Indira College of Engineering and Management (MCA) Parandwadi, Pune

SYMCA Semester III Mini Project

2021-22

"Food Order System"

SUBMITTED BY -

Nainesh Gopalrao Iche – 23029

Under the Guidance of -

Dr. Darshana Desai

CERTIFICATE

To whom so ever it may concern

This is to certify that Mr **NAINESH GOPALRAO ICHE** Roll No **23029** from SYMCA has successfully carried out the project titled **Food Order System** Using **JAVA (Android Studio) , Firebase** technology for the fulfilment of Semester III.

Project Guide Name

Sign

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Chapter 1: Introduction

Existing System and Need of the System:

In the present scenario, people have to physically visit the hotels or restaurants for eating food and have to make payments through cash mode most of the time due to unawareness of advanced technologies at certain places. In this method time as well as physical work is required, among which time is something that no one has in ample amount.

The traditional food ordering procedure is not efficient enough for hotels and restaurants, as they have to deal with the crowd, in their restaurant. The old methods can be classified into categories which are paper grounded and verbal grounded. For paper-based work, the waiter comes and pens down foods that customers order and pass the food list containing paper to the chefs or cooks in the kitchen for further process.

Also, from the owner's point of view maintaining data records and the accounts in the physical file are quite difficult and tedious work to do. And also, it is full of risk as anyone can access it and modify the data.

Future Scope of the System:

This order food online system project aimed at developing an online food ordering system that can be used in small places, and medium cities firstly and then on a large scale. It is developed to help restaurants to simplify their daily operational and managerial task as well as improve the dining experience of customers. And also helps restaurants develop healthy customer relationships by providing good services. The system enables staff to let update and make changes to their food and beverage list information based on the orders placed and the orders completed.

Operating Environment

Software Requirements:

- Windows 7, Windows 10.
- Android Studio, Visual Studio Code.
- Linux Kernel.
- Firebase DB

Hardware Requirements:

PC Laptop Configuration

- Processor – i3 or any higher version
- Hard Disk – 10 GB or more
- RAM – 8GB RAM or more

Android (Linux kernel) Configuration

- Android Version – Above Android 6.0 (Marshmallow)
- Storage – 30 MB or more
- RAM – 2GB RAM or more

Technologies Used:

Front-end Design [Android Studio (JAVA)].

In recent times, Android became the world's most popular operating system for various reasons. As an Android programmer, I want to share what the Android Studio is? Android Studio is an IDE for Google Android Development launched on 16th May 2013, during Google's I/O 2013 event. Android Studio contains all the Android tools to design, test, debug, and profile your application. The Android Studio uses <u>Gradle</u> to manage your project, a Build Automation Tool. You write Android apps in the Java programming language using an IDE called Android Studio. Based on JetBrains' IntelliJ IDEA software, Android Studio is an IDE designed specifically for Android development.

DataBase [Firebase]

Firebase is a Cloud-hosted, NoSQL database that uses a document-model. It can be horizontally scaled while letting you store and synchronize data in real-time among users. This is great for applications that are used across multiple devices such as mobile applications. In recent times, Android became the world's most popular operating system for various reasons. As an Android programmer, I want to share what the Android Studio is? Android Studio is an IDE for Google Android Development launched on 16th May 2013, during Google's I/O 2013 event. Android Studio contains all the Android tools to design, test, debug, and profile your application. The Android Studio uses <u>Gradle</u> to manage your project, a Build Automation Tool.

Chapter 2: Proposed System

Proposed of the System:

This system is a bunch of benefits from various points of view. This online application enables the end-users to register to the system online, select the food items of their choice from the menu list, and order food online. Also, the payment can be made through online mode or at the time of home delivery depending upon the customer's choice and convenience.

The selection made by the customers will be available to the hotel reception or to the person handling the work assignment. Now this same person will assign the orders to the specialist chef to be completed within a fixed duration of time. As soon as the chef prepares the food, the later person forwards the parcels to the delivery persons assigned with the location and customer identity of the customer along with the bill status.

One of the various benefits of this is system is that if there is a rush or a huge crowd present in the restaurant then in that case sometimes unavailability of tables cut downs the restaurant's customer.

