## Meel

A smart nutrition app that aims to assist people by offering end-to-end personalized solutions in all nutritional processes.

## Background

As two software developers and a designer, we put our heads together to build an app that offers tailor-made solutions for their nutrition. Our research showed that incumbent apps don't address individual differences' intricacies. People are still having difficulties in building healthy habits, finding end-to-end solutions that suit their needs, and clearing up the confusion.

Meel is formed as a product that addresses these issues by creating a new mental model around nutrition. We launched the MVP version basing this model that'll be improved with distinctive features to uniform all services about nutrition.

## Meet the team



**Me**Product Designer



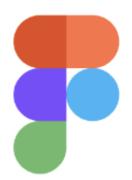
**Hakan**Full Stack Developer



**Ege**Full Stack Developer

## My responsibilities

- Product Strategy
- User Research
- Competitive Analysis
- Interaction & Visual Design
- Prototyping
- Testing

















## Design Process

Part to whole and whole to part.

#### Strategy



Market Trends
Problem to Solve
Aims and Wishes

#### Research



Audiences
Nutritionist Interview
User Interviews
Competitive Analysis

#### Analysis



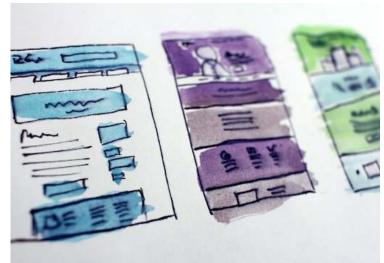
Evaluation Personas

#### Ideation



How Might We?
Card Sorting
Interaction Design

#### Design



Sketches
Wireframes
Style Guide
Features

#### **Test**

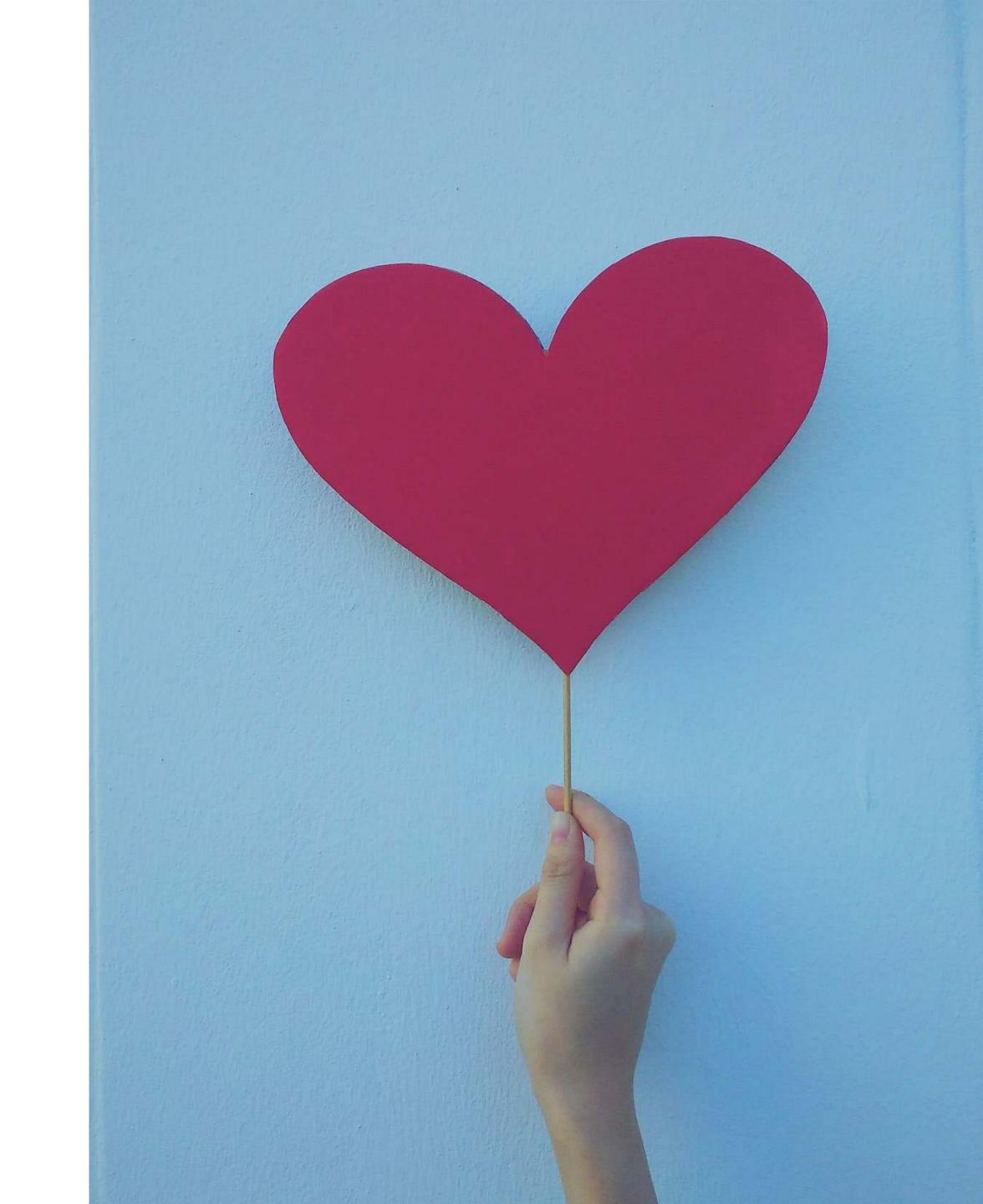


Usability Test
Future Roadmap
Learnings



### Market trends

- Seeing the harmful effects of unhealthy behaviors
- Obesity as a global issue
- Global pandemic threat
- Increase in the types and spread of diseases
- Mistrust in the food industry



#### **Problem to Solve**

## Having difficulties making healthy habits a lifestyle.

- Nutrition needs are different for everyone. People try to combine stereotypical knowledge that does not address personal needs by referring to too many sources.
- They're not able to observe the reflections on healthy behaviors on their bodies in a short period. It affects their determination.

#### We...

## Our point of view makes Meel unique.

For us, nutrition is a subject that;

- · Versatile and contains interrelated and cyclical elements that give insights about the whole.
- Needs a tailored approach that considers the intricacies of individual differences.
- Requires a scientific approach.



# LET FOOD BE THY MEDICINE AND MEDICINE BE THY FOOD.

HIPOKRAT

MÖ 460- MÖ 375

#### Values, Beliefs, Aims and Dreams

## Exactly where we want to be

- Smooth and effortless
- Meaningful outputs
- Inclusive perspectives
- To make the connection between the individual and food visible and healthy
- Be enlightening and pathfinder
- To do all these in a stylish, simple, intuitive, and useful way

## Research

- Secondary Research
- Nutritionist Interview
- User Research
- Competitive Analysis



## Secondary research

- Nutrition blogs
- Social platforms (competitors, nutritionist, food scientists, life coaching)
- Articles
- Dietary guidelines and reports published by government agencies



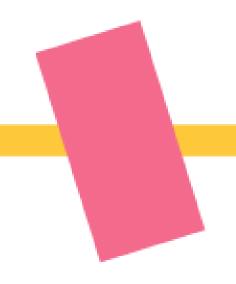
#### **Nutritionist Interview**

### What I am aim to learn from the nutritionist

- What information do nutritionists request?
- Which outputs make sense?
- What are the important factors in the food records?
- How to determine the eating habits of the clients?
- Which methods are used to change unhealthy behaviors?

