

Milestone 3

Group 19

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Development

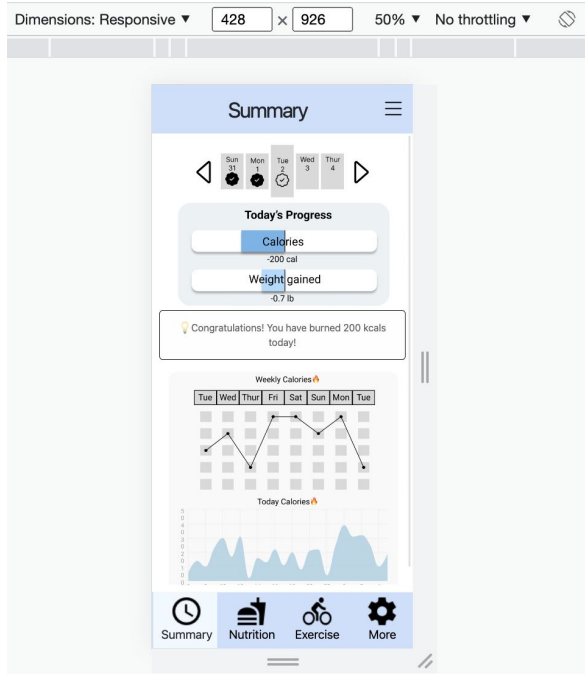
Three Tasks

1. Nutrition Calculator. Query for any food and amount for a detailed nutrition information. We use the calories calculator API to support the user calculate the food they want to check, and add them to the the page. At the nutrition wheel area, the users can see the calculated calories for the food they choose. If they want to know the details of this food, they can check the table next to the the nutrition wheel. This feature can give the users a general idea that how much nutrition they will get from their daily food intake, so that they can make a healthy/balanced diet plan.
Reference: <https://calorieninjas.com/api>
2. Tracking the BMI. This feature is a BMI calculator. Users only need to input their height and weight, then the calculator will automatically calculate the BMI for them. We use an API to implement this feature.
Reference: https://dev.to/shantanu_jana/how-to-create-bmi-calculator-using-javascript-3l07
3. Search bar. In case the users want to add some food that not in the recommendation list, we use an API to provide users search food feature that they can search from search bar. They input the name of the food, such as “apple”, it will show up as a list, then choose one of them, to add to the page.
Downside: when the users search the food, it would be no food pictures. It's the paid feature of this APP.

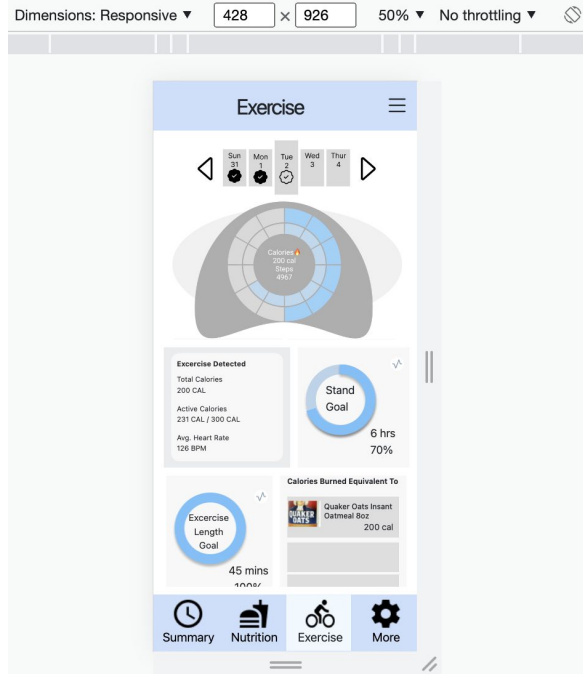
Screenshots of the APP

GitHub Link: https://github.com/tigerisbigcat/CS160_Final_Project GitHub Page Link: https://tigerisbigcat.github.io/CS160_Final_Project

