

# Icy Meal – Case study

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Manuel La Porta



# Initial Prompt

Design an app that suggests recipes based on what's in your fridge.

# Project overview



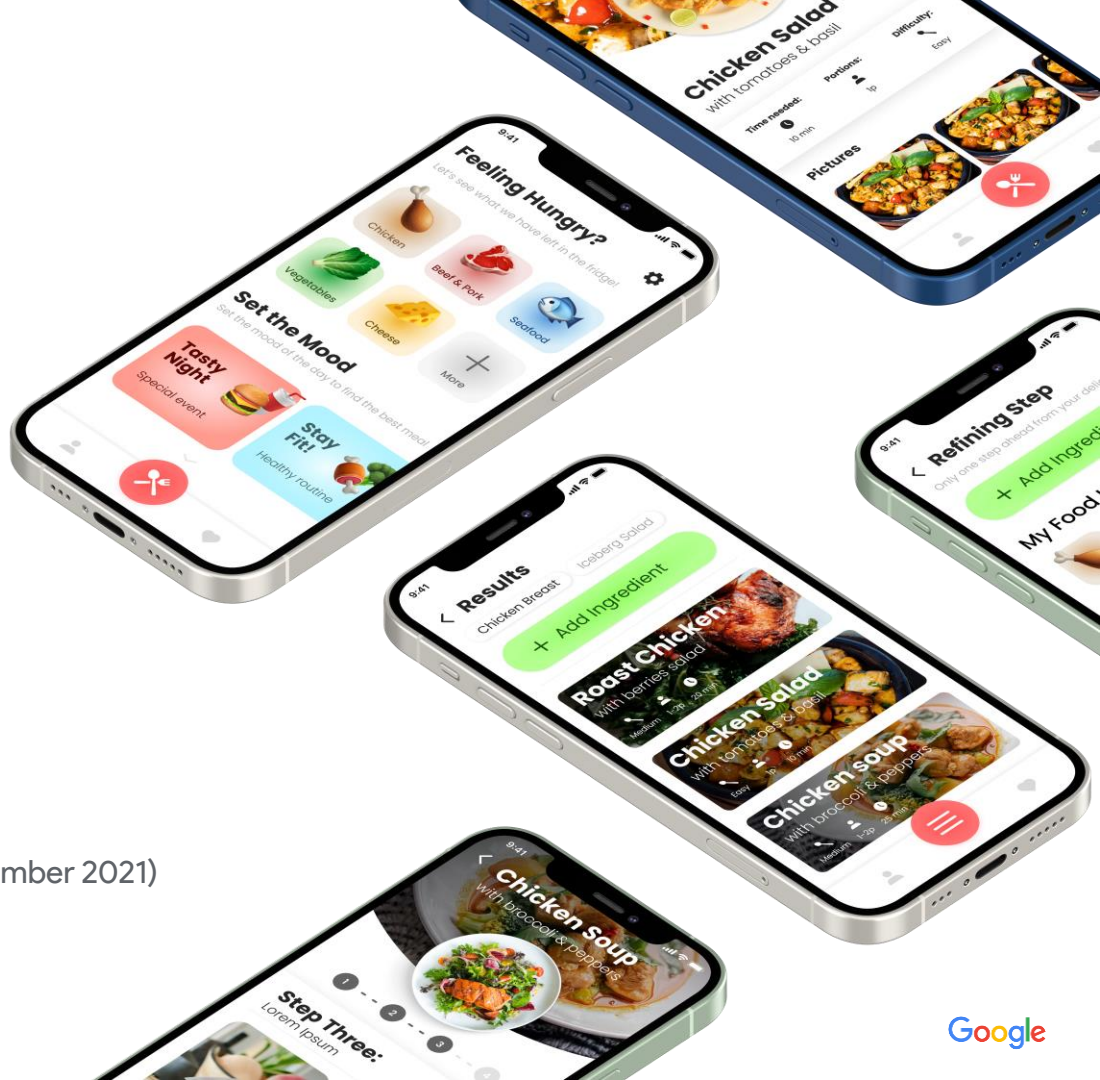
## The product:

A useful app that gives suggestions and come up with recipes based on what you have left in the fridge.



## Project duration:

Autumn Project. (from October to November 2021)



# Project overview



## The problem:

People rapidly become obsessed with specific meals, especially when they have not the right amount of time to come up with new recipes or they can't just go out to the grocery store.

Not always these meals are healthy or recommendable.



## The goal:

A proprietary app which helps people to expand their diet and make them eat healthier, in an affordable and rapid way.

**All of this using anything but the things left in their fridge.**

# Project overview



## My role:

Lead UX Designer



## Responsibilities:

- Brand identity definition
- User Research
- Wireframing
- UI Prototyping

# Understanding the user

- User research
- Personas
- Problem statements
- User journey maps

# User research: summary



I conducted researches with the specific aim to define at least 2 different groups of people with different age spans who don't have much time to dedicate cooking or who just believe that a healthy diet always goes with excessive amount of money . The groups helped me to define a specific empathy map and better understand users' needs overall.

The results were significantly aligned with the first assumptions I made upfront about the struggle users feel whenever they have to think about new recipes in a context where the fridge is almost empty and especially when they have not much time.

# User research: pain points

1

## Time

When it comes to hunger, time hardly could be an ally. A healthy diet requires time, this is especially true when who cook is not a professional or they don't have the right kinds of ingredients at their disposal.

2

## Food Scarcity

When the fridge is almost empty is comprehensible to rely on fast or even junk food to satisfy our needs.

3

## Prejudice & Boredom

Diving in cooking new recipes might worry at first. Especially if users are newcomers or they are just bad at it.





## Ally Cross

**Age:** 31

**Education:** Economics Degree

**Hometown:** Orlando, Florida

**Family:** Lives with her boyfriend

**Occupation:** Employed

*“Due to my job I almost forgot to eat most of the time. Even though I enjoy cooking overall.”*

### Goals

- Prevent any distractions during work sessions.
- Find a way to eat healthily and don't waste time.

### Frustrations

- Not having much time to dedicate to his diet.
- Lack of time for cooking better meals.

Ally completely fulfil the definition of a “workaholic person”. She is a force of nature, and she enjoys her job more than anything else. However, that might distract her with her hobbies and needs such as eating healthy and having time to dedicate to cooking new strange recipes. Her job takes most of her days, so she usually ends up exhausted and unwilling of doing anything complex.



## Luca Pisanello

**Age:** 22

**Education:** High school

**Hometown:** Rome, Italy

**Family:** Single, lives alone

**Occupation:** Unemployed

*“I find working out a basic need for myself, but I end up ruining everything when I forgot to go to the supermarket to refill my fridge”*

### Goals

- Being able of having the strength of working out more efficiently.
- Be less worried about the food he eats when he lacks of ingredients.

### Frustrations

- Having the fear of finding his kitchen only full of junk food.
- Being hungry and less willing of choosing complexity over fast food.

Luca is extremely obsessed with working out, it could be for him, he would work out every moment of his life. However, he fears he won't have so much time to do that when he will finally find a job. So he would become more efficient with his outdoor session and also with food selection. In this regard, one of his major struggles manifests when he has not had the right ingredient to make healthy recipes, ending up eating junk food to compensate for this lack.

