing food logs, nutrient logs, and user profiles. We divided these tasks among team members, allowing each person to choose an area of interest. Although we were new to the environment and progress was slow, we managed to complete the main requirements for each task.

## Technology Stack:



## Challenges:

- **Lack of familiarity with some tech tools**
  - Some features weren't implemented due to lack of tech stack experience and/or limitations.
- **Initial Planning**
  - Started off rough with no formal planning.
- **Time Constraints**
  - A lot of expected features were not implemented due to time limitations.

## Next Steps:

- Enhance the Food Log by prompting users to record the estimated portion size of their meal in grams.
- Enhance the Nutrition Log to automatically calculate the nutritional content of each meal, based on the estimated portion size from the Food Log.
- Enhance the Goal Setting feature to include a progress bar showing current versus goal calorie intake.
- Integration with smartwatches (Smart Clothing App)
- Incorporate professional roles, like coaches & trainers, to oversee and assist student athletes more effectively.
- Build a better UI/UX design using Figma.

## References:

1. Kontele, I., & Vassilakou, T. (2021, August 21). *Nutritional risks among adolescent athletes with disordered eating*. Children (Basel, Switzerland). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8394476/>
2. Thompson, R. (n.d.). *Mind, body and sport: Eating disorders*. NCAA.org. <https://www.ncaa.org/sports/2014/11/4/mind-body-and-sport-eating-disorders.aspx>