Cocoa Repo

Chocolate recipes mobile application

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User Experience (UX) Course
Project book
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Contents

1.

Introduction

This project book presents the student's study and design of the user experience in a mobile application from start to finish. To help understand the needs and to make the application usable and easy to use from the end users, the process began with doing a extended research on competition and the user preferences, continued with the design of the first drafts of the application and concluded (in the scope of this semester) with the implementation of some prototypes for the first version of the application. In this document you can also find a synopsis of all the deliverables and designs that were created in this user experience design journey as well as some notes and thoughts on how to extend and continue this project in the future.
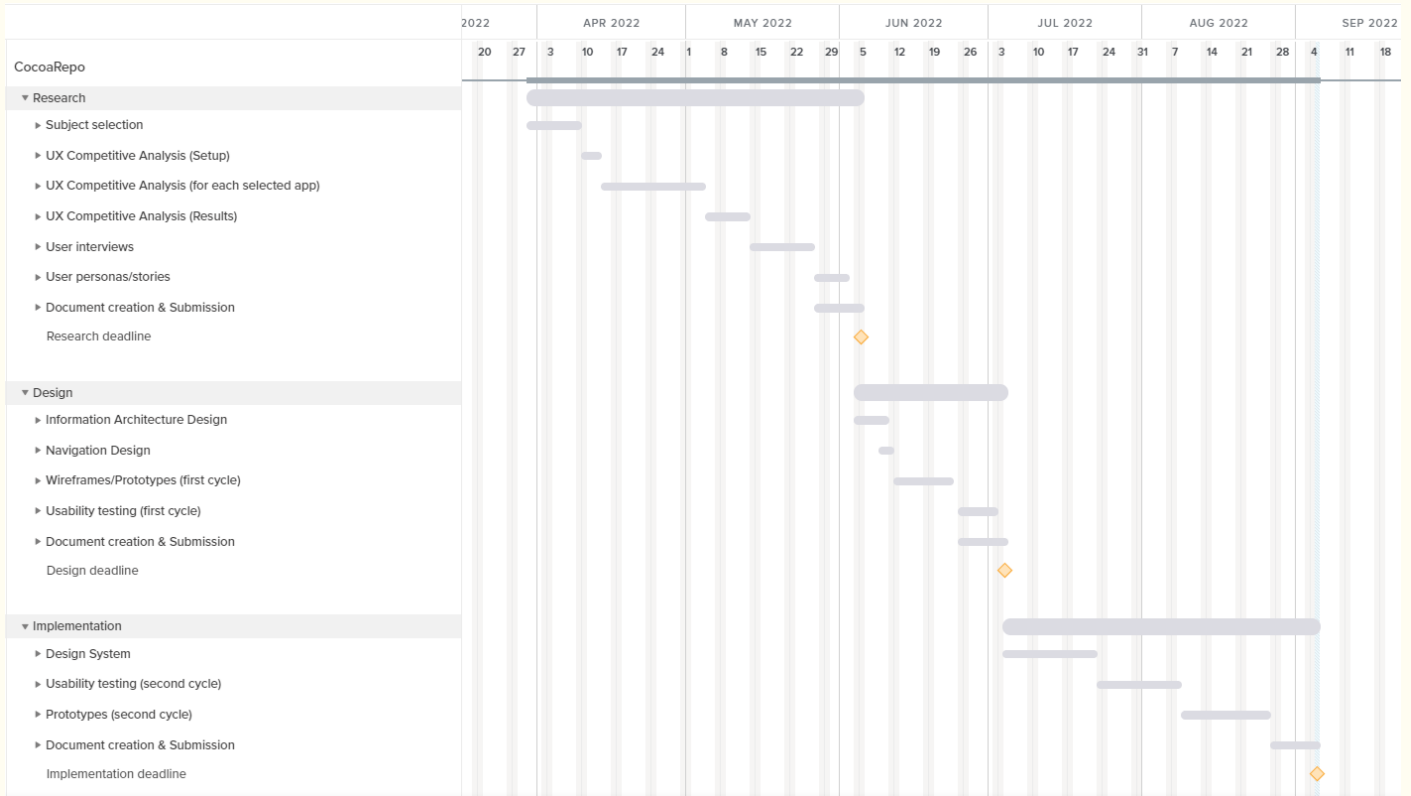
2.