# Users Story



*“As a dedicated worker, I want to be able of cooking healthy meals in a short period, so that I can prevent relying on junk food and spoil my diet.”*



*“As a fitness lover, I want to be less worried about what I eat when there is a lack of healthy food so that I can concentrate on other daily activities.”*

# Users Story



## **Persona: Ally**

Goal: Consume a healthy lunch in a short period of time

# User journey map



## Persona: Ally

Goal: Consume a healthy lunch in a short period of time

ACTION	Browse the web	Pick the recipe	Follow the instructions	Get everything done
<b>TASK LIST</b>	<p>Tasks</p> <ul style="list-style-type: none"><li>A. Navigate the web from a device</li><li>B. Find the website that suits her the most.</li></ul>	<p>Tasks</p> <ul style="list-style-type: none"><li>A. Check the ingredients she has in the fridge.</li><li>B. Browse the website</li><li>C. Pick the most useful recipe</li></ul>	<p>Tasks</p> <ul style="list-style-type: none"><li>A. Read the recipe</li><li>B. Follow the instructions.</li><li>C. Hope everything goes fine.</li></ul>	<p>Tasks</p> <ul style="list-style-type: none"><li>A. Finish cooking</li><li>B. Check the results and be sure it matches the recipe on the web</li><li>C. Eat</li></ul>
<b>FEELING ADJECTIVE</b>	<p>User emotions</p> <ul style="list-style-type: none"><li>• Lost</li><li>• Curious</li><li>• intrigued</li></ul>	<p>User emotions</p> <ul style="list-style-type: none"><li>• Disappointed</li><li>• Happy</li><li>• Fulfilled</li></ul>	<p>User emotions</p> <ul style="list-style-type: none"><li>• Indecisive</li><li>• Firm</li><li>• worried</li></ul>	<p>User emotions</p> <ul style="list-style-type: none"><li>• Fulfilled</li><li>• Engaged</li><li>• Disappointed</li></ul>
<b>IMPROVEMENT OPPORTUNITIES</b>	<ul style="list-style-type: none"><li>• A place where you can find all the recipes.</li><li>• A provider that links the user to every existent cooking websites.</li></ul>	<p>Area to improve</p> <ul style="list-style-type: none"><li>• Reduce the time required to find the right recipe based on the ingredients she has.</li></ul>	<p>Area to improve</p> <ul style="list-style-type: none"><li>• Make the UX as fast and easy as possible</li><li>• Use clear instruction as well and pictures and video tutorial.</li></ul>	<p>Area to improve</p> <ul style="list-style-type: none"><li>• Being sure to divide every recipe into difficulty levels and allow users to save them for next times.</li></ul>

# Problem statements

## Problem statement:

Ally is an worker who needs a faster way to eat healthy food because she want to focus more on her job.



## Ally Cross

**Age:** 31

**Education:** Economics Degree

**Hometown:** Orlando, Florida

**Family:** Lives with her boyfriend

**Occupation:** Employed

*“Due to my job I almost forgot to eat most of the time. Even though I enjoy cooking overall.”*

## Goals

- Prevent any distractions during work sessions.
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- Not having much time to dedicate to his diet.
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Ally completely fulfil the definition of a “workaholic person”. She is a force of nature, and she enjoys her job more than anything else. However, that might distract her with her hobbies and needs such as eating healthy and having time to dedicate to cooking new strange recipes. Her job takes most of her days, so she usually ends up exhausted and unwilling of doing anything complex.

# Problem statements

## Problem statement:

Luca is a youngster who needs to prevent eating junk food because he wants to focus more on others activities.



## Luca Pisanello

**Age:** 22

**Education:** High school

**Hometown:** Rome, Italy

**Family:** Single, lives alone

**Occupation:** Unemployed

*“I find working out a basic need for myself, but I end up ruining everything when I forgot to go to the supermarket to refill my fridge”*

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# Competitive Audit

- Goals & Methods
- Case study Navigation



# Goals & Methods

## Objective

The main goal of Icy Meal is to give users the opportunity to create fancy and healthy recipes with just the things they have in their fridge.

We audited other industry competitors to understand how the Icy Meal app compares

## Research Questions

Are they attracting the audience that they say they are speaking to?

How does their app look and feel?

Does the design complement the product?

Will the user get confused as they navigate through the app?

## Procedure

We reviewed these aspects of the competitors and their app design:

- Audience
- First thoughts
- User Interaction
- Visual Design
- Contents

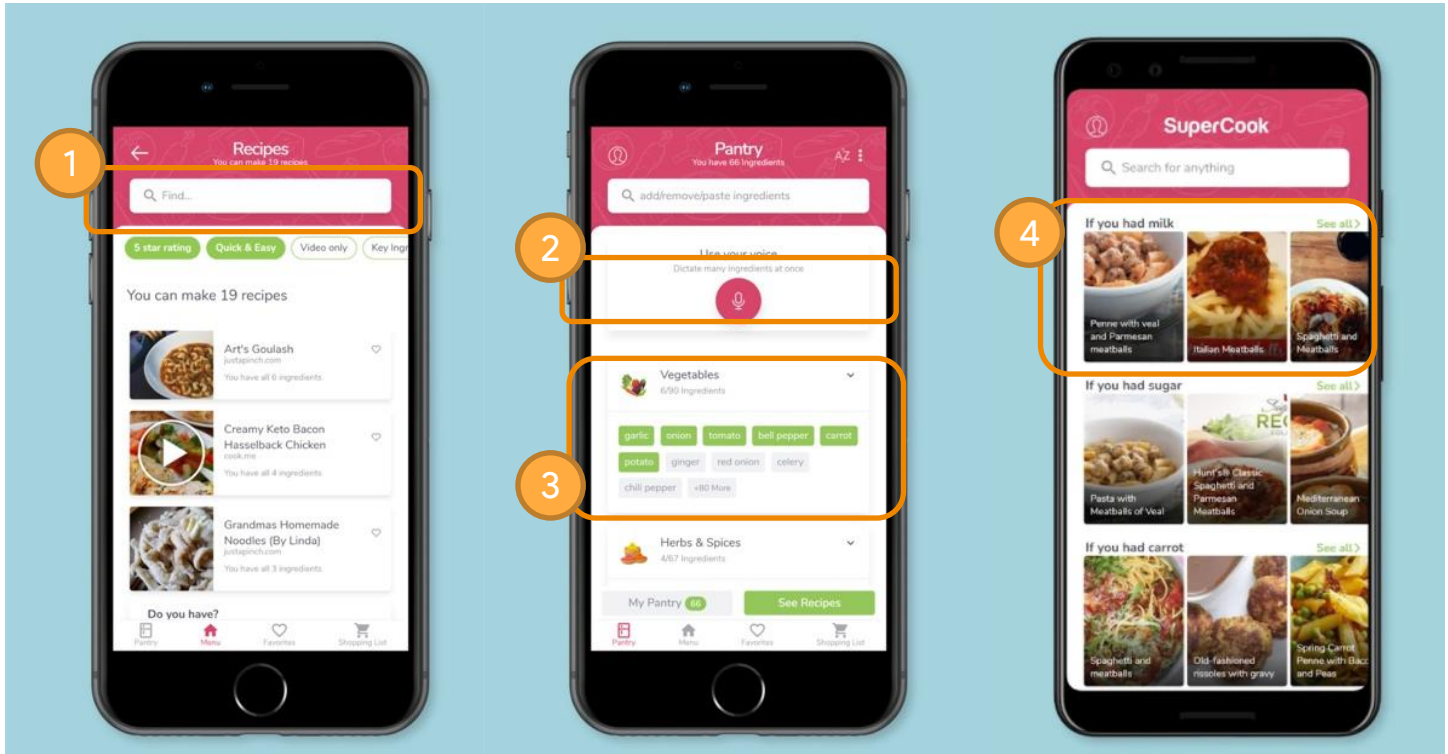


# Navigation

Analysis of SuperCook and Allrecipes, two of the main potential competitor of Icy Meal

