

1. Introduction

1.1 Problem Statement

People love to cook and eat. Usually, people will have a collection of recipes that they like to try. In this area, people certainly need a better method to keep the collection of recipes in organize ways. It is because, the conventional way is become old and tedious. Therefore cooking with your recipe on the phone is a lot tastier than holding a book of recipe.

1.2 Proposed System

The aim of this project is to develop a mobile application that has the functionality of searching and displaying the recipe with recipe image, title, cooking time, cooking steps and nutritional health about the recipe. Additional functionality could be added from time to time.

1.3 Work Division

A team of four members was assigned for this project. The task was split into three phases: planning, sketching and prototyping. Planning phase is a process where all of us discussing about the functionalities of the application and analyse certain recipe finder application that have been created nowadays. After that, we suggest the layout and design through our members and choose the best one. This is in sketching phase. In prototyping phase, we develop a prototype for our application using Adobe XD.

1.4 Report Outline

This report is divided into several sections that include: introduction which explains our mobile application development, requirement analysis that covers user requirements for the mobile application, future work and conclusion which also will discuss of certain problems encountered in the project.

2. Requirement Analysis

2.1 Functional Requirement

- User can search for recipes based on recipe name.
- User can search for recipes based on different category of cuisine.
- User can view recommended recipe by system.
- User can view new recipe uploaded to the system.
- User can view selected recipe from the list of recipes.
- User can view the nutritional health from the recipe they select.
- User can view the time taken to cook the recipe they select.
- User can view the ingredients needed from the recipe they select.
- System will guide user on the process of cooking from A-Z.

2.2 Requirement Recording

2.2.1 Use Case diagram

After we analyse the requirements, use case diagram was used to visualize the features of our mobile application.

