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**Course: CCSW 225**  
**Title: Human Computer Interaction**  
**Instructor: Rasha AlOmari**  
**Term 2/ 2021**

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## CCSW-225 Human Computer Interaction

2022 2<sup>nd</sup> semester

### Group Project

<b>Project Title:</b>	Healthy Wealthy App
<b>Assignment#</b>	Final Project Report
<b>Submission Date:</b>	5 February 2023
<b>Team Members:</b>	<ol style="list-style-type: none"><li>1. <u>Raghad Al-Shahrani</u> ID: <u>2111500</u></li><li>2. <u>Lamar Al-Muteri</u> ID: <u>2116596</u></li><li>3. <u>Raghad Al-Saadi</u> ID: <u>2111169</u></li><li>4. <u>Fay Al-Shareef</u> ID: <u>2110919</u></li><li>5. <u>Noura Al-Bassam</u> ID: <u>2111657</u></li></ol>
<b>Section:</b>	C2L

## - Contribution Log -

Team Members:

M1: Raghad Al-Shahrani

M2: Lamar Al-Muteri

M3: Raghad Al-Saadi

M4: Fay Al-Shareef

M5: Noura Al-Bassam

no.	Task	M1	M2	M3	M4	M5	Notes
1	Interview	😊	😊	😊	😊	😊	
2	Questioner	😊	😊	😊	😊	😊	
3	Write in File	😊		😊		😊	
4	Interview Stats	😊					
5	Needs and Insights	😊	😊	😊	😊	😊	
6	Determine Tasks in app	😊	😊	😊	😊	😊	
7	Draw Low-Fidelity					😊	
8	explanation Low-Fidelity	😊		😊	😊	😊	
9	Idea Design		😊				
10	High- Fidelity	😊	😊	😊	😊	😊	
11	Final Report and Presentation	😊	😊	😊	😊	😊	

## - Deliverables Log -

	Mark	Due Date	Instructor Notes
Assignment#1			
General project idea.	1	Week 3	
Targeted users.			
Main problems to be solved.			
How to: Data collection.			
How to: find users.			
Interview questions.			
Online questioner link.			
Assignment#2			
The raw data collected from the users.	2.5	Week 4	
Visualization of collected data.			
List of 5 needs.			
List of 5 insights.			
List of 5 main tasks.			
Assignment#3			
Photos of Low-Fidelity Prototyping for 3 distinct tasks	4	Week 5	
1-2 sentence caption for each significant screen.			
How will the new design meet users' requirements?			
Assignment#4			

High-Fidelity Interactive Prototype for 3 distinct tasks	6	Week 7	
Explanation of all interfaces			
Explanation of the designed application or system			
Assignment#5			
Final project report.		Week 7	
The presentation file.	5	Week 10	
Total	30		



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# Interview Questions

## For pregnant women:

- What foods should you avoid during pregnancy?

**Answer:** It's best to avoid eating sweets, salty foods, caffeine, sea food, food containing vitamin A, and spicy foods.

## For over-weight people:

- In your opinion, which foods cause you to gain weight?

**Answer:** I stopped eating sugars, starches, carbohydrates of all kinds and also stayed away from wheat and fast foods. Now I only eat vegetables and protein such as meat, eggs, some legumes and vegetables that contain a percentage of protein, and I have reduced my intake of fruits that contain a percentage of sugars.

## For hypertension and diabetic patients:

- What foods should diabetics avoid?

**Answer:** Sweets, foods or fruits that contain a high percentage of sugar like ice cream, mangos, dates, watermelon, and pineapples. but we can eat it with limits and avoid overdoing it.

Sometimes we need to eat sweet stuff when our blood sugar is low which is called (hypoglycaemia).

- What foods should hypertension patients avoid?

**Answer:** Highly salty foods raise my blood pressure, pickles, and bananas as well. There are also foods that I always eat in the morning that help me control my high pressure, which is garlic. It is very useful and I advise everyone to eat it. I also like adding olive oil to my foods.

# Interview Questions

## For all:

- do you need a nutritionist?

**Answer:** Yes, I was hoping to find a nutritionist by mobile or application but I couldn't find any.

- Would it help if there was an app that combines nutritional instructions and consultation from nutritionists?

**Answer:** Yes of course, it will help in searching sources and save time and effort. It was so difficult for me searching on everything I eat.

- If there was an application that provides diets and health services, what are the advantages that you expect?

**Answer:** I hope that the app will help me have a balanced diet by providing healthy foods which I can subscribe to, methods of preparing lunches, a calculator that calculates calories, and notification to drink water and move.

- Have you gone to health clinics for a diet before? If yes, can you tell me what the obstacles you faced were?

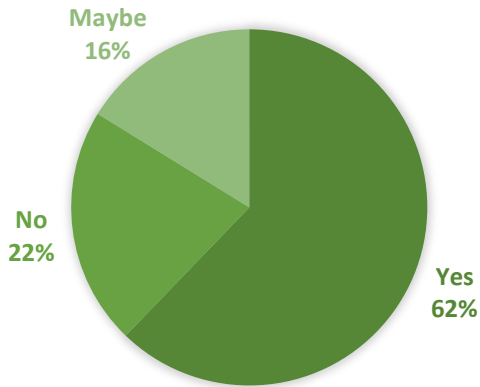
**Answer:**

- No, because I don't have a lot of time and it is not easy to find an appointment.
  - Yes, the system was harsh, so I couldn't continue with it for a long time.
- Have you ever tried other diet applications? How was your experience with it?

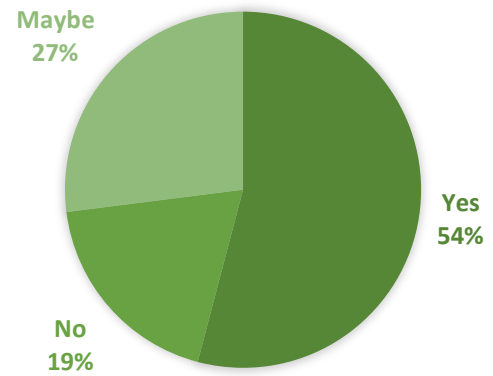
**Answer:** No, because they are usually expensive even though they don't provide all the necessary services.