# SuperCook

Accessibility took into consideration



Dynamic searchbar

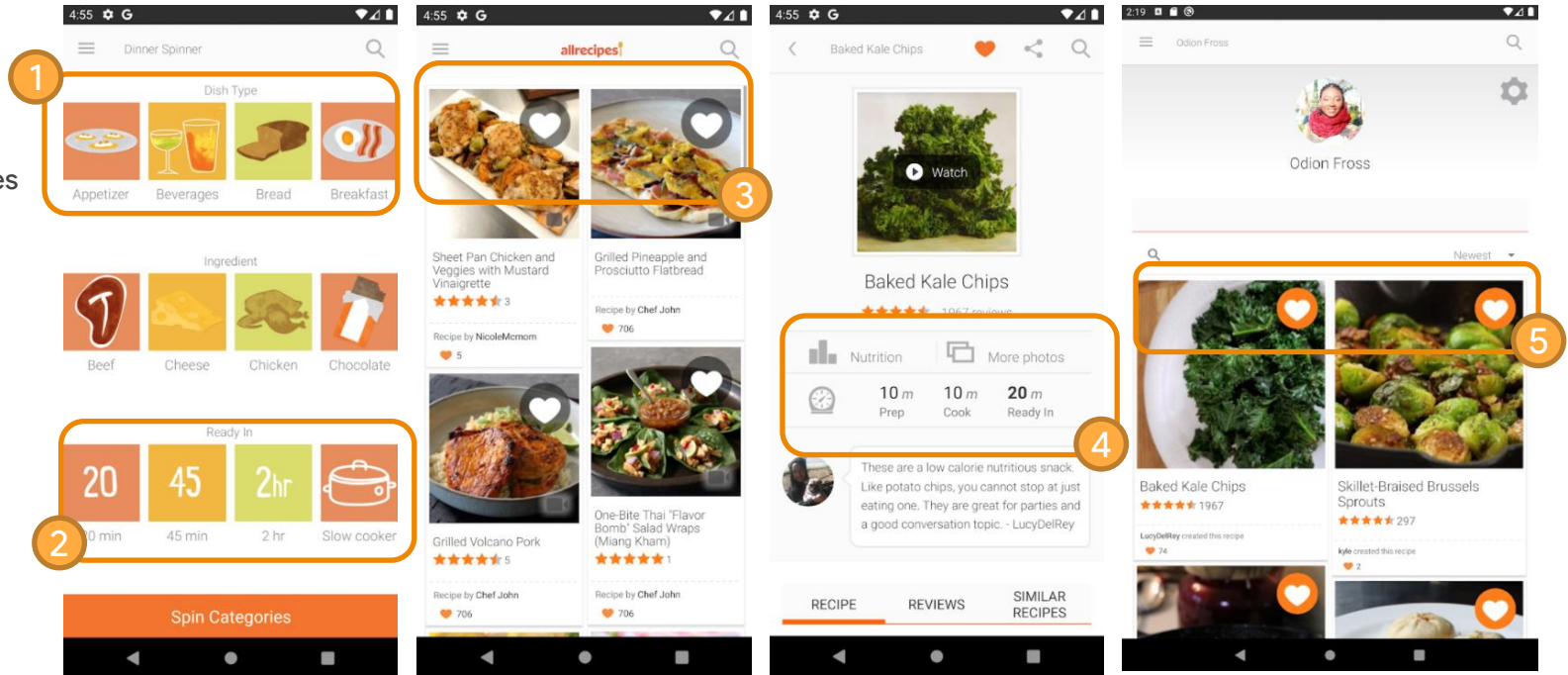
Fast results based on food categories

Suggestion based on common food categories



# Allrecipes Dinner Spinner

Recipes are divided into types of dishes



Suggestion based on time required

Display wide images of the Final results

Display every detail into the selected page

Allow users to save their favorite recipes



# Starting the design

- Digital wireframes
- Low-fidelity prototype
- Usability studies

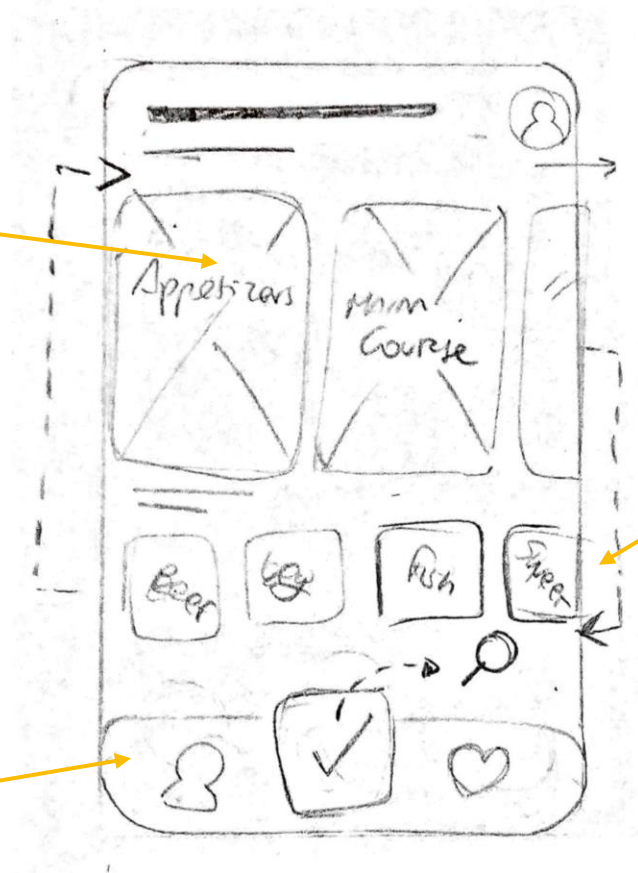
# Paper wireframes

The main goal of Icy Meal is to give users the opportunity to create fancy and healthy recipes with just the thing they have into their fridge.

However, I would give the app a broader objective, helping people learn how to cook.

Suggestions based on previous recipes divided into categories

The nav bar will be dynamic and simple (just 3 buttons)

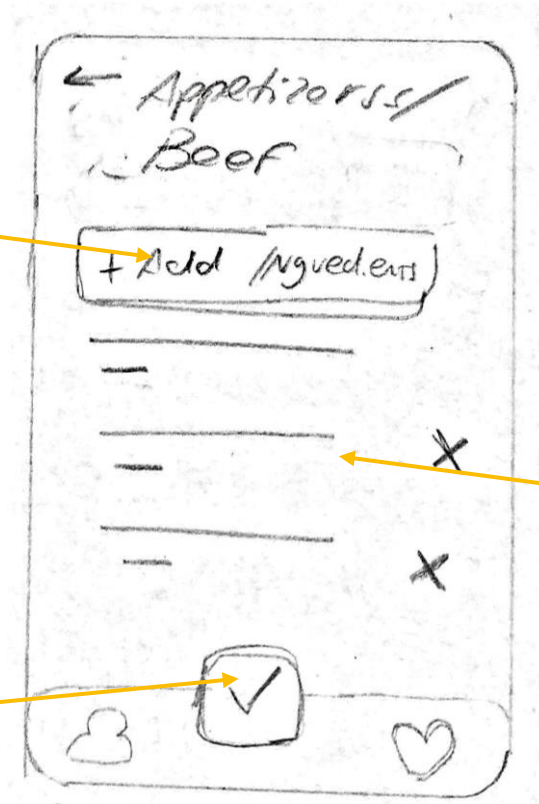


Fast recipes based on the main meal type

# Paper wireframes

The user flow will follow 2 specific steps, giving the user the opportunity to select the main course they want to pick, hence, proceeding with the other ingredients selection.

