SOFTWARE REQUIREMENTS SPECIFICATION

for

FOODKAMP APP (P005)

Version 1.0

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May 1, 2021

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1 Introduction

1.1 Purpose

In this era where time is money, people in our college generally face the hassle of waiting a lot in cafeterias like Cafe Zippy and Aladin to get their food. It is a tiring and time-consuming process. But a food ordering app can reduce this time barrier. With the help of this system, a person can order desired food at his desired time. Also, it will help restaurants to get optimized control, as they will be well prepared with the orders, when the customer arrives. From the management point of view, the manager will be able to control the restaurant by having all the reports in hand and will be able to see the records of their sales. This application helps the restaurants to do all functionalities accurately and also increase their efficiency. Thus, benefiting everyone involved in the business.

1.2 Document Conventions

Every requirement statement has its own priority.

1.3 Intended Audience and Reading Suggestions

This SRS document is for project managers, developers, staff, users and testers. Further the document will provide all the internal, external, functional and non-functional information of "FOODKAMP APP".

1.4 Project Scope

The food delivery app is a platform for people for ordering food online.

A user can search for his favorite food from his/her selected restaurant. Users can also see the price, reviews and average delivery time (if restaurant provide delivery services, like Aladin) for their understanding. A user can also select options like "visit and eat", "collect the parcel" or "I want delivery". User can provide the time, at which he/she will reach the restaurant, or wants his/her order to be delivered. After the user is satisfied with his food choice, he/she can place the order and make a payment from the in-app wallet. User can deposit the money in their in-app wallet. After the payment is made, a unique QR code is generated for that order, which is used for verification, while receiving the order. After the order is placed, order is received by the restaurant, and they can

start preparing for that order.

Throughout the process, user can know the status of his order. Once the order is prepared, users get a notification, that their order is prepared. Later, the user can post his/her review and experience of the order.

Restaurants can apply to be a part of the system and can add/update food menus, food images and information. Restaurants can also see the summary of their daily, weekly, or monthly sales.

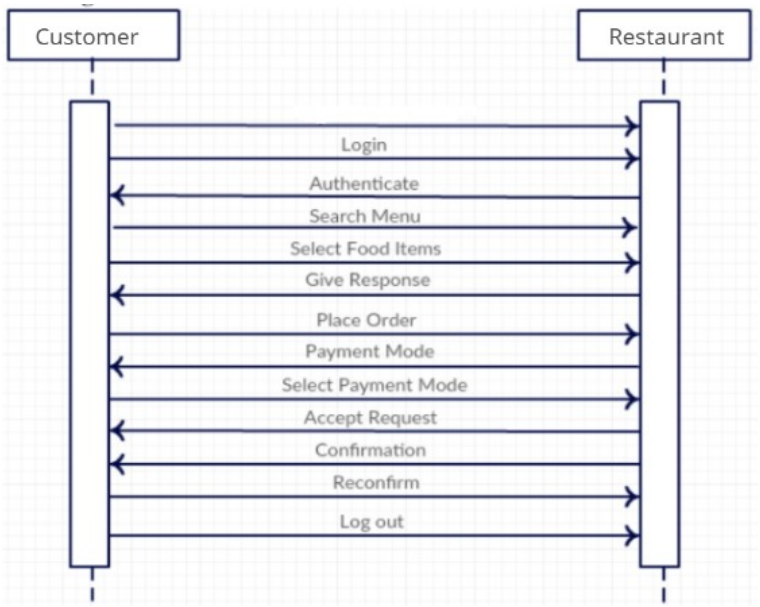

Figure 1.1: Entire work-flow

Figure 1.1 (Entire work-flow) is the overview of the project. Connection of all the entities are dependable to each others. This gives the simple idea about the functional activities of the project.

2 Overall Description

2.1 Product Perspective

"FOODKAMP APP" is the replacement of the traditional dine-in method. This will allow the users to enjoy their meals in college cafeterias and nearby restaurants, without losing their time while standing in lines to place their order. Also, it will help the restaurants to be ready with the orders and have a knowledge of their requirements for the present time, knowing which they can adjust work load. Also the order data can be used to generate statistics of sales which will also allow the restaurants to make adjustments to their menus or cooking methods.

2.2 User Classes and Characteristics

The food delivery app will basically have 2 types of users.

- Customer
- Restaurant

Customers will order the food. Restaurant will accept the order, and deliver (if they provide delivery services), else customers will collect their order by visiting restaurant.

Figure 2.1: Types of users

2.3 Product Functions

The food delivery app will have many functions: -

- Allowing the user to register/sign in on the app with his/her details
- Showing the list of available restaurants
- Showing menu according to the selected restaurant
- Showing correct prices and delivery time (if delivery possible)
- Should have an easy-to-use interface
- Allowing the user to select multiple food items at the same time
- Allowing the user to add money to the wallet
- Making payments flawless and accurate
- Assuring the user of the order placed
- Allowing the restaurant to register/sign in in the app with their details
- Allowing restaurant to maintain the record of each order
- Allowing the restaurant to update the menu
- Allowing the restaurant to change opening and closing times
- Allowing the restaurant to verify orders while pick-up and delivery
- Allowing restaurant to check their timely sales

After installing the app, the first thing the user has to do, is to create his account on the app. This will allow the user to perform all the functions without any issues. The user can use his/her email and password to login and log out of the app.