#### **Nutritionist Interview**

## Requested information



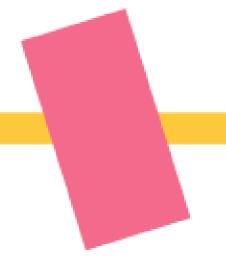
Physical characteristics

Physical activity level

Medical history

Alcohol & Tobacco

Food allergies



Supplements

Eating out habits

**Emotional eatings** 

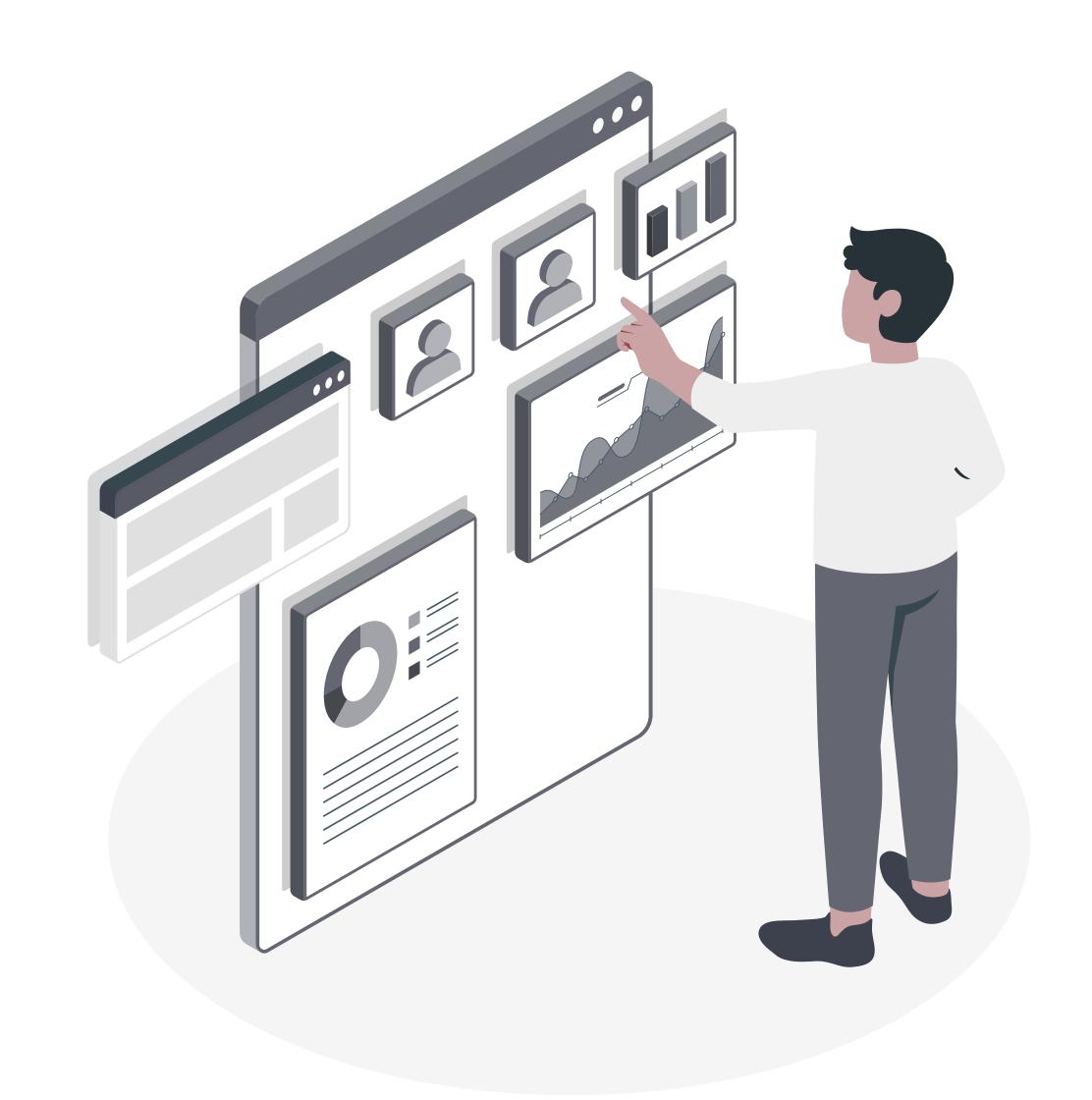
Post dinner eating

Food culture & skills

#### **Nutritionist Interview**

## Turning data into value

- Body measurement & metrics
- Meal frequency & timing
- Meal skip
- Insufficient nutrition values
- Insufficient food groups
- Eating patterns and food choices



#### **User Research**

## Identify target audience

Social media (comments, likes, followers), UX case studies, blogs, brainstorming session.

#### Geographic

• Those who live in major cities.

#### Demographic

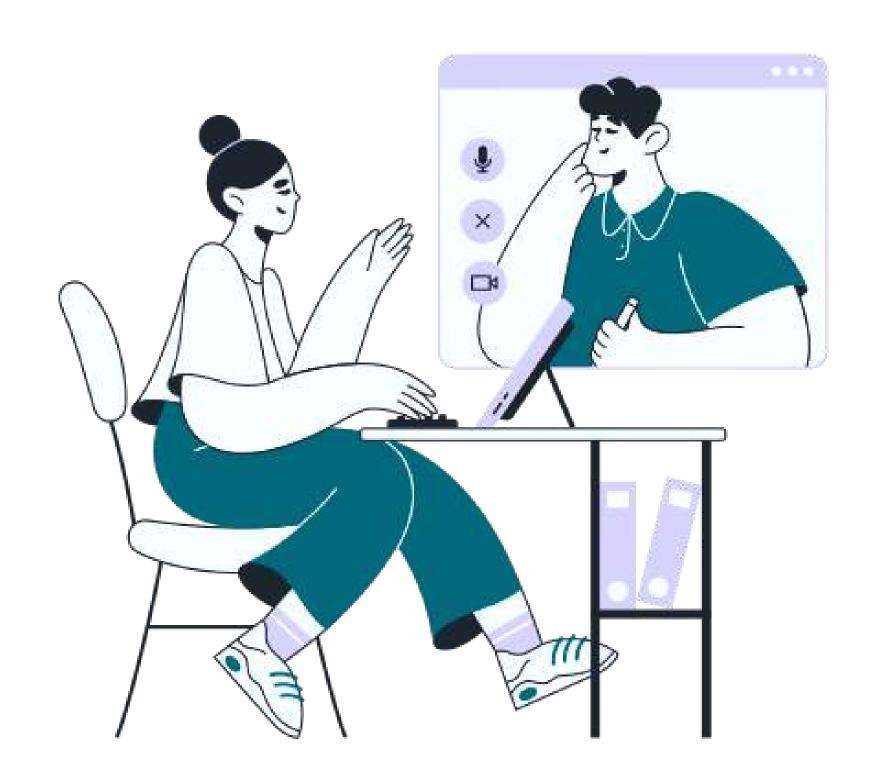
- The education level is high school at least.
- The age range is 20-45.

#### **Psychographic**

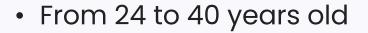
- Those who want to gain or lose weight, weight loss transformation.
- Those who have a regular sports life.
- People who want to try new diet types and recipes.
- People who are interested in curious about what they eat.
- Those who are closely concerned with the food budget.
- People with nutritional disorders and diseases.

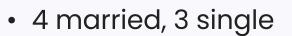
#### **User Interviews**

## Talking to people allowed me to dig deep the details of their relationship with nutrition.

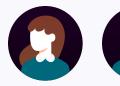


#### **Participants**





• PAL, from novice to advanced





3 female 4 male

#### What...

do you usually do when you're active? are the obstacles to healthy eating? motivates you to eat well? gains or losses are important to you?

#### Can you describe...

your meals?

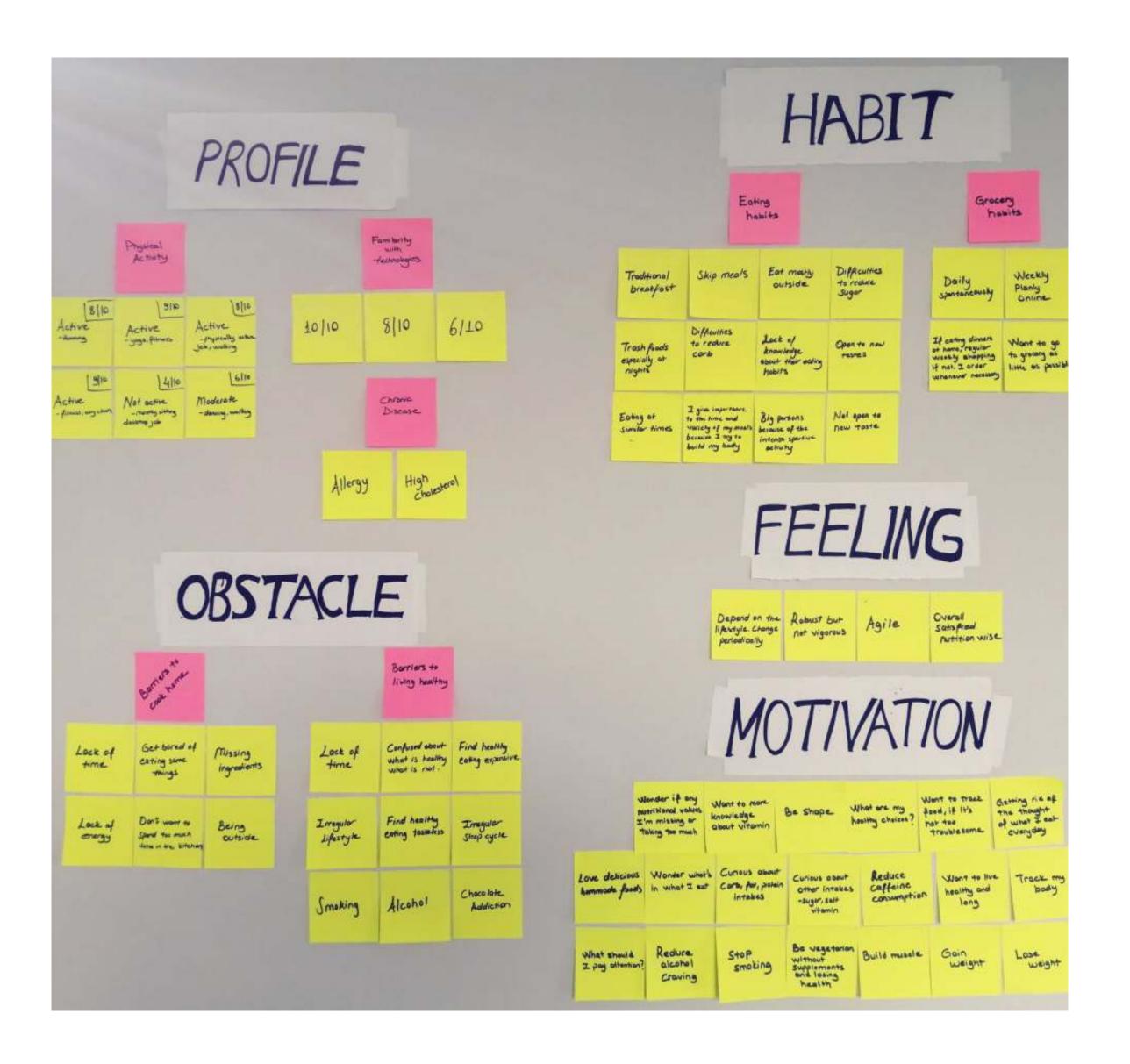
how you decide what you eat every day? the process of doing your grocery shopping list? your feeling about time in the kitchen?