Opportunity to add (or delete) at any moments other ingredients



The list of ingredient displayed.

The navbar changes automatically and the main button allow to confirm the choice

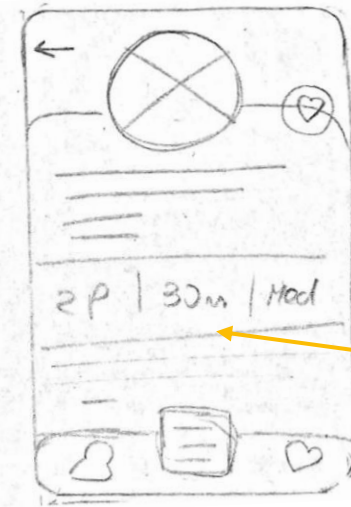
# Paper wireframes

As my goal is more than give just some suggestions about what to eat, I wanted to add a specific and subsequential screen that allows the user to follow a step by step guide in order to attain the same exact meal showed by the app.

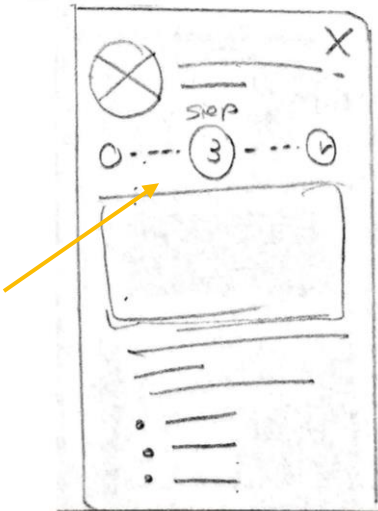
Research Results list



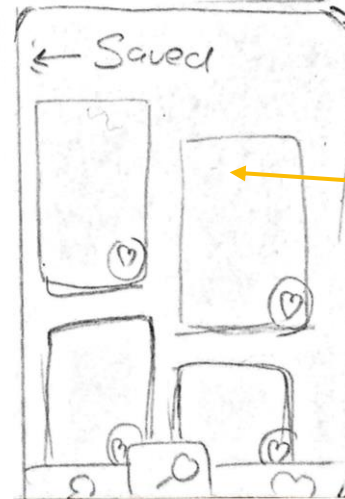
Single recipe displayed. (With details)



Subsequential cooking step by step guide (toggleable).



Saved Recipes Page





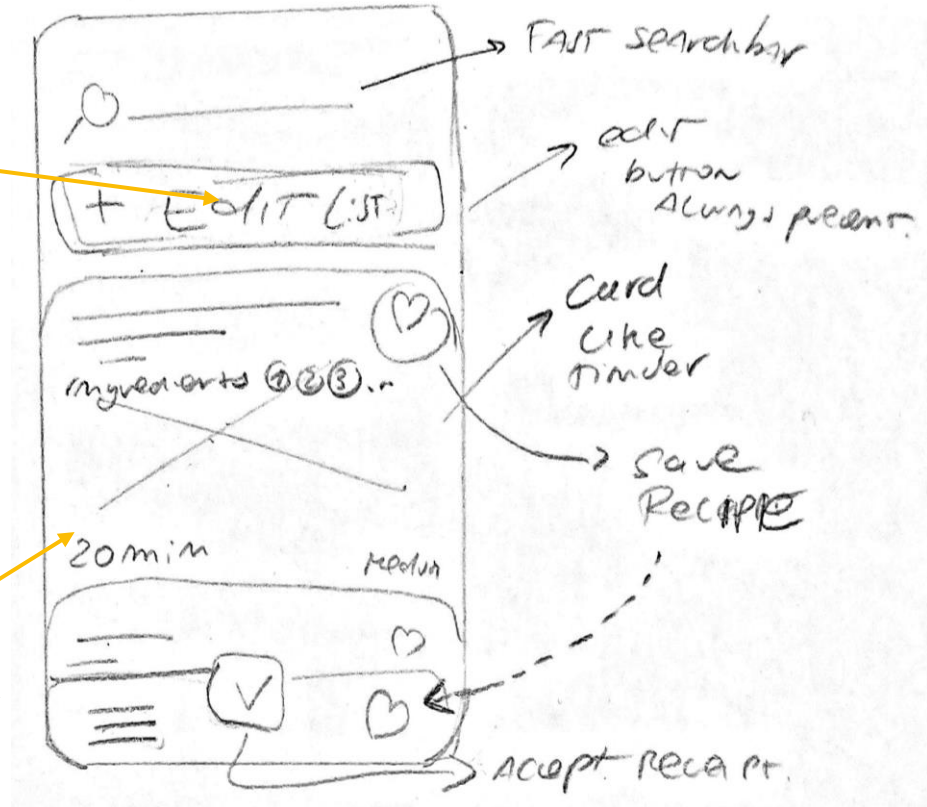
# Paper wireframes

Just for aesthetic purposes I also added another way of displaying results, specifically using fullscreen cards as an old recipe book would have done in the past.

This features might be appreciated and could help users focus on search results.

Always present, "Add Ingredients" button

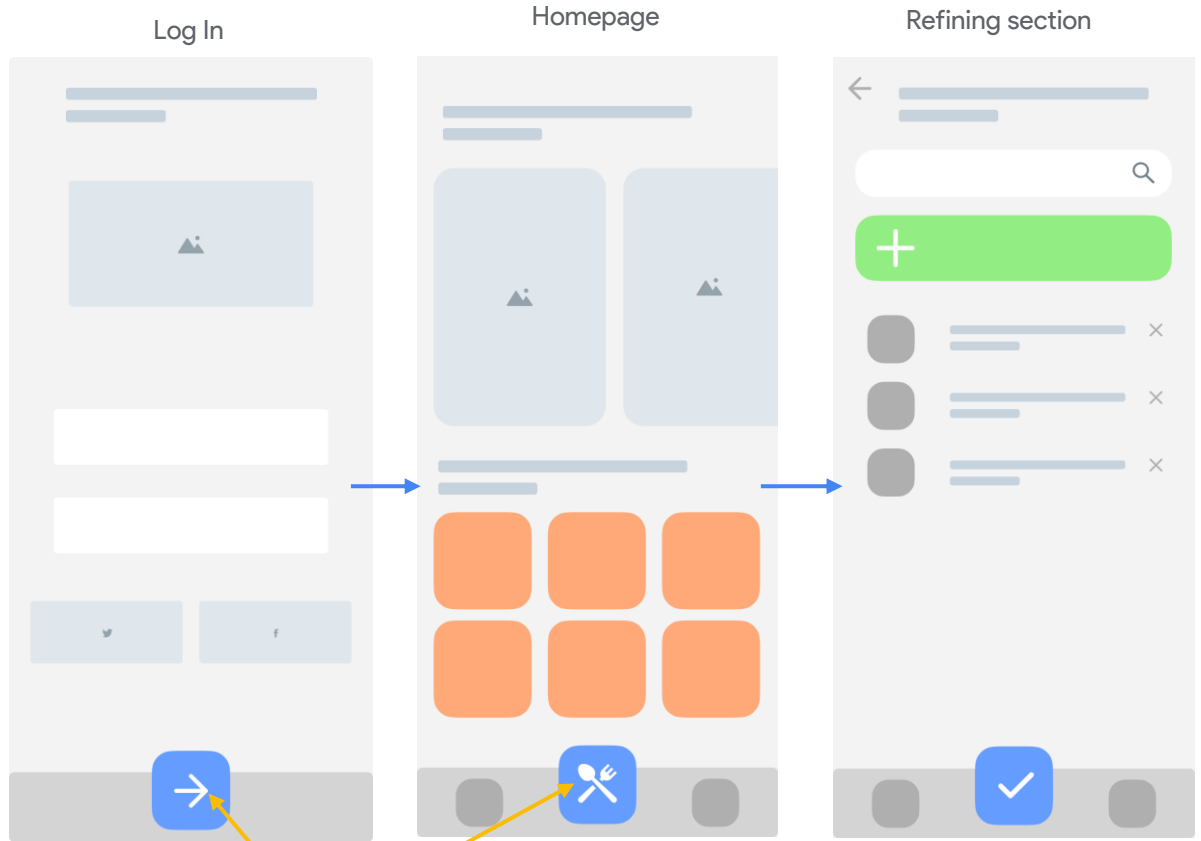
Full screen card to show recipes. (gesture needed)