Project description

CocoaRepo is an mobile application, in which users can find and publish various recipes, whose main ingredient is the chocolate. It is aimed at users who are primarily creative and like to bake at home and enjoy various kinds of chocolate. The target group of this app is users with minimal to moderate experience in creating desserts through simple steps, tips and pictures as the application will help the user not to deviate from the recipe.

The main features of the application will be the following:
- The user will be able to discover a list of new and trending recipes from other users.
- The user will be able to search for recipes based on a keyword (either the title of a recipe, or one of the recipe's ingredients).
- Users will be able to select a category (type of chocolate/technique) and see corresponding recipes with this type of chocolate.
- The user will also be able to read a recipe, save it for later use to his list of favorites as well as to share it on his social networks.
- In the recipe details screen there will be the ingredients needed for the recipe execution as well as the steps to follow with corresponding images. The user will also be able to leave a comment as well as follow the creator of the recipe.
- In the application there will also be a system to collect points either by posting recipes or by getting involved with other users' posts. When the user reaches some certain points he will have the option to redeem those points to buy discounted chocolate items or baking sets from suppliers/sponsors.

3.

Project timeline

CocoaRepo	2022	APR 2022	MAY 2022	JUN 2022	JUL 2022	AUG 2022	SEP 2022

▾ Research

▸ Subject selection

▸ UX Competitive Analysis (Setup)

▸ UX Competitive Analysis (for each selected app)

▸ UX Competitive Analysis (Results)

▸ User interviews

▸ User personas/stories

▸ Document creation & Submission

Research deadline

▾ Design

▸ Information Architecture Design

▸ Navigation Design

▸ Wireframes/Prototypes (first cycle)

▸ Usability testing (first cycle)

▸ Document creation & Submission

Design deadline

▾ Implementation

▸ Design System

▸ Usability testing (second cycle)

▸ Prototypes (second cycle)

▸ Document creation & Submission

Implementation deadline

4.

Deliverables presentation & Methodology

4.1. Research

4.1.1. UX competitive analysis

In the context of trying to gather information and understand the needs and preferences of the target group of this recipe mobile application, the first step was to analyze the competition. Three mobile applications were selected from the competition and got investigated and rated based on the Nielsen heuristics.
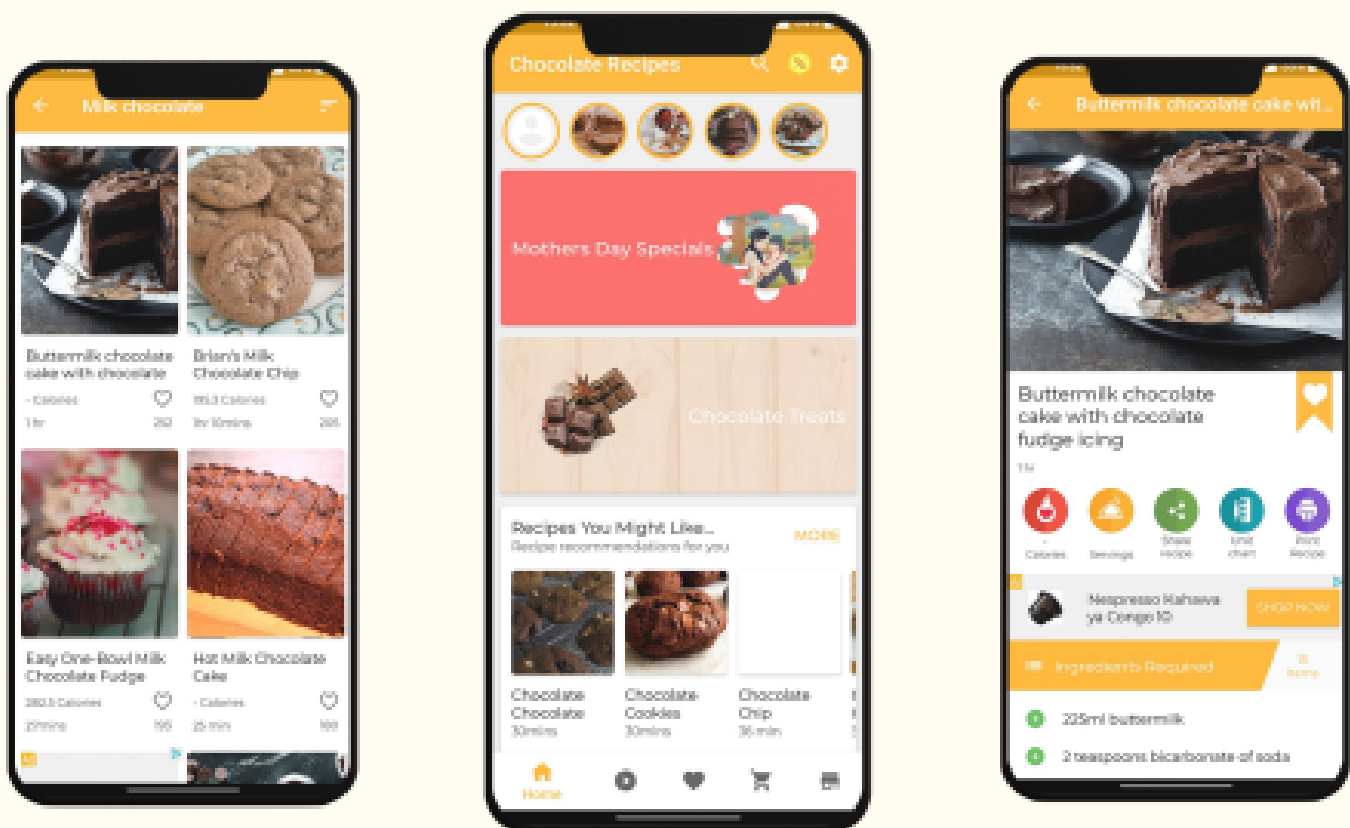
A report of the features list and the usability report of this analysis can be found here (chapter 3).

