



IPrep&Cook

Phase 2 Report

First Prototype and Heuristic Evaluation

3LEIC04 G04

Interação Pessoa Computador

Licenciatura em Engenharia Informática e Computação

João Pedro Rodrigues Coutinho	up202108787
Miguel Jorge Medeiros Garrido	up202108889
Tomás Henrique Ribeiro Coelho	up202108861

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1. Project Description

IPrep&Cook is a project that presents users with a fun and enjoyable mobile application which helps them to achieve their goal of having a healthier lifestyle.

For this prototype phase, we decided to focus on the following three tasks:

- I. **Recipe Generator** - Allows the generation of different recipes based on both what the user's goals/tastes are and ingredient availability.
- II. **Calories Calculator** - Calculates the amount of calories the user has ingested based on what he has consumed throughout the day.
- III. **Weekly Meal Planner** - Provides the user with the ability to plan out an entire week of meals based on what their goals are and how much time they can spend on preparing meals.

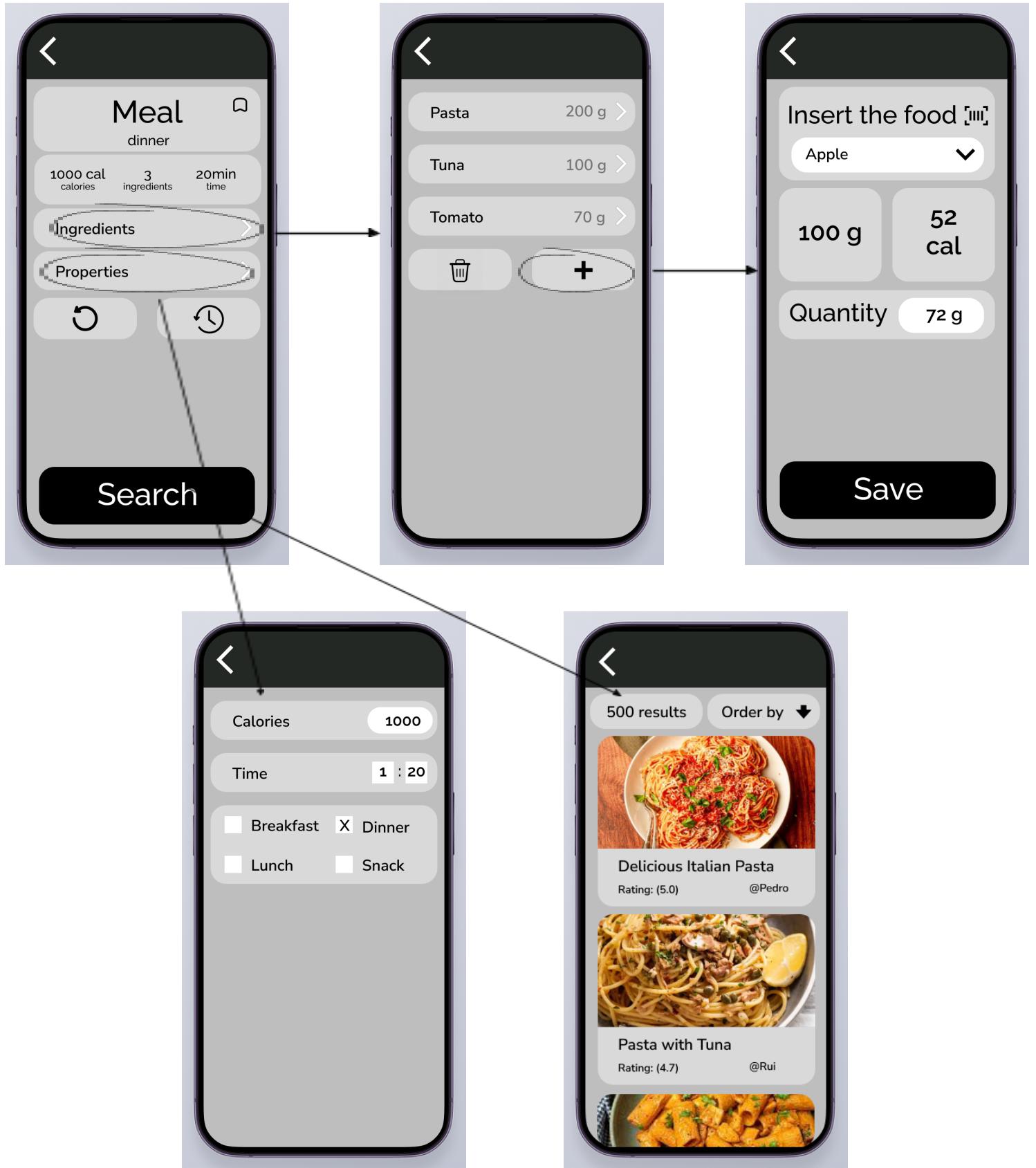
The decision to focus on these specific tasks stemmed both from our desire to make our project stand out from other apps already widely available for download and the feedback we received in Phase 1, based on our potential userbase's needs.