# Digital wireframes

The digital LOFI Wireframes helped me to better focus to the several screens of the app. Moreover they were quite helpful understanding functionalities and features that could work in the final build.

The following screens show the first steps in the user flow.

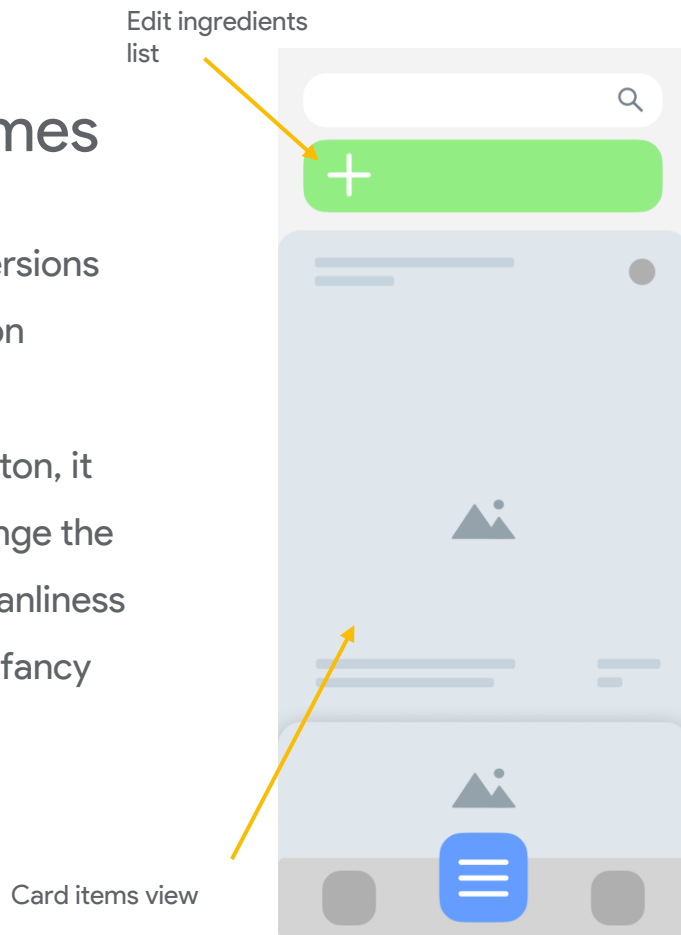


Dinamic button changes based on the screen we are currently on

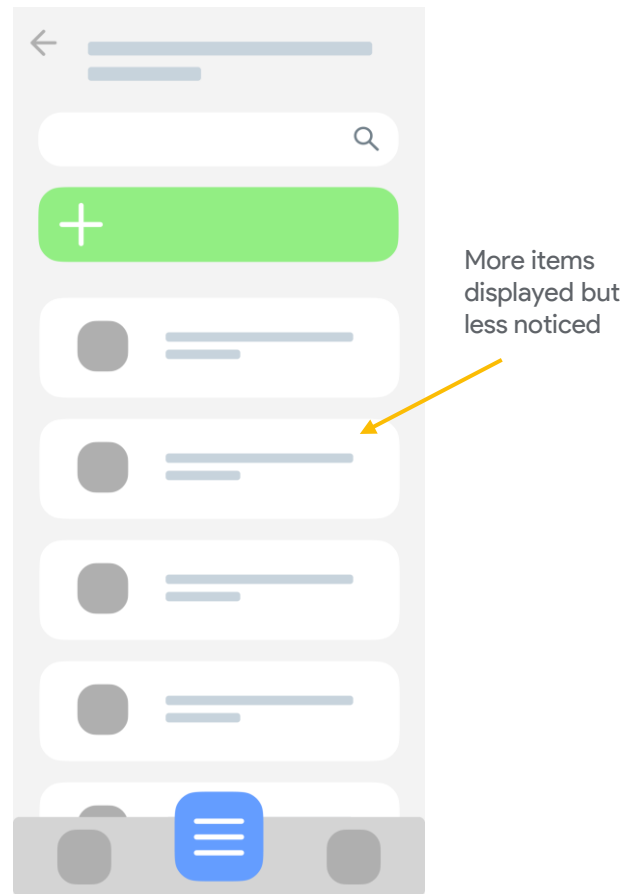
# Digital wireframes

I implemented the two versions of the result list defined on sketches.

Through the dynamic button, it would be possible to change the list type, choosing for cleanliness and a clearer view over a fancy and less general view.



List type 1 (main)



List type 2 (Toggled)

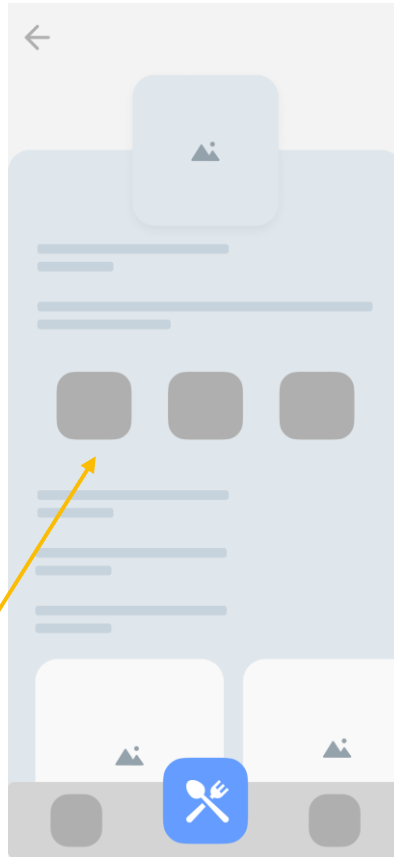
# Digital wireframes

The step by step guide is something that could be triggered by the dynamic button. However this is not a mandatory step for the user as the real flow ends after displaying the single recipe screen.