# Questionnaire Statistics

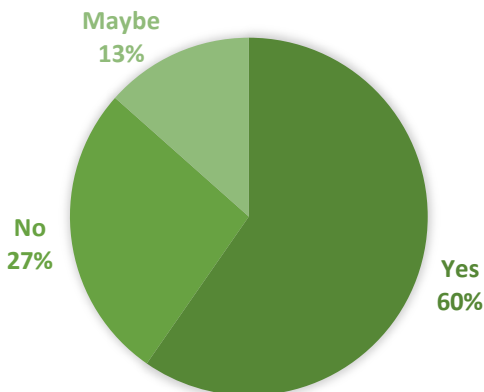
**IF YOU CARE ABOUT YOUR FOOD,  
DO YOU NEED MEDICAL ADVICE?**



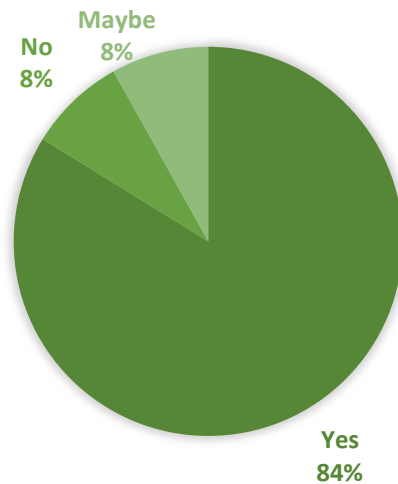
**DO YOU NEED FOOD  
NOTIFICATIONS ALERT?**



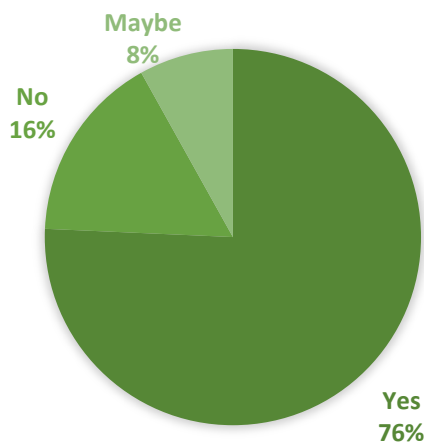
**WOULD YOU RATHER HAVE THE APP  
REMIND YOU FOR YOUR MEDICATION  
TIME?**



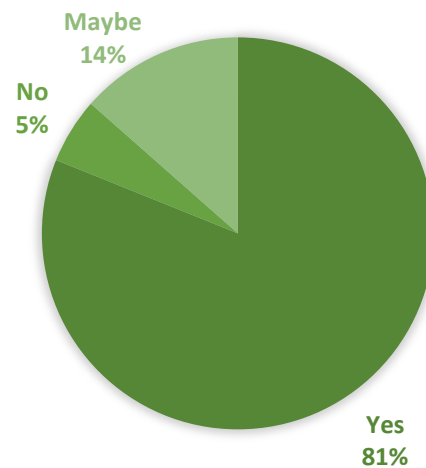
**DO YOU SUPPORT THE IDEA OF  
DELIVERING HEALTHY MEALS?**



**DO YOU NEED THE APPLICATION TO  
PROVIDE INFORMATION ON HEALTHY  
RESTAURANTS IN YOUR AREA?**

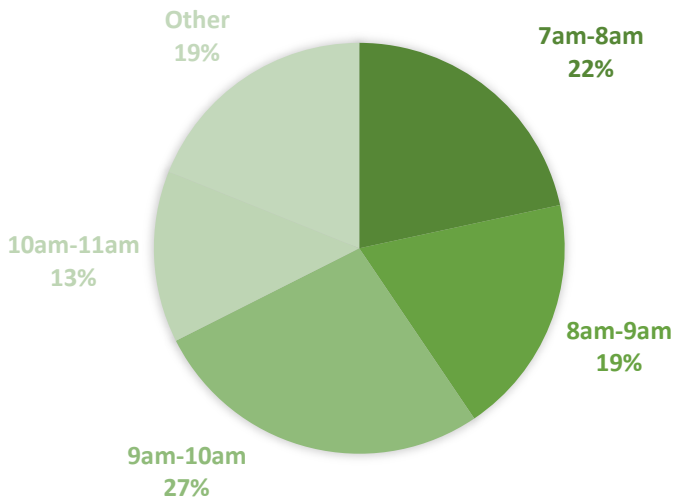


**WOULD YOU PREFER THE APPLICATION  
TO PROVIDE WORKOUT SERVICES?**

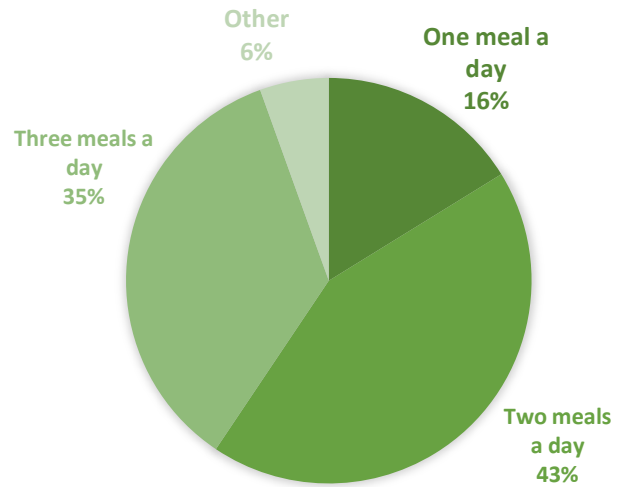




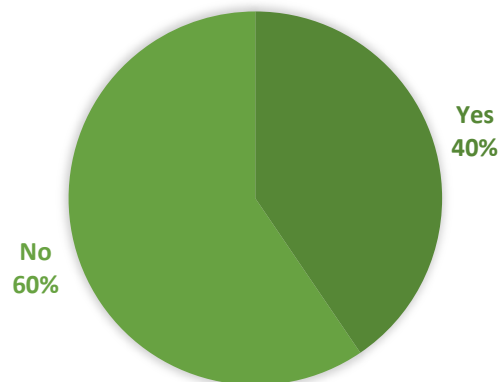
### WHEN DO YOU PREFER TO HAVE BREAKFAST?