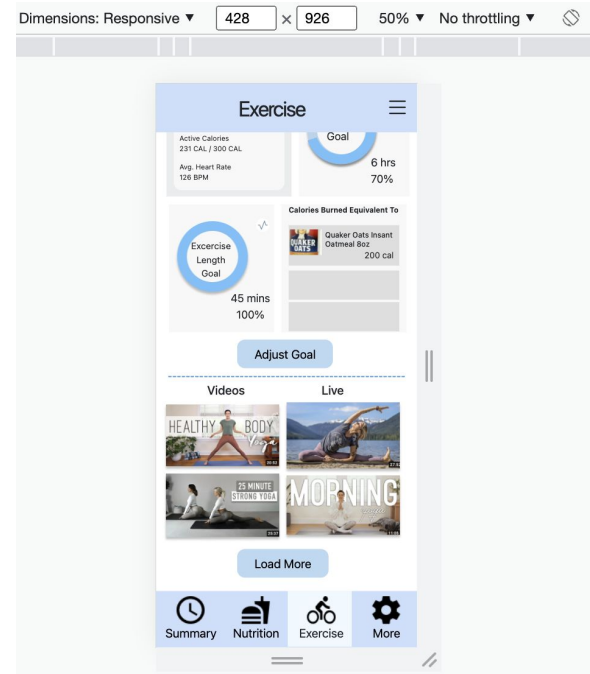
Summary Page



Exercise Page



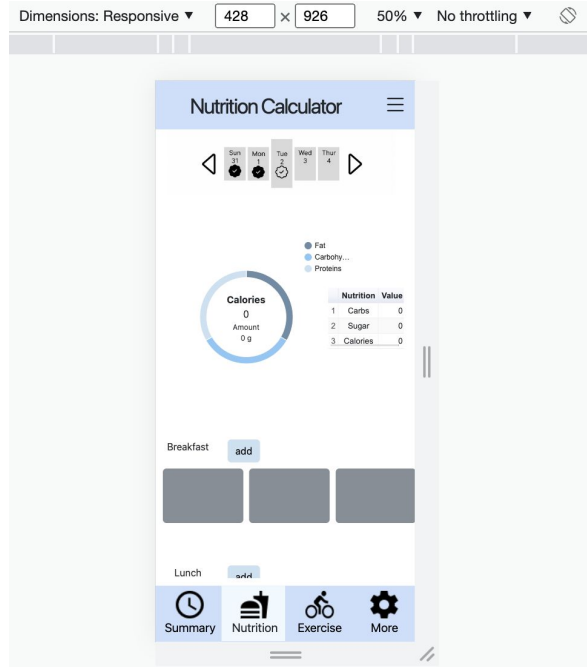
Exercise Page



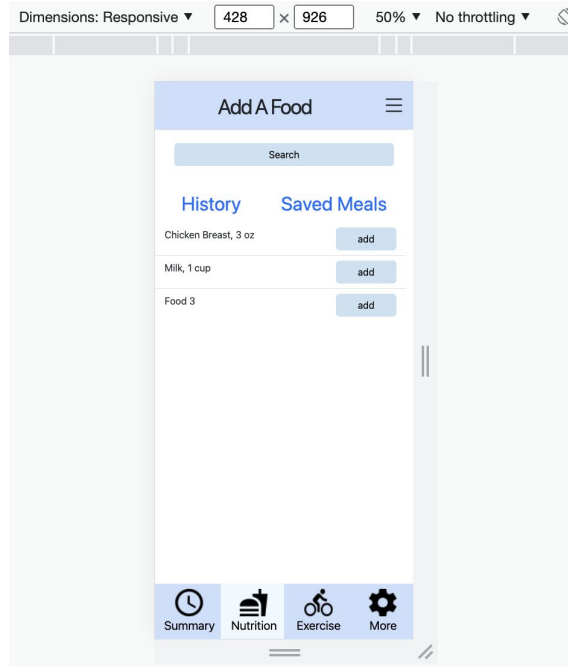
Screenshots of the APP

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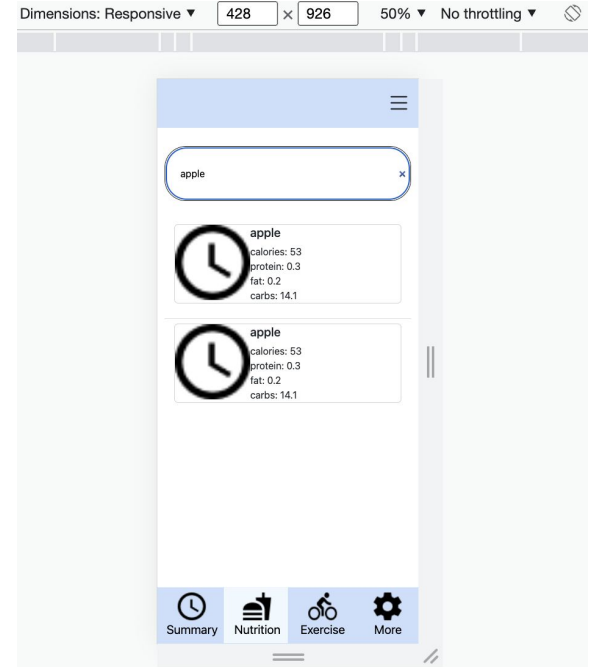
Nutrition Page