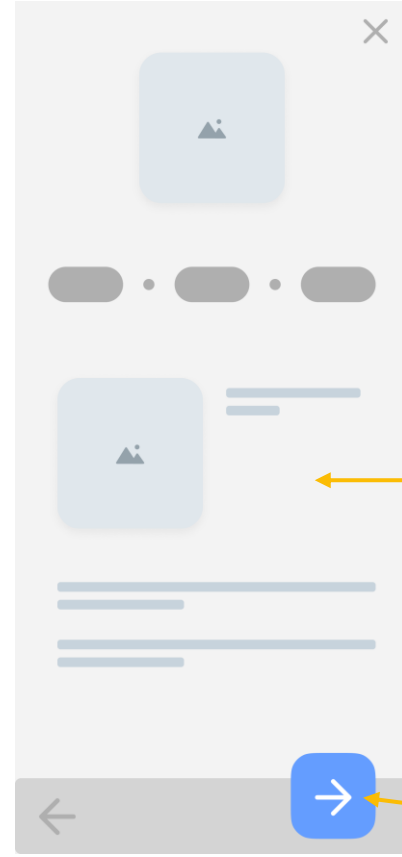
Specific details (time, difficulties, quantities, ...)



Single recipe screen



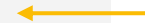
Step by step Guide



Progressbar



Every step is highlighted by its own screen



"Next" Button

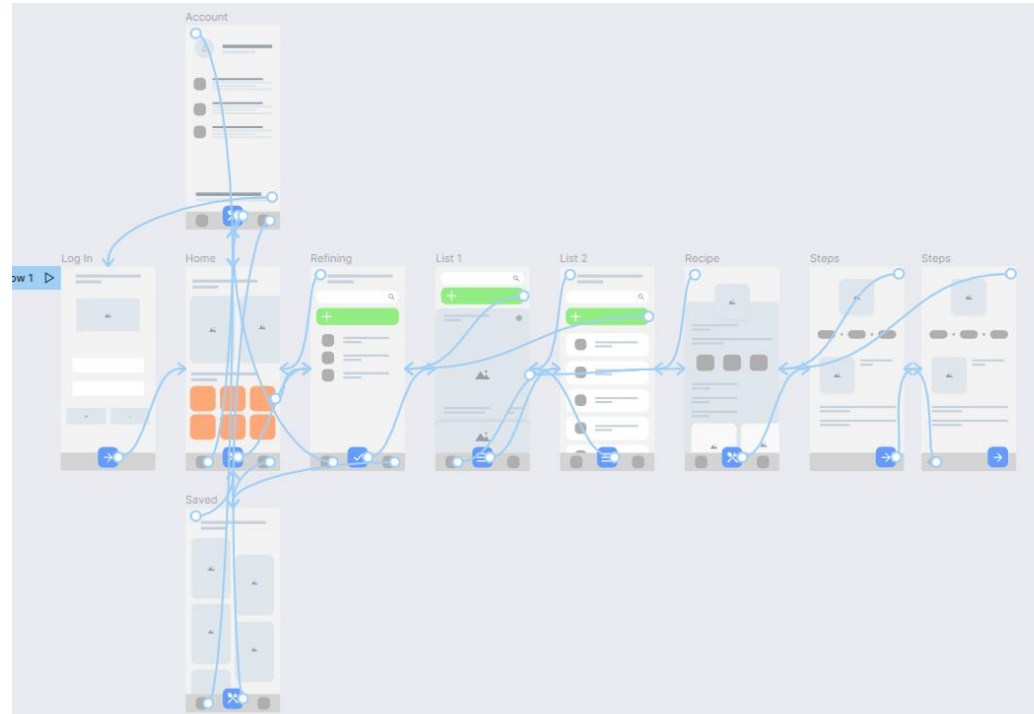


# Low-fidelity prototype

In the Low Fidelity we can clearly see how the whole design process was devised.

The main screen try to replicate the intended path the user should follow to order the products.

View the Icy Meal! [Low Fidelity Prototype](#)



# Usability study: parameters



Study type:

Unmoderated usability study



Location:

Italy, in place



Participants:

4 participants



Length:

5-10 minutes

# Usability study: Affinity Diagrams

Based on an Unmoderated Usability study conducted on the Low Fi prototype, I have acquired some useful insights about minor improvements of the user-flow.

## AFFINITY DIAGRAMS - Icy Meal

### Getting started

Feel confused  
getting started

needs strong separation with a simple recipe app

feel overwhelmed by the quantity of information

### Tone

Positive and confident tone overall

confused  
tone

### Item selection

not so confident with the overall flow

hard time knowing how hard a meal could be

needs more on screen details before checking single recipes

### Navigation

more intuitive gestures needed



# Usability study: findings

Insert a one to two sentence introduction to the findings shared below.

1

## Finding

some users had trouble on  
how to find information  
about recipes

2

## Finding

some users struggled  
understand how to start &  
about gestures  
implementation.

3

## Finding

some users were confused  
by the way the  
The flow is organized



# Usability study: Insights

Based on an Unmoderated Usability study conducted on the Low Fi prototype, I have acquired some useful insights about minor improvements of the user-flow.

## Round 1 findings

- 1 Make the overall UI cleaner and less overwhelming (P1)
- 2 to add title and icons in order to improve the intuitiveness of the layout. As well as gestures hints. (P0)

## Round 2 findings

- 1 Add icons that better specify information and details . (P1)
- 2 Use a specific palette to increase hierarchy between buttons and sections. (P2)

# Refining the design

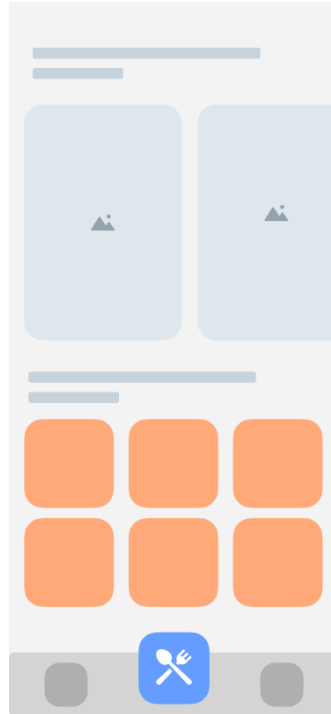
- Mockups
- High-fidelity prototype
- Accessibility

# Mockups

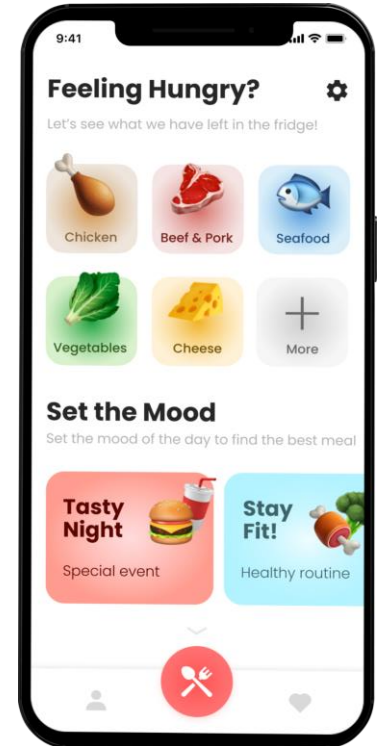
The early design didn't set enough focus on the "main ingredients" section.

Therefore I decided to swap a section and dedicate less importance to the "Set the mood" Space. Moreover, the original idea of the main escape button was kept until HIFI prototyping.

