Swiggy clone Application(SRS) 1

Software Engineering (Lovely Professional University)

SWIGGY CLONE APPLICATION SPECIFICATION DOCUMENT

Application Requirements Specification

APPLICATION REQUIREMENT SPECIFICATION

1. SCOPE

The Client of the application is Appoets.They asked Tranxit Technologies to develop a modern well-established food chain App looking for a mobile platform. Offline delivery services looking for a convenient mobile delivery. Basically, we aim to provide a mobilized method for food delivery system.

In current formal dining environments, some form of physical static menu is utilised to convey the available food and beverage choices to customers. Said menus are generally paper based and hence impose restrictions on the textual real estate available and the ability a restaurateur has to update them. This document specifies the requirements for a restaurant paper menu and ordering replacement strategy to alleviate the problems associated with the current archaic method. Four related concepts are encompassed by the general scope of the Swiggy Clone system. The first pertains to the replacement of paper-based menus using an electronic format, the second relates to a complementary electronic strategy for the front of house handling of a customer's order and the third surrounds the process of transferring said electronic orders to the kitchen for preparation and finally the orders are delivered to user. It should be noted that while the suggested strategy incorporates the use of various hardware components, the primary focus of the presented SRS relates to the constituent software elements.

1.1 OVERVIEW

The Swiggy Clone is a software package to facilitate ordering within a location nearby restaurant. This specification will cover the customer and restaurant registration related portions. The detailed informationabout how customers and restaurant will register to the application and various approvals will be provided. The specification describes how the customer choose specific restaurant and order food and how those orders are managed and delivered by restauarant,then how the order will be picked up and delivered to the specific user by delivery boy. It will be also described what the dispute panel will do and how it works.

The system contains full accountability and logging systems, and supports supervisor actions to account for exceptional circumstances, such as a order being refunded or walked out on. Customers are presented with an attractive and easy-to-use surface computer GUI with option to choose from theirmenus. Once customers done with order, they can place order from their cart, and payment is done once order is delivered. In the meanwhile, if items ordered by customer are not available unfortunately, Dispute panel is responsible for handling the issue and order can be replaced by available dishes or Cancelled and if delivery doesn't respond within timeline, dispute panel reassign the order to another delivery boy.

1.2 OBJECTIVES

The objectives of Swiggy Clone application are as follows

- To implement mobile app for Swiggy Clone app and is to satisfy customers wish by ordering food by the way you are
- To deliver full content management for Restaurant and disputers/Admin
- To display attractive, appealing dishes in restaurant dashboard
- To design a base platform for SWIGGY CLONE application, suiting such Food delivery system
- To send helpful Push notifications to users in most important events during the application workflow.
- To support logging of errors/warnings/exceptions and audit all the user actions during the application execution.
- To achieve high performance of the application and scalability.

PROJECT RETURN ON INVESTMENT (ROI Metrics) OF THE ENTIRE SWIGGY CLONE APPLICATION ARE AS FOLLOWS

Initially:

- To attract customers from 18..60+
- To achieve at least 80% of users completed registration on Swiggy Clone to participate in one or more activities on SWIGGY CLONE APP. We define "retained users" as registered users, who have visited SWIGGY CLONE at least 2 more times after registration AND have ordered food during 3 months after their initial activity.

For future:

- To involve thousands of users to Swiggy Clone app
- To make a positive buzz through community about easy food delivery system
- To achieve and confirm an ability for adding restaurant above 5km in the future. Most of base platform features, defined in this conceptualization, could be efficiently re-used in the future for building new communities if this application succeeds.

General Capacity Metrics:

- The maximum expected count of users will be several thousand until the end of first year. The system must be scalable.
- The maximum expected count of concurrent users for the application is 500.

General Usability Metrics:

- The new application will be specially designed for users of 18…60+years old.
- GUI has to be attractive, user friendly and fun.

1.3LIMITATIONS AND ASSUMPTIONS

The limitations of the entire SWIGGY CLONE application are listed below:

- The application is in English only. The application is for USA users by default.
- This is a first conceptualization for SWIGGY CLONE and, therefore, not all details are covered now – future contests will explain them.
- There can be restrictions to collect some sort of personal data for users and that can limit application functionality.
- No pre-approval of blog/forum posts by System Admin will be supported in the first version of the application.

Assumptions critical to the success of the entire SWIGGY CLONE application are listed below:

- The application will be web-based and both on ANDROID and iOS
- Any user will access the application through a web-browser.
- Users can be from different time zones.
- International symbols have to be properly displayed in the application.
- System Admins will be able to manage all the users and manage/moderate all the content in the application.
- Admin will fully control and approve activities of their Restaurant and users in the application.
- All the content and activities will be appropriate for ages of 18..60+
- At least one System Admin has to present in the system.
- The application is free to download for all users

Environment and technology requirements:

- Cloud hosting space (Amazon aws) will be used to entirely host the application.
- The application will be fully workable on PC, Mac machines/Android/iOS. The minimal required hardware resources can be assumed as the same as for using for the Project we have.
- Web-pages are required to properly fit on mobile devices, working on iOS and Android platforms.
- Application has to be implemented in PHP (Web), Java (Android), Objective-C/Swift (iOS) technologies.
- MySQL 5.1 will be used as a database.
- The design has to be simple and avoid abstraction or persistence framework

BENEFITS

Greater flexibility in menus, an increase in restaurant productivity and capacity for extensive business auditing are the primary benefits associated with the Swiggy Clone.

Menu updates can be rolled out at any time with no extra labour from printing and distributing new menus, allowing for more dynamic pricing and content changes. With the underlying software system taking responsibility for a customer's order throughout its lifecycle, not only is accuracy ensured, but all actions are logged in a database for analysis and accountability of App.

2. SOFTWARE REQUIREMENT SPECIFICATION

A software requirements specification (SRS) is a description of a software system to be developed. It lays out **functional** and non-**functional** requirements, and may include a set of use cases that describe user interactions that the software must provide.

2.1 Purpose of SRS:

In short, the purpose of this SRSdocument is to provide a detailed overview of our software product, its parameters and goals. This document describes the project's target audience and its user interface, hardware and software requirements.

2.2 Purpose of Swiggy Clone Application:

The purpose of this SRS is to outline both the functional and non-functional requirements of the subject Swiggy Clone. In addition to said requirements, the document also provides a detailed profile of the external interfaces, performance considerations and design constraints imposed on the subsequent implementation. It is the intention that the presented set of requirements possesses the following qualities, correctness, unambiguousness, completeness, consistency, verifiability, modifiability and traceability. Consequently, the document should act as a foundation for efficient and well-managed project completion and further serve as an accurate reference in the future. The primary audience of this SRS document will be the development team employed to implement the specified SWIGGY CLONE. It will not only provide an extensive capacity for project planning and progress assessment but it will further assist with developer/Clients interactions. To this audience group, this SRS should convey and confirm the required functionality and represent a contractual agreement between the involved members.

2.3 Process Involved:

The following use cases of the "SWIGGY CLONE" conceptualization are in scope. Please note, they will be slightly renamed and extended in the specification document, but references to those original use cases are also provided.

- Unregistered Users also Can view(You can click skip option and g view restaurant)
- Register to Application
- Display Nearby Restaurant
- Request to restaurant

- Accept/Reject order by restaurant(Rejection done on the basis if ordered items not available or no availability of delivery boy)
- Order Assigned to Delivery boy
- Pickup and deliver order by Delivery Boy
- Reassign order by dispute panel
- Manage orders, rejection by dispute panel
- Push notification for user and delivery boy

2.4 FUNCTIONAL REQUIREMENTS

This subsection presents the identified functional requirements for the subject Swiggy Clone. Initially, general requirements that pertain to the whole system are given. Where possible, subsequent requirements have been demarcated based on their relevance to the users of the system, that is, Customers, Restaurants, Admin, Delivery boy and Dispute panel

2.4.1 General:

The following are theidentified functional **general** requirements that directly relate to the entire Swiggy Clone System.

Requirement	**Description**
G1	A server shall host the Swiggy Clone App and provide system data processing and storage capability.
G2	A surface app page shall provide a customer with all customer system functionality.
G3	Anapp shall provide a User/Restaurant with all user/restaurant system functionality (according to access control).
G4	A display shall provide a Delivery Boy with all Delivery boy system functionality.
G5	A app shall be capable of interfacing with a register to facilitate the accurate processing of a payment

2.4.2 Customer:

The following are theidentified functional **Customer** requirements that directly relate to the entire Swiggy Clone System.