Also, there will be chances that the waiters are unavailable as they are busy handling others, so the customer can directly order the food to the chef online by using this application, by checking the seat availability in the restaurant. This system allows the staff to serve customers within less time as compared to the manual system.
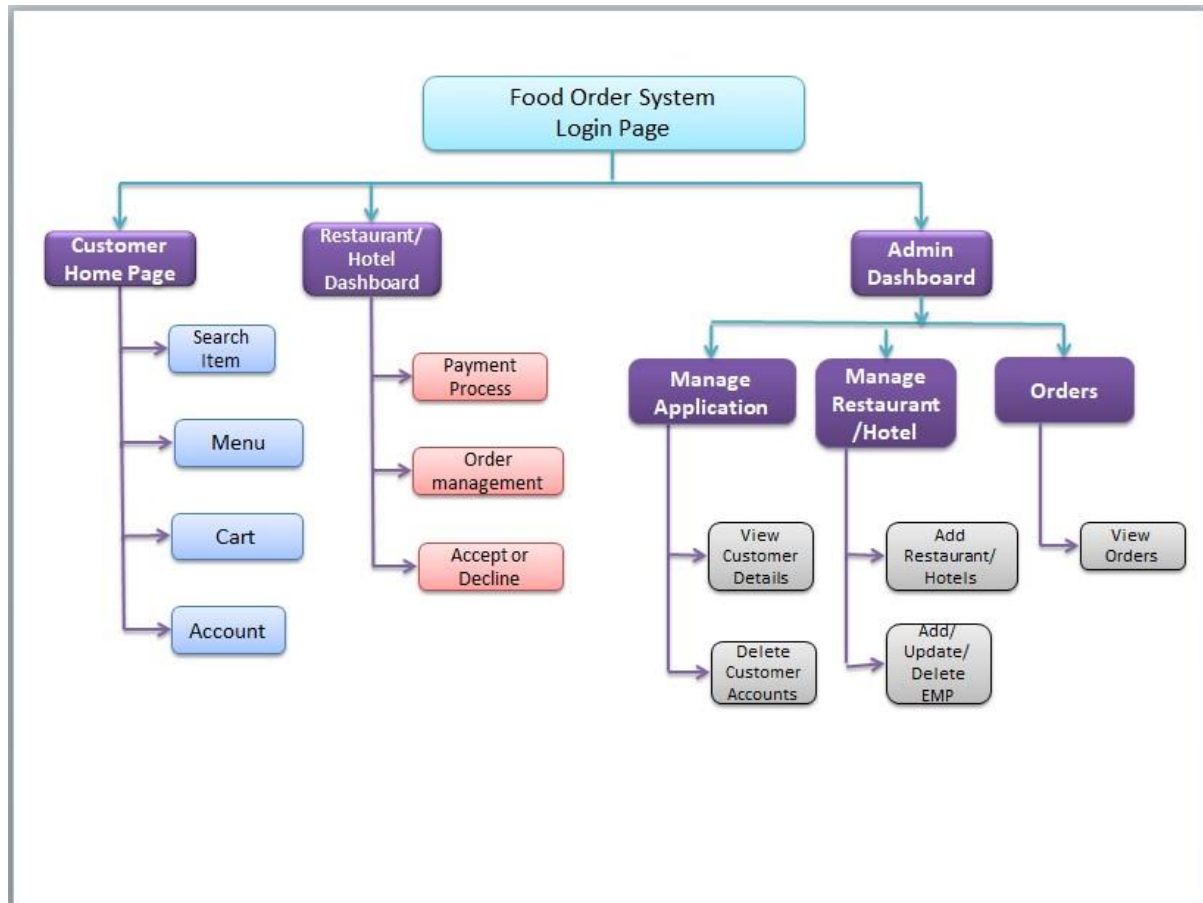
Objectives of the System:

The main objective of the Online Food Ordering System is to manage the details of Item Category Food Delivery Address, Order Shopping Cart. It manages all the information about Item Category, Customer, Shopping Cart, Item Category. The project is totally built at administrative end and thus only the administrator is guaranteed the access. The purpose of the project is to build an application program to reduce the manual work for managing the item Category Food Customer, Delivery Address. It tracks all the details about the Delivery Address Order Shopping Cart. We all know that with COVID-19 becoming increasingly widespread, the lives of people around the world have changed. Most countries have announced shutdowns, and life, as we know it, has changed completely. Almost everything is closed except for essential services. Whether it is grocery delivery or food delivery services, every essential business is growing. Many startup businesses have started to invest in 10-minute delivery apps, such as Dija and Weezy apps. The aim of these objectives of food delivery services are to deliver quality food in less time. These apps promise you to deliver your groceries within 10 minutes. The target market also used to be busy people who needed a restaurant delivery service because they didn't have time. Now, the target market is everyone. Most people now require home deliveries. With people practicing social distancing, self-quarantine, and staying indoors to stop the spread of the virus, food-delivery startups are in demand more than ever. They cater to more orders than ever. Food delivery companies can actually help people stay indoors and fight this pandemic.
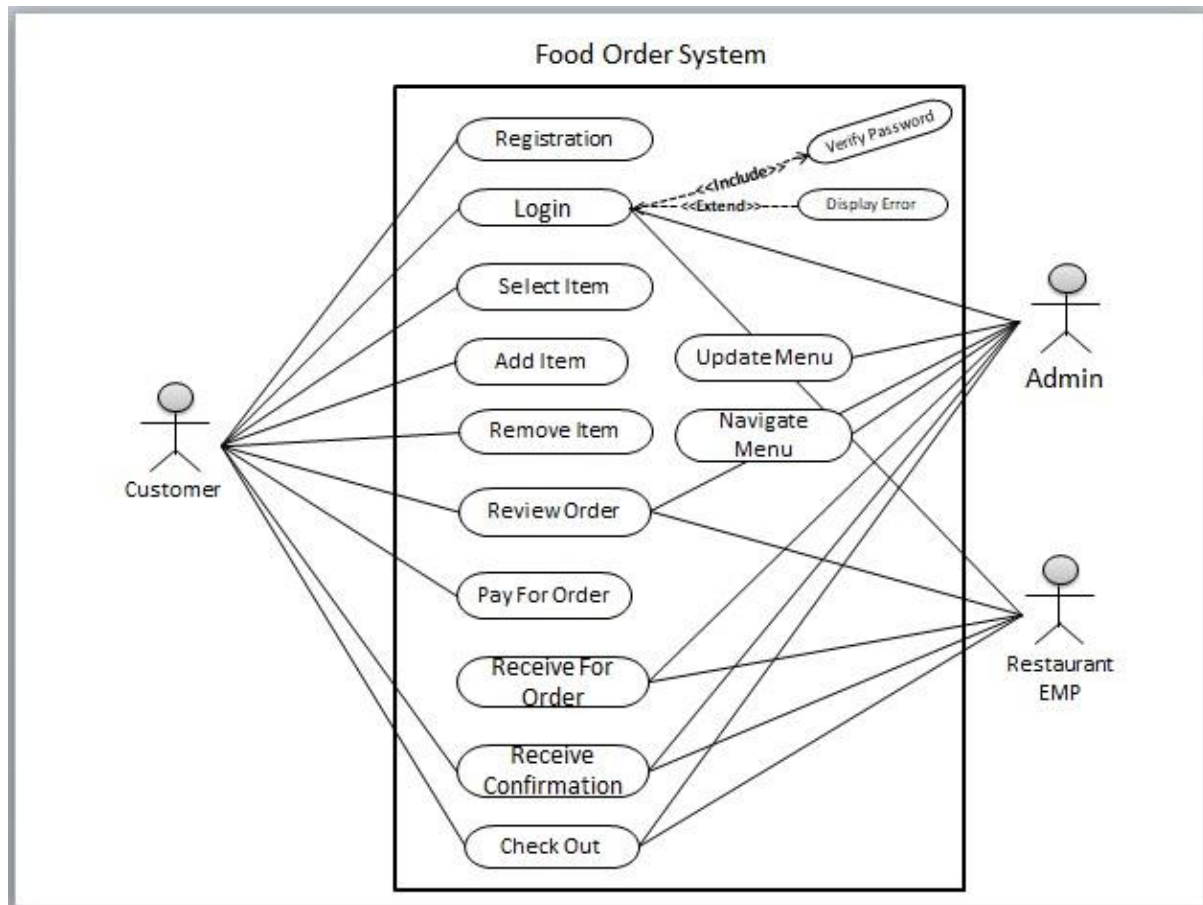
User Requirements

- Create an account.

- Manage their account.

- Log in to the system.

- Navigate the restaurant's menu.

- Select an item from the menu.

- Add an item to their current order.

- Review their current order.

- Remove an item/remove all items from their current order.

- Provide payment details.

- Place an order.

- Receive confirmation in the form of an order number.