Add Food Page



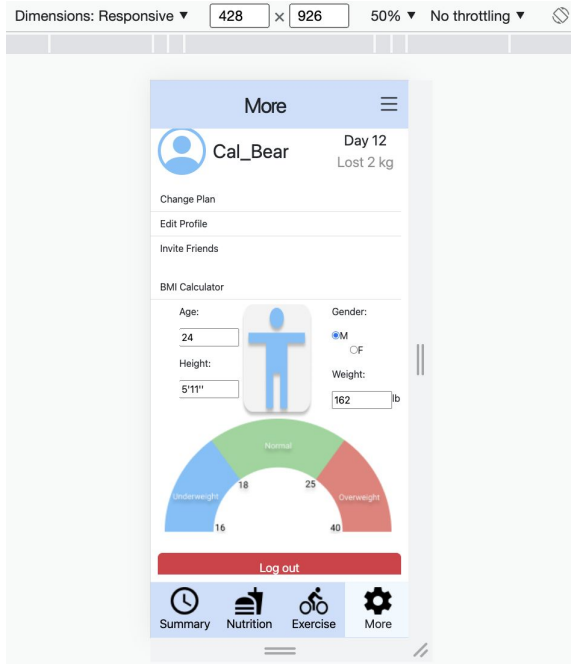
Search Food Page



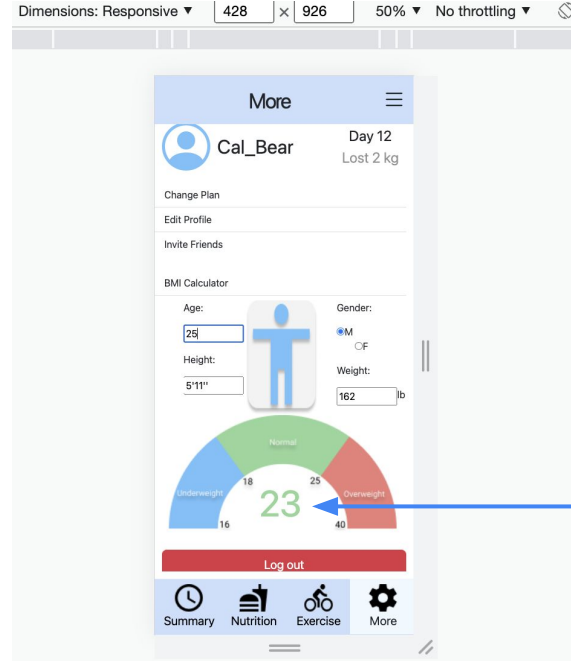
Screenshots of the APP

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More Page - Before Calculating the BMI



More Page - After Calculating the BMI



It will show the BMI result here.
Corresponding with the Heath
Color:

Blue: Underweight

Green: Normal

Red: Overweight

Video Link of the APP

https://drive.google.com/file/d/1yd-x4_b_Sp9GPquQtkKSnkrMoF2vCVwa/view?usp=sharing

User Evaluation

Usability Test Description

We want to run a usability test to learn how users like the interface and interactions of our application, and does our application solve out their problem effectively.

We would show participants the webpage of our application and make them free to interact. Then we want to know their reaction to our interface and interactions, then ask them a few questions.

Question list:

Do you have some part you got confused about?

Which part you think is good to keep?

Do you think for most the users they will easy to learn how to use this app?

Any suggestions for this APP?

Are you satisfied with the BMI calculator feature? Rate 1-5, 1:very unsatisfied 5: very satisfied

Are you satisfied with the the adding food feature? Rate 1-5, 1:very unsatisfied 5: very satisfied

Are you satisfied with the the macro calculator feature? Rate 1-5, 1:very unsatisfied 5: very satisfied

Usability Test Note - Participant 1

Reaction to the Interface:

I like it, it's a simple and user-friendly interface. I like the color combination it feels energetic. I also like the calories trend lines. But I feel like some of the pages have too much information, I think it would be better if it can reposition some of the elements.

Q: Do you have some part you got confused about?