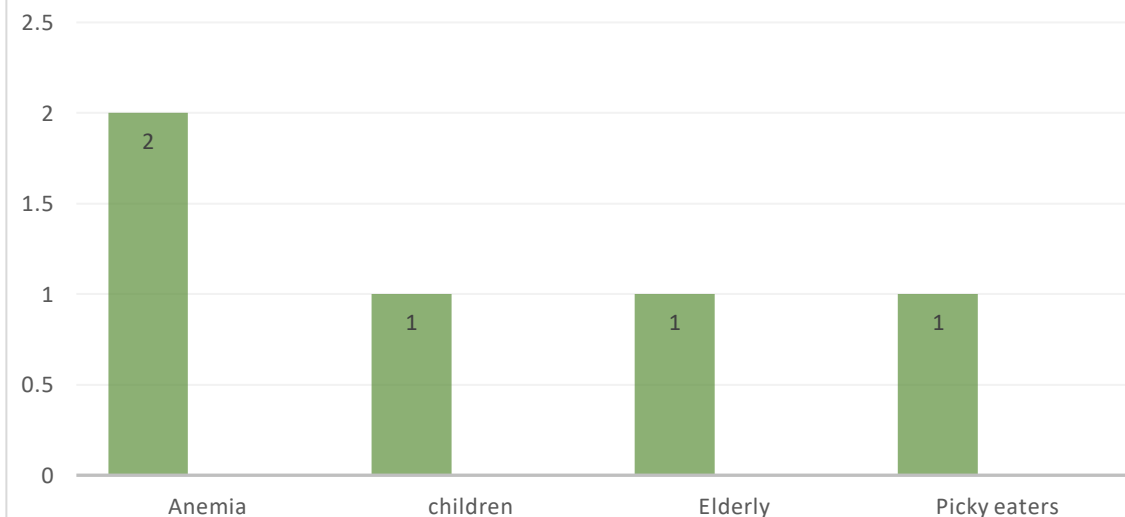
### HOW MANY MEALS DO YOU EAT PER DAY?



### OUR CATEGORIES ARE (DIABETICS AND HYPERTENTION, OVERWEIGHT, AND PREGNANT WOMEN) DO YOU THINK THAT THERE IS A CATEGORY THAT NEEDS TO BE ADDED?



If you chose "yes" in the previous question, what are the categories we should add?



## Interview stats

Hypertension and Diabetic patients	
Foods	Number of people
Salty Food	10
Pickles	10
Banana	3
Ice cream	4
Mangoes	5
Soft drinks	6
Sweets	10
Watermelon	2
Pineapple	1

Over Weight	
Foods	Number of people
Sweets	6
chocolate	4
Soft drinks	4
Chips	6
Fast Food	8
Rice	3
Bread	5
French Fries	5
Soft drinks	3
Mango juice	2

Pregnant	
Foods	Number of people
Pineapple	3
processed meats	2
herbs	4
Caffeine	2
Raw eggs	3
sweets	3
spicy foods	5
Seafood rich in zinc	3

# Needs and Insights

## Needs and insights our users:

User	Needs	Insight	Solution
<b>Pregnant women</b>	Pregnant women need to follow a special diet that provides them with the elements needed for the growth of the baby.	These users encounter difficulties with meal planning and lack knowledge about foods high in vitamins, calcium, and other nutrition that are advantageous to the baby.	Our app will help them get food suggestions rich in what they need and schedule it for them.
<b>Over Weight</b>	They need a treatment plan, regularity, and a health regimen.	These users have problems with their appetite, irregularity in their health system, exercise, and they do not have enough commitment and motivation.	Our application will provide nutritional instructions, consultation from nutritionists, and notifications. That will help them with their diet and encourage them to stay committed.
<b>Hypertension and diabetic patients</b>	They need reminders to take medicine.	These users usually have difficulty remembering to take their medicine because of their busyness, and sometimes get confused from having different medicines.	Our application will have notifications to remind them of their medicines at the right time and help them distinguish which ones they need to take each time.
<b>Healthy people</b>	They need a food plan.	These users don't have the experience and information to make a proper food plan that suits them, and they don't have the time nor find affordable places.	Our application will provide nutritional instructions and consultation from nutritionists.
<b>Parents</b>	They need a proper food plan and diet to follow for their children.	Because children are going through a growth period, it's very important to manage their diet properly and make sure they are getting all the nutrients they need to stay healthy and grow strong.	Our application help parents by providing guidance, instructions, and the ability to consult a professional easily.



# Needs and Insights

## Tasks performed in the application:

1. Providing a healthy food schedule.
2. Providing nutritional instructions and consultation
3. Provides healthy food delivery.
4. Provides a calorie counter.
5. During creating an account, the user will choose what user category they are.
6. Provides notifications that remind the users of their medicines.
7. Providing information and locations of healthy restaurants nearby.

# Low-Fidelity Prototyping

## Healthy Wealthy's design

Our application fulfills all of our users' needs and we focus on multiple categories such as: pregnant women, obese people, hypertension and diabetic patients, healthy people, and parents. It will be simply-designed with meaningful icons so that people of all ages can easily use it. Our goal is to provide them with healthy food, a diet schedule, and calculate the calories of each meal. Moreover, the application users will be able to chat directly with a nutritionist if they have any inquiries. Furthermore, the users can enable notifications to remind them for their medications. These features are time-efficient, low in cost, and helps them achieve their goals effortlessly.

## Tasks performed in the application:

- Personal Information
- Instant chat with specialist
- Medication notification
- Calorie counter "Add calories"
- Calorie counter "Add meal"

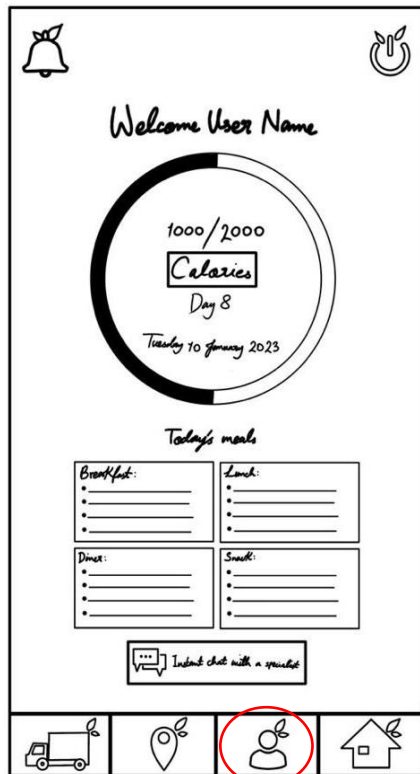
# Low-Fidelity Prototyping

## • Personal Information

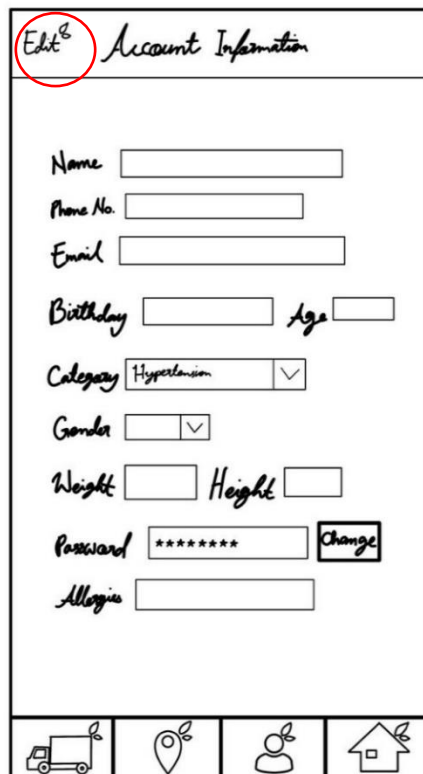
From the main menu, the user can click the “account logo” button that will take them to account information page where they can see data or

If the user clicks on “edit” they will be able to modify their information. But if user does not click on “edit”, the information will not change.

