



# Fidroo: A Food Delivery App

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**Abstract**— Fidroo a food delivery application which will be used to take orders from the users and deliver food to their respective places. We are using an open source framework Flutter for the development of this application and the programming language used is Dart. In this for the backend of the application we are using Firebase which is a software which provides us the services for the backend. For the database we are using Cloud Fire store for storing all the data of the app. This is a hybrid application which can be installed in both android as well as IOS devices. It is a food delivery app which only focuses on Cloud Kitchens and Cloud Chefs this differentiates it from other food delivery applications in the market.

**Keywords-** Food Delivery, Flutter, Firebase, Cloud Fire store, Dart, Android, IOS, Cloud Kitchens, Cloud Chefs, Hybrid.

## I. INTRODUCTION

In today's era, the use of the internet and smartphones are widely spread all over the world, people are not confined to using a phone to make a call or send messages, and they can carry out numerous tasks with the help of the internet such as video conferencing.

E-commerce, Digital banking, Payments, Online Education, Entertainment & Lifestyle and during this enhancement one more industry has also seen rapid growth, which is the food industry through their online food ordering system, in which a customer has internet access can browse from a website or any other application and go through all the listings from various Restaurants, select desired food, provide address information, and make payment.

Within a given time, the food is delivered to the address, it's just that simple, and it has provided Restaurants with a great customer base and also made a variety of options available to the customer. Studies suggest that 42% of the overall food ordering market is now being placed online.

Collectively, the food industry has an annual growth rate of about 3.7%, with 15-20% annual growth in the online ordering and food delivery sector.

Another technology that has made an online food ordering system seamless is the Electronic payment system. Or online payment system. This method has grown rapidly due to the Internet era over the last decade.

It provides various options as per the consumer's need, such as Credit Card, Debit Card, Smart Card, E-Wallet, Net banking, Mobile Payment, etc. Nowadays integrating a payment gateway to a website or other application ensures ease of use, authenticity, and great customer service.

## II. RELATED WORK

### *Swiggy*

Swiggy is one of the most popular app in the food sector which delivers food to the people which is in various cities and is growing massively with respect to all type of food dishes which includes breakfast, lunch, dinner and beverages. This hyperlocal food delivery app currently operates in 25 cities in India and has about 40000 restaurants globally. Swiggy has established a reputation for itself in the online food delivery space in a short span.

It is basically an Indian food delivery app. The most attractive part of this app is that it does not have any restriction value in ordering food of any amount. It delivers the food in approximately 37 to 40 minutes of timespan. One can eat his/her favorite meal ordering from their favorite restaurants.

### *Zomato*

Zomato is also one of the most liked app by the users in the food sector and is a publicly traded company. It started with providing reviews and information about restaurants and natured into online table reservations and online food delivery. It provides a restaurant delivery service and is based in India. It contains all food types and is liked by many people. Users can place their orders according to their needs taking the look to the reviews shared by the customers and rating given to the particular restaurant. Zomato also provides the option in which one can follow their friends and are able to see their liking of their food. People can enjoy many promos and offers and get delivered the food as soon as possible.

### *EatSure*

Eatsure is a food delivery app, which brings popular restaurants that serve delicious food while abiding by the best-in-class safety measures. This enables you to trust the food that you relish so much. However, EatSure is not just a food

delivery app, but also a promise, assuring safety and hygiene in every bite you take. Eatsure contains some bonus points from which you can get some coupons with discount respectively.

#### *Dunzo*

Dunzo is an Indian company, which provides delivery services in Bengaluru, Delhi, Gurgaon, Pune, Mumbai, Chennai and Hyderabad. They have their own app that is available 24X7 and delivers grocery, food, packages that provides to their customers on demand. People can order anything which is available in a store and Dunzo delivery partners will deliver the items ordered from the app. It basically helps when you do not want to go out, or when you are cooking something and you have forgotten to get an ingredient and if it is not available nearby, Dunzo comes to your rescue. You can order it from the app and the ingredient will be at your doorstep.

### III. IMPLEMENTATION

We are developing our project using some of the newest technologies in the market they are:-

#### *Flutter*

An open source framework developed and put forward by google which is used to develop hybrid mobile application means we don't have to maintain two different codebases for android and iOS applications because now in only one codebase you can run your app in android as well as iOS devices. Flutter is a UI centered framework in which we can develop great UI's seamlessly which look same in both android and iOS device.