The data of the user that will be saved will be – email, first name, last name, phone no., address and password hash.

Users can then use the app and select the food item of their choice. Also, the users will have the option to save their favorite food items, so that they can be ordered quickly.

Each food item will have an image, name, price, and availability, reviews and average delivery time.

Each order will have a unique order ID, timestamp, item names, quantities, prices, total price, payment mode and order status.

Each restaurant will have a unique ID, name, opening and closing time, food menu, phone no., email ID.

2.4 Operating Environment

The "FOODKAMP APP" will operate in android operating system.

2.5 Design and Implementation Constraints

Customers have 3 activities: -

- Registration/Login
- Ordering Food
- Making Payment

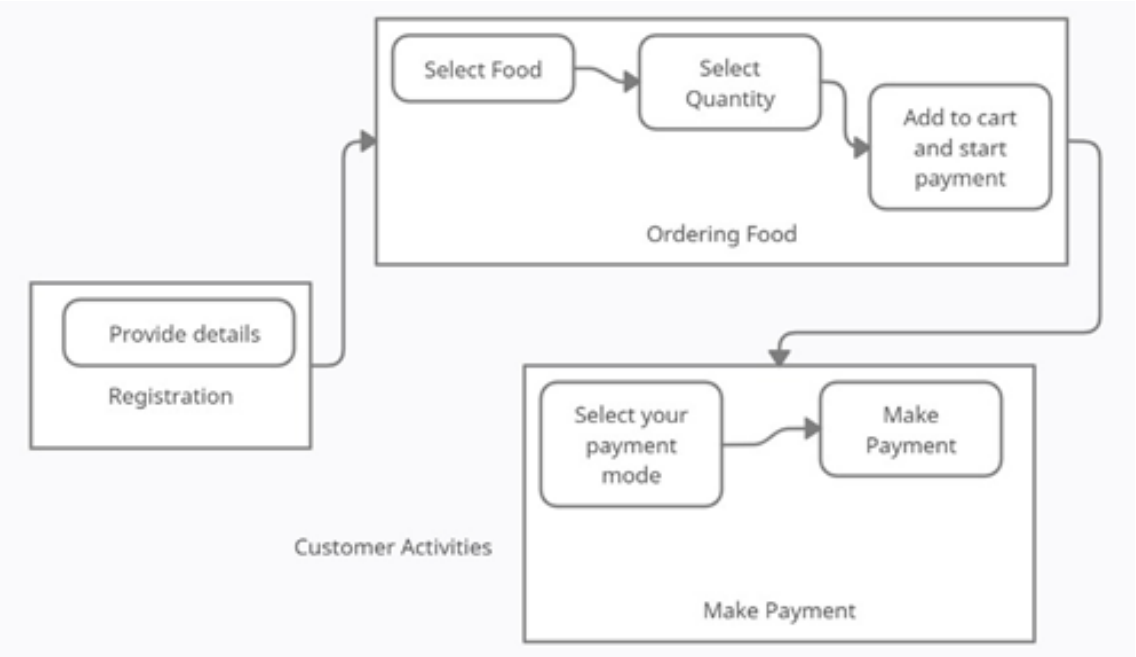

Figure 2.2: Customer Activities

Customers first must register in the app. After registration, they can browse through restaurants and select their food. After selecting food, they can make payment to place their order.