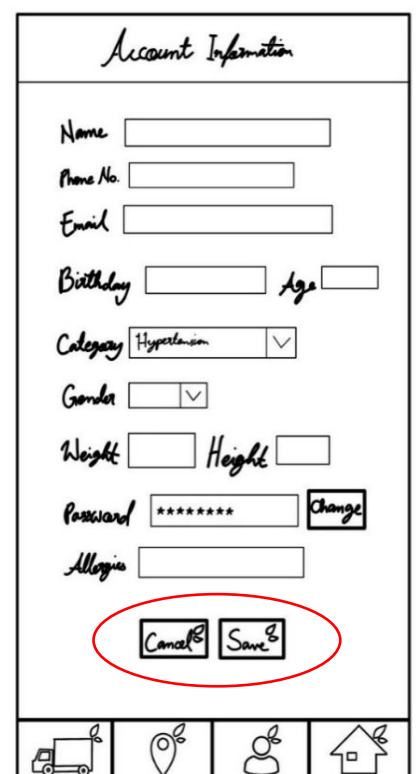
If the user clicks on “Cancel” no changes will be applied. If they click on “Save” it will save the modified information.



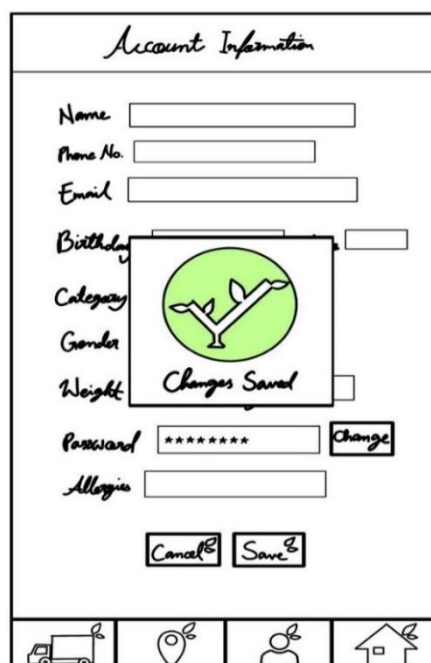
Main menu screen showing a welcome message, a circular progress indicator for calories (1000/2000), and a section for today's meals (Breakfast, Lunch, Dinner, Snack). A bottom navigation bar contains icons for home, location, profile (circled in red), and shopping cart.



Account Information screen with an "Edit" button circled in red. Fields include Name, Phone No., Email, Birthday, Age, Category (Hyper-tension), Gender, Weight, Height, Password (with a "Change" button), and Allergies. A bottom navigation bar is at the bottom.



Account Information screen showing the "Cancel" and "Save" buttons circled in red. Fields include Name, Phone No., Email, Birthday, Age, Category (Hyper-tension), Gender, Weight, Height, Password (with a "Change" button), and Allergies. A bottom navigation bar is at the bottom.

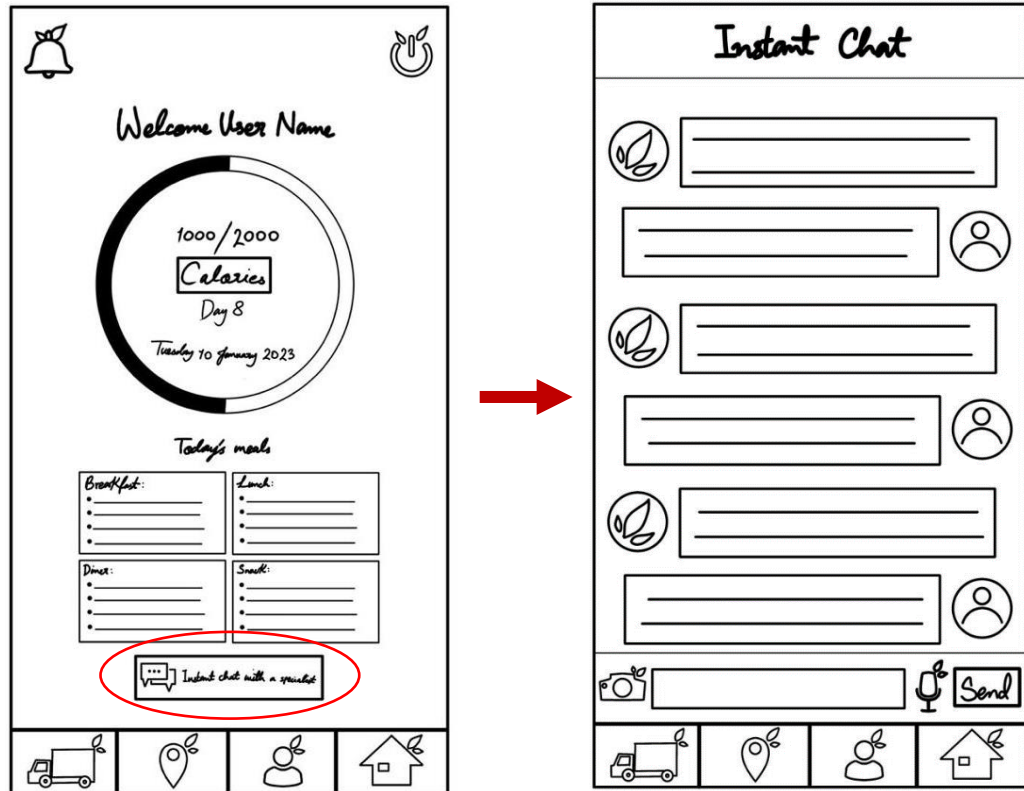


Account Information screen showing a confirmation message "Changes Saved" with a green checkmark icon. Fields include Name, Phone No., Email, Birthday, Category, Gender, Weight, Password (with a "Change" button), and Allergies. "Cancel" and "Save" buttons are at the bottom. A bottom navigation bar is at the bottom.