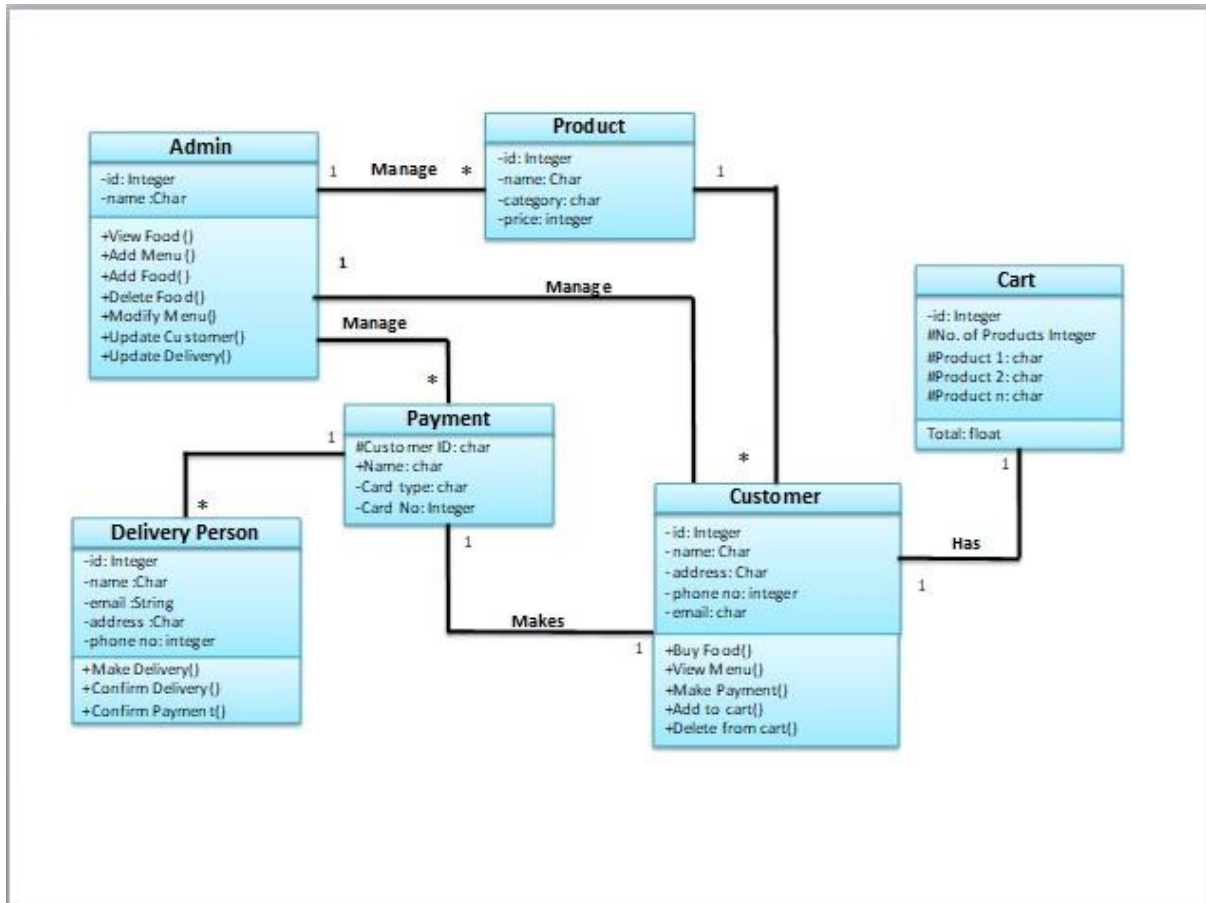- View order placed.

Analysis & Design

Module Hierarchy Diagram:

Use Case Diagram:

Food Order System

Actors: Customer, Admin, Restaurant EMP

Use Cases: Registration, Login, Select Item, Add Item, Remove Item, Review Order, Pay For Order, Receive For Order, Receive Confirmation, Check Out, Verify Password, Display Error, Update Menu, Navigate Menu

Relationships: Login <<Include>> Verify Password, Login <<Extend>> Display Error

Class Diagram:

Admin
-id: Integer
-name :Char

+View Food ()
+Add Menu ()
+Add Food ()
+Delete Food()
+Modify Menu()
+Update Customer()
+Update Delivery()

Product
-id: Integer
-name: Char
-category: char
-price: integer

Cart
-id: Integer
#No. of Products Integer
#Product 1: char
#Product 2: char
#Product n: char

Total: float

Payment
#Customer ID: char
+Name: char
-Card type: char
-Card No: Integer

Delivery Person
-id: Integer
-name :Char
-email :String
-address :Char
-phone no: integer