#### How...

is your typical day in your life?
often do you sport?
often do you try different flavors?

#### **User Interviews**

Thanks to the affinity diagram, I captured some patterns in users' habits, emotions, obstacles, and motivations.



#### **User Interviews**

## Takeaways



#### **Common interest**

To have a healthier lifestyle.



#### **Shopping behavior**

Shop as few times as possible, and they do so as quickly as possible.



#### **They wonder**

What's in what they eat and how it affects their body, How they can get rid of unhealthy habits



#### Customizable nutrition experience

Everyone needs different solutions according to their lifestyles, goals, habits, physical activity level, and physical characteristics.





They want to lighten the burden of determining what to eat every day

They find eating out expensive and unhealthy. They're looking for practical and healthy meals which they can cook at home.

They find planned shopping and eating profitable to save time, energy, and money.

They can track food if the process is not too troublesome.

#### **Competitive Analysis**

## Who are top in the market?



#### Myfitnesspal

Broad target audience

The largest database

Losing weight centric approach



#### Lifesum

Enjoyable UI

Most inclusive

Premium



#### Yazio

Track centric approach
Inadequate meal plan



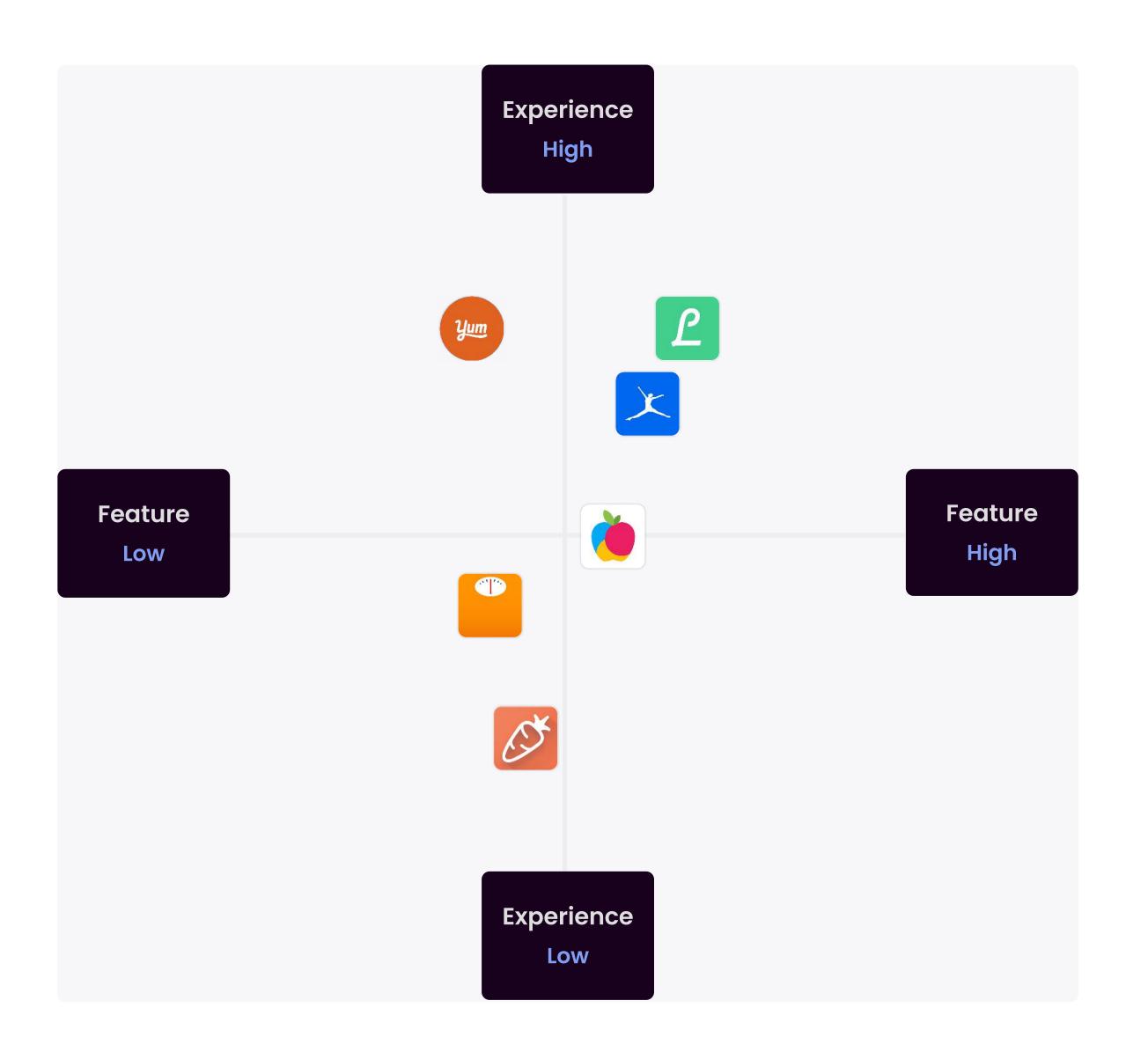
#### Lose it

Bad UI

Too much personal info

## Perceptual map

I created a perceptual map to determine where competitors are, and prioritize my research.



## Competitive matrix

- See the overall picture of competitors
- Identify areas of improvement and gaps between users' needs and competitors' offers.
- Better understand our difference and what makes us unique.

	Myfitnesspal	Lifesum	Yazio	Lose it
Year founded	2005	2013	2011	2008
Location	San Francisco, US	Stockholm, Sweden	Erfurt, Germany	Boston, US
Social	<b>✓</b>	×	<b>✓</b>	<b>✓</b>
Track food	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Track history	×	×	×	×
Barcode scanner	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Food recognition	<b>✓</b>	<b>✓</b>	×	×
Tailored plans	×	×	×	×
Shopping list	×	Premium	×	×
Disease, allergies and pregnancy	×	Allergies	×	×
Daily tips and blogs	MFP blog shares a post everyday.	×	×	×
Explore food	×	×	×	×
Integration with apps	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Meal reminder	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Weight reminder	<b>✓</b>	×	<b>✓</b>	<b>✓</b>
Water reminder	<b>✓</b>	<b>✓</b>	<b>✓</b>	×
Detecting food preferences	×	×	×	×
Customizable dashboard	×	×	×	<b>✓</b>
Export information	Only nutrition data	×	×	×

## Strengths Weaknesses

To understand the strengths and weaknesses of competitors, I give ear to the voice of their users. I tried to understand what their satisfactions, pain points, suggestions are.

#### Strengths

#### Weakness



Compatible with many apps and devices.

Add workouts.

Lose weight centric approach. Fits the American market.

Focus on losing weight mainly.

Complicated search results.

Easy to miss some main features.

Lack of tailored meal plans & insights.

P

Impressive greeting.

Enjoyable UI.

Lifescore test.

Easy to use.

Complicated search results.

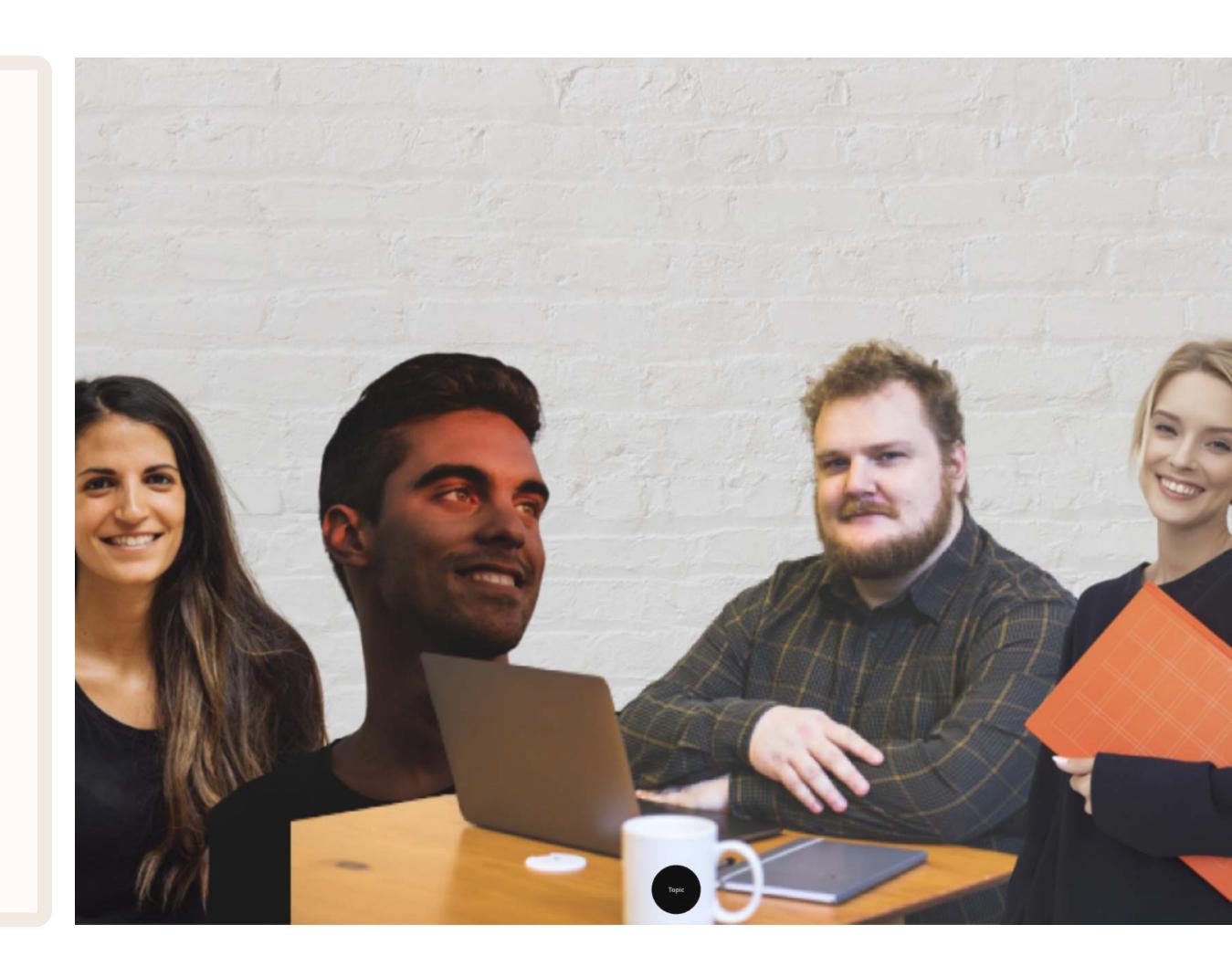
Too much personal information.