RequirementsDescription	
C01	Customer Shall be able to login or skip from registration to enter the menu dashboard

C02	Customer shall be able to view nearby restaurants(Specified Distance)
C03	Customers shall be able to choose their favourite restaurant or restaurant they wish to order food
C04	Customer shall be able to view menu and categories and subcategories involved
C05	Customer shall be able to order foods and add to cart
C06	Customer shall be able to remove orders from cart
C07	Customer shall be able to navigate between menu and can add items to cart
C08	Customer shall be able to engage bill mode to finalise payment through their engaged menu by cash
C09	Customer shall be able to disengage bill mode to cancel the billing process through their engaged menu by card
C10	Customer shall be able to cancel the order
C11	When in billing mode,app shall display a representation of a cash payment for the item ordered
C12	When in billing mode, app shall display a representation of a bankcard payment for each customer
C13	Customer shall able to order item from wallet amount
C14	Customer shall able to cancel order and if cancelled money will be transferred to wallet to order food for next time(If Card Payment)
C15	Customer shall able to receive delivery boy details once order picked up
C16	Customer shall able to track the delivery boy details
C17	Customer shall able to give rating for restaurant and delivery boy
C18	Customer shall able to favourite the restaurant
C19	Customer receives notification for order accepted and once order picked and delivered
C20	Customer shall able to use offers for restaurants have

2.4.3 Restaurant:

The following are theidentified functional **Restaurant** requirements that directly relate to the entire Swiggy Clone System

RequirementsDescription

R1	Restaurant shall able to CRUD items from menu

R2	Restaurant shall be able to receive orders from customers
R3	Restaurant shall be able to view the orders which has been ordered by customers
R4	Restaurant shall be able accept or cancel order depends upon the order received and availability of order
R5	Restaurant shall be able to assign delivery boy to deliver order
R6	Restaurant shall be able to receive acknowledgement from Delivery Boy
R7	Restaurant shall be able to view the payment
R8	Restaurant shall able able to receive notifications once order delivered
R9	Restaurant shall able to give offers

2.4.4 Delivery Boy:

The following are theidentified functional **Delivery boy** requirements that directly relate to the entire Swiggy Clone System

Requirements	**Description**
D1	Delivery boy shall able to start the shift
D2	Delivery boy shall able to receive incoming request from restaurant
D3	Delivery boy shall able to acknowledge for the request
D4	Delivery boy shall able to acknowledge for request within 3 sec of time
D5	Delivery boy shall able to toggle Online/Offline/Break option
D6	Delivery boy shall able to reach the restaurant and check with order details
D7	Delivery boy shall able to receive customer details from restaurant
D8	Delivery boy shall able to pick up and deliver order to customer
D9	Delivery boy shall able to receive rating from customers
D10	Delivery boy shall able to receive notification for restaurant details, payment details of customer
D11	Delivery boy shall able to receive payment if order is done with cash

2.4.5 Admin

The following are theidentified functional **Admin** requirements that directly relate to the entire Swiggy Clone System

Requirements	Description
A1	Admin shall able to Manage users
A2	Admin shall able to Manage providers
A3	Admin shall able to Mange accounts
A4	Admin shall able to CRUD items for restaurant
A5	Admin shall to manage restaurant details
A6	Admin shall to manage restaurant rate and reviews
A7	Admin shall able to manage Delivery boy details
A8	Admin shall able to display top rated restaurant
A9	Admin shall able to display offers for specific restaurant
A10	Admin shall able to contact between Delivery boy and restaurant to replace or cancel order if items are not available
A11	Admin shall to add promo code/offers

2.4.6 Dispute

The following are theidentified functional **Dispute** requirements that directly relate to the entire Swiggy Clone System

Requirements	Description
DI1	Dispute panel shall able to reassign order in the case, if delivery boy dint acknowledge the request
DI2	Dispute panel shall manage, if customer needs replacement of order or cancel order in case of order not available

2.5 NON-FUNCTIONAL REQUIREMENTS

This subsection presents the identified non-functional requirements for the Swiggy Clone App. The subcategories of non-functional requirements given are safety, security, interface, human engineering, qualification, operational and maintenance.

2.5.1 Safety

The following are the identified non-functional **safety** requirements that directly relate to the entire Swiggy Clone System.

Requirements	Description
S1	The system shall log every state and state change of action, tablet and display to provision recovery from system failure.
S2	The system shall be capable of restoring itself to its previous state in the event of failure (e.g. a system crash or power loss).
S3	The system shall be able to display a menu at all times to facilitate manual order taking should the need arise.
S4	The system shall utilise periodic 120-second keep-alive messages between mobile and the server to monitor app operational status

2.5.2 Compatibility and Security:

The following are the identified non-functional **Compatibility and Security** requirements that directly relate to the entire Swiggy Clone System.

Requirements	Description
CS1	The system shall able to use the app in different platforms like different versions of OS/Mobiles
CS2	The system shall able to do authentication process for login and payment through bankcard
CS3	The user shall able to do payment with secured bank payment mode
CS4	The system shall able to do encryption and decryption of data for password which is given by user for login

2.5.3 Human Engineering Requirements

The following are the identified non-functional **Human engineering requirements** that directly relate to the entire Swiggy Clone System.

Requirements	Description
H01	Any element of the system will take no longer than 10-seconds to restart.
H02	Admin must not dismiss an engaged menu unless the customer requests it.

2.5.4 Performance Requirements

The following are the identified non-functional **Performance requirements** that directly relate to the entire Swiggy Clone System.

Requirements	Description
P1	The server shall be capable of supporting no less than 200 concurrent connections from any combination of computers, tablets and displays.
P2	The server shall be capable of supporting an arbitrary number of active orders, that is, no orders shall be lost under any circumstances.

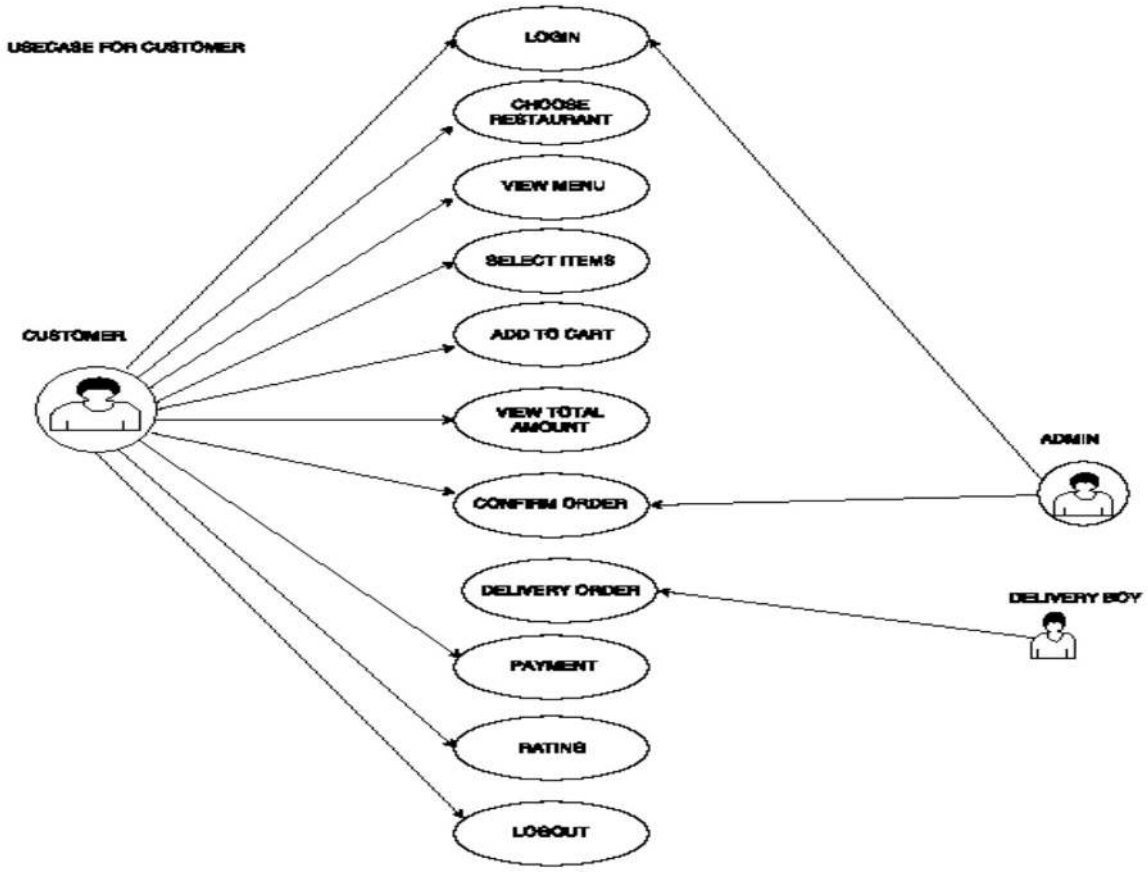
P3	The server shall be capable of supporting an arbitrary number of active customer payments, that is, no payments shall be lost under any circumstances

3 UML ANALYSIS MODEL

This subsection extends upon the functional requirements given through the presentation of detailed use cases. To facilitate an unambiguous and clear view of how the end-users interact with the Swiggy Clone system, the actors (end-users) involved in the use cases, a use case diagram and detailed use case descriptions are provided. The use cases that find representation are Log In, Log Out, Accept Order, Deliver Item, Process Bankcard Payment, Process Cash Payment, Abort Meal, Abort Account, Issue Refund, Place Order, Call Delivery boy, Pay Bill, Accept/Reject Item and Indicate Item Ready.

