

# Research Plan

## Study 1: Semi-structured interview



# Calorie Counter for weight loss

## Background

I spent more than +10 years alone before I get married and at this period I always order fast food and my weight get increased with the speed of light and to be honest, after short notice from being fat I decided to follow a diet. believe me, I follow most of the popular diets available from now in the world 😊, but it's useless because once I lose motivation, I back fat again because I realize it later, I fully love food I love it. so, the only solution it works for me is to be aware of what I eat daily and from here's the idea of the application come. Most people have lacked the knowledge to care about their meals' nutrition. so, the first step is to be aware of what we eating every day. Therefore, we will create a mobile app for adults who desire to lose weight by the calorie-counting diet method.

Our app aims to help you track their daily meal routines by adding the ingredients and getting each ingredient's number of calories.

## Research Goal

Our team wants to learn about how adults' tools to counting calories, including what goals they try to achieve when using these tools. We want to determine what opportunities and needs might exist for improving these methods so that we can use these findings to help us shape the direction we take in developing our product.

## Research Questions

- [Needs] What is essential to stick with the calorie counting method?
  - How do we get our users motivated to daily use?
- [Behaviors] How healthy adults make time to stay fit?
  - How useful is the calorie counting method for weight loss?
- Do they really need other information to stick in their diets?
  - How do users feel about existing products?

## Method

- 30-minute in-person or video semi-structured interview to gather in-depth qualitative data
- The researcher will use the interview script as a guide and ask follow-up questions based on answers from the user

## Recruiting

5 participants

- Adults with a full-time job who:
  - Use the calorie counting app to track the calorie nutrition of food daily to lose weight.
  - Have been using the products for at least 3 months
- To recruit participants, we will send emails to full-time employees including my family and friends who are willing to lose weight.

## Screening Questions

1. What is the primary reason for you to use the calorie counting app?

- a. weight loss
- b. get an idea of ingredients calories
- c. track my weight
- d. All of the above
- e. Other (screened out)

2. What is your primary way to track weight loss?

- a. Have a health instructor (screened out)
- b. Use digital product
- c. Currently, I am not on a diet (screened out)
- d. Other (screened out)

3. How long have you started calorie counting?

- a. Less than a week (screened out)
- b. 3 months to a year
- c. Over a year (screened out)

4. When was the most recent time you have used these digital products?

- a. Within a week
- b. Within a month.
- c. Over a month ago (screened out)

5. How often do you use these weight loss digital products?

- a. Daily
- b. About once a week
- c. 2-3 times a month (screened out)
- d. About once a month (screened out)
- e. Fewer than once a month (screened out)

## Timeline

- Design proposal: Jul 1-3, 2021
- Recruiting: Jul 4, 2021
- Sessions: Jul 5, 2021
- Readout: Jul 28, 2021

## Introduction

My name is Mohammed Elzanaty. Thank you very much for participating in this study. I am currently working on a project related to a calorie counting application. I would love to learn more about your experience of weight loss with digital products. This interview will take about 30 minutes. If you want to leave the session or take a break at any point, please let me know. Do you have any questions before we start?

Do you mind if I record this session for note-taking purposes? The recording won't be shared with anyone outside of our team.

Warm-up questions: [Build rapport. Start with easy questions to get to know the participant]

1. Could you tell us more about yourself?
2. Which diet methods do you want to choose to lose weight?
3. What's the motivation for you to lose weight?
4. Which apps or websites are you currently using for weight loss? Have you tried other apps before?

Probe into needs and behaviors

5. How did you get started using weight loss applications? [Motivation: what did participants hope to achieve?]

Follow-up questions: -

- When did it happen?
  - What was the trigger for losing weight?
  - How did the weight loss applications work for you?
  - What was the learning outcome? Did you reach your dreaming weight?
- 
6. How long have you been using the weight loss application?
    - How did you become familiar with digital weight loss application?
    - (If not digital) Why did you switch to using digital application for the very first time? [Which needs did digital product meet those other types failed to meet]
  7. How often do you study? What motivates you to continue to use the application on a daily/weekly/etc. Basis? [There might be internal motivation "I want to track my weight loss fluctuation visually" and external motivation "motivate me to stick on my diet".]