Restaurants have 4 activities: -

- Registration/Login
- Updating Menu

- Receiving and Preparing Order
- Verifying and Fulfilling Order

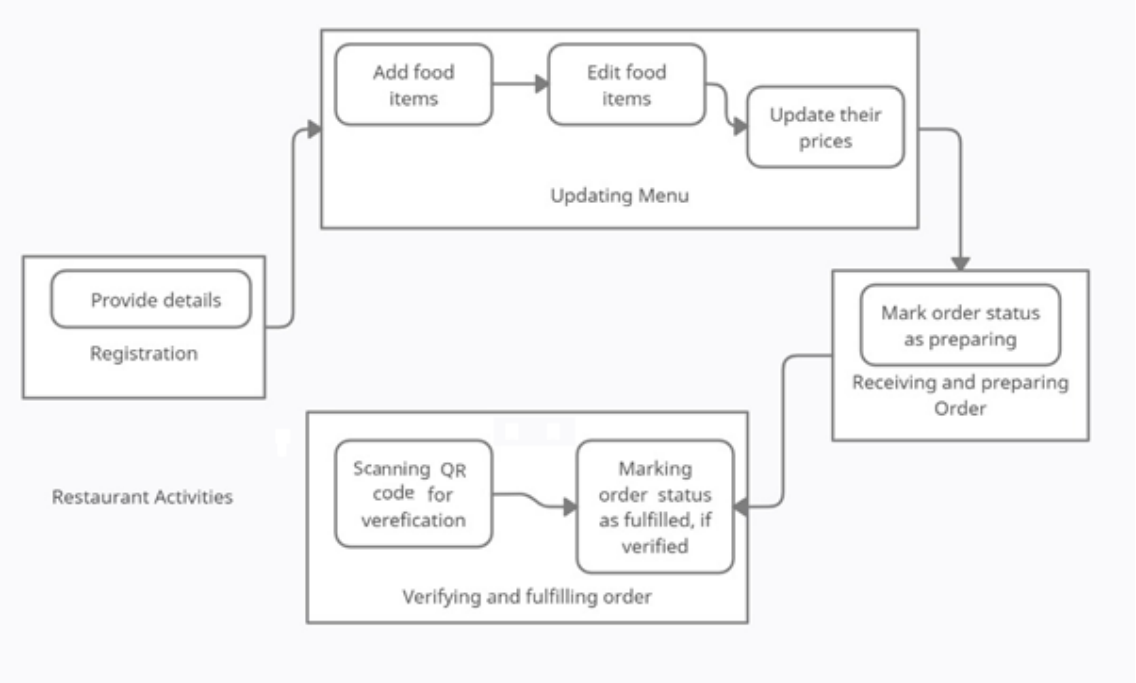

Figure 2.3: Restaurant Activities

Restaurants also first must register in the app. After registration, they can update their menu. After updating menu, when restaurants receive orders, they shall start preparing them, and finally fulfill the order after verification.

3 System Features

"FOODKAMP APP" is an e-commerce application for restaurants. So, the main art of this product is to enter the data of different restaurants and users, and change them as needed, and also keep track of transactions made via app.

3.1 Description and Priority

This "FOODKAMP APP" has some main features and some sub features. But all the features are necessary for this app.

The features of user with priority from top to bottom:

1. **Login:** The first basic step to start placing your order.
2. **Select Food:** Customers can select their food from the menus, provided by the restaurants.
3. **Place Order and make Payment:** After selecting the food, customers have to make payment to finally place their order.
4. **Logout:** After placing order, customers can logout, if they want.

The features of restaurant with priority from top to bottom:

1. **Login:** The restaurant must be logged in to receive order details
2. **Update Menu:** The restaurant must have an updated menu for correct display of quantities and prices to the user
3. **Receiving and Accepting Orders:** The restaurant should receive and prepare order within the time specified by them.
4. **See Statistics:** Restaurants can see their sales statistics from the app

3.2 Functional Requirements

Food Ordering App is being built on Flutter framework, and uses Dart and Kotlin as languages for programming, and Firebase for database.

Back-End – Dart, Kotlin, Firebase
Front End – Dart-Flutter
Database – firebase

4 Other Nonfunctional Requirements

4.1 Performance Requirements

"FOODKAMP APP" will be used for ordering food from the restaurants present in the college. This app uses Flutter + Dart, Firebase.
The app should perform its function in minimum time and with maximum accuracy.

4.2 Security Requirements

- One user can perform only his/her actions.
- User cannot cancel the order, once it is placed.
- Also, if the payment is cancelled from any end, safety of the amount deducted should be taken care of.
- If an order is placed successfully, quantities available of those items must decrease from the restaurant menu
- Order won't be fulfilled until the restaurant scans the QR code from user's phone, or the user themselves tap on the "received order button".
- Money must be deducted from the wallet after each successful order placement
- Order receiving time can't be less than time after including the order preparation time

4.3 Software Quality Attributes

1. **Availability:** The application must be able to fulfill user requests 24x7. And should allow user to place orders when at least one restaurant is open.
2. **Reliability:** The application must assure that the user requests reach to the restaurants successfully.
3. **Testability:** In case of a software bug, it must be found and resolved quickly.
4. **Maintainability:** The app must allow changes to the interface or working quickly and should not disturb other components of the app.
5. **Usability:** The app must be easy to understand and use. The interface must be user-friendly and must be free from any glitches.

4.4 Business Rules

"FOODKAMP APP" is for ordering food from restaurants available. It basically saves time and hassle. This app only places the orders and does not manage the preparation of the orders at the restaurant.

If the order is not prepared by the time the user wanted his/her order, the restaurant must be responsible for that.

Also, if the order is not picked-up by the user within the defined time, it would be in restaurant's control of whether to fulfill the order later or cancel the order and return/not return the money.

5 Other Requirements

"FOODKAMP APP" will need maintenance as it is a long process software. It will need re-factoring and further the requirements can be changed as the information is changing frequently. Also, the changes in the app would be done depending mostly on the needs of user and restaurant, or when there is any security issue or any software bug.