Too many steps.

Lack of tailored meal plans & insgihts.

## Analysis

Personas

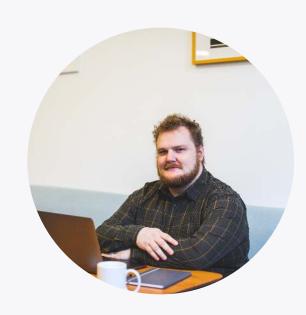


### Personas



#### Defne

Defne is a working mother. While raising children, doing housework, and working full time, she tries to find room for personal time. She prepares meals with her family's support. She takes care of her family's healthy nutrition and tries to be more informed.



#### Serkan

Serkan has a desk job with busy working hours. He has a sedentary lifestyle. He has been overweight for a long time and also has diabetes. He often gets hungry due to frequent changes in his sugar ratio. Although he sees a dietitian, he is still far from reaching his goals.



#### Aras

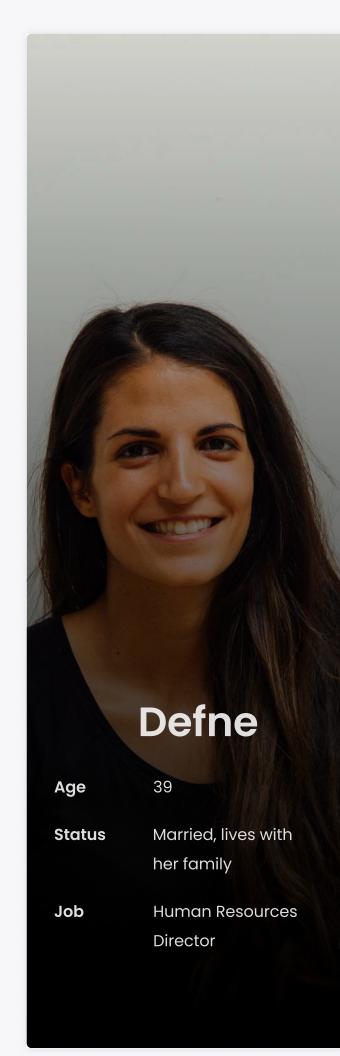
Sport and nutrition have always been a huge part of his life. He is working on building his body with fitness. The variety and size of his portions are important for him since he has intensive physical and mental activities and wants to increase his muscle mass.



#### Nisan

Nisan is a student who lives with her housemates. She tracks food expenses to control her finances.

She's sensitive to animals and enviorement. She tried to be a vegetarian but couldn't do that because of a lack of nutrition and finding expensive healthy vegetarian options.



#### Bio

Defne is a working mother with two kids at age 6 and 12. While raising children, maintaining their homes, and working full time, she tries to find room for personal time. She prepares meals with her family's support. Defne is talented, curious, and practical about the kitchen. She takes care of her family's healthy nutrition as much as she can and tries to be more informed.

Problem solver

Energetic

Responsible

Organized

#### **Behavior**

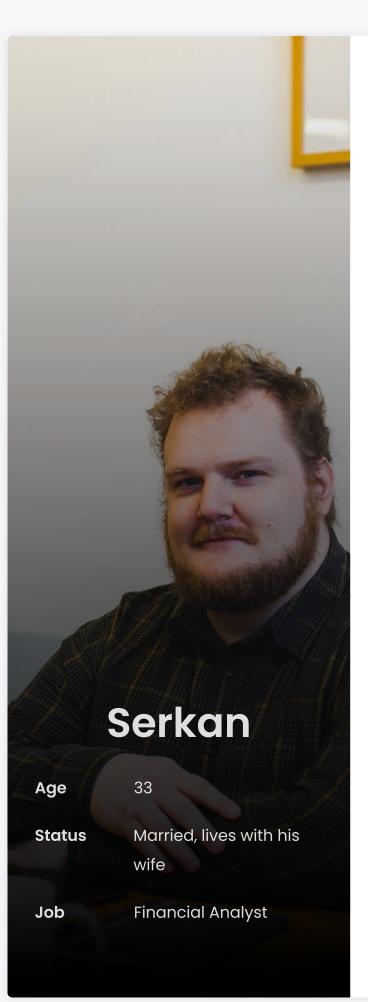
- Walks in the park on the weekend.
- The family eats together at breakfast and dinner.
- Goes to the bazaar one day per week.
- Buys organic foods.
- Prepares practical lunches for her kids and herself.
- Generally cooks on Sundays and doubles up.
- Freezes ingredients and meals to be more practical.

#### Frustration

- Struggles to find time to exercise.
- Each one in her family has different tastes and picks some foods. Difficult to cook food that everyone likes.
- Has trouble getting her kids to eat vegetables.
- Be tired of planning meals weekly.

#### Wishes

- Be more active and do light exercise.
- Get her body in shape, especially wants to get rid of belly fat.
- Keep her family healthy.
- Spend more time with her family.
- Spare time for herself.
- Learn quick and healthy meals to add to their eating routine.
- Learn kitchen tips.
- Be able to monitor whether her kids are getting enough nutrients for their growth.



#### Bio

Serkan has a desk job with busy working hours. He has a sedentary lifestyle. He has been overweight for a long time and also has diabetes. He often gets hungry due to the frequent changes in his sugar ratio. He sees a dietitian. Although he lost some weight with his diet program, he is still far from reaching his goals.

Extrovert

Cheerful

Perceiver

#### Behavior

- Goes to his dietitian biweekly.
- Fills a food record form manually given by his dietitian.
- Likes to eat outside.
- Be fond of fast foods. He tends to unhealthy foods when he's hungry.
- Taste plays an important role for him.
- Sometimes he skips meals or has to eat late hours due to his busy schedule.
- Member of a gym but he does not persist.

#### Frustration

- Feels hungry frequently.
- He doesn't feel full without eating meat.
- Likes junk foods.
- He doesn't show continuity while dieting and exercising.

#### Wishes

- Lose weight.
- Learn delicious healthy choices.
- Make healthy eating his lifestyle.
- Balance his sugar ratio.
- Find the motivation and energy to do sports.
- Stop emotional eating.
- Reduce his portion sizes.



#### Bio

Sport and nutrition have always been a huge part of his life. He is working on building his body with fitness, and also does yoga to increase his elasticity and wellbeing. He spares 5 days for sportive activities. So, he has limited time. He is very knowledgeable and attentive about nutrition. The variety and size of his portions are important for him since he has intensive physical and mental activities and wants to increase his muscle mass.

Extrovert

Energetic

Open minded

Organized

#### Behavior

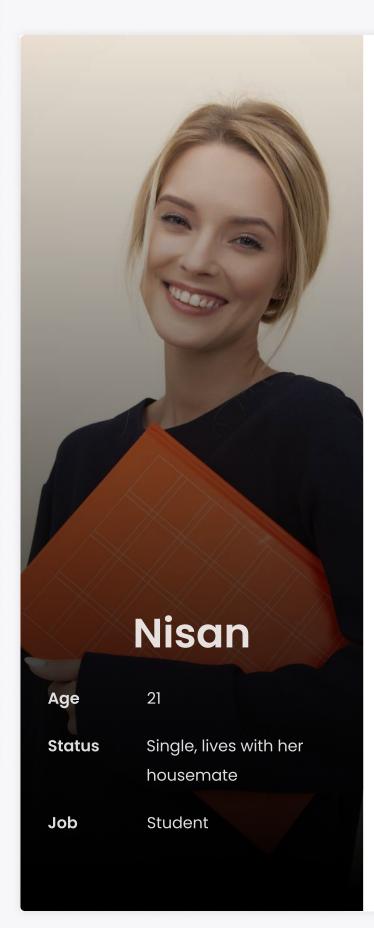
- Has breakfast practically at home.
- Usually eats lunch out after gym.
- Oftenly prepares dinner at home.
- Eats mainly meat.
- Stays away from trash foods.