Use case

There are four actors in the Swiggy Clone are Customer, Restaurant, Admin, Delivery Boy. While the Customer, Restaurant and Admin actors are base specialisations, the Delivery boyinteracts between both the Customer and Restaurant actors as a generalisation.



3.1Use case for Customer:

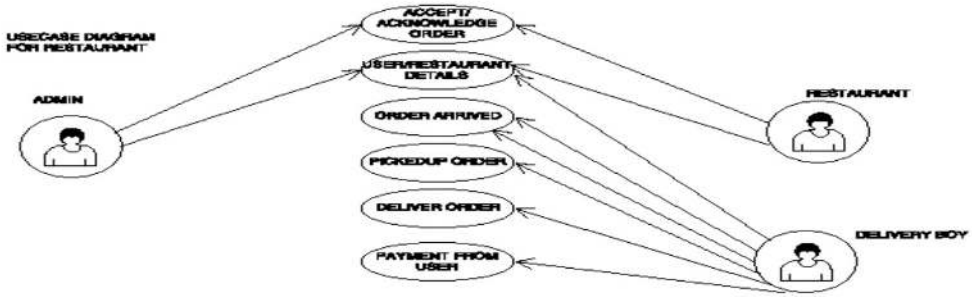
The actors involved in this use case are Customer, Delivery Boy and Admin. User will be having a Social Login and Separate Signup Options. Unregistered users can also view menu (Using Skip Option) and while ordering user should signin.Once the user login, nearby restaurant will be displayed in the Dashboard.

User can choose their own wish list restaurant and order foods**.** Once the order is done, restaurant will accept the request based on the order done by user. User can change menu based on the replacement menu given and can have different dish or else say to cancel the order.

If user accepts replacement, restaurant will assign the order to Delivery boy. Delivery boy should acknowledge the order request and reach the restaurant. Once reached the restaurant, he checks for the order details which he received and receives customer details from restaurant. Then, he picks the order and delivers to the user. The payment can be done through cash or card, which should be chosen once the order, is done.

3.2Use case for Restaurant:

Once customer confirms order, restaurant receives the order request. Restaurant checks with order and confirms the availability and assign the order to Delivery boy. Delivery boy needs to acknowledge the order and reach the restaurant to pick the order. Once delivery boy reaches the restaurant, he checks for the order details and deliver the order to specified user



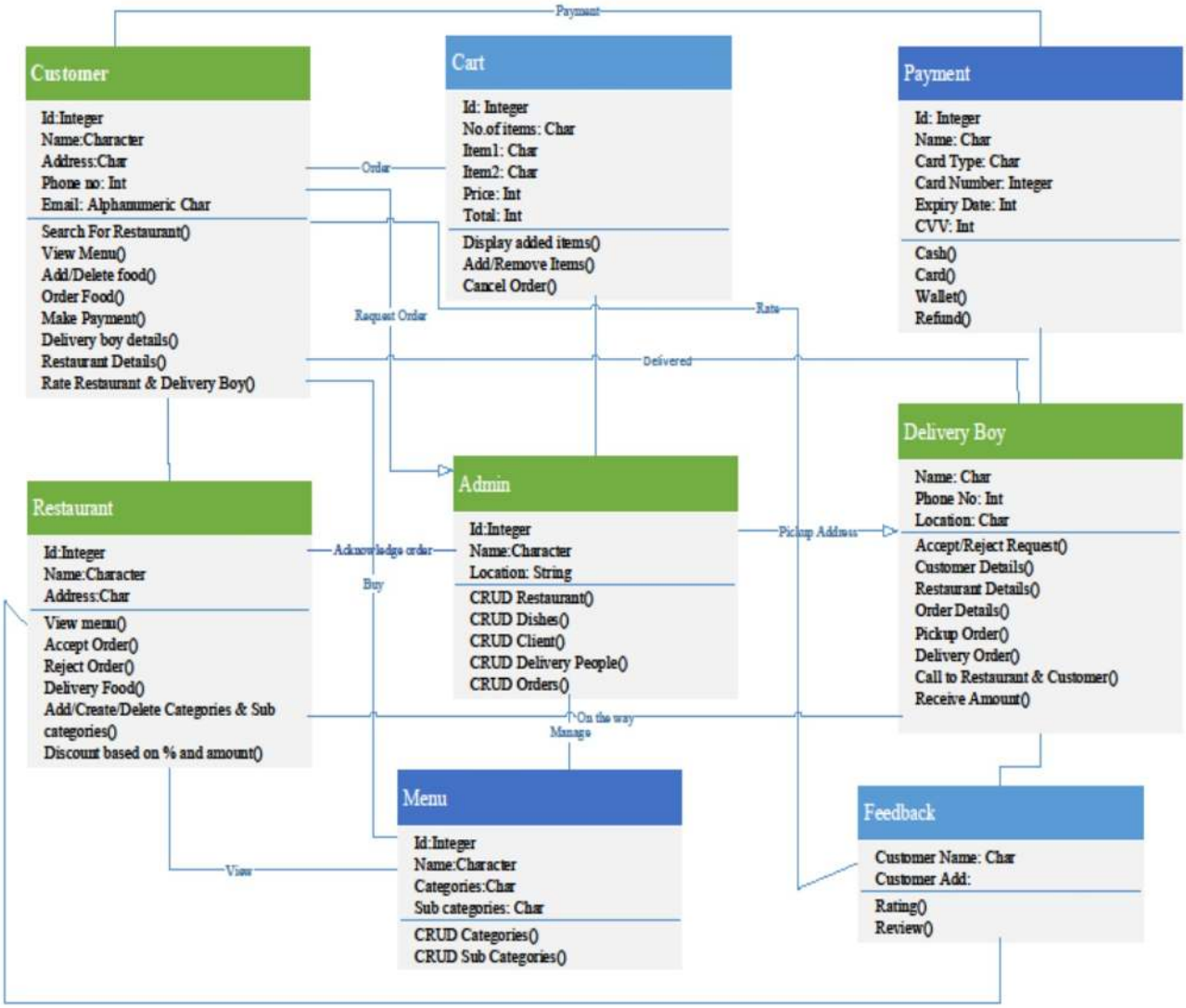
4 CLASS DIAGRAM

4.1.1Class descriptions

The following subsection presents descriptions for the classes identified for the Swiggy Clone system

Customer:

This class represents that the customer can order food of their own choice from nearby restaurant. They are responsible for view menu; add/delete order from the cart. Once order delivered payment can be done to delivery boy if cash. Then customer can rate for the restaurant and delivery boy.