4.1.2. User interviews

In addition to trying to extract information from other similar applications, interview sessions with real users took place to get more information about the experience of the users with those kinds of applications. I had the chance to understand the user frustrations, what is commonly liked and appreciated by the users and what features they thought the other applications were lacking. A report of those user interviews can be found here (chapter 4).

4.1.3. User personas & User stories

As a result of the user interviews, I was able to come up with a list of user stories that each story describes who the role of the user is, what the goal of this story is and how this story will benefit the user. In this way these stories can be converted into information/tasks that need to be designed, analyzed and developed. In addition to user stories some user personas were created that present simulated users that represent a chunk of the target group. A template of such personas can be found below and all the user stories and personas can be found here (chapter 5 and 6).

Aristotelis

Age	23
Marital status	In a relationship
Occupation	University student
Financial situtation	$$$$$

Goals/Needs

- He wants to expand and improve his skills and knowledge in baking
- He wants to find simple recipes for start and then to try some more advanced recipes
- He loves white chocolate so he wants to find more recipes with it
- He wants to find creative recipes to make for his girlfriend

Pain points

- Usually the ingredients of chocolate recipes are too expensive.
- Steps are not thoroughly explained
- He feels that he lacks technical knowledge when reading a recipe he is about to make

Baking experience level

Beginner

User story

" As a beginner person i want to find recipes with detailed steps so that i learn about new techniques and become better at baking "

4.2. Design

4.2.1. Information architecture design

After gathering all the user stories, each small piece of information that is going to be in the application was inserted into cards. Those cards were then organized into bigger logical groups that contain similar information. This process has led to the initial information architecture needed to start creating the navigation design and later the first low-fi fidelity wireframes.

https://miro.com/app/board/uXjVOmv6_Ik=/?share_link_id=479047709827

The exported diagrams can also be found here.
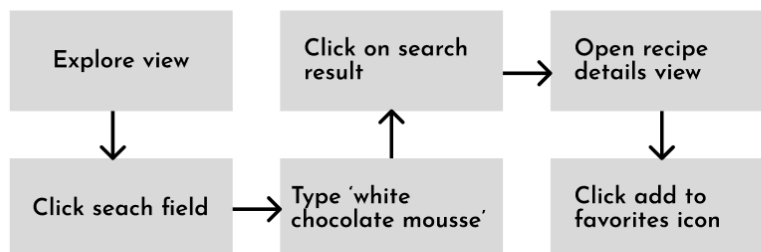
4.2.2. Navigation design