+Make Delivery()
+Confirm Delivery ()
+Confirm Payment()

Customer
-id: Integer
-name: Char
-address: Char
-phone no: integer
-email: char

+Buy Food()
+View Menu()
+Make Payment()
+Add to cart()
+Delete from cart()

Manage   1   *
1
Manage
Manage
*
1
*
Makes
1
Has
1
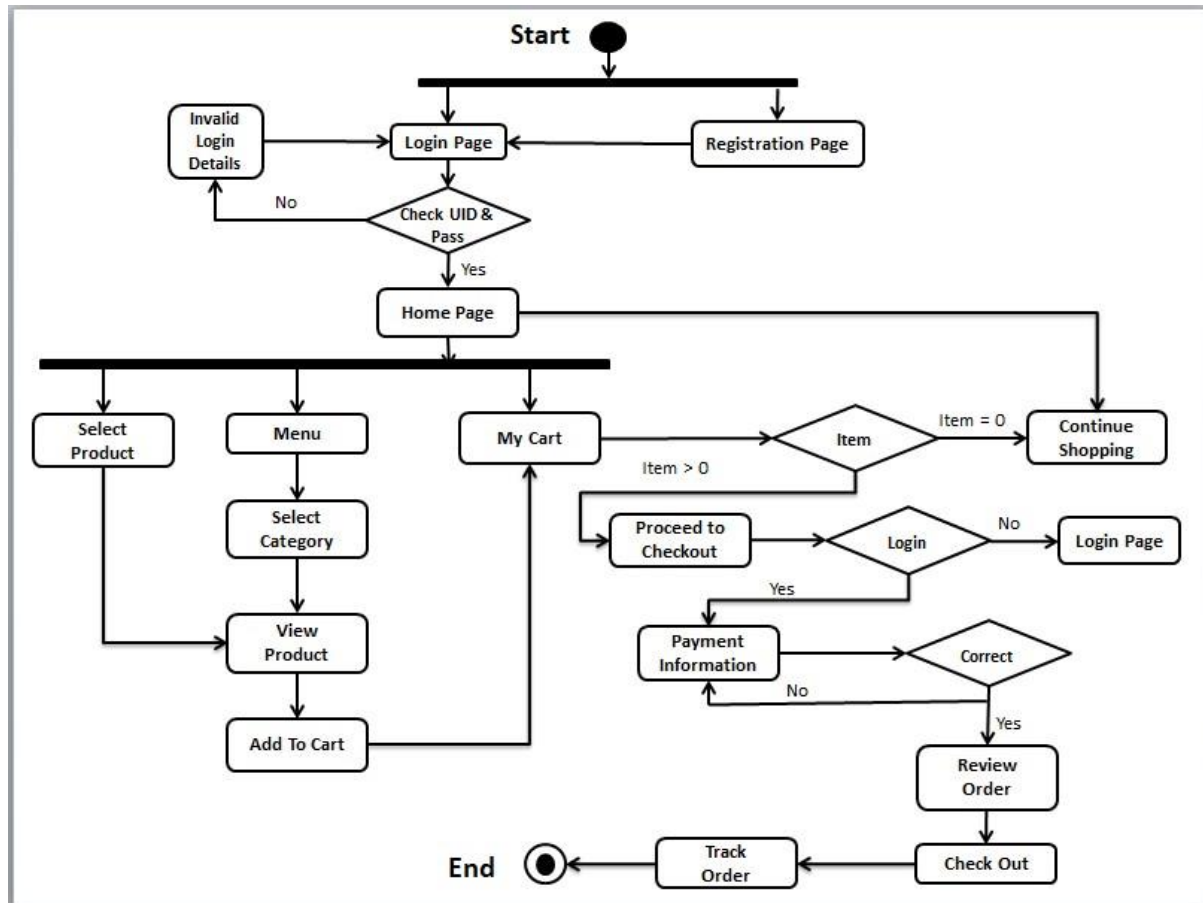1

E-R Diagram:

Activity Diagram (Admin):
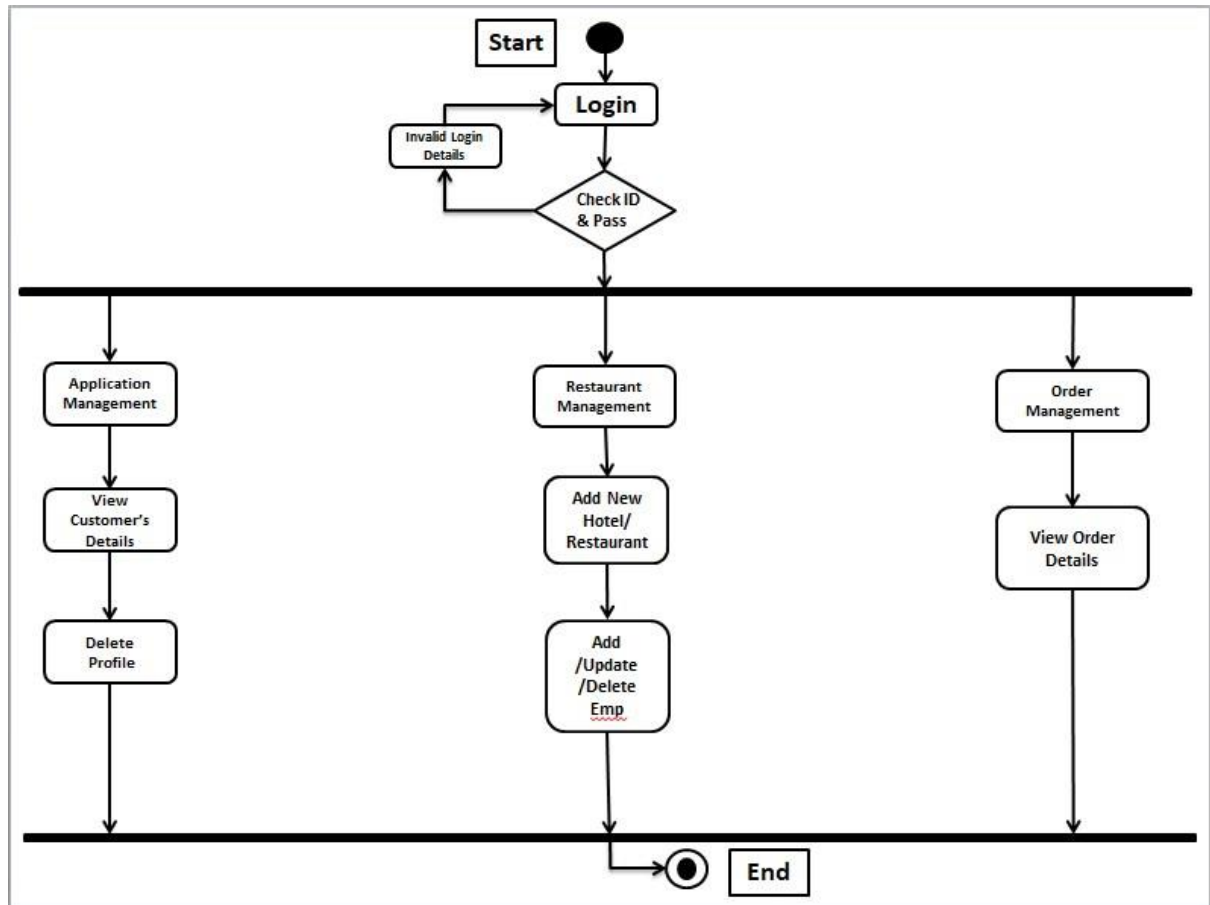
Activity Diagram (Customer):

User Interface Design

Food On

Find homemade food around you
or offer your own !

CONNECT AS CHEF

CONNECT AS CUSTOMER

CONNECT AS DELIVERY
PERSON

Login

✉ Email id

Password 👁

Forgot Password?