Restaurant:

This class represents that the restaurant can CRUD (CREATE, READ, UPDATE, DELETE) items form the dashboard. Restaurant can able to receive order from the customer and has the

authority to accept/reject order. Once order received, assigns delivery boy to pick up the ordered food. Restaurant can give offers for the dishes

Delivery Boy:

This class represents that the delivery boy will be acknowledging the request or ignores the request. Once he acknowledge the request, he will move towards the restaurant and checks for the user order details and if everything is done he picks the order and deliver to the user. Delivery boy receives rating from customer

Admin and Dispute Panel:

This class represents that the admin will CRUD restaurants, menus, dishes, categories and subcategories. Dispute panel will reassign the order to other delivery boy if the one who assigned doesn't respond. And if any item ordered by customer is not available the dispute panel will act as a intermediate between customer and restaurant to have a conference call and restaurant has the responsibility to give different dish to replace else customer can cancel the order

Feedback:

This class represents that the delivery boy and restaurant gets star ratings from customer. Based upon ratings given by users, restaurants will be displayed in the dashboard

Cart:

This class represents that the ordered items will be displayed in the cart and also customer has the option to add or remove items from cart. The final payment will be displayed in the cart for customer finalization

Payment

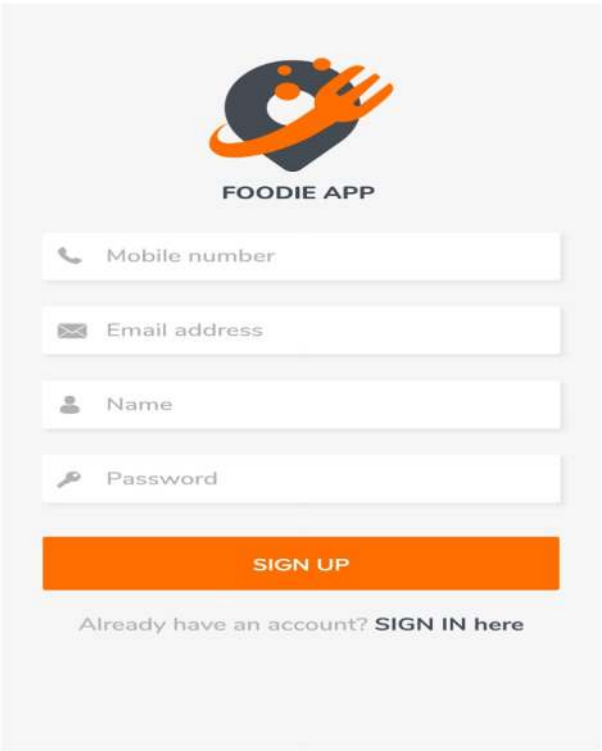
This class represents a payment to be made to the restaurant. It may contain any number orders and is related to exactly one Account. A Payment maintains its total value of the paying customer. The card payment class represents an extension of the Payment class for customer payments that are to be paid using a bankcard. The Cash Payment class represents an extension of the Payment class for customer payments that are to be paid using cash.

The wallet class represents if any order cancelled and if payment is done with card, the amount will be refunded to wallet and can order the next day or otherday.Thepromo code class represents that the code is given by restaurant as compensation to users and can have offers to orders or specific order