User tasks

User Task #1:
Search a "white chocolate mousse" recipe and add it to your favorite recipes

User Task #2:
Post a new recipe for a "vanilla chocolate cake"

User Task #3:
Find the vanilla chocolate recipe you have already created and add "milk" in the existing ingredients list

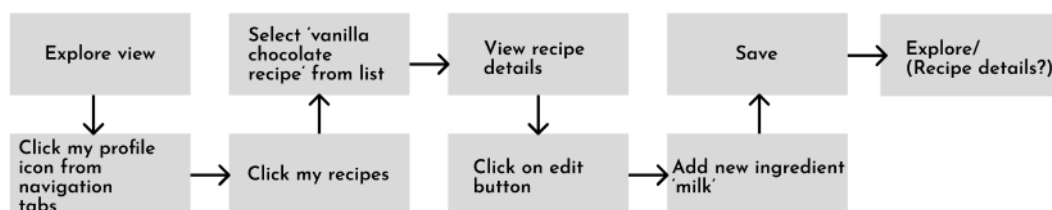Task flow: Search a "white chocolate mousse" recipe and add it to your favorite recipes

Explore view	Click on search result	Open recipe details view
Click seach field	Type 'white chocolate mousse'	Click add to favorites icon

Views: Explore, Search empty input state, Search results, Recipe details

Task flow: Post a new recipe for a "vanilla chocolate cake"

| Explore view	Enter recipe ingredients (1)	Enter recipe steps (1)	Select recipe tags (2)	Upload photos (3)	Submit recipe (4)	Explore/ (Recipe details?)
Click post recipe icon from navigation tabs	Enter recipe title 'vanilla chocolate cake' (1)	Enter recipe tips (optional) (1)	Enter duration to make recipe (2)	Upload video (optional) (3)	Overview recipe form details (4)	

Views: Explore (w/ Navigation tabs), Add recipe view (stepper form - possibly 4 steps), Recipe details (preview)

Task flow: Find the vanilla chocolate recipe you have already created and add "milk" in the existing ingredients list

Explore view	Select 'vanilla chocolate recipe' from list	View recipe details	Save	Explore/ (Recipe details?)
Click my profile icon from navigation tabs	Click my recipes	Click on edit button	Add new ingredient 'milk'	

Views: Explore (w/ Navigation tabs), My profile view, My recipes list view, Recipe details (edit), Add recipe view (stepper form)