#### Frustration

- Eats fruit rarely.
- Used myfitnesspal before. He found the app complex and the feedback insufficient.
- Same meals in his eating routine.
- Be tired to decide what he eats every day.

#### Wishes

- Add healthy snacks to his routine.
- Learn practical meals.
- Learn faster ways to increase muscle mass without any supplementals.
- Add variety to his eating routine, especially with greens and fruits.
- Track his foods.
- Be able to cook his meals in general.
- A specific plan which suits his needs or guides what to eat.
- Nourish with high-fiber foods more frequently.



Nisan likes going out with her friends and being socially active. She is sensitive about environmental issues. She tries to reduce her damage to the earth. Nisan, an animal lover, has a cat. She tried to be a vegetarian, but she couldn't do that. She felt weak because of being underweight and unhealthy choices.

Nature lover

#### **Behavior**

- Swims regularly.
- Eats out at least three days a week.
- Prepares dinner with her housemates, and they eat together.
- Tracks her grocery expenses by taking notes.
- Prepares practical lunches for her kids and herself.
- Eats mostly salad and sandwiches for lunch at university.

#### Frustration

- Eats carbs mainly when she tries to be a vegetarian.
- Does not know how to eat vegetarian.
- She finds limited and expensive healthy vegetarian options that she can order.

#### Wishes

- Gain some weight.
- Be vegetarian without being unhealthy.
- Be able to track expenses more easily.
- Learn the impacts of what she eats on the environment.
- Reduce food waste.
- Be able to cook his meals in general.



## How might we?

A brainstorming session with my teammates to find sparking and innovative ideas.

#### **HMW**

ensure the entire track process is fast and intuitive?

#### **HMW**

make the nutrition data easily understandable and informative?

#### **HMW**

make the nutrition content attentiongrabbing and meaningful?

#### **HMW**

help users improve their grocery shopping experience?

#### **HMW**

make the planning process customizable?

#### **HMW**

make the app where users exchange information and enjoy this interaction everyday?

### Time to evaluate some of things what I've learned so far

#### How might we ensure track process is fast and intuitive?

- Effortless and efficient,
- Target-oriented, as simple as possible,
- Turning the information into valuable outputs to motivate the user to maintain their continuity,
- · Avoiding inconsistencies in nutrition values,
- · Avoiding complexity in search results,
- User friendly measurements

### How might we make the nutrition data easily understandable and informative?

- · Visual richness, easy readability,
- Helping users to gain insights into the whole by obtaining piecemeal information,
- · Not only showing numbers, explaining what they mean to them,
- Aiming to educate users to be able to interpret their progress by themselves,
- · Customizable,
- Food group, body, measurements, indexes, meal analysis.

#### How might we make the nutrition content attention-grabbing?

- · A feed that has a scientific approach,
- Recipes, blogs, clips, exercises, videos,
- · Aiming to educate users according to their interests in nutrition,
- Give information about food. (Values, frequency of eating, benefits, season, history, etc.)

## How might we help users improve their grocery shopping experience?

- An editable grocery list that contains average estimated prices,
- Intertwined with other modules,
- Be able to buy products on the list by using delivery services.

## Card Sorting

I carried out a card sorting exercise to organize features into sensible categories. This exercise helped me to label navigation and build information architecture.

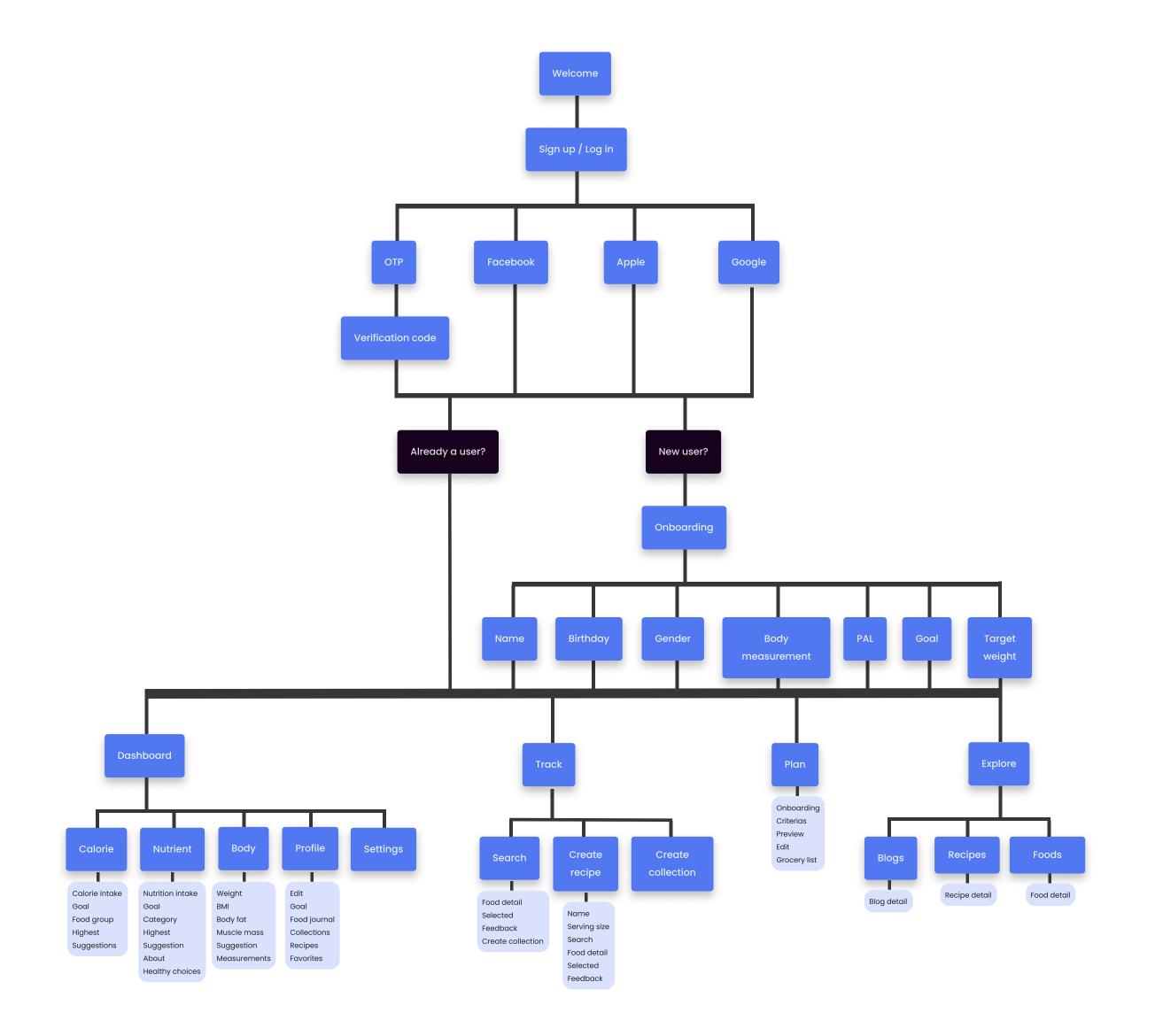
#### Cards to solve Recipes History Restrictions Track Collections Macros and Suggestions Body Insights micros Plan Diets Pattern Allergies Blog Goals Food search **Grocery list**