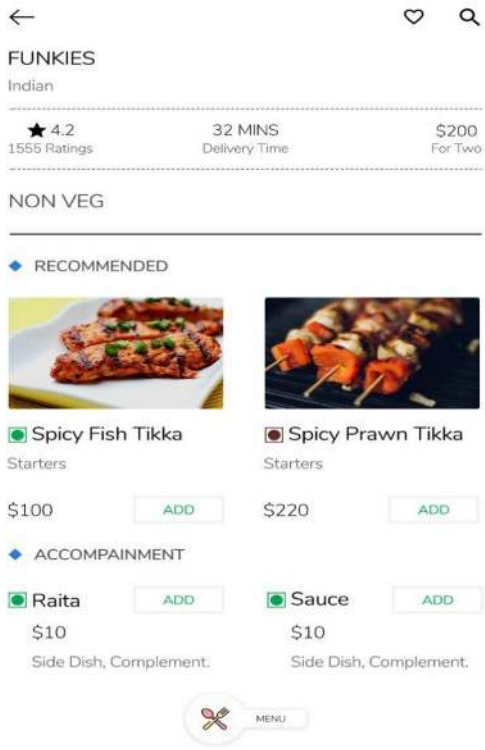
5 DESIGN SPECIFICATION

5.1 Design Flow for User

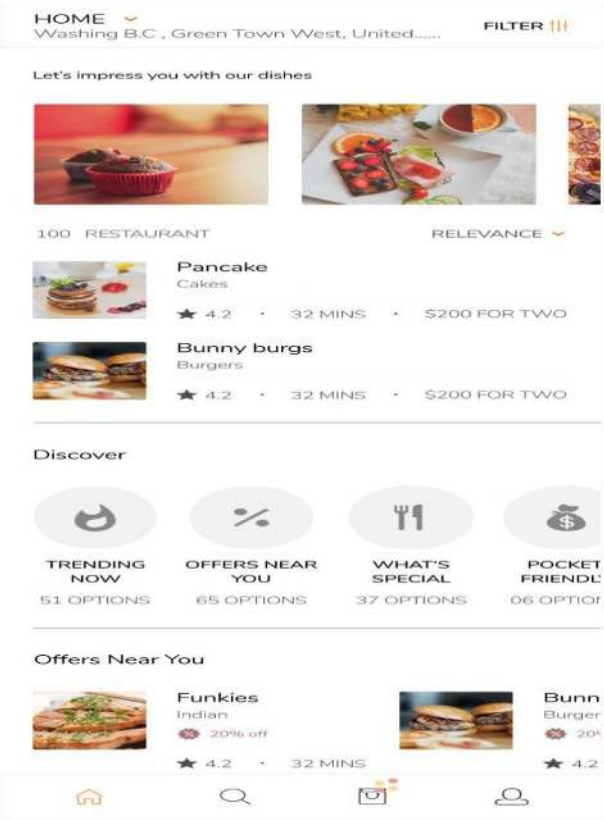
USER SIGNUP



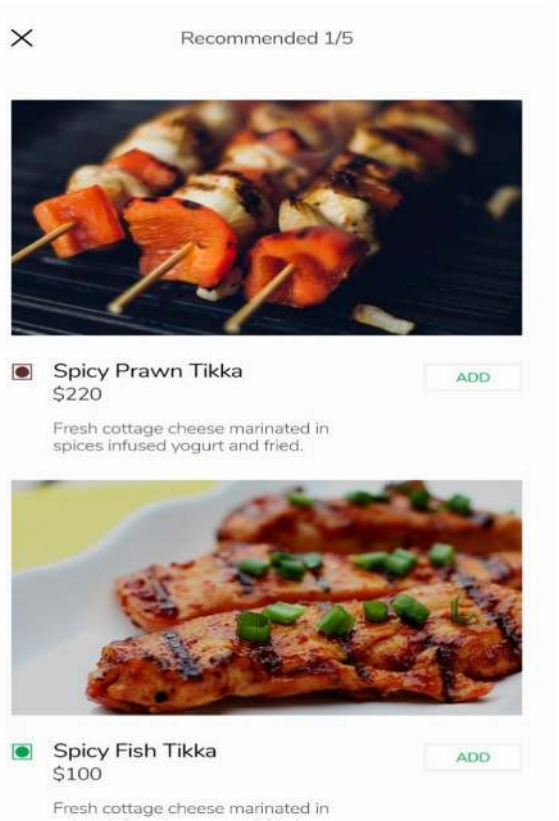
MENU DISPLAYED



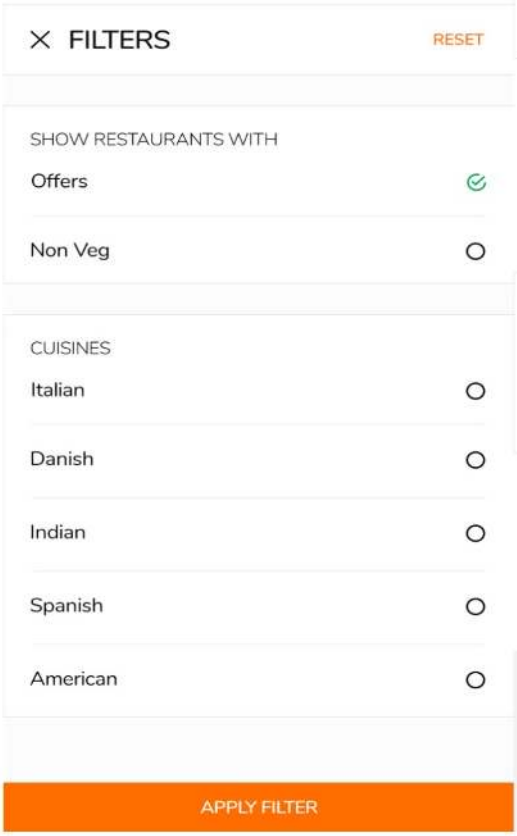
OFFERS DISPLAYED



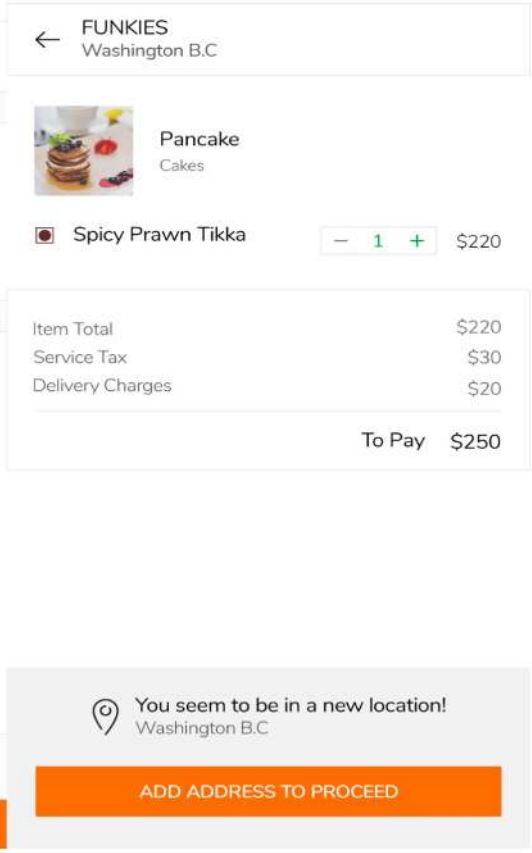
ITEM DESCRIPTION



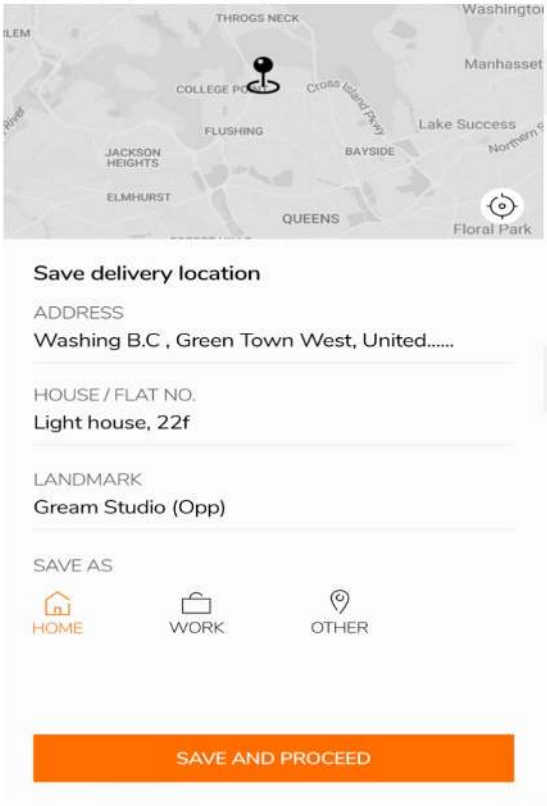
FILTER



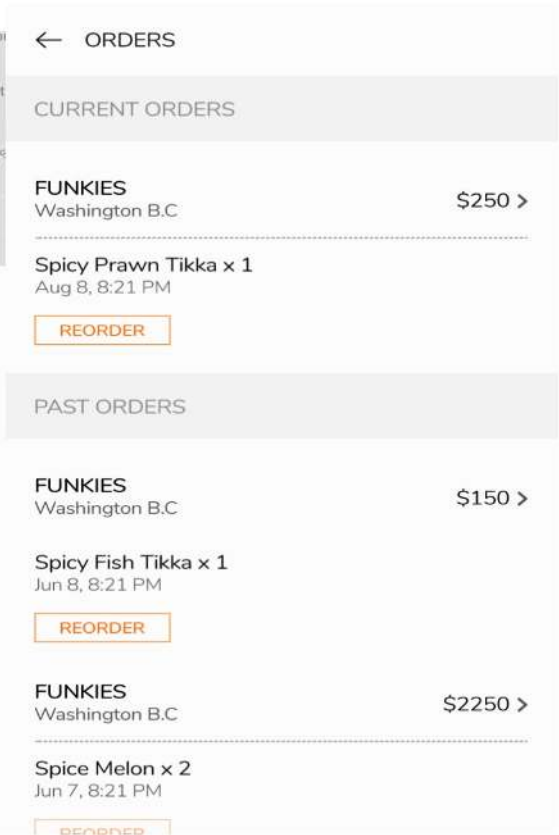
ADD ITEMS



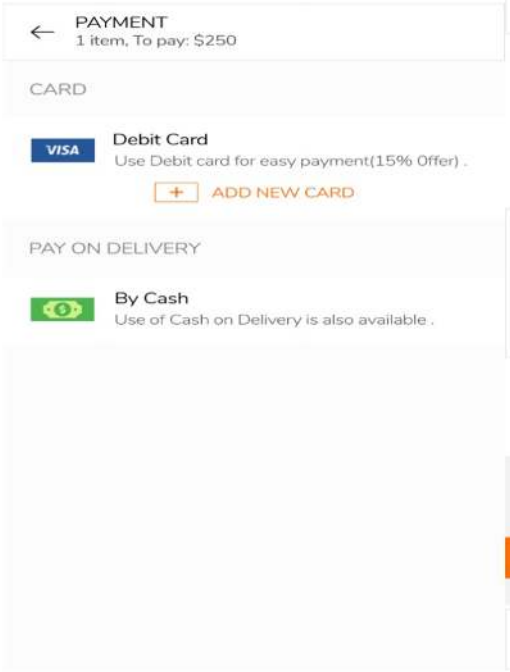
MANAGE ADDRESS



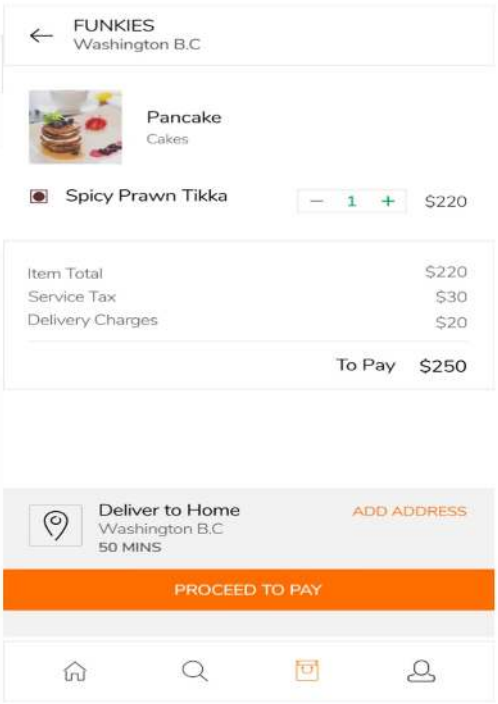
ORDER DISPLAYED



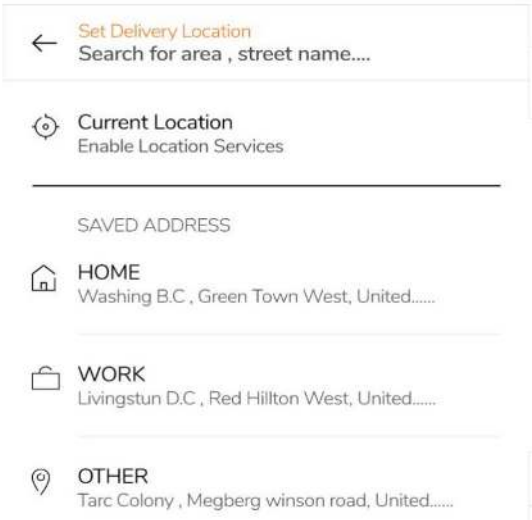
PAYMENT



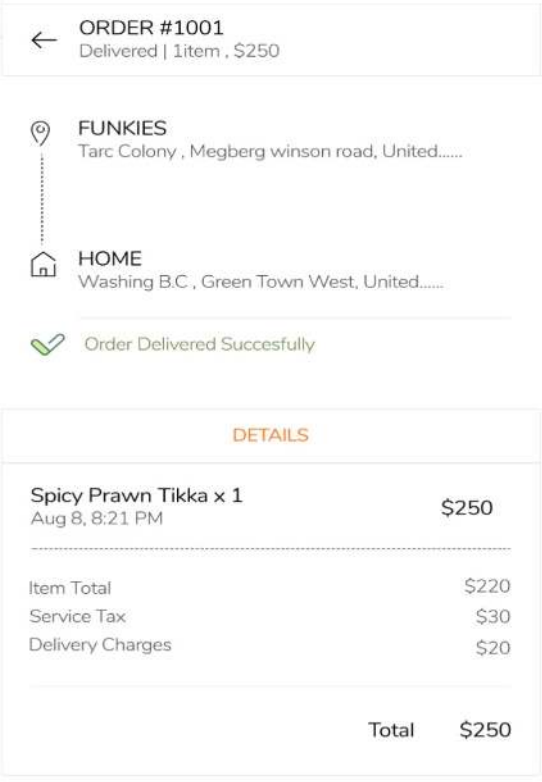
PROCEED PAYMENT



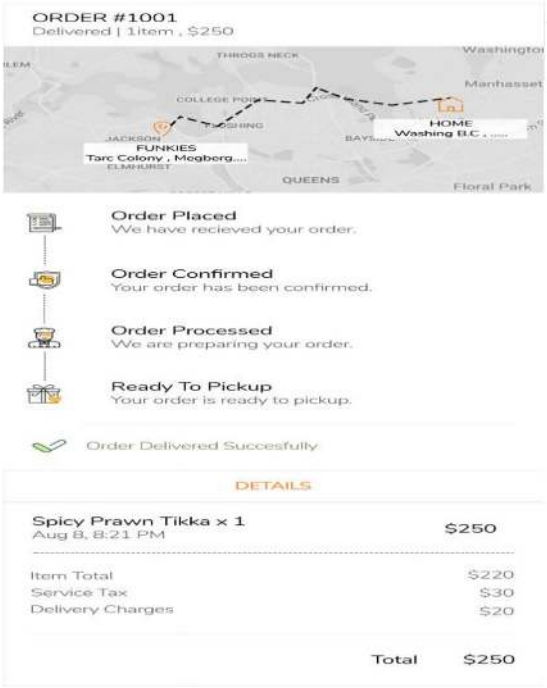
LOCATION ADDRESS



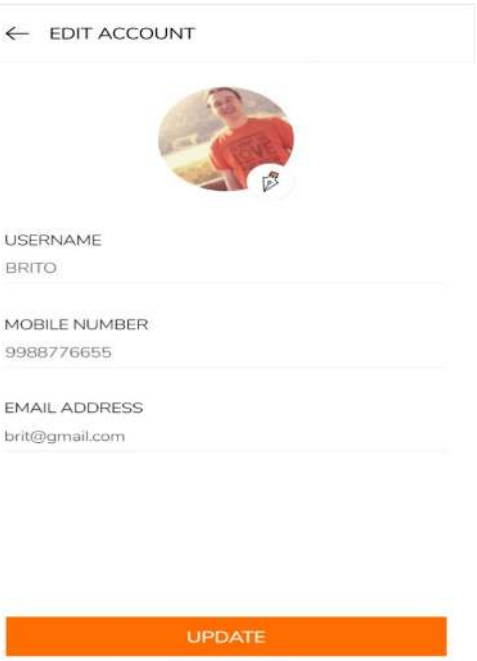