4.2.3. Low-Fi wireframes
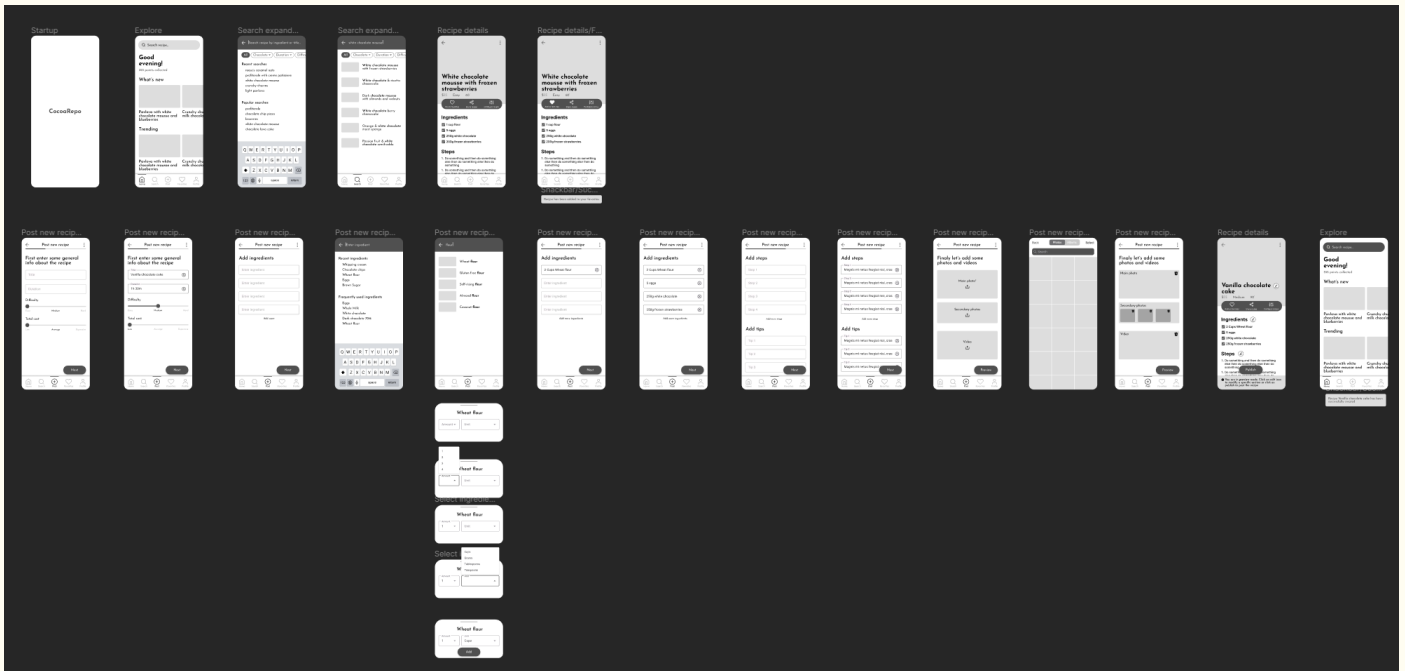
4.2.4. Usability testing report

In this first round of usability testing, the users were given the low-fi wireframes and three user tasks to complete as presented in the navigation design section. The results from these sessions can be found here (chapter 4).

4.3. Implementation

4.3.1. Design system

Each element that was used in the various screens of the application was broken down into smaller chunks (components). This helped each screen to have elements whose styling was consistent and following the same rules. To organize these components and create a design system, the Atomic Design methodology was used. In Atomic Design each element gets placed in one of the five levels (Atoms, Molecules, Organisms, Templates and Pages).
You can find an overview of the implementation of the Atomic Design system below.

https://www.figma.com/file/AVJE5O9rTMeFvcdgefBtiX/CocoaRepo?node-id=1%3A4

4.3.2 Prototypes

After the useful feedback received from the first round of the usability testing, where the users had the opportunity to test a first draft of the application and complete some tasks in it, I proceeded to make some changes in order to fix and optimize the users experience and enhance the overall usability of the application. These updated prototypes were used on the second round of usability testing to get more feedback on the fixes and new functionalities of the application. A screenshot of the prototypes can be found below as well as a link to the relevant Figma page.