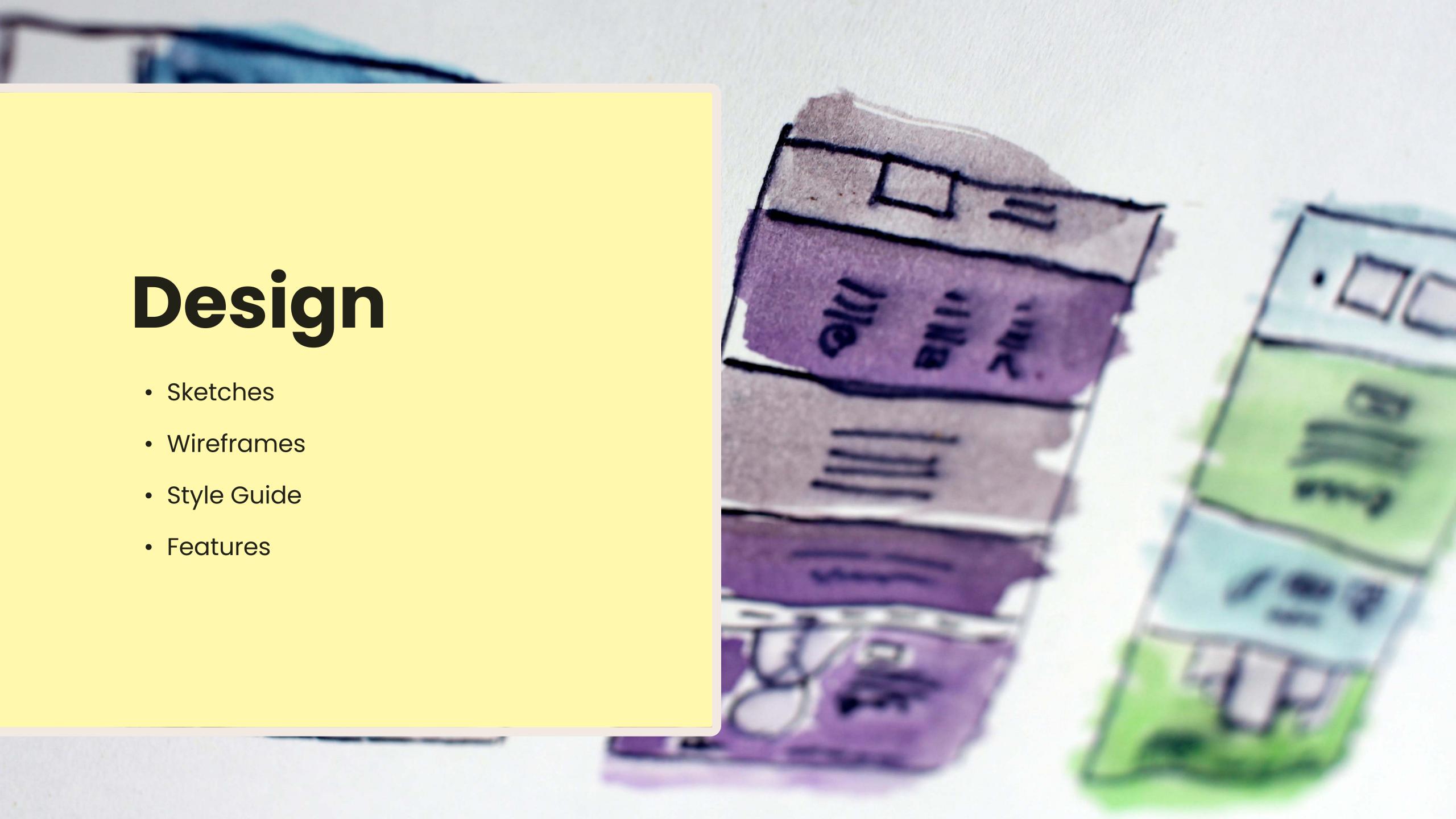


## Sitemap

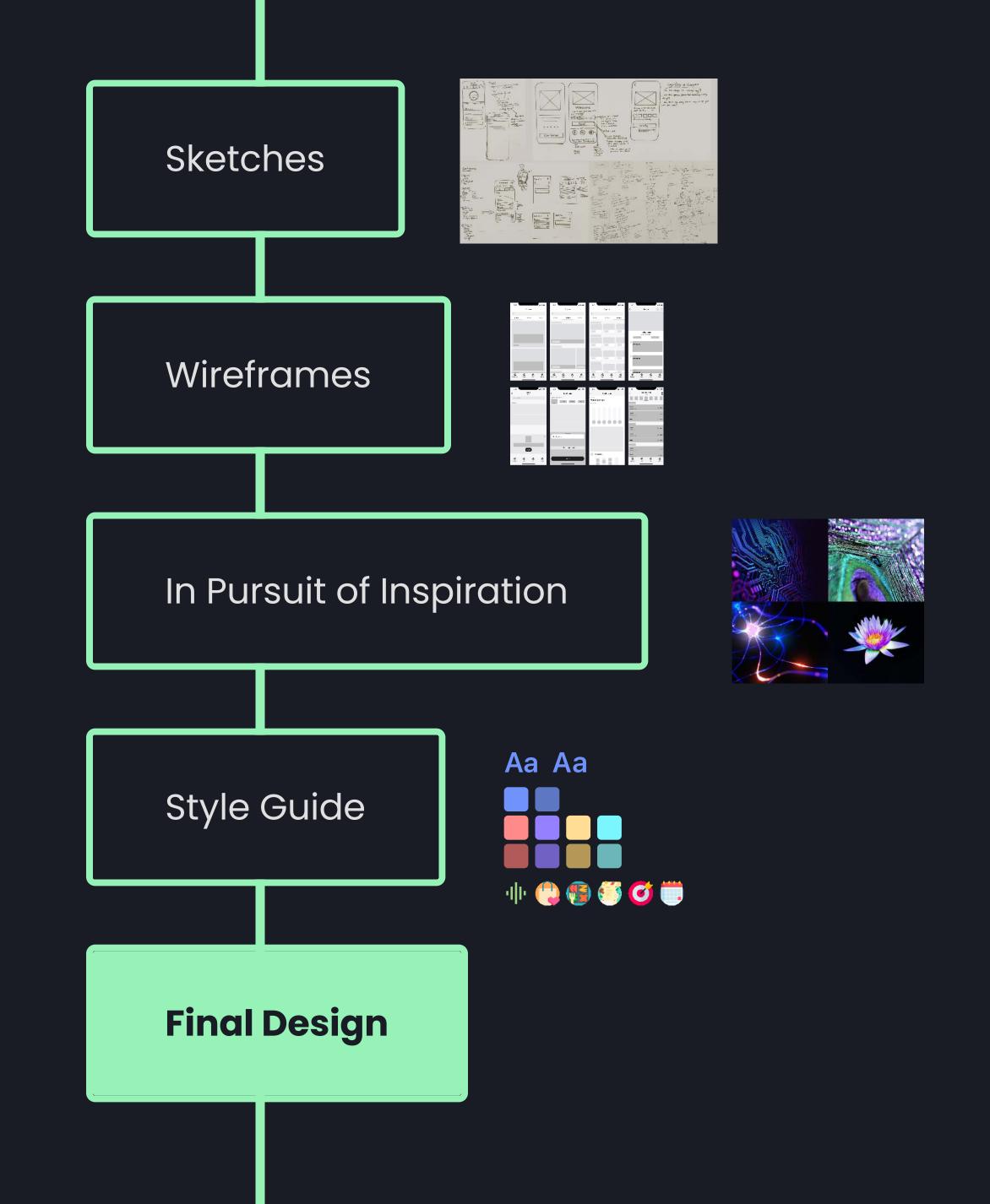
After deciding what features to prioritize, I designed a basic information architecture based on results from card sorting.

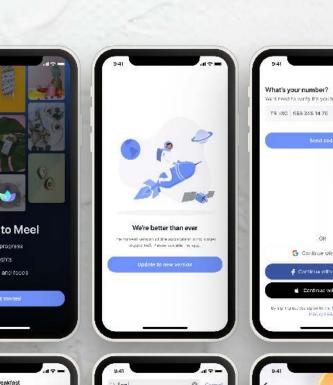
Understanding how Meel works cleared up the fog in our minds and reduced our mental burden while keeping the app in our minds by providing the app visible.