Confirmation message that will let the user know that the changes were saved.

# Low-Fidelity Prototyping

- Instant chat with specialist

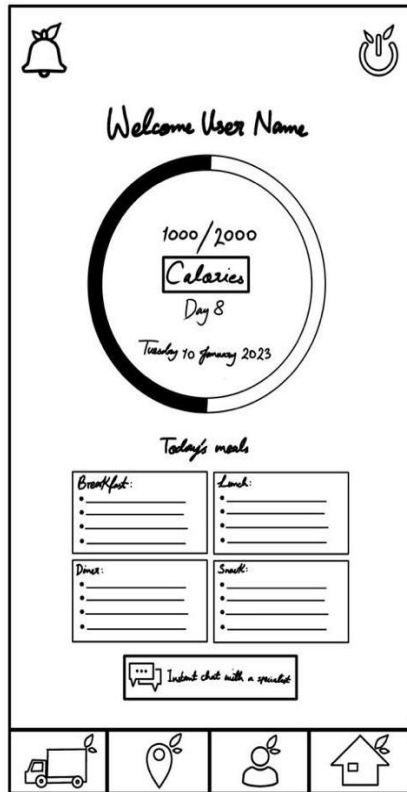


From the main menu, the user can click the "Instant chat with specialist" button that will take them to a chat page where they can directly chat with a specialist.

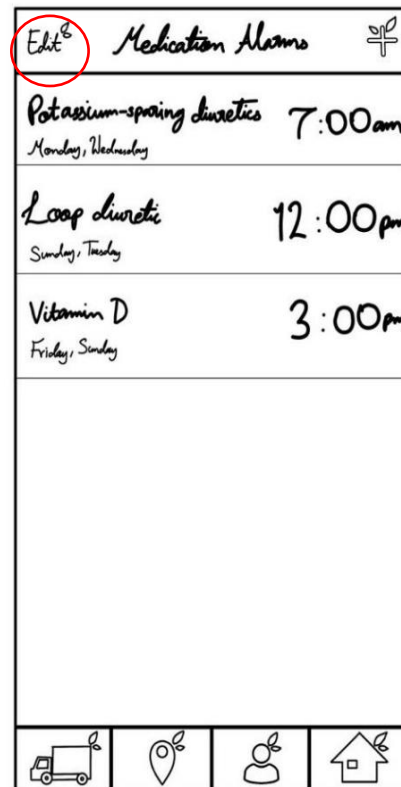
# Low-Fidelity Prototyping

## Medication notification

From the main menu, the user can click the “bell logo” button that will take them to a medication alarm page where they can see the medication schedules.



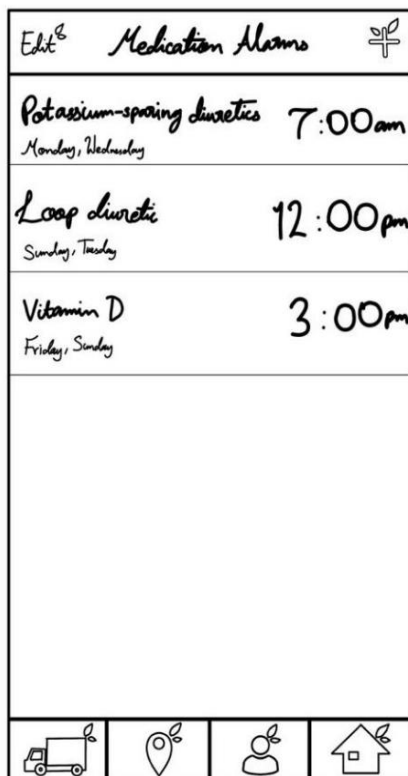
Hand-drawn prototype of the main menu. At the top left is a bell icon, and at the top right is a leaf icon. The text "Welcome User Name" is centered. Below it is a circular progress indicator showing "1000/2000" and "Calories Day 8" with the date "Tuesday 10 January 2023". Underneath is a section titled "Today's meals" with four lists: Breakfast, Lunch, Dinner, and Snack, each with five bullet points. At the bottom is a button that says "Instant chat with a specialist". The bottom navigation bar contains four icons: a truck, a location pin, a person, and a house.

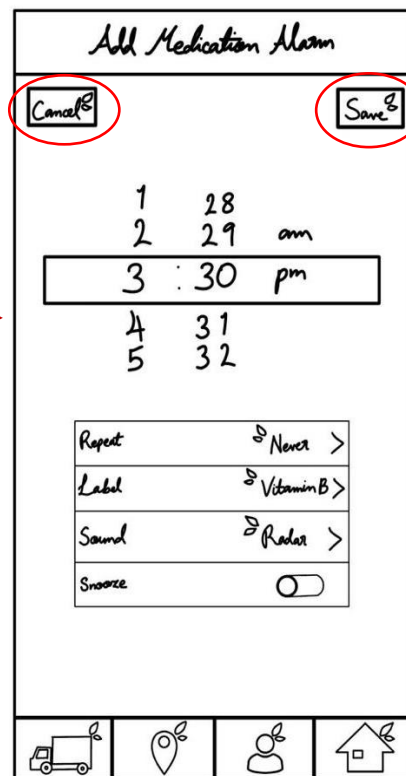
Hand-drawn prototype of the "Medication Alarms" screen. At the top left is an "Edit" button circled in red, and at the top right is a leaf icon. The screen lists three medication alarms: "Potassium-sparing diuretics" at 7:00 am (Monday, Wednesday), "Loop diuretic" at 12:00 pm (Sunday, Tuesday), and "Vitamin D" at 3:00 pm (Friday, Sunday). The bottom navigation bar is identical to the main menu.

From the medication alarm page, the user can click the “Edit” button that will allow them to change and modify the alarms.

From the medication alarm page, the user can click the “addition logo” button that will allow them to add more alarms.



Hand-drawn prototype of the "Medication Alarms" screen, similar to the previous one but with an "Add" button circled in red at the top left. The list of alarms is the same. The bottom navigation bar is identical.

Hand-drawn prototype of the "Add Medication Alarm" screen. At the top left is a "Cancel" button circled in red, and at the top right is a "Save" button circled in red. The screen shows a time selection interface with a grid of numbers (1-5 for hours, 28-32 for minutes) and a selected time of 3:30 pm. Below the grid are four settings: Repeat (Never), Label (Vitamin B), Sound (Radar), and a Snooze toggle switch. The bottom navigation bar is identical.