https://www.figma.com/file/AVJE509rTMeFvcdgefBtiX/CocoaRepo?node-id=302%3A2293
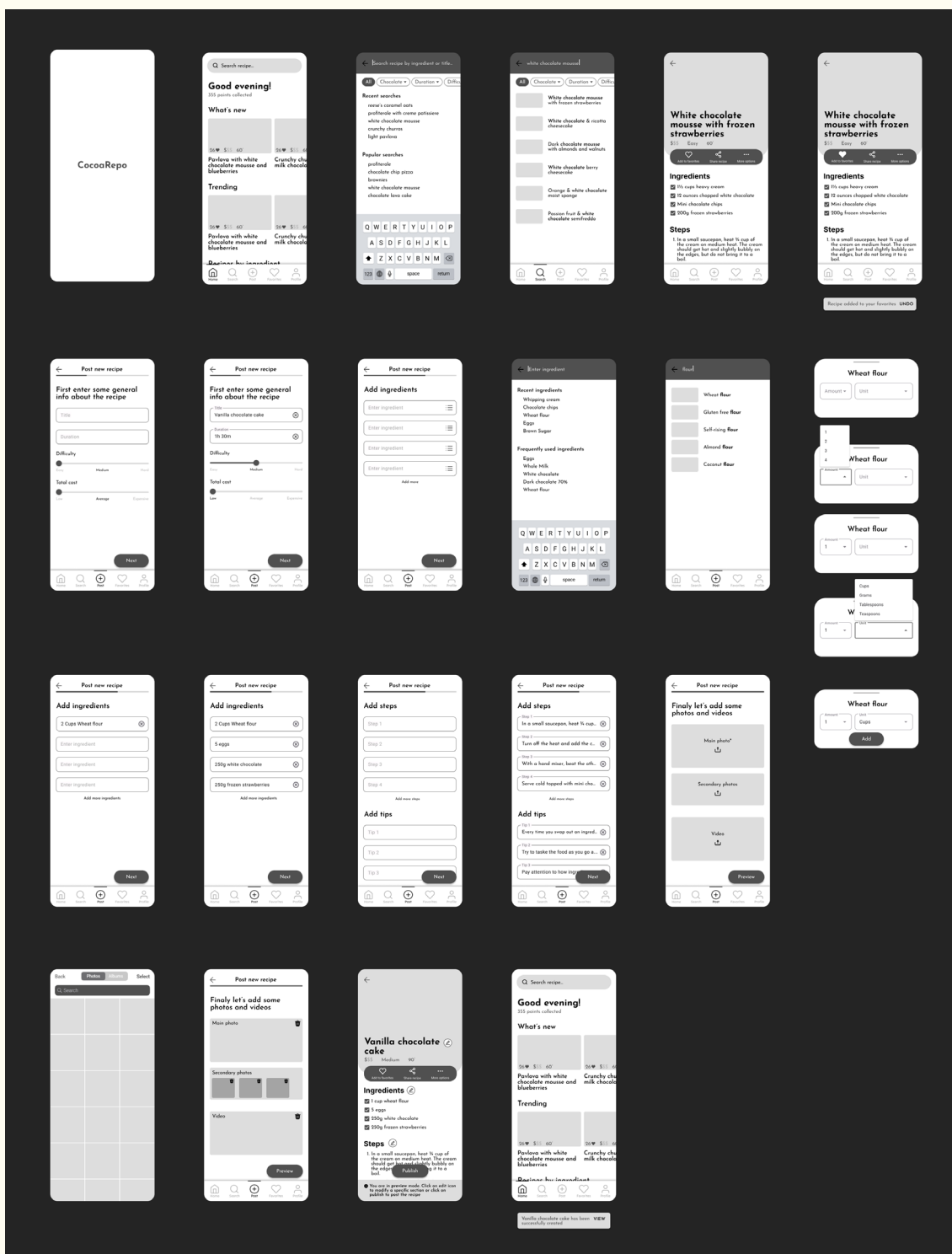
After the conclusion of the second round of wireframe design some high fidelity prototypes were created following this application's styled guide. For the same screens the tablet version was designed to show how the components and sections adapt based on the device (responsiveness). Below you can find a screenshot of some of these prototypes.
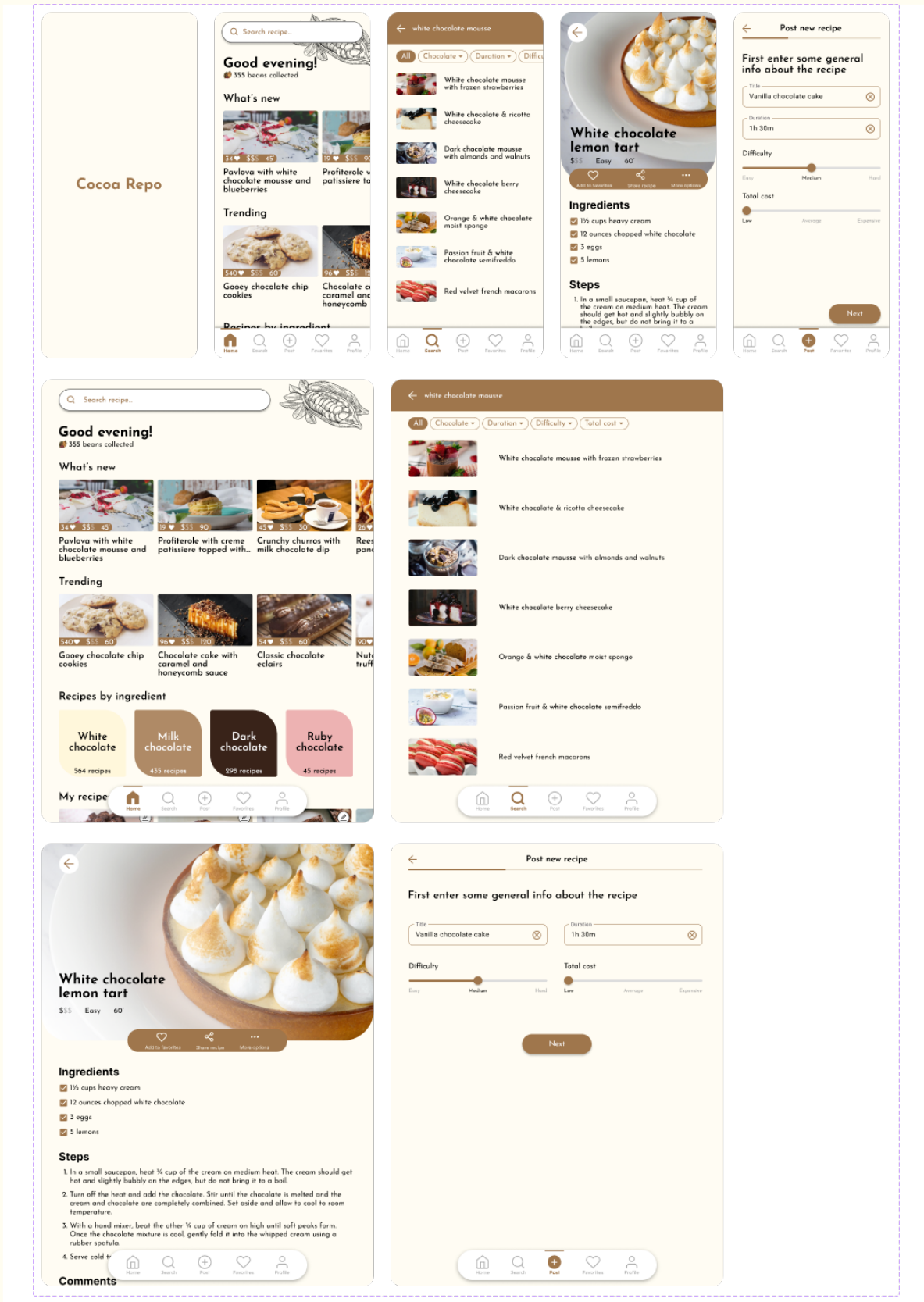
4.3.3. Usability testing report