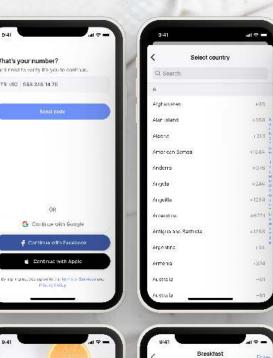




## Throughout the Final Design

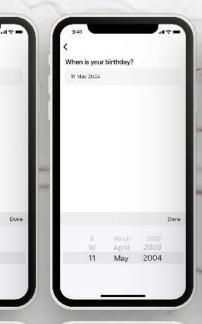


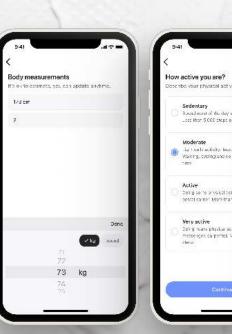


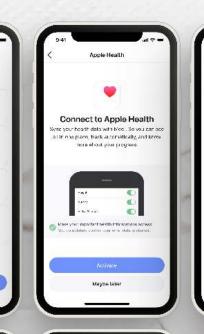


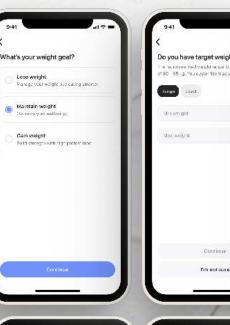




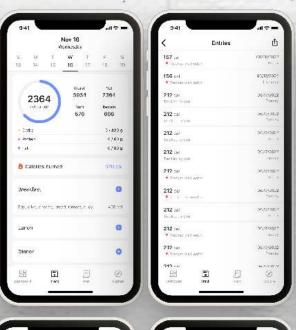


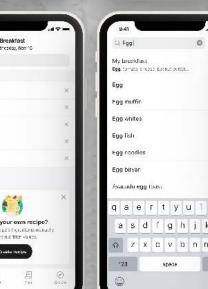




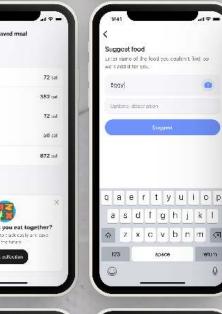


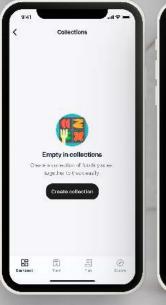


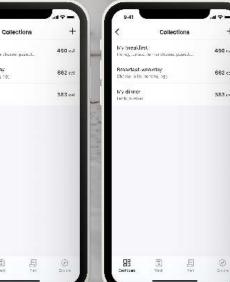


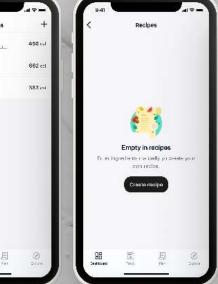


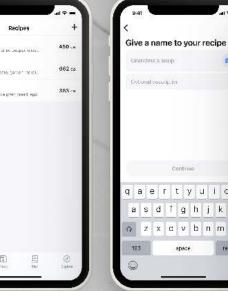


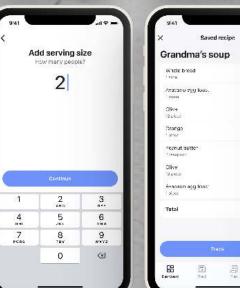


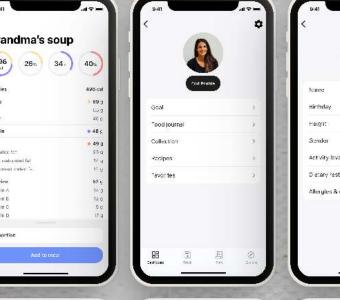








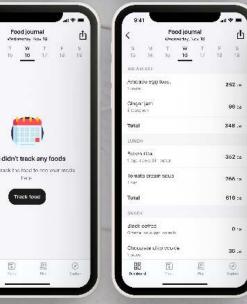




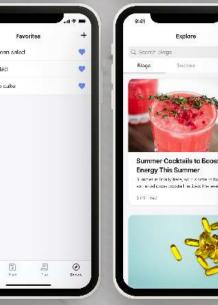






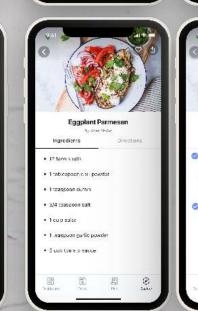




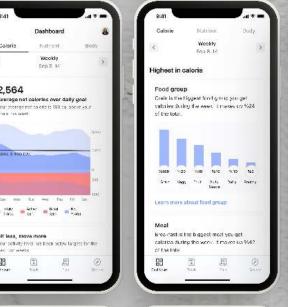




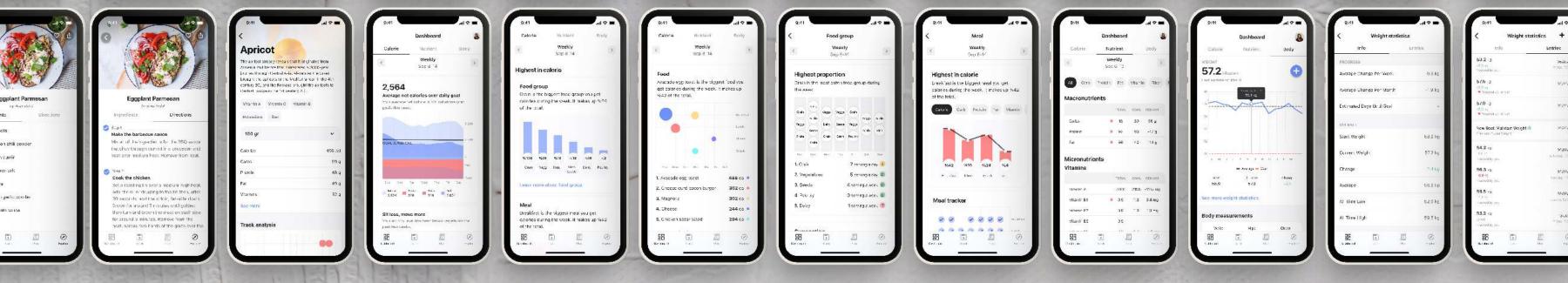














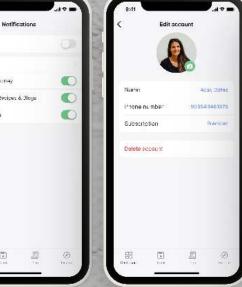


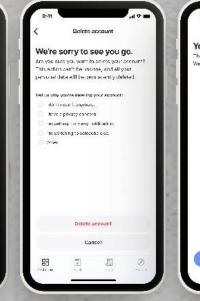




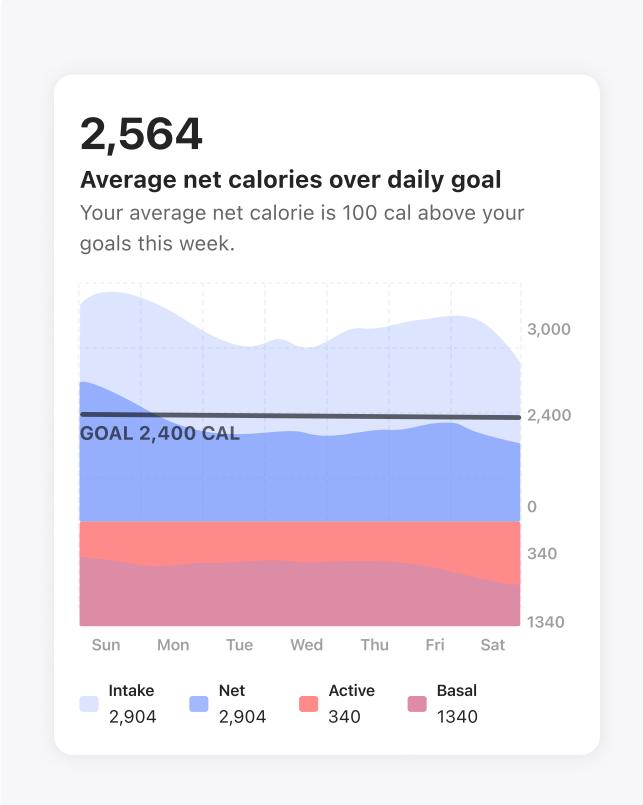


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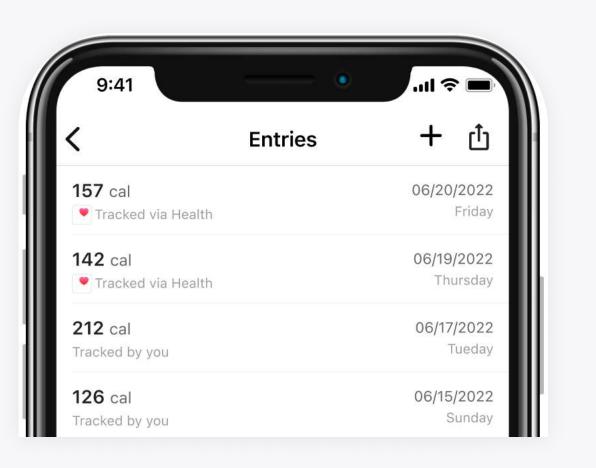
## Meel brings a different approach to calorie analysis.



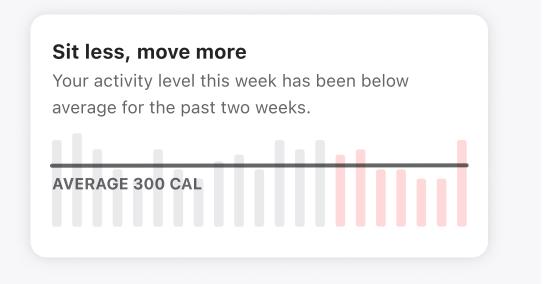
Users can see intake calories with active and basal calories burned simultaneously. They can understand where they are on the way to reaching their weight goals at a glance.

Goal is adaptive according to changes in the users' factors instead of being fixed. Same with basal calories. So, users have more consistent data about their calorie calculator.

Users can track active calories manually or provide automatic transfer via Apple Health. They can see all in one place and share.



Whether the trend is positive or negative, Meel works to keep the inner motivation of the user high to encourage them to have an active life.



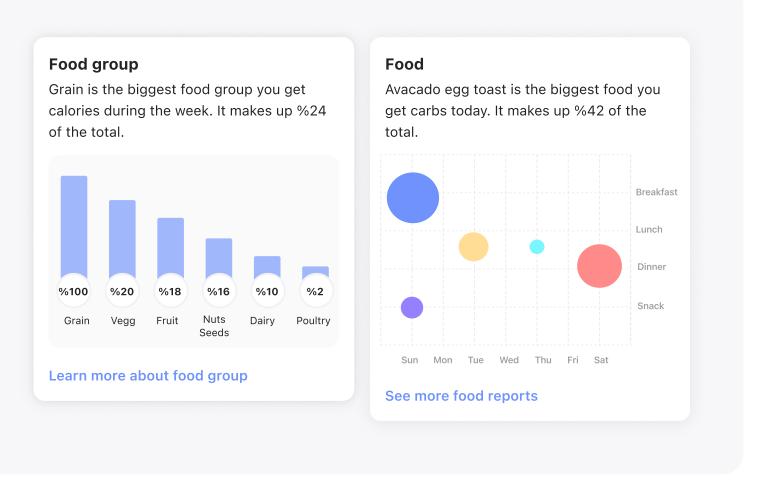
## Build awareness of eating habits

As users track food, they can get detailed information about themselves.

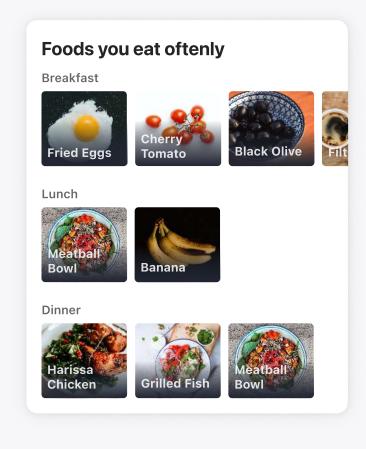
Users can see the distribution of meals separately for all nutritional values.