ORDER STATUS



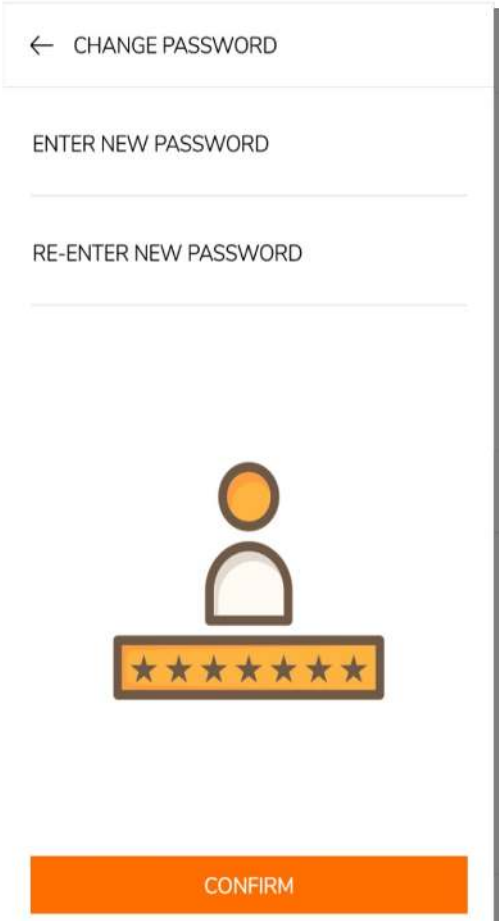
ORDER STATUS



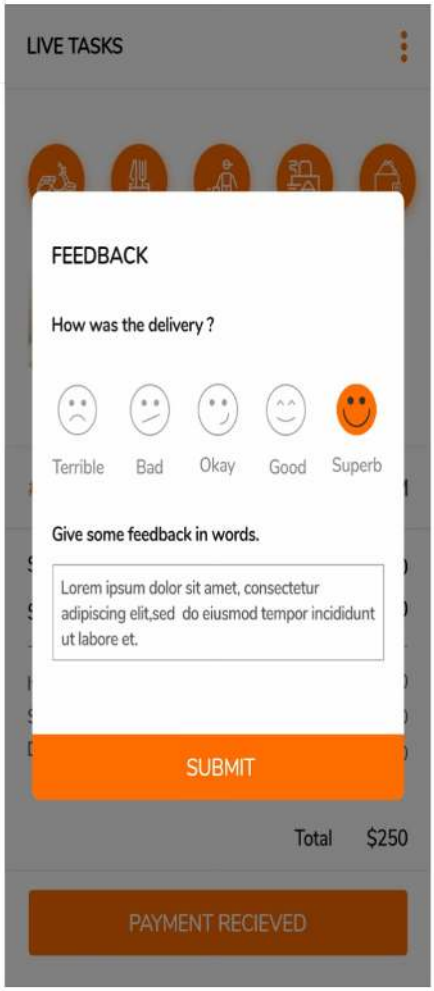
PROFILE EDIT



RESET PASSWORD

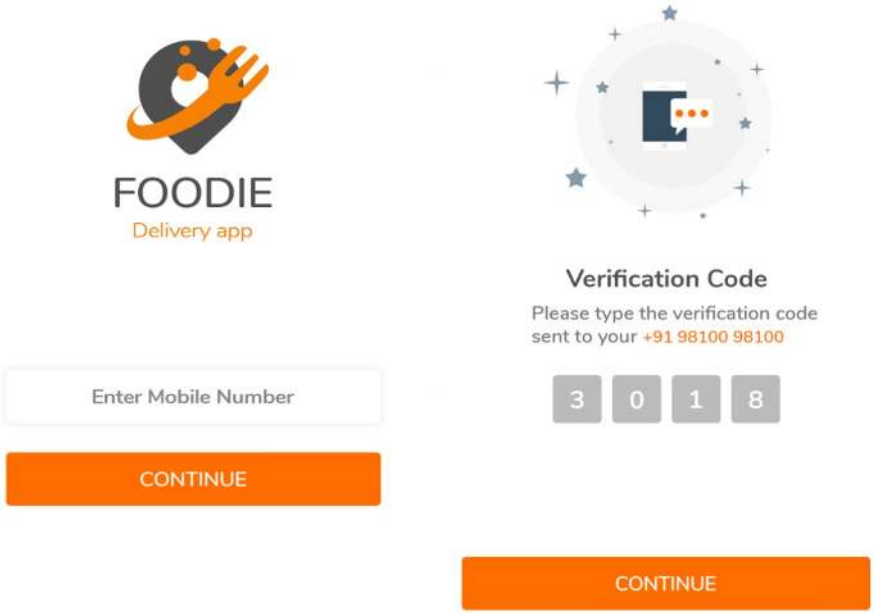


FEEDBACK

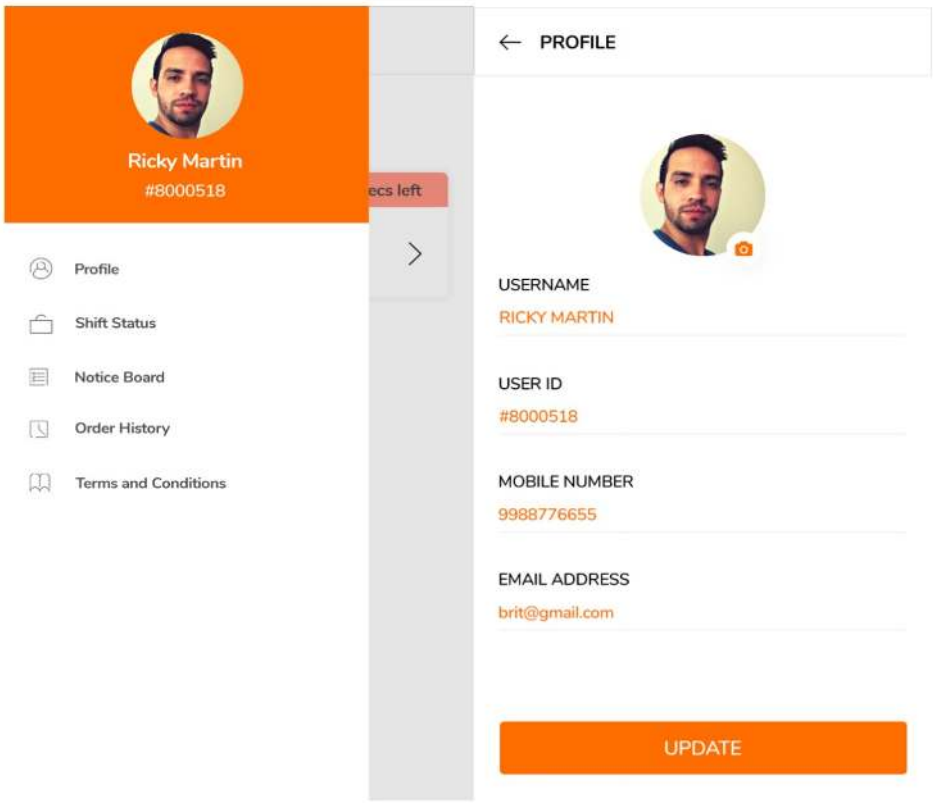


5.2 Design Flow for Provider

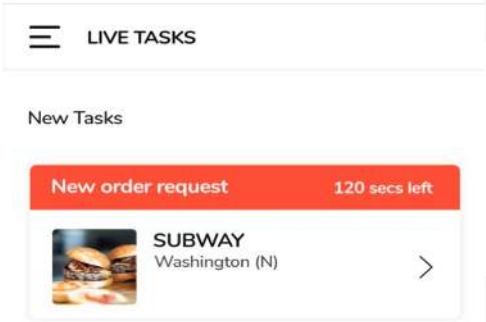
LOGIN **OTP**



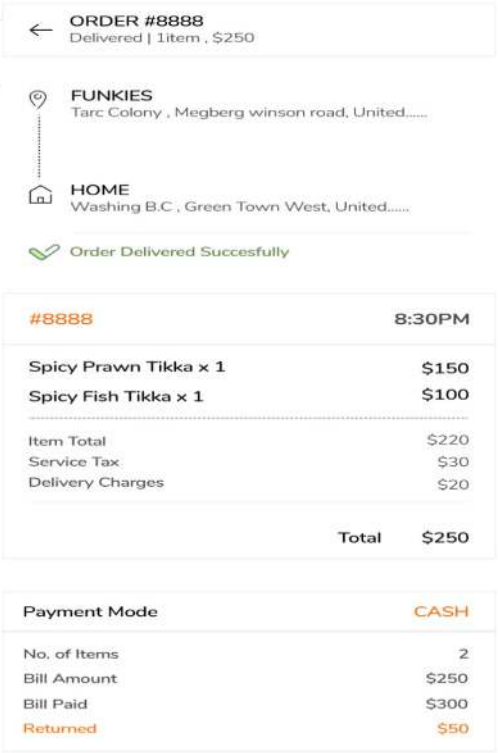
PROFILE MENU **PROFILE**



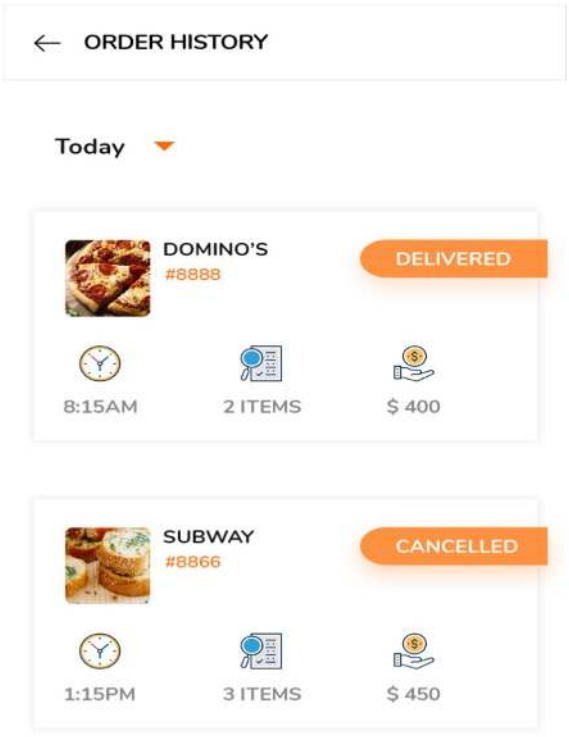
NEW REQUEST



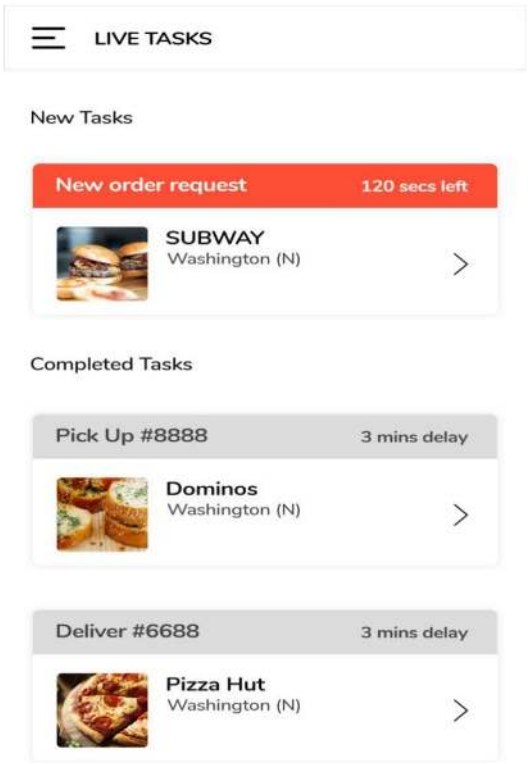
ORDER DETAILS



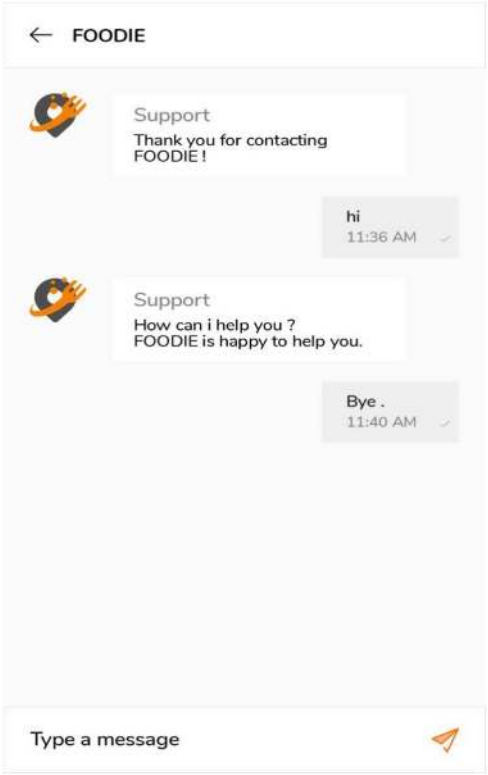
ORDER HISTORY



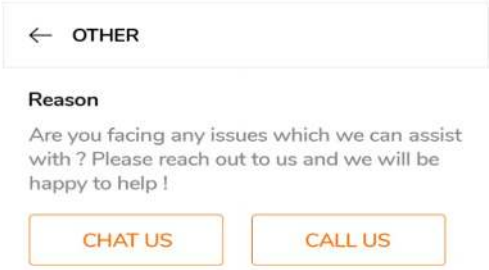
LIVE TASK STATUS



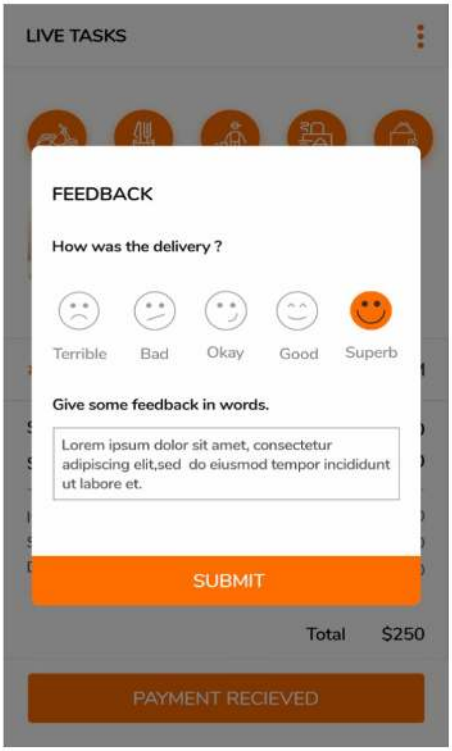
CHAT PROCESS



MODE OF HELP



FEEDBACK