As mentioned previously the new updated prototypes were used on this second round of usability testing. Some new valuable feedback was extracted from these sessions but for the scope of this semester will not be further examined and the wireframes will not be updated. However the other designers can take this feedback and initiate a new design cycle working on those improvements. A full testing report can be found here (chapter 3).

5.

UX conclusions

In the final usability tests it becomes apparent that some components of the application need to be reinvestigated (for example the more options button in the recipe details screen). For this reason it is important to go back and redesign the information architecture at least for this part. An actual card sorting with real users might also provide useful information rather than just an expert review. In the design system it would be also more helpful to include additional rules that correspond to the animations and transitions from screen to another screen for better consistency. Also the sense of place needs to be improved (for example show the recipe name on the top header as the user scrolls in the recipe details screen). Every designer is encouraged to also take the feedback from the last usability report, update the wireframes and schedule new usability tests (and continue to do so if/where needed).

6.

Self-evaluation

Even though time was really limited, a better time management in that free time was needed. Also it became clear that not enough time was put on early in the project lifecycle making it hard to follow the timelines. Also I had to put more effort into the Information architecture and Navigation design to save time from developing the initial wireframes. Also I am aware that this book also needs a lot of improvements and I will come back to it to create a proper short and extended version of this to better showcase my effort this semester. It was an incredible, exciting, interactive and challenging journey that required a lot of work just to scratch the surface of this user experience subject.

7.

Acknowledgements

I would like to thank my professors L.Lekou and M.Kiouri for guiding me throughout the semester even when my time was limited. I would also like to thank all the users that gave up their own time to do the interviews and usability tests and give me detailed feedback for my project. Finally, shout out to the whole online community that provides so many free open source software and assets that I was able to use in my project.

8.

References

https://www.freepik.com/ for the mockups.

https://www.figma.com/ for designing the wireframes and prototypes.

https://miro.com/ for creating the diagrams and card sorting.

https://unsplash.com/ for providing free to use images in prototypes.

https://www.figma.com/file/AVJE509rTMeFvcdgefBtiX/CocoaRe-po?node-id=322%3A2442 more references and moodboard.