Yes, I'm a little bit confused about the calories trending graph in the main page. I'm not sure if it's the calories offset value since it's got no unit.

Q: Which part you think is good to keep?

I think you should keep the nutrition calculator feature which calculates the accumulate calories by adding food.

Q: Do you think for most the users they will easy to learn how to use this app?

I think so, overall the nutrition app got 4 pages which is very straightforward. All the interaction and buttons are obvious and clear.

Q: Any suggestions for this APP?

I thought you can delete some features in the exercise page, for example the "calories burned equivalent to" feature, I think it's a little bit redundant.

Usability Test Note - Participant 1

Q: Are you satisfied with the BMI calculator feature? Rate 1-5, 1:very unsatisfied 5: very satisfied.

5. It's easy to check and easy to type, I like the different display based on user's different BMI values.

Q: Are you satisfied with the the adding food feature? Rate 1-5, 1:very unsatisfied 5: very satisfied.

3. It works well, but the searching feature is not that smooth and it's a little hard to adjust the amount of each food.

Q: Are you satisfied with the the macro calculator feature? Rate 1-5, 1:very unsatisfied 5: very satisfied

5, the nutrition calculator is very clear to show the nutritions I ate today and it's automatically sum up the macro of the foods that I added, it's very clear and easy to see from the bar chart.

Usability Test Note - Participant 2

Reaction to the Interface:

For the visual part, the main color of this APP is light blue which is comfortable to look at, I like it. For functionality, the navigation bar is fixed at the bottom is a useful function that sometimes I just want to switch to the main page, so that I don't need to click the back button many times. For the search function, it got me confused at the beginning, because we don't need to press confirm button, it will automatically show the results. I like the BMI feature too, I can track my BMI changes at any time.

Q: Do you have some part you got confused about?

Yes, like what I said, the search bar part.

Q: Which part you think is good to keep?

I think all the features are good to keep. Some small functions we don't use very often but it good to have it when we want to use it.

Q: Do you think for most the users they will easy to learn how to use this app?

Yea definitely. This APP the navigation is very clear, I think most of people know how to use it when they first see it.

Q: Any suggestions for this APP?

I think you can add some suggestions diet plans. Most of us don't know how to eat healthy. With some suggestion plans we can easily set up a diet plan and excuse it. This would be good feature for the people who has procrastination, such as me.

Usability Test Note - Participant 2

Q: Are you satisfied with the BMI calculator feature? Rate 1-5, 1:very unsatisfied 5: very satisfied.

5. I like it, through we don't use it very often like tracking the daily calories, it's still useful when we want to know such as monthly BMI changing.

Q: Are you satisfied with the the adding food feature? Rate 1-5, 1:very unsatisfied 5: very satisfied.

2. When we add the result to the page, the picture size is squeezed, it looks really weird.

Q: Are you satisfied with the the macro calculator feature? Rate 1-5, 1:very unsatisfied 5: very satisfied

Yes, and I will give 5. It really helpful for me when I want to know how much calories I get from my daily meals. It's a good warning before I eat something.

Synthesis

What did you learn from how the user interacted with your app?

We have learned we should pay more attention to the users' needs. Focus on the feature that users use the most. Some functions that we thought they are very important when we design, but from the reactions of users, it can be seen that these functions are not very useful to them.

What parts of your interface worked well and allowed the user to achieve their goals?

The nutrition page has the best interaction when we test it with our target users. They can easily to search the daily food and add to the panel, the calculator give them the instance results of the food they choose. The information of it, is exactly what the users want.

Did the user say or do anything surprising or unexpected? (If so, what?)

No

How will your learnings help you improve and implement your app in the future?

These experiments, testings, surveys are good experiences for us to use in the future studies or projects. From the user experience part, the lessons we learned from the real product design, such as focus on the users' real needs, would help our products more competitive than others. From functional implementation, we learned next time, separate the files to avoid less conflicts when we do the team work.

Synthesis

Overall thinking

Overall, the process of making this app taught us a lot. From the very beginning, the user analysis, collecting the target user's habits, needs, etc. Then we have a user persona. Then questionnaires, drawing sketches, making various demo diagrams, wireframes, and then the final Figma high-fidelity graphs, every step of the design is based on the user's experience and needs as much as possible. We had many meetings and discussions. We narrowed down the features we listed, and determined which would be the primary features and which would be the sub-features. And then to the final code implementation.

Teamwork is very important, we often end up with pages being overwritten because of page code conflicts, but by working together, we find better ways to collaborate with each other. Here is the APP that we show now.