Before usability study



After usability study

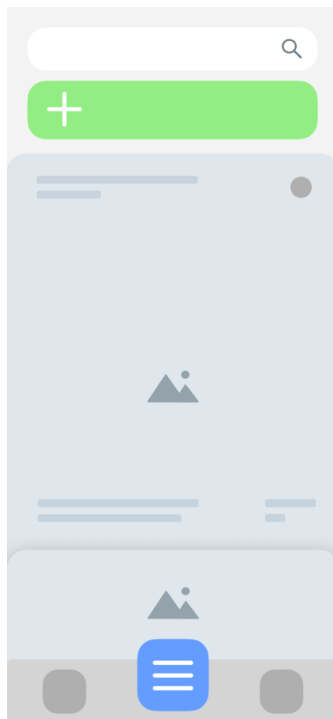


# Mockups

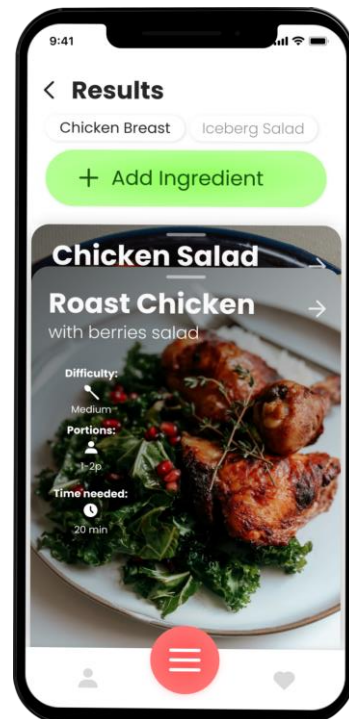
The principal idea of using cards was brought to life in the Prototyping stage.

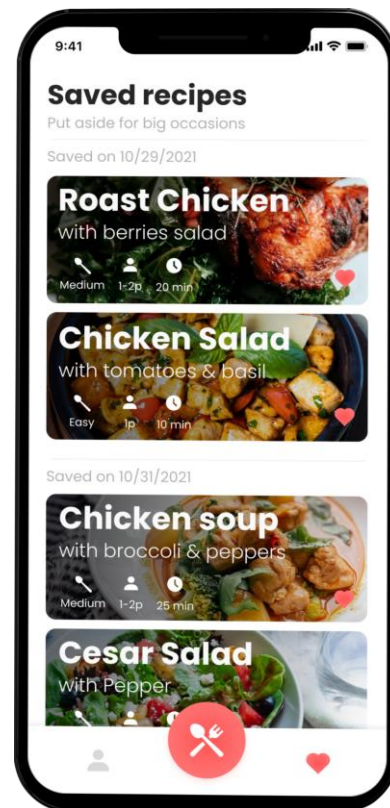
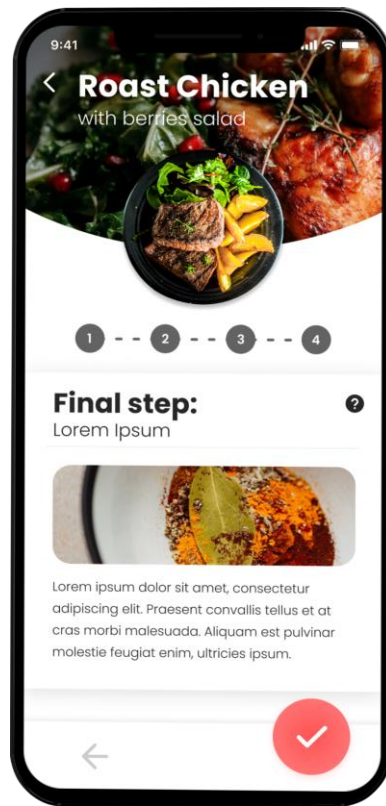
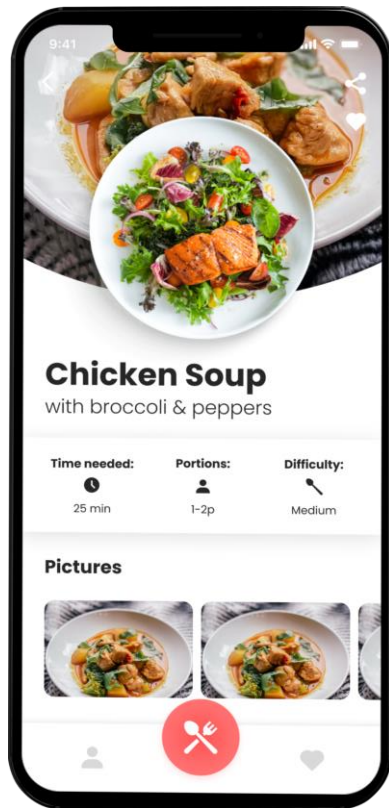
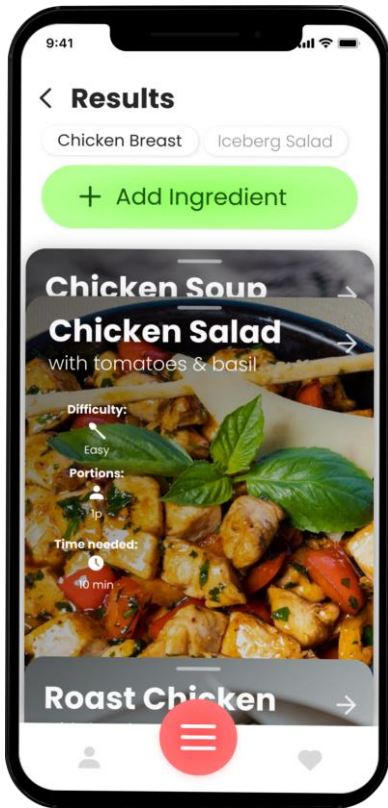
Users may switch list layout through the dynamic main button.

Before usability study



After usability study



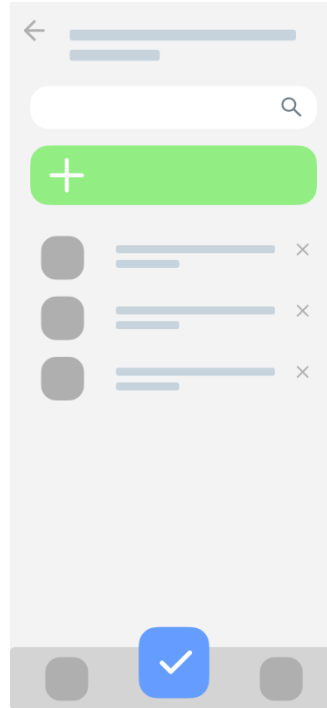


# Mockups

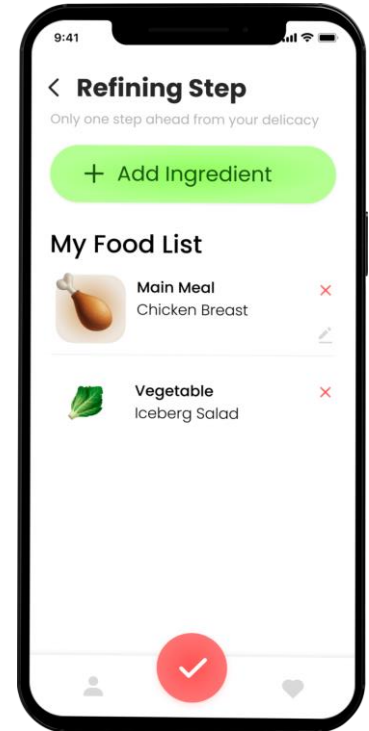
The “refinig section” consist of the last stage before checking out results.