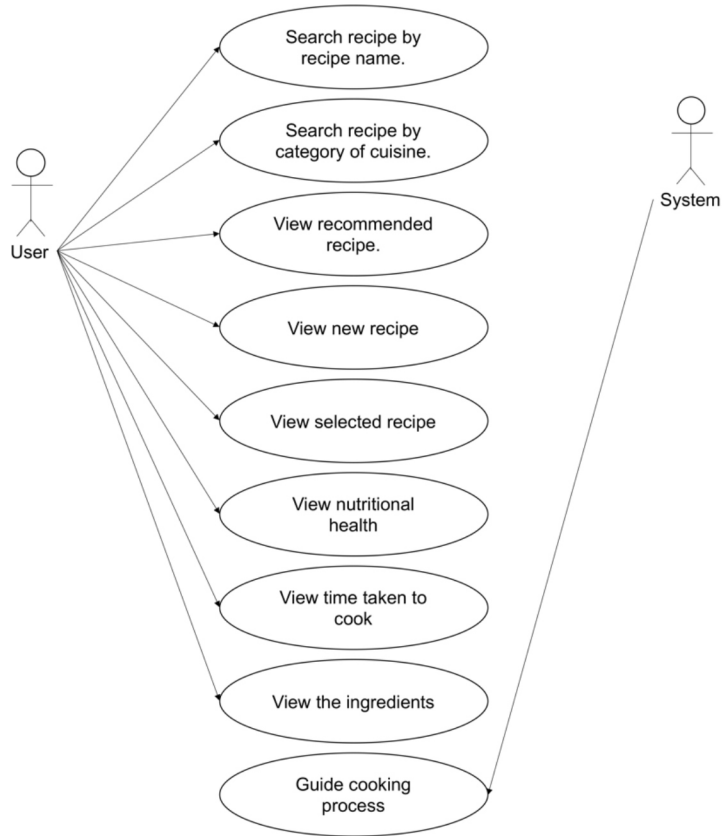


Figure 1: Use Case diagram

2.2.2 Sequence diagram

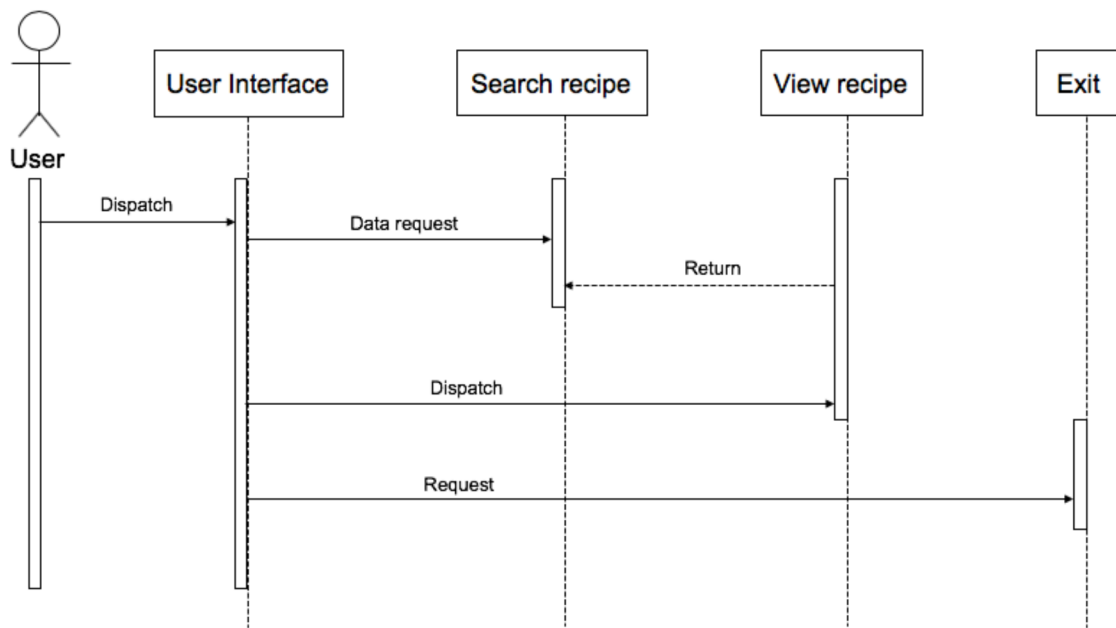


Figure 2: Sequence diagram

3. Prototype

3.1 Initial design

The main screen views shown in figure 3 were drawn following the discussion among our team. From the left, user will be taken to home screen that show two buttons: Search Recipe and Search Category. User should choose which type of searching method they prefer to use. After click any of the button, user will be taken to the second user interface in the middle. In the second user interface, user will be shown a list of recipes that they want to cook. Lastly, the system will display the recipe of the chosen food by the user.

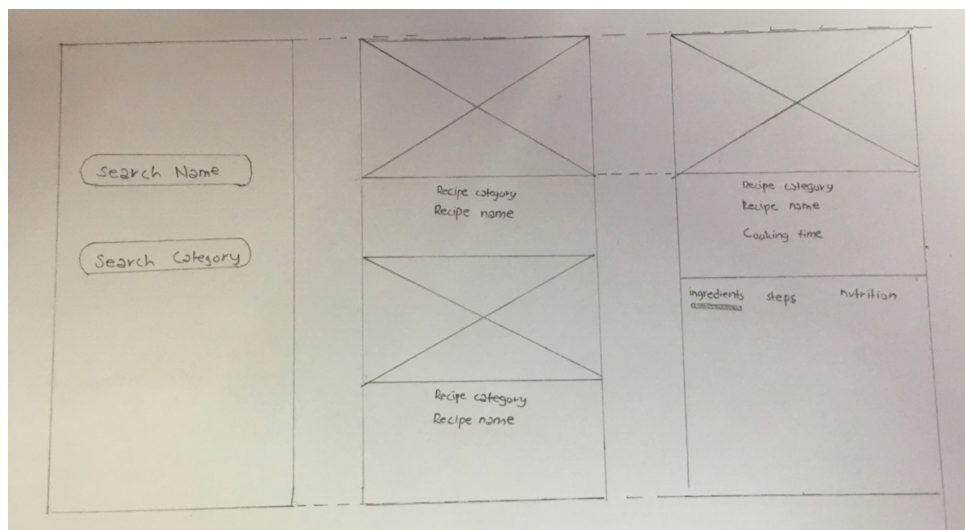


Figure 3: Initial design

3.2 Design change

Before we implement high fidelity prototype, we decide to change our home screen to increase the user experience. User will be provided with a search bar to help them search specific recipe they want. After that, we split the recipe into different category such as Malaysian cuisine, Korean cuisine and Japanese cuisine. We also add new functionalities in our application which is the user can choose the latest recipe that are uploaded and recommendation recipe from the system.