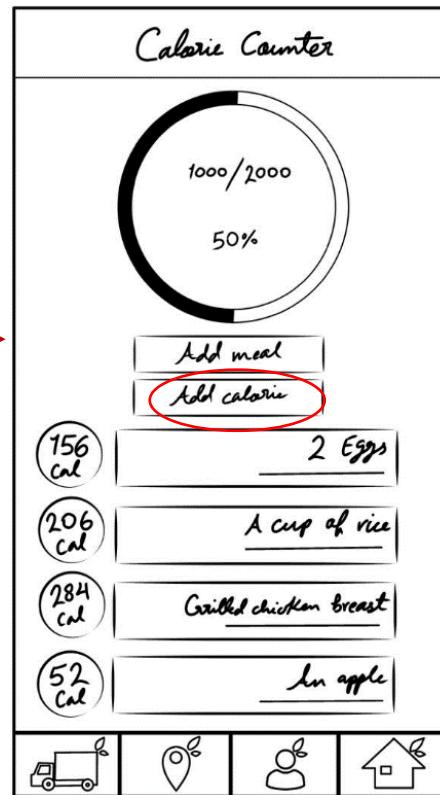
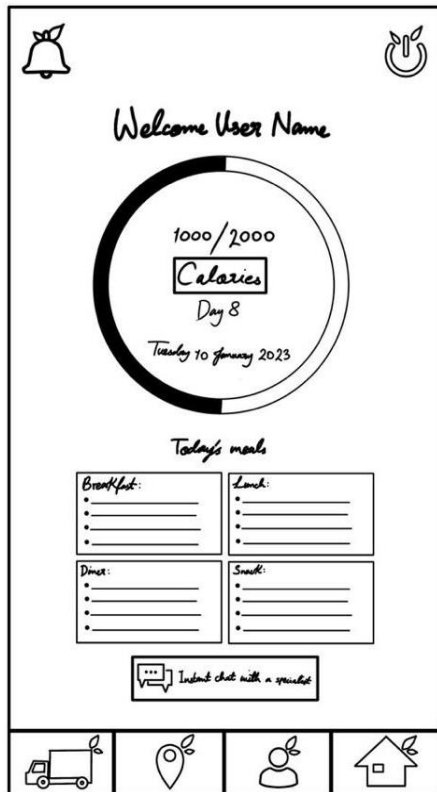
From this page the user can add medication alarm and click the “save” button or click “Cancel” button and go back to medication alarm page.



# Low-Fidelity Prototyping

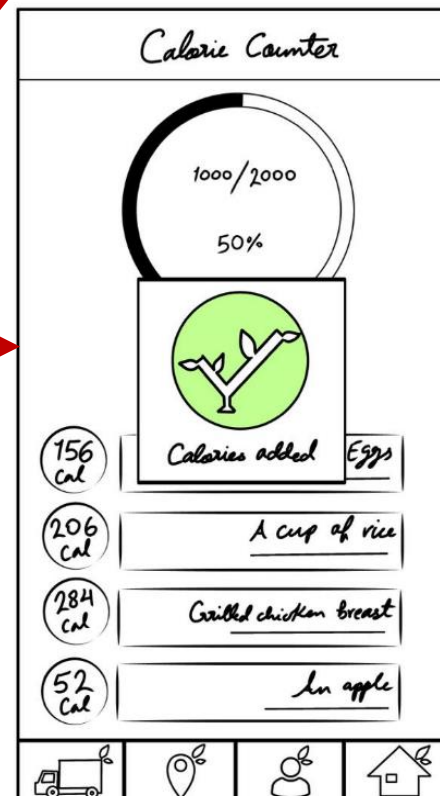
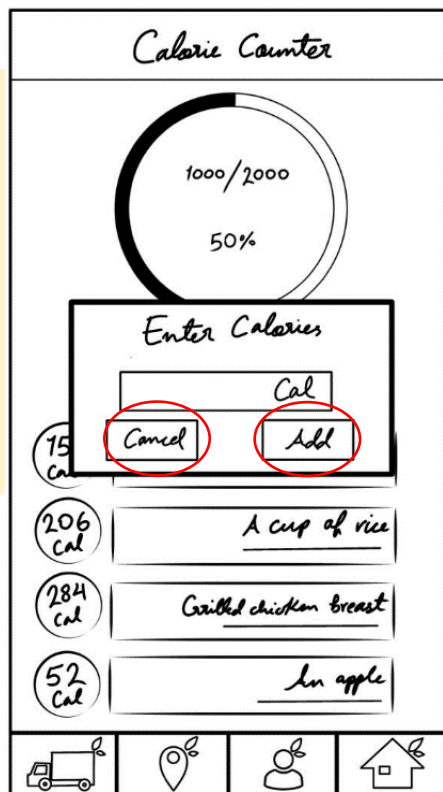
- Calorie counter “Add calories”

From the main menu, the user can click the “Calories” button that will take them to a page where they will be able to add their



If the user knows how much calories they’ve gained from their meal they can directly add it by clicking the “Add calories” button. (Example: They know from the chocolate bar wrapper)

When the user adds the calories in this window, they can click “Add” to save the added calories. If “Cancel” was clicked, the window will close and no calories will be added.

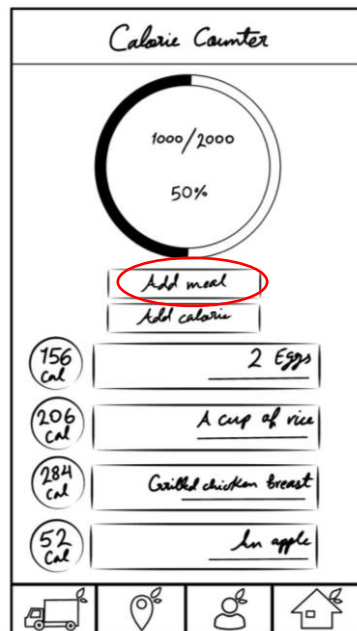


Confirmation message that will let the user know that the calories they entered were added.

# Low-Fidelity Prototyping

## • Calorie counter “Add meal”

From the calorie counter menu, the user can click the “Add meal” button that will take them to the category page. (In this case the user doesn’t know how many calories is the meal they ate, so the app will assist them).