8. How do you decide about which diet methods may work? Why? [Do users care about progress? Do existing apps do a good job at celebrating progress?]
- Do you have any plans to reach your desired weight?? [Do participants set up goals in the app?]
9. Are you currently on a weight loss diet? If so, what kind of diet?
- Have you used any product for calorie counting method in your weight loss diet?
  - What was the very first product you were using? Why did you switch to other products? [ask what other product]
  - (If a participant is using more than 1 product currently) What do you use each product for?
10. You mentioned you are using “Fitness” what time of day and where you usually use my fitness pal? [Does the participant have a daily routine? Is it spontaneous?]
- Do you have a daily routine to use it?
  - when and where typically do you prefer to use it? (Ex, At noon every day? Are they on a short lunch break? When are they waiting for a bus)?
  - Why do you use it in the mentioned time and location?
11. When was the last time you opened up Fitness? Could you walk me through how you were using this app? [How do people on diet interact with existing tools? Better to ask participants to show than tell]

Observation & follow-up questions:

- Observe what features the participant is using and how the participant uses them.
- Ask what participants like or dislike about each feature, why they like/dislike each feature. Which features do participants not use and why?
- What's on participants' Wishlist for the app?
- If participants talk about frustrations, ask why and their current workarounds.

## Wrap-up

Thank you so much for sharing your experience and insights. Your answers will help our team build a better product. If you have any additional thoughts and comments, I would love to hear about them at any time. I can be reached at [mohammedelzanaty129@gmail.com]. Hope you have a wonderful day.

## Study 2: survey

### How to add nutrition and macro information?

In our previous study, we learned that users prefer tracking the calorie and counting macros simultaneously based on their needs. This is a promising opportunity we may be able to target with our product, but more data is needed to better understand the needs and whether they generalize to the larger population of working adult's people.

### Research Goal

This study focuses on better understanding users' needs related to calorie and macro tracking, as well as better measuring the extent to which these needs are held by the majority of users.

### Research Questions

- How digital weight loss products could support our users to get their desired weight and stay healthy?
  - Which features/functions are useful?

### Method & Recruiting

- Use surveys to collect data from at least 30 working adult's people.
- Test survey questions with 5 volunteers recruited from our engineering team.
- Send surveys to Google fitness group whose answers in our screener meet our recruiting criteria:
  - Use mobile weight loss product at least once a week
  - Have been using digital language learning products for at least 3 months

### Survey Questions

1. Which diet method are you currently following? [Assumption: people might use different method for weight loss diet]
  - a. Keto
  - b. Calorie counting
  - c. Intermittent fasting
  - d. Plant-based diet
  - e. Low-fat diet
  - f. Low-carb diet
  - g. Other
2. In the past months how did you get information for your diet?
  - h. Health instructor
  - i. Personal trainer
  - j. Instagram diet challenge
  - k. Mobile or desktop applications [if respondents do not select mobile, survey ends]
  - l. All of the above
  - m. Other

3. In the past month, which types of mobile products did you use for your diet plan?

(Select all that apply) [current tools]

- a. Calorie counting application like fitness
- b. Instagram
- c. Website in mobile browser
- d. Video platforms (e.g., YouTube)

4. In the past week, how often did you use a mobile app related to your diet? [Frequency]

- a. A few times per day
- b. About once per day
- c. 4-6 times per week
- d. 2-3 times per week
- e. Once per week
- f. Did not use at all [survey ends]

5. Which of the following best describes when you use a weight loss application? [Do participants have a routine?]

- a. I use the weight loss application when I have a block of time to do so [Spontaneous]
- b. I set aside time for using the website application. [has a routine]
- c. The weight loss app reminds me. [The tool does the planning work]
- d. Other (Specify\_)

6. In the past week, how long did it take for you to use the weight loss application each time? [How much time users spend on app]

- a. Less than 15 minutes.
- b. 15 to 30 minutes.
- c. 31 to 1 hour
- d. Longer than 1 hour

7. In the past months, how much weight did you lose using weight loss application?

[Do users have specific weight loss goals?]

- a. Less than 1 kilogram
- b. 1 to 2 kilograms
- c. More than 2 kilograms
- d. Not at all

8. Which of the following describe you better? [to get an idea how can improve the design of app]
- a. I am using the app to control my daily calorie.
  - b. I am using the app because it is so flashy and makes me motivated.
  - c. I am using the app because it gives me the macro tracking option of my daily meal.
  - d. I am using the app because it helps me to stay healthy and give me a chart of my weightloss progress.
  - e. All of the above

9. What is your age?
- a. Under 18
  - b. 18-25
  - c. 26-35
  - d. 36-65
  - e. Above 65

10. How do you keep motivated to stick on a diet? [Review habits]
- a. I have joined a fitness group
  - b. The application helps me to keep motivated, it recommends me various blogs and recipes
  - c. I myself a very strict person
  - d. I lost my interest after a while and broke my diet plan

11. Based on your experience with the weight loss app(s) you are using, how essential were the following features? [What types of achievements/milestones do you care about?]

	Not Necessary	Nice to have	Must have	Does not apply
Track my weight loss in line chart				
Show the macro and nutrition info in a pie chart				
Barcode reader of products				
Ability to follow your friends				