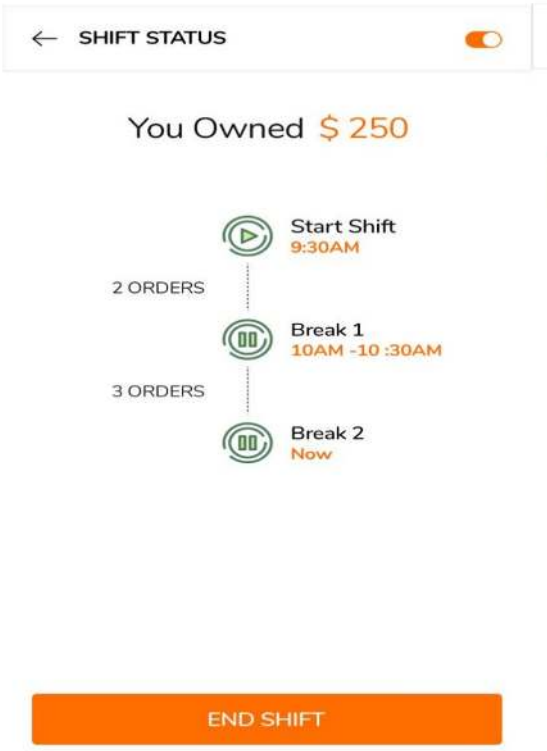


5.3 Design Flow for Delivery Boy

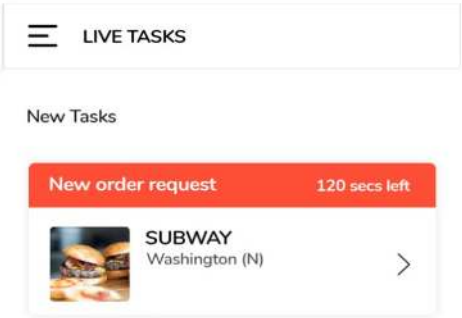
LOGIN

START SHIFT

BREAK STATUS



NEW ORDER REQUEST



ORDER DETAILS

ORDER #8888
Delivered | 1item , $250

FUNKIES
Tarc Colony , Megberg winson road, United.....

HOME
Washing B.C , Green Town West, United.....

Order Delivered Succesfully

#8888	8:30PM
Spicy Prawn Tikka x 1	$150
Spicy Fish Tikka x 1	$100
Item Total	$220
Service Tax	$30
Delivery Charges	$20
Total	$250

Payment Mode	CASH
No. of Items	2
Bill Amount	$250
Bill Paid	$300
Returned	$50

START TOWARDS RES

LIVE TASKS

SUBWAY
Tarc Colony, Megberg winson road,
United States- 100987

#8888	8:30PM
Spicy Prawn Tikka x 1	$150
Spicy Fish Tikka x 1	$100
Item Total	$220
Service Tax	$30