#### *Dart*

Dart is a programming language developed and launched by google for flutter it supports object oriented programming and functional programming. In dart we can do synchronous as well as asynchronous programming. It is becoming popular due to its support to asynchronous programming and it handles asynchronous tasks seamlessly. There is an official playground developed to practice and learn Dart and is called as DartPad.

#### *Firebase*

Firebase is software which provides many different services like for software development, analytics and for engaging the user. Some of them are like for software development it provides authentication, cloud fire store, real time database, storage, machine learning.

For engaging the user Cloud Messaging, in app messaging, Ad Mob, A/B testing

For analytics it has dashboard of the usage of the application. We are using firebase for the database and authentication purposes and in firebase for database we are using cloud firestore.

In our project we have three different apps

1. User App
2. Home Chef App
3. Admin App

#### *User App*

1. Introduction - Welcome screens will be shown for the first time after app installation
2. Phone verification - Using the mobile OTP verification method, user can log into the application. If the user logs in for the first time, the user is required to sign up and provide a few details such as name and email
3. Set location - The user is given two options :
  - a) Set location via current location
  - b) Set location via dropping the pin on google map.
4. Once the sign up process is done, The user can select food items from any home cook available.
5. The user adds items to the cart and proceeds to checkout

#### *Home Chef App*

1. Login - The registered home cooks will be provided with login credentials, with which they can log in to the home cook app.
2. Set dish status - The home cook can set the status of a particular dish to online or offline based on availability.
3. Set restaurant status - The home cook can set the status of their cloud kitchen to online-offline based on their convenience.
4. Accept/Reject Orders - The home cook can accept or reject the incoming order from users.
5. Set delivery time - Upon accepting the order, the home cook has a live counter running, within the time limit the home cook must prepare the food. In case of failure, the home cook has an option to extend the time. No home cook is allowed to extend the preparation time by more than 1 hr. This is to ensure a proper user experience.
6. Menu updating - In case of any changes in menu items or pricing, the home cook must contact the admin team and the team will update the pricing.

#### *Admin App*

1. Verification - Admin will manually(physically) inspect home cooks, and cloud kitchens, and based on the inspection. The admin team will decide whether to enroll the cloud kitchen/home cook or not.The process will be similar to Paytm physical KYC.

2. Registration - The Admin team, upon successful verification will register the home cooks to the platform via the Admin App. The unique login ID and credentials will be created for individual home cooks. These credentials will be later used by the home cooks to login into the home cook app.
3. Menu Adding - Admin team will gather the menu from home cooks and upload them to the admin app platform inside the specific home cook page. This way, the chance of encountering pricing errors will be eliminated. The menu items will be added with their respective add ons through the admin app only
4. Delivery Management - The admin app is a double-view application that has a dynamic interface that changes according to the Authorisation ID provided at the time of login. In the case of the admin login, The admin view will be prompted. Similarly, the delivery view will be prompted in the case of the delivery person's login. The delivery management view will display
  - a) Current incoming orders from users.
  - b) Address of the home chef
  - c) Address of the user
  - d) Total Amount for the order
  - e) Delivery instructions(if any)

#### IV. RESULTS AND CONCLUSIONS

We have three working apps on which work is continuously going on and they are:

- User App
- Admin App
- Home Chef App

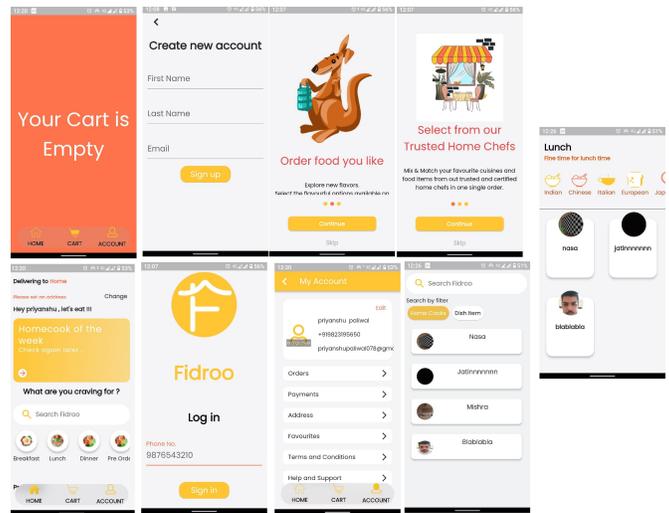


Fig : User App

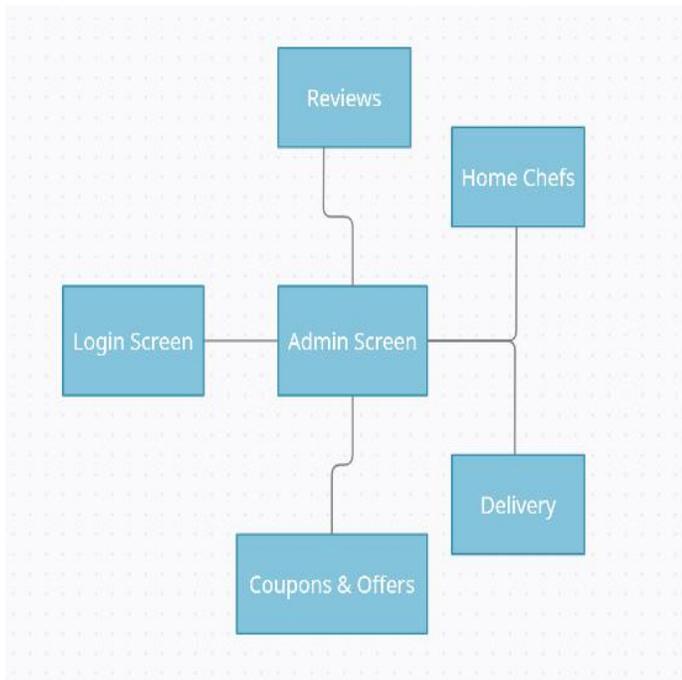


Fig : Admin App flowchart

#### Admin App

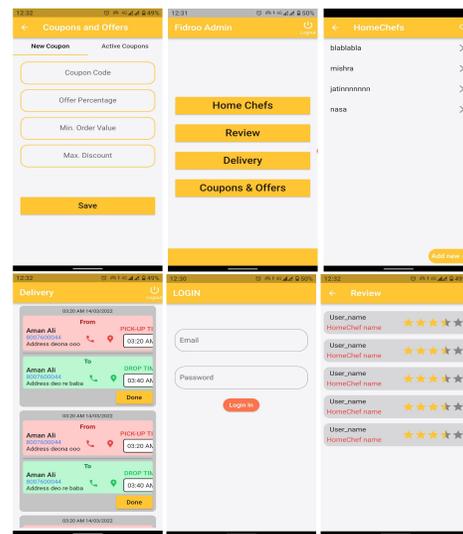
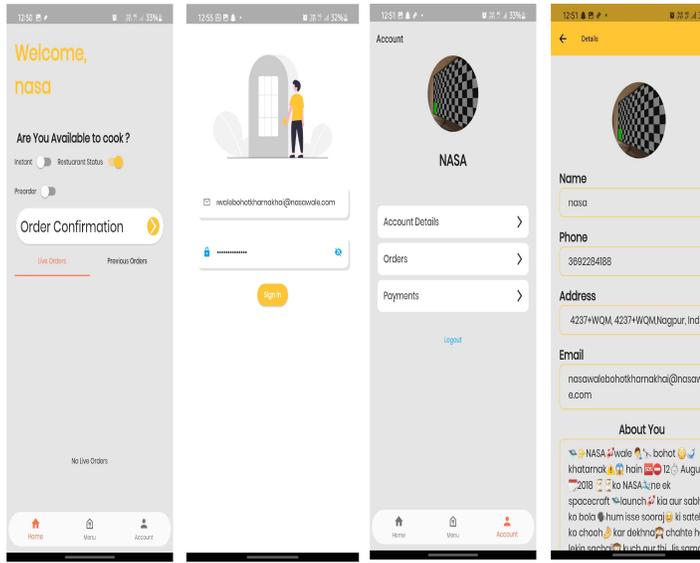


Fig : Admin App

## Home Chef App

Is going on the developed components.



In present this project in under development and simultaneously testing

## V. REFERENCES

These are the references from where we have referred to develop our project and to learn about the technologies which are used in our project.

- [1] Official documentation to use firebase in flutter <https://firebase.flutter.dev/>
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- [3] Referred some mediam blogs <https://medium.com/>
- [4] Referred different websites for ui development some of them are Pinterest,Screenlane, Dribbble <https://in.pinterest.com/> , <https://dribbble.com/> , <https://screenlane.com/> .
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