2. Prototype's Wireflow

2.1 - Recipe Generator

The *Recipe Generator* gives users access to delicious, nutritious, and/or quick meals with just a single click. Our approach was to provide comprehensive, yet user-friendly, solutions, ensuring that all types of users can effortlessly discover the perfect recipe to meet their preferences. Whatever meal the user is looking for - whether it be a specific flavor, a healthy meal or even just one that is quick to make - our feature is designed to cater to every user's culinary needs.

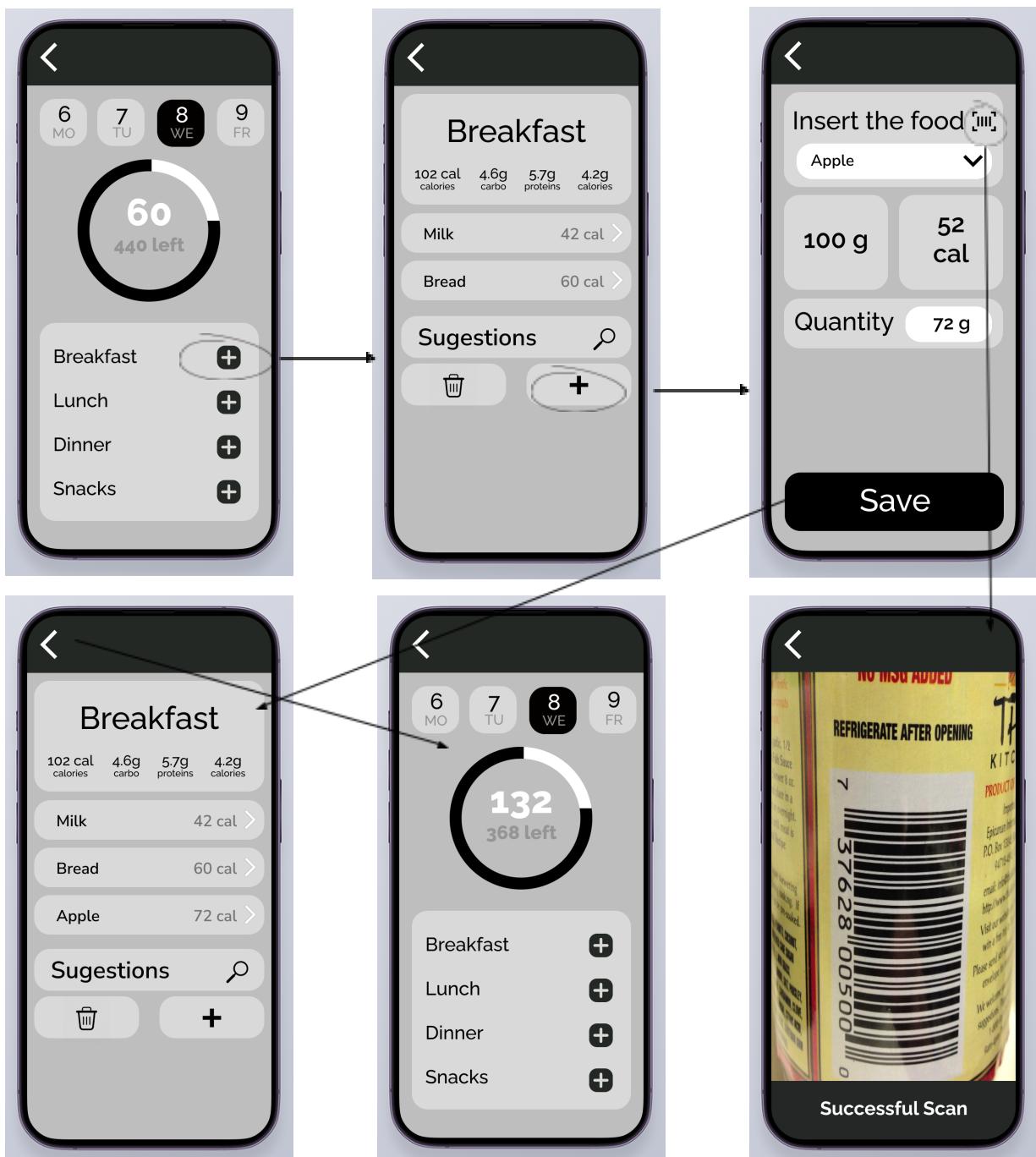
This feature offers a customizable menu, allowing users to input criteria for their desired meal search. Users can edit parameters such as available ingredients, expected calories, preparation time, and meal type. Additionally, they have the option to save presets for future use or load previously used ones. After inputting these preferences, the system generates multiple solutions based on the current information and the user's past preferences. Users can then choose an option, after which a detailed post containing the recipe, nutritional information and other relevant details will be provided to them.