Delivery Charges	$20
Total	$250

STARTED TOWARDS RESTAURANT

ORDER PICKEDUP

LIVE TASKS

SUBWAY
Tarc Colony, Megberg winson road,
United States- 100987

#8888	8:30PM
Spicy Prawn Tikka x 1	$150
Spicy Fish Tikka x 1	$100
Item Total	$220
Service Tax	$30
Delivery Charges	$20
Total	$250

ORDER PICKED UP

ORDER DELIVERED

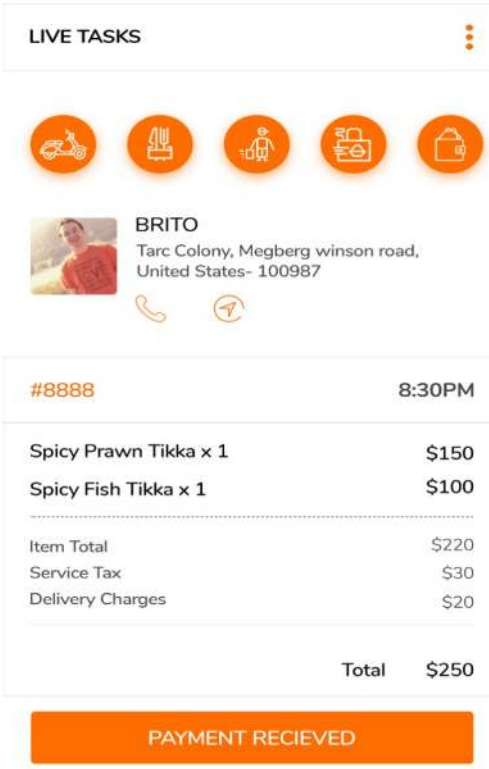
LIVE TASKS

BRITO
Tarc Colony, Megberg winson road,
United States- 100987

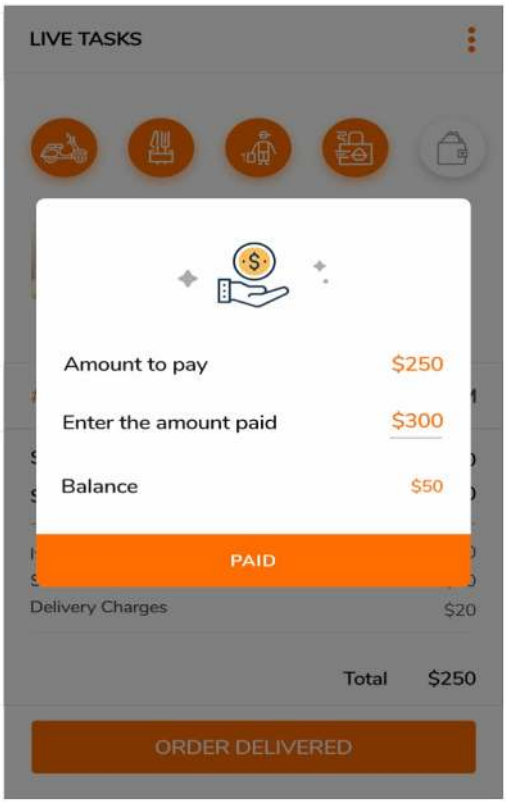
#8888	8:30PM
Spicy Prawn Tikka x 1	$150
Spicy Fish Tikka x 1	$100
Item Total	$220
Service Tax	$30
Delivery Charges	$20
Total	$250

ORDER DELIVERED

PAYMENT RECEIVED

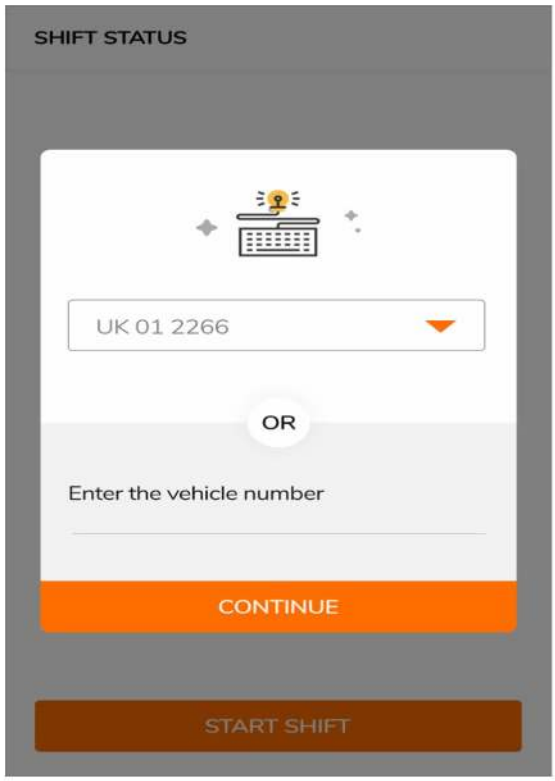


AMOUNT PAID



END SHIFT

VEH NUM BEFORE SHIFT



REPORT

WAITING FOR TASK