Calorie Counter

1000/2000  
50%

Add meal  
Add calories

156 Cal 2 Eggs  
206 Cal A cup of rice  
284 Cal Grilled chicken breast  
52 Cal An apple



Back Choose Category

Meats Processed Meats  
Fish Fruits  
Vegetables Nuts  
Grains Dairy

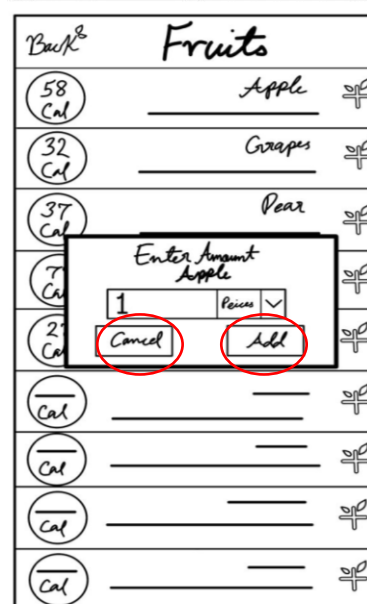
In this page it has a list of food categories they can choose to add their meal. For example, if the user chooses “Fruits” it will take them to a page that has a list of all the different kinds of fruits.

The list will contain the types of fruits and their calories. When the user clicks on the “addition logo” a window will appear where they can add the fruit.



Back Fruits

58 Cal Apple  
32 Cal Grapes  
37 Cal Pear  
79 Cal Figs  
27 Cal Orange



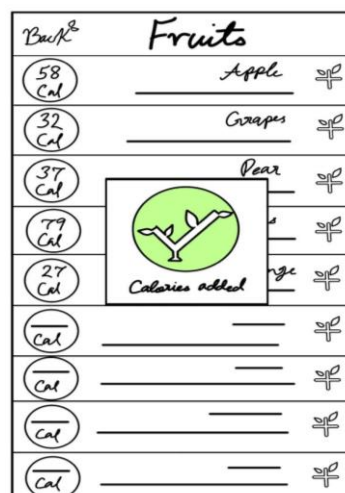
Back Fruits

58 Cal Apple  
32 Cal Grapes  
37 Cal Pear  
79 Cal Figs  
27 Cal Orange

Enter Amount Apple  
1 Pieces  
Cancel Add

In this window, the user will be able to choose the unit of measurement (Piece, grams, cups, spoons) and add it. The application will calculate and add the calories when the user clicks “Add”. If the user clicks cancel, the window will close without adding calories.

Confirmation message that will let the user know that the calories they entered were added.



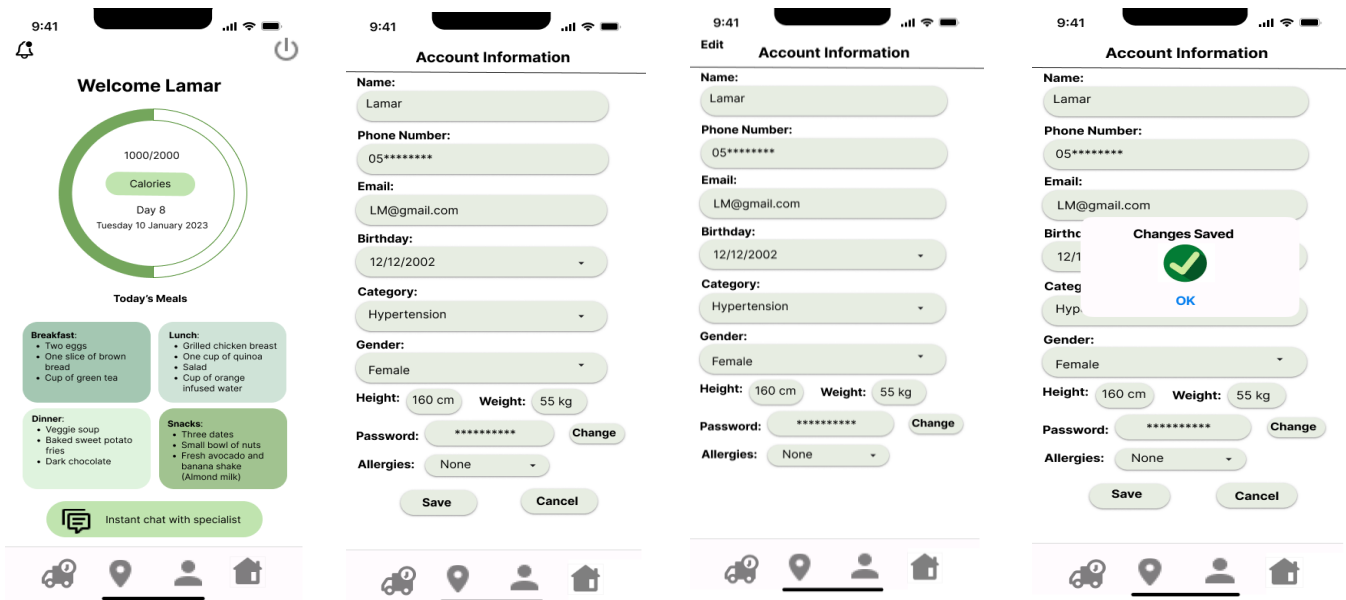
Back Fruits

58 Cal Apple  
32 Cal Grapes  
37 Cal Pear  
79 Cal Figs  
27 Cal Orange

Calories added

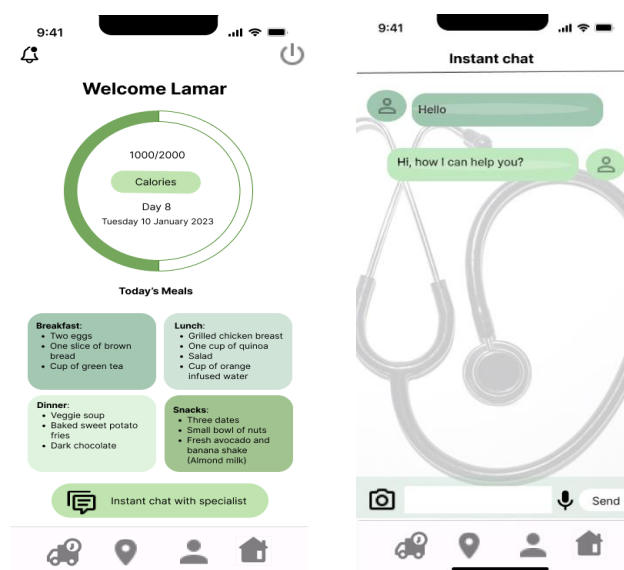
# High-Fidelity Prototyping

## • First task: Account



Users can access their account page by clicking on the account logo at the bottom. They can change any of their information as desired, and the program will notify them that the changes have been successfully saved.