LOGIN

Don't Have An Account? Create

———— OR ————
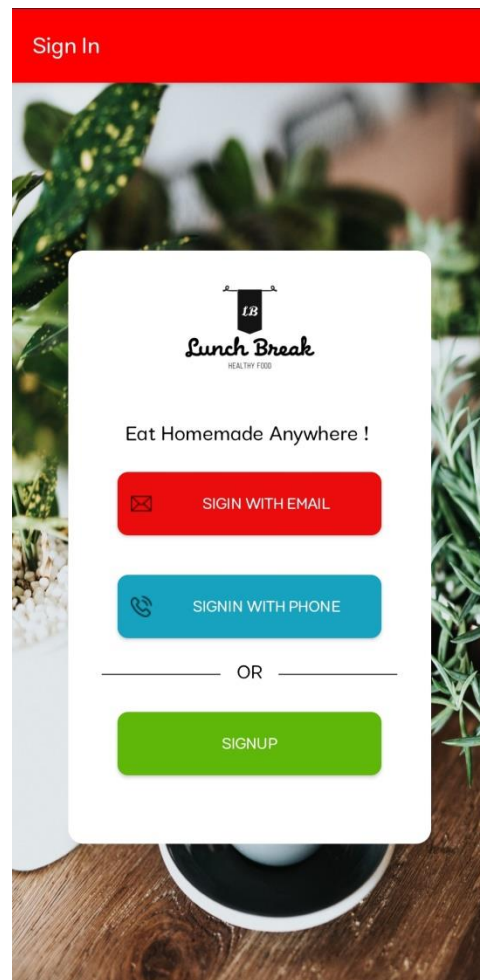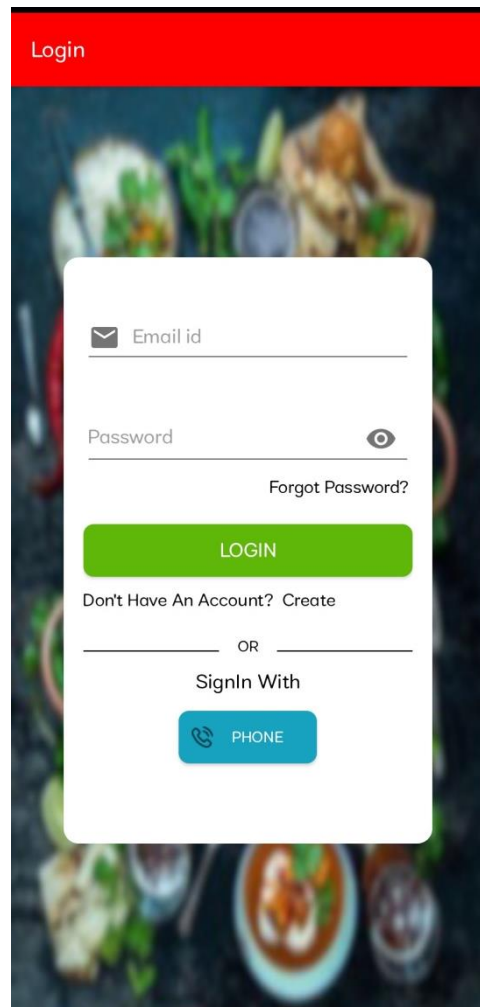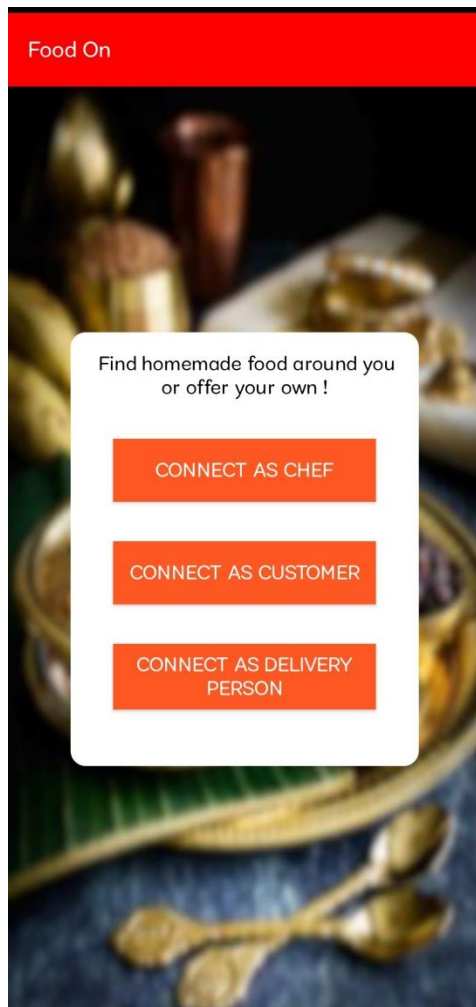
SignIn With