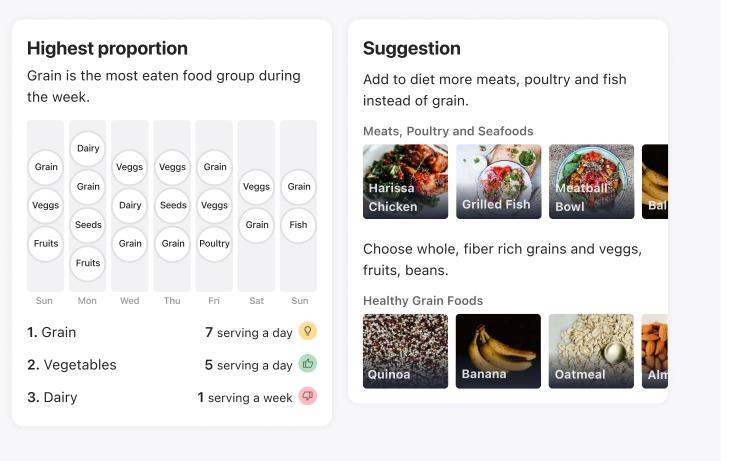
Users can learn from which food and food group they get the most nutritional value.



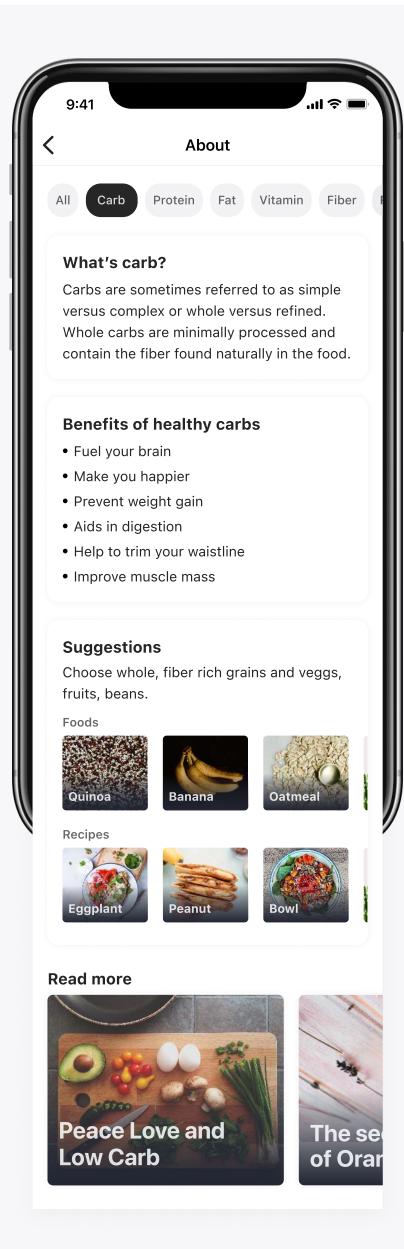
Users can see the most frequently eaten foods at each meal.



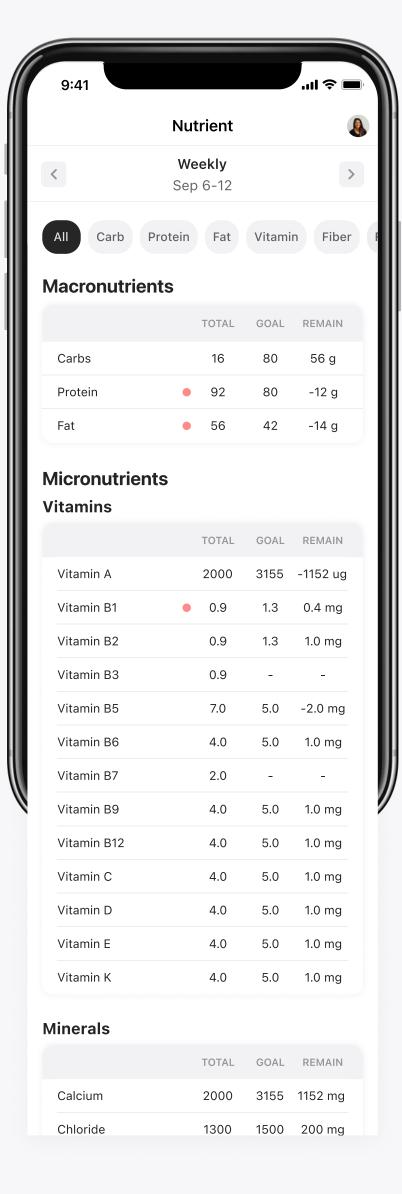
Users find out what food groups you get too much or too little. Try the recipes we recommend to balance the distribution according to your taste.



Not only showing numbers. Meel aims to help users to gain insights into the whole. Users can learn which foods are rich in relevant nutritional value. They can find healthy recipes and interesting content about these foods.

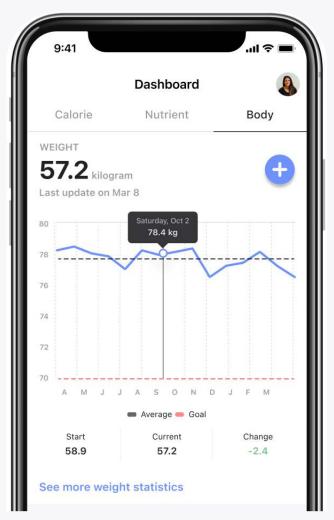


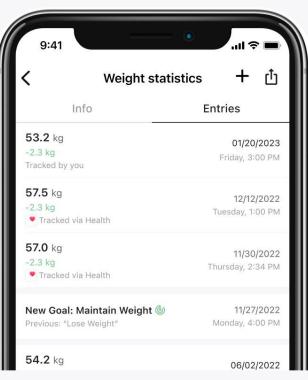
They can see all nutritional values in one place.
They can see at a glance how much they've taken and how much is left to reach their goals.

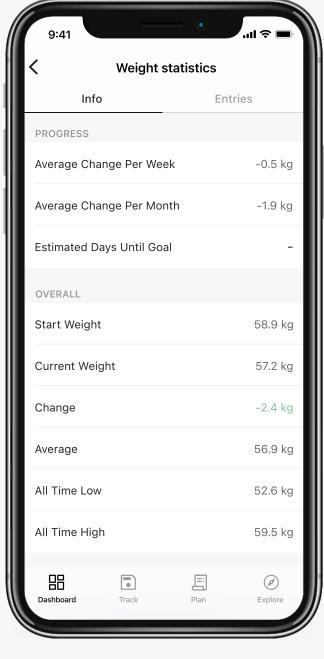


Users can follow weight progress and entries that they can share.

They can even see estimates of how much time you need to spend to achieve your target weight.







Body metrics are measuring tools that provide a better understanding of health levels.

Waist 0.0	Hips <b>57.2</b>	Chest <b>92.0</b>
Neck	Upper arm 0.0	Thighs 93.0

BMI Underweight How can I gain weight?	<b>18.5</b> % Healthy: 20.0-24.9
<b>BMR</b> Minimum energy required at rest.	1504.8
<b>Body Fat</b> The percentage of your body that consists of fat.	<b>20.5</b> % Healthy: 20-24.9
<b>Lean Body Mass</b> The percentage of your body tha consists of fat.	<b>48.3</b> kg t Healthy: 50-65
<b>WHR</b> Waist to hips ratio.	<b>0.58</b> Healthy: <0.80
<b>WtHR</b> Waist to height ratio. Abdominal fat.	<b>0.58</b> Healthy: <0.80

## Test

- Usability Testing
- Future Roadmaps
- Learnings



## Usability Testing

I conducted a small usability test to find any loopholes in the app and see if my solutions work well.



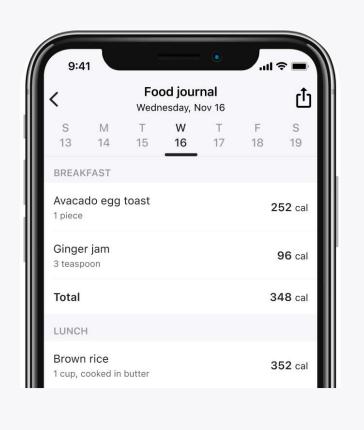
#### **Tasks & Results**

Task: Track Food

Tracking food is a breeze. They just wished for a more colorful UI.

Task: Share Food Journal

They liked seeing and sharing what they ate, but they wished the food journal feature would be more visible and accessible.

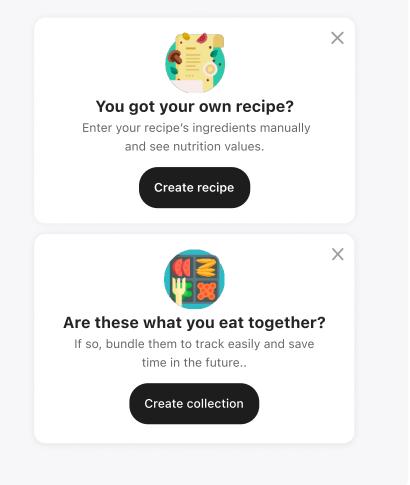


Task: See the Progress

They loved to be able to access such detailed information by only tracking their foods. Especially they liked to see what food group is missing or excessive.

✓ Task: Create Recipe & Collection

Creating a collection is a time saver as they eat the same foods regularly. Buttons to create a recipe and collection are grabbing attention and are clear.



## Roadmap

- Purchase feature from the grocery list
- Tailored meal plans
- An inclusive feed for exploring content, videos, and events about wellbeing
- Conduct A/B tests
- Enrich UI
- Offer solutions for users having diseases, allergies, and diets
- Carbon footprint, impacts on environments



## Learnings

We spent our time enjoying and learning a lot from beginning to end.

We still have a lot to do. We released the MVP version. However many features lie in our minds and hearts. And releasing MVP, which is the basis for realizing our ideas, and getting closer to the realization of our ideas step by step, creates a feeling of excitement in all of us.