2.2 - Calories Calculator

The *Calories Calculator* feature encourages users to track their calorie intake, assessing whether they are below, within, or above their (calorie) goals. With an emphasis on simplicity, the feature utilizes our comprehensive database to provide users with the best and most accurate information about their nutritional choices.

When utilizing this feature, users will have their daily calorie intake on display, with the option to access detailed information for each meal, such as breakfast. Additionally, users can review their historical data, tracking their progress over a week or a month, for example. Within each meal, users have the possibility to add, remove, or edit what they consumed and how much, either by inputting manually or scanning the product.



2.3 - Weekly Meal Planner

The *Weekly Meal Planner* serves as a valuable tool for users to plan their entire week, delivering a well-balanced schedule aligned with their specific objectives. Its key feature lies in its ability to provide a diverse and user-friendly approach, ensuring a complete and healthy meal plan for every day of the week.

As the *Recipe Generator*, users are able to define not only their goals but how they pretend to have their week planned as well. Users can opt to begin with a new planner, select a template, or revisit a previously planned week. Once the plan is established, users can iterate through each day and meal, with the ability to add, modify, or delete entries. Additionally, users can access detailed information about each meal, including preparation steps, ingredients, and caloric content.



3. Heuristic Evaluation Results

In this phase, our prototypes were evaluated by two other groups. We got their feedback in a heuristic report that contains the description of the problems and their severity level, from 1 up to a maximum of 4.

With **level 1** of severity we got:

- **Flow error in Figma prototype:** something to be aware of so that when we show the prototype to someone else, it looks consistent and clean.
- **Usage of different pages with the same purpose but different functionalities:** this could lead to some users that are used to a specific way of accessing a functionality simply being unable to do so in a different page/situation.
- **Lack of feedback:** one of the highlighted problems is that there is no way to distinguish the meals that have already been consumed from those that haven't been consumed yet. This would make the app less intuitive for the user, when it should help him tell the next meals and dispose of the meals that have already been consumed in an easy and user-friendly way.

With **level 2** of severity:

- **Flawed functionalities:** some of our implemented functionalities are not intuitive or miss something. We have a scanning feature that is supposed to read a product's barcode and save its details (such as calories, for instance), but won't let the user choose the amount consumed; this could lead to wrong values being introduced, which have a direct influence on the user's diet. Other implemented features allow the user to add products either to a recipe or the *Calories Calculator*, but don't possess an option to delete a specific product.
- **Lack of intuitiveness:** one of the features requires the user to perform a swiping motion but there is no tutorial to let them know what to do. This could lead to some users not being familiar with some of the features that our app offers, such as marking a meal as *consumed* or, more importantly, the feature to generate a new meal (in the *Weekly Meal Planner Template*), which could result in a downgraded user experience.