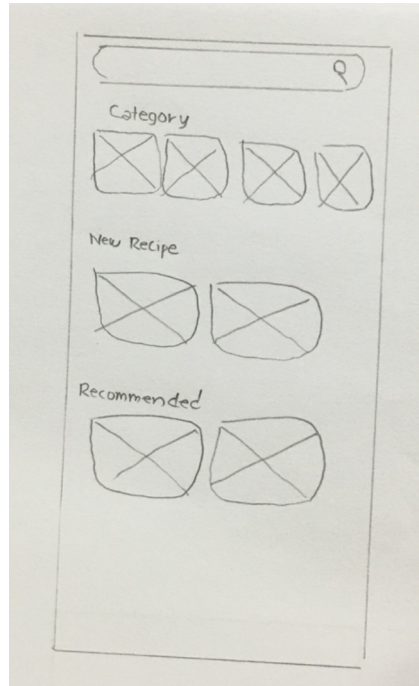


Figure 4: Update design

3.3 Prototype

High fidelity prototype that are created using Adobe XD.

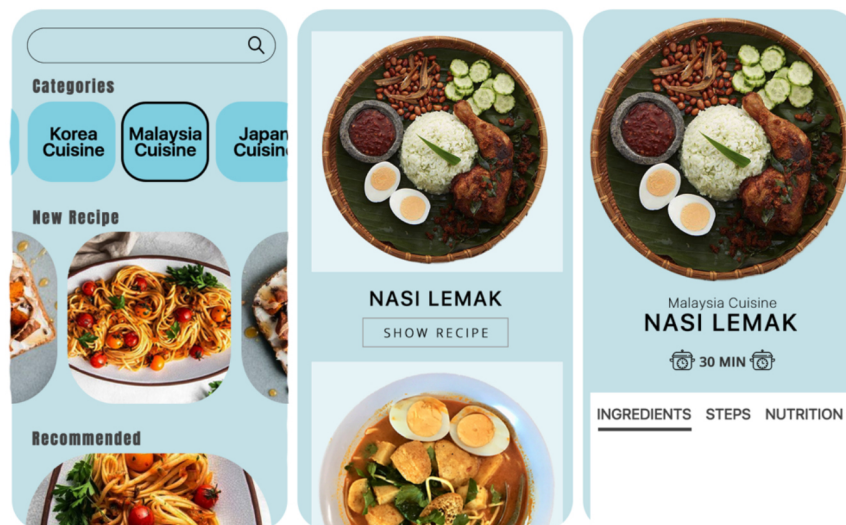


Figure 5: Prototype

4. Future Work

This project turned out to be a valuable experience in our team. Many little challenges were encountered to understand why managing application development is not an easy task.

The core functionality of this application is to display the ingredients and steps for the recipe chosen by user. But, we are struggling to put all of the details in one screen to increase user experience and decrease users' eye constraint to scroll down the list on their screen. User will face difficulty to check the steps while cooking in the kitchen.

Although our project only reach prototyping phase only, but still it is a complicated process. From this project, we learn to manage time, understand and capture user requirements, define scope which will contribute to a better management of application development.

5. Conclusion

This application will be handy for anyone that are looking for recipe. The application can be used by broad range of users such as parents trying to cook new recipe for their kids, single person that want to try a new recipe and restaurant owner that want to add new recipe in their menu. Since this is a mobile application, users have the luxury to search for the recipe they want anytime. It will help to make the lives of people simpler.