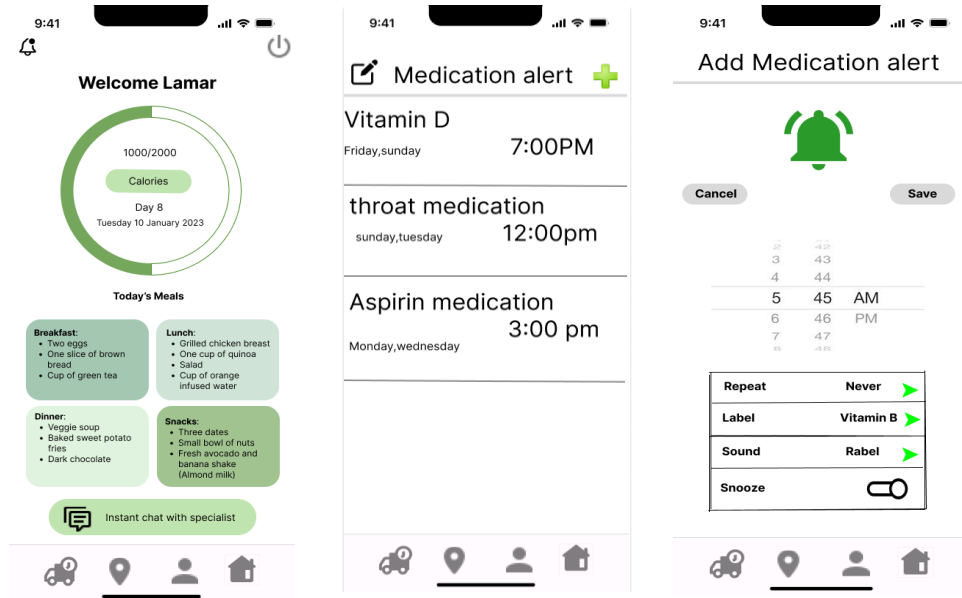
## • Second task: Instant chat with specialist



Users can instantly chat with a specialist by clicking the chat box on the home page, which will direct them to the chat page.

# High-Fidelity Prototyping

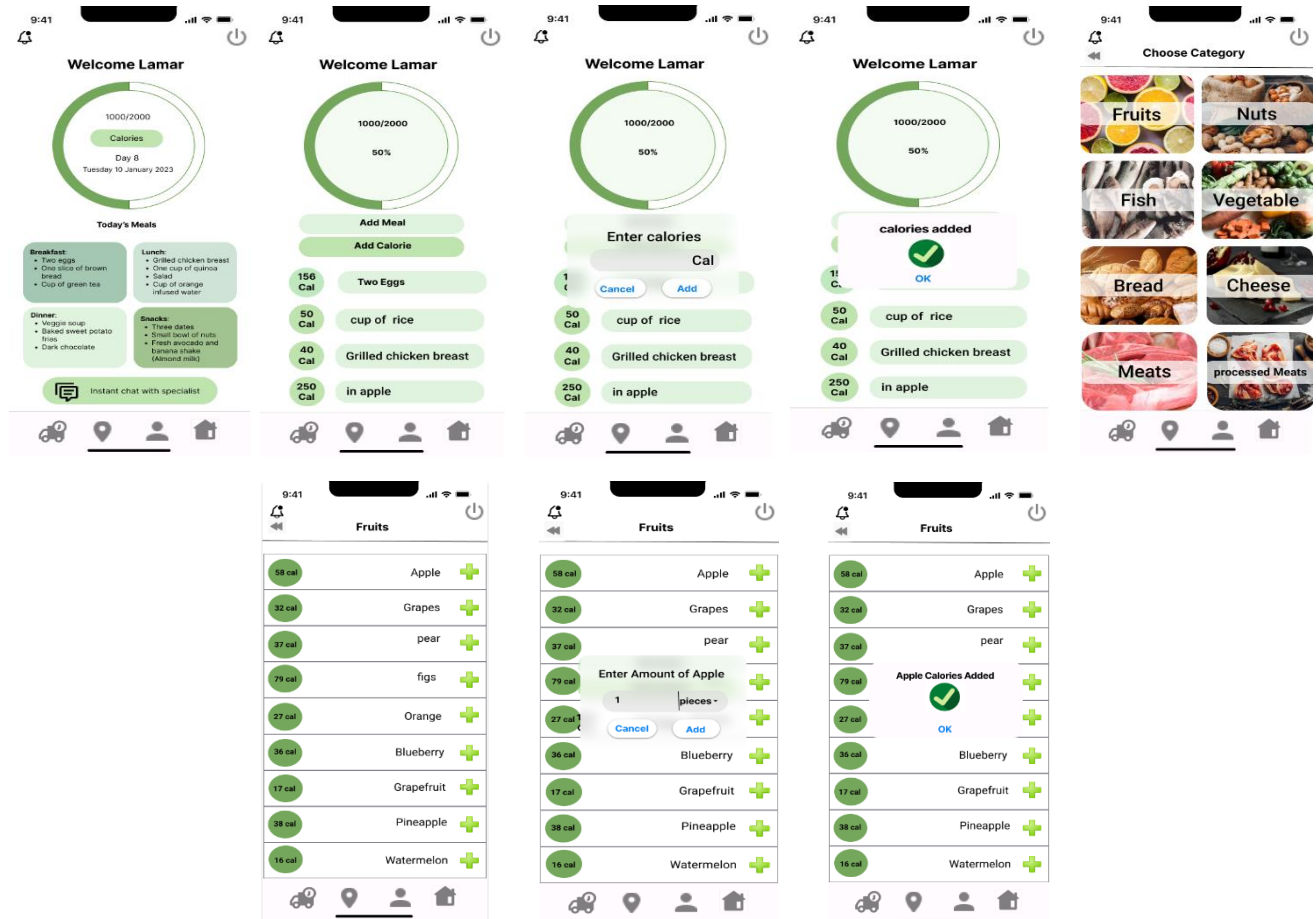
## • Third task: Alerts and notifications



When users click the bell logo at the top left of the page, it will send them to the alerts and notifications page where they can view their current alerts and edit or add new alerts.

# High-Fidelity Prototyping

## • Fourth task: Add calories



Users can add calories to the calorie counter by clicking the “calories” button in the main page. It will take the user to the calorie page where they can see their previous meals, and they have the option to add calories by typing them manually by clicking “add calorie” or click “Add meal” where they select the food type, and the application will automatically calculate the calories for them. When adding calories, the program will notify them that the calories have been successfully added.

# High-Fidelity Prototyping



- Application link:**

<https://www.figma.com/proto/puNNT6pPVAJ0ATe950JmKD/Healthy-Wealthy?node-id=0%3A3&scaling=scale-down&page-id=0%3A1&starting-point-node-id=0%3A3&show-proto-sidebar=1>