With **level 3** of severity:

- **Lack of clarity:** some pages in our application don't have a title letting the user know where he is at; most importantly, in our *Calories*

Calculator, we are not showing the measure (*cal/kcal*) we are using, which could lead to misleading values.

- **Lack of feedback to the user:** we've seen some examples of this before, but this one is more severe according to what the other groups reported. In our app the user has the option to delete a product from the *Calories Calculator*; however, if the user deletes it by mistake, there is no confirmation option available. This could result in unwanted behavior when the user interacts with the app.

4. Corrections to perform in Phase 3

As we've seen before there are a few corrections to be made to our app's prototypes. We've listed them accordingly to the table we've shown before:

Problem	Correction
1	Correct the flow in Figma to point to the correct page.
2	Add an option to insert the amount of food ingested and convert it automatically to weight.
3	Change the color of the meal tickets that were already consumed.
4	Usage of the page with the scanner option for every prototype.
5	After scanning the product, select the amount of food from the registered product.
6	When the user goes to the <i>Meals</i> page for the first time, show a tutorial of how to generate a new meal (swipe).
7	Add a button in the foods previously inserted in the <i>Calories Calculator</i> to make it possible to delete them.

8	Show a confirmation pop-up when the user tries to delete a meal/ingredient.
9	Add a title to the page so the user knows where he is and display the “cal.” in the <i>Calories Calculator</i> .

5. Conclusion

In this phase of our project, we started working on our application’s prototype in Figma.

Our work was then reviewed/evaluated by two other groups and, although we were confident in what he had developed so far, it was clear that there were still features that were either missing, incomplete or just outright poorly designed; this process was really important due to the fact that it allowed us to quickly identify the major issues with our app’s design find. Therefore, we will focus our efforts on trying to fix them so that users can enjoy the best version possible of ***IPrep&Cook***.

6. Annexes

6.1 - Received Heuristic Evaluation Reports

6.1.1 - Report 1 (by Group 3)

HCI Winter Semester 2023 - 2024

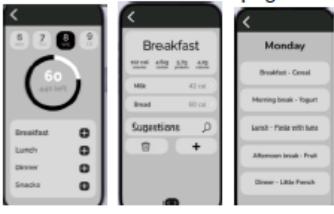
Heuristic Evaluation Report

Class Nr.: LEIC04 – 9/11 – Thiago Sobral

Group evaluated: 04 – Iprep&Cook

By group: 08

Problem #	Issue (include screenshot)	Heuristic(s)	Severity (1-4)
1	Missing "calories" to indicate what is being measured. Lack of clarity. 	1, 2, 6	3
2	Missing documentation to assist users use the system: the scroll to the left is not intuitive. 	6, 7, 10	2
3	Two types of "insert the food" (first without scanner, second with scanner) 	4	2

4	Could have an option to delete a single food component, if inserted by error.	3, 5	3
			
5	Could distinguish the meals that have already been taken from the ones that haven't.	1	1
			
6	When the "trash" button is clicked, the prototype flows to the daily meal menus. Probably should flow back to the first page.	1	
			

6.1.2 - Report 2 (by Group 8)

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Heuristic Evaluation Report

Class Nr.: LEIC04 - 09/11/2023 - Thiago Sobral

Group evaluated: 4 - IPrep&Cook

By group: 3 (Nuno Silva e Tiago Azevedo)

Problem #	Issue (include screenshot)	Heuristic(s)	Severity (1-4)
1	Poderia ter uma opção para introduzir número de ingredientes em vez de quantidade em g para calcular as calorias	2	1
2	Código QR não especifica a quantidade	7	2

3	Não dá para anular calorias inseridas	3, 9	3
4	Opção para gerar nova refeição não está muito intuitiva	6	2
5	Opção para apagar refeição/ingrediente não pede confirmação	5	2