Within this step we can add a main meal and specify its type. In addition users could add more ingredient through a dedicated button always displayed on top.

Before usability study



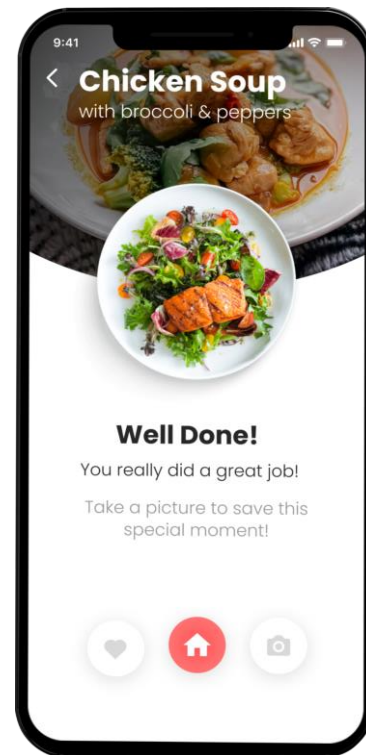
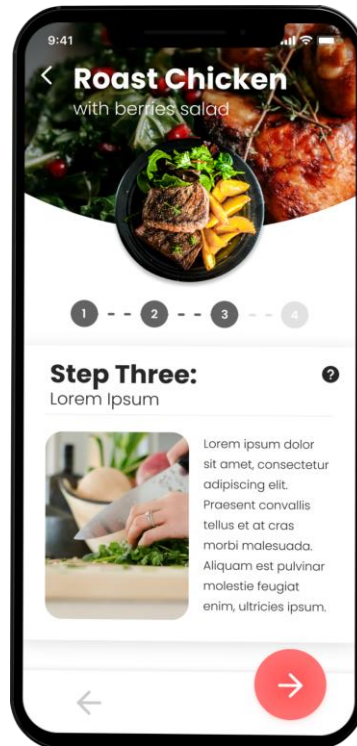
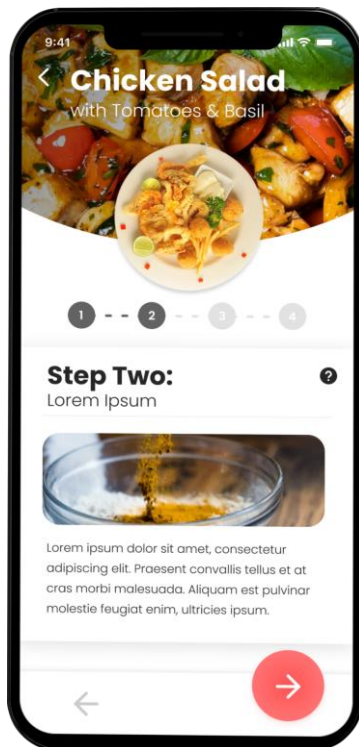
After usability study



# Mockups

Talking about the step by step guide, I added a progress bar with which users can handle the remaining tasks.

A built in timer feature as well demonstration videos might be implemented to make the process even simpler.

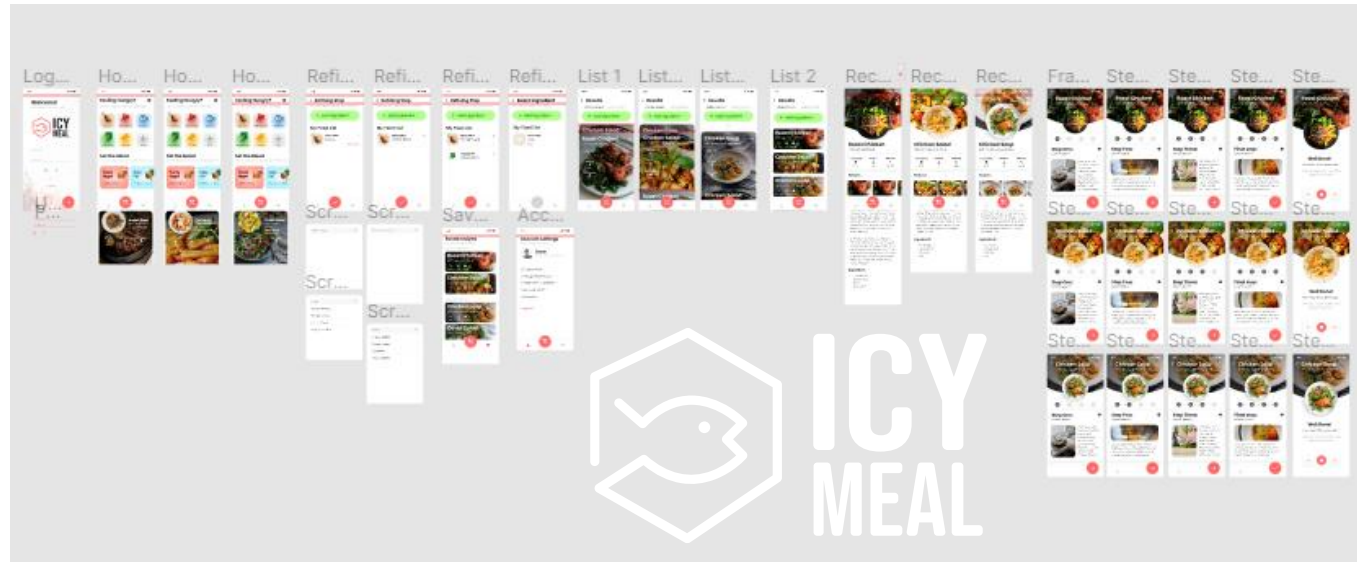


# High-fidelity prototype

The final high fidelity prototype presented cleaner user-flows for homepage and list of results.

It also meet user needs for the main purpose of the app as well as more customization options before the confirmation.

View the Icy Meal! [High Fidelity Prototype](#)





# Accessibility considerations

1

The contrast created by the colors chosen is aligned with the WCAG standards.

Moreover, the design was devised with the opportunity of adding and shaping more features for accessibility purposes.

2

Throughout the whole user flow icons are primarily used over text to help users understand the intended cycle.

On the homepage titles and additional text are included in order to sharpen user's research.

3

As users found pages pointlessly full, I proceeded to make the overall pages less busy, therefore more intuitive and easy to understand.

As previously described I proceeded to switch focus on the main section in order to simplify the flow overall

# Going forward

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- Takeaways
- Next steps

# Takeaways



## Impact:

The main goal of the app can be considered reached. I've tried with all myself to better understand every user need, revising and iterating based on feedbacks received from the usability study.



## What I learned:

While designing the Icy Meal app, I learned that the first ideas for the app are only the beginning of the process. Even something simple as a recipe app may hide some minor struggles and accessibility problems.

However, the whole interface was devised with the main purpose of cleanliness in mind. A purpose that I would consider met in its whole.

# Next steps

1

Conduct another round of usability studies to validate whether the pain points users experienced have been effectively addressed.

2

Conduct more user research to determine any new areas of need.

# Let's connect!



Thank you for your time reviewing my work on the Crunchy Gap app! If you'd like to see more or get in touch, my contact information is provided below.

Email: [manulaporta98@gmail.com](mailto:manulaporta98@gmail.com)

Thank you!