Jason Zhang	jzhang2422@wisc.edu	jasonz23121
Tairan Hu	thu67@wisc.edu	thu1012
Nianze Guo	nguo9@wisc.edu	NianzeGuo
Hongying Li	hli763@wisc.edu	nancyhongying

After speaking to a TA in OH, we decided to include two different project ideas in this proposal as suggested. One is more interesting and the other more conservative. It would really be great if you could provide feedback on both and maybe some suggestions. If only one is accepted, please just review/grade the first (Clean Fridge).

Title: CleanFridge

Introduce your App

1. Describe what the problem is that your app is solving. Why is this an important problem (if you can provide some validation that this problem is important, it would be useful)?

    When ingredients are bought, they often come with a dish one wishes to cook; however, as much as 30-40% are often wasted in the fridge. A large portion of that can be traced down to one not knowing what to cook with that ingredient so that the dish is enjoyable for their mood that particular day. This application will help its users to use their ingredients at their potential by recipe search, not wasting any bought food. It would also help to track the calories from the cooked dishes to promote a healthy diet.

3. Who are your natural users? You will need to interact with them a bit in the semester and collect feedback from such users.

    The application's natural users will include all those who buy and cook themselves.

Your competition

1. What other apps have you found that are similar to your app?

    SuperCook, Allrecipes Dinner Spinner, BigOven, Epicurious, Magic Fridge

2. What is your experience with such other apps?

    They all have a very complete database of foods, capable of covering a large portion of ingredients.

3. What will make your app better than such competition? What niche does it fill?

    1. This application will allow its users to track the calories of the dishes they cook to promote a healthy lifestyle.

    2. It could also possibly allow its user to take a picture of a food ingredient to search for a recipe instead of entering a category/name, which will allow a wider search of the recipe and identification of the type of food.

    3. The lack of recipes can also be resolved by having its users create and post their own dishes.

Main modules of your app

What do you think are the main modules of your app, e.g., server-side, mobile device side, other 3rd party software or services.

Module 1A: Ingredient search through text enter (Mobile device side / Server Side)

- Textfield to enter
- Search by keyword from a database
- Scrollable view to select ingredient

Module 1B: Ingredient search through camera/album photo (Server Side / 3rd Party Service)

- Button to direct to camera/album
- Identify ingredient
- Scrollable view to select ingredient

Module 2: Recipe search with identified ingredient (Server Side / 3rd Party Service)

- Recipe search from database / API from 3rd party
- (Link to tutorial)

Module 3: Calendar-based calorie tracking (Mobile Device Side / Server Side)

- Import calories from selected recipes/customized value
- Tracking with a summary on a calendar

Module 4 (extension): Calorie intake analysis and diet suggestion (Mobile Device Side)

Module 5 (extension): Shareable recipe (Mobile Device Side / Server Side)

Mobile "Innovation"

What do you think is the most innovative aspect of your app from a mobile app perspective, i.e., what will you do differently from a regular desktop application that makes it truly mobile. Usually, the app should incorporate some features of a mobile device to make the experience of users quite seamless.

1. The mobile innovation could be the use of the camera to register what type of ingredient is being used to allow its user to use new ingredients. This feature could allow its users to use this application while shopping to find some interesting food they may want to try.
2. Another innovation is the calorie tracking. This feature will not only the recipes given from the database but also the meals that the user may have eaten when they went to a restaurant.

What mobile devices do you need to test your project, and how many such devices do have access to amongst your group members?

We are planning to make this on a smartphone with a camera. Our group members have access to at least one Android device and one Apple device.

Title: Workout Routine Maker

Introduce your App

1. Describe what the problem is that your app is solving. Why is this an important problem (if you can provide some validation that this problem is important, it would be useful)?

> In the fitness world, it's super important to customize your workouts to match your specific goals, whether that's losing weight, getting stronger, improving your stamina, or just feeling healthier overall. One-size-fits-all routines don't cut it because everyone's different. So, your workout plan needs to be flexible and fit into your schedule. Plus, doing the same exercises over and over can get really boring and make it tough to stay motivated. That's where our app comes in. We empower you to design your own workout schedule and plan, filled with exercises that you handpick to suit your preferences and goals, keeping you engaged and enthusiastic about your fitness journey.

3. Who are your natural users? You will need to interact with them a bit in the semester and collect feedback from such users.

> Our primary user demographic comprises college students who have a keen interest in fitness and desire personalized workout routines tailored to their specific goals and preferences. We recognize that college life can be hectic, and students often seek effective ways to incorporate fitness into their busy schedules. By providing a platform that allows them to craft their own workout plans, we empower these individuals to take charge of their fitness journeys, helping them stay motivated and achieve their health and wellness goals while balancing their academic commitments.

Your competition

1. What other apps have you found that are similar to your app?
Stronger Fastr, Workout Maker

2. What is your experience with such other apps?
Stronger Fastr is nice but only available as a web app, workout maker has a very old UI and doesn’t provide videos during the workout

3. What will make your app better than such competition? What niche does it fill?
Our app is on mobile, has music, and provides videos as a form reminder and motivation during the workout

Main modules of your app

What do you think are the main modules of your app, e.g., server-side, mobile device side, other 3rd party software or services.

Server-Side (Backend) Module:

a. User Management:
    i. Handles user registration, authentication, and profile management.
    ii. Manages user preferences, health data, and fitness goals.
b. Workout Management:
    i. Manages the exercise library, including descriptions, categories, and multimedia content.
    ii. Handles workout customization, storage, and retrieval.
c. Notification Management:
    i. Manages reminders, notifications, and alerts sent to users.

Client-Side (Frontend) Module:

a. User Interface:
    i. Displays app content, including workout routines, exercise library, and user profiles.
    ii. Handles user interactions, navigation, and user inputs.
b. Media Player:
    i. Plays workout videos and music within the app.
c. Local Data Storage:
    i. Stores user preferences, cached content, and temporary data on the user's device.
d. Notification Listener:
    i. Listens for and displays notifications and alerts from the server.

Third-Party Integrations Module:

a. Social Media Integration:
    i. Allows users to share content and achievements on social media platforms.
b. Music Integration:
    i. Integrates with music streaming services like Spotify or Apple Music to play music within the app.

Database Module:

a. Stores and manages all the persistent data including user information, workout details, exercise library, and subscription details.

Mobile “Innovation”

What do you think is the most innovative aspect of your app from a mobile app perspective, i.e., what will you do differently from a regular desktop application that makes it truly mobile. Usually, the app should incorporate some features of a mobile device to make the experience of users quite seamless.

- It allows for routines to be made and used anywhere, users can bring their phone to a gym/friends place/park etc. but they can't do that with a desktop.
- It allows users to share their routines with social media apps which is easier with a mobile device
- It allows users to get push notifications and reminders on their phone

What mobile devices do you need to test your project, and how many such devices do have access to amongst your group members?

We are planning to make this on a smartphone. Our group members have access to at least one Android device and one Apple device.