📞 PHONE

Food On

FirstName

LastName

✉ Email id

Password 👁

Confirm Password 👁

🇮🇳 IN +91 ▾   MobileNumber

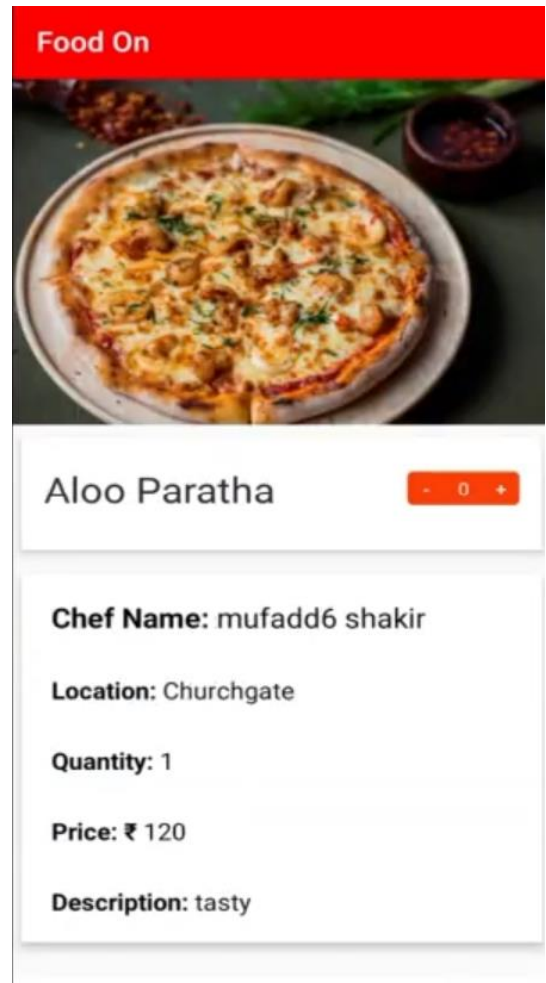## Food On

Area

Pin Code
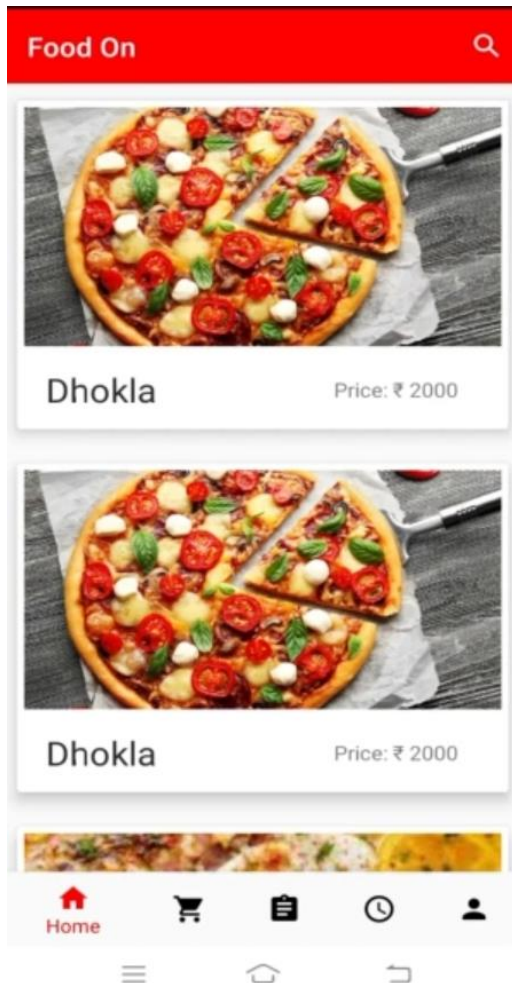
State
Andhra_Pradesh ▾

City
Adoni ▾

REGISTER

──── OR ────

SignIn with

✉ EMAIL   📞 PHONE

Dhokla   Price: ₹ 2000

Dhokla   Price: ₹ 2000

Home

Aloo Paratha   − 0 +

Chef Name: mufadd6 shakir

Location: Churchgate

Quantity: 1

Price: ₹ 120

Description: tasty

Aloo Paratha   - 2 +

Price: ₹ 120 × 2

Enter Address

Local Address

○ home address

○ Other address

Add a Note (Extra Onion,sauce...)

Add cooking instruction

NO   YES

Grand Total: ₹ 240

REMOVE ALL   PLACE ORDER

🏠   🛒 Cart   📋   🕐   👤

Aloo Paratha

Price: ₹ 120 × 2   Total: ₹ 240

Dish name: Aloo Paratha

Description

tasty

Quantity

1

Price

120

UPDATE   **DELETE**

Aloo Paratha

Price: ₹ 120 × 2   Total: ₹ 240

Grand Total: **₹ 240**

Add Payment Method   >

Payable Orders

Online Payment

After your first payment, we will save your details for future use.

▭ Credit, Debit & ATM Cards ⟩

Cash payment

₹ Cash on Delivery