LEADING UNIVERSITY

FOOD VALLEY

A Project submitted to the

Department of Computer Science and Engineering

Leading University

Sylhet - 3112, Bangladesh

in partial fulfillment of the requirements for the degree of

50th batch

Bachelor of Science in Computer Science and Engineering

Name	ID
Estheak Ahmed Rahe	1912020058
Md. Shahjahan	1912020078

Supervisor

Rumel M. S. Rahman Pir

Associate Professor

Department of Computer Science & Engineering

Date of submission: 16th March, 2022

Proposal

To,

Head of the Department,

Department of Computer Science & Engineering,

Leading University, Sylhet.

Subject: Application for permission to approve the project proposal.

Sir,

With due respect, we would like to inform you that we, the students from 50_{th} batch of CSE department, are interested in developing a mobile application - Food Valley for our third-year project under your guidance.

So, we would be highly obliged, if you kindly accept our proposal and guide us towards the right direction for accomplishing our project.

You'r most obediently,

Estheak Ahmed Rahe –1912020058

Md. Shahjahan– 1912020078

50_{th} batch,

Department of CSE,

Leading University, Sylhet.

Approval

The project name is 'Food Valley' submitted by Estheak Ahmed Rahe, Md. Shahajahan respectively to the department of Computer Science & Engineering, Leading University. It has been accepted as it satisfies the partial for the award of their Bachelor of Science in Computer Science & Engineering which has been approved by Honorable Head of Department, Shafkat Kibria.

Head of the Dept.

Shafkat Kibria

Assistant Associate Professor & Head Department of Computer Scienceand Engineering

Chairman, Exam. Committee

Shafkat Kibria

Assistant Associate

Professor

Department of Computer Science and Engineering

Supervisor

Rumel M. S. Rahman Pir

Associate

Professor Dep of Computer Science and Engineering

Recommendation Letter from the Project Supervisor

The project entitled 'Food Valley' submitted by the students
1. Estheak Ahmed Rahe –

   1912020058

2. Md. Shahjahan– 1912020078

Is a record of project work carried out under my supervision and I, hereby, approve that the report be submitted in partial fulfillment of the requirements for the award of their Bachelor Degrees.

Signature of the Supervisor:

Rumel M. S. Rahman Pir
Date: 16th March, 2022

Abstract

Food Valley is a Food Delivery grounded android operation that focuses to give a completely brand new type stoner experience to the users which will ease their trouble to buy foods. This will let them to change their lifestyle and practices regarding buying products. The application will also be very essential to grow the trust over Food Delivery platforms which is really significant. The User Interface is developed keeping in mind to make the use of it as easier as & as lower time consuming as it could. So naturally Customers won't have to consume time just to learn the app interface from the veritably beginning. The entire operation as its background algorithm and planning on which it's based on. However, this is not the end or the final version of it. Quite a number of features and options will be implemented in its future modification. We are also aware that the application has quite a number of rooms to work with we are determined to work with every possible thing as we find it out.

Acknowledgement

At first, we'd like to express our earnest gratefulness to the Almighty which will noway be enough for giving us this break for the accomplishment of our project. Alhamdulillah!, we 're successful with our project and it ended appropriately.

Also, we can't forget the mental support that we were provided with our family members without whom its far beyond imagination to reach at this stage of our life, in the state of educational life we are at now as well. All this may not have been possible without their guidance, support, comfort, concern & love for us.

As this project was very first experience for us so naturally it was obvious to be in trouble at the beginning. But with our respected teachers' help & concern we were able to find a successful end. We learned things that we should focus on in the right time to avoid the error outcomes, by the help of our teachers. Especially, our respected supervisor Rumel M. S. Rahman Pir who has been helpful throughout the project by giving continuous update and corrections, which were really essential for our projects.

Last but not the least, we would like to remember our friends, websites, youtubers who helped us with our required information, data, knowledge regarding this project.

Table of Contents

Work Plan

We Maintained a proper Working
Schedule During this project

20 Days	30 Days	30 Days	15 Days	10 Days
Gathering Information	Interface Design	Backend Coding	Testing & Finalaizing	Report & Slide Making

Chapter 1
Introduction

Project Motivation

Food Valley is an android based application that will serve to meet the needs of consumers for domestic furniture in regular basis in this rapidly developing modern age. Its interface is developed in such a way that it will be very easy and quicker to purchase the desire foods by checking and sorting.

Change is a decent and obvious thing in the world of technology. So, we can expect changes in the food delivery market for a better future. According to the report from McKinsey & Company, "The worldwide market for food delivery was valued at €83 billion in 2016". In the current times, the food delivery market has already matured in most of the countries with an overall growth rate of approximately 3.5% for the next five years.

Aims and Objectives

Goal of our project is to develop an Android app as well as for iOS. The main users of our application will city area's people who used to in online food and don't have enough time of cooking in tight schedule On the other hand a person who want start their business in "Cloud Kitchen". Virtual/cloud kitchens (a/k/a ghost kitchens) are a great alternative to the traditional brick-and-mortar restaurant. Ghost kitchens offer users the freedom to focus on food preparation and product marketing and minimize the administrative hassle and logistics that often burden food businesses. Also,the application is platform independent. More about our project is discussed in detail in further sections.

Chapter 2
Background Story

App-based food delivery is a popular way to get a quick and easy meal. While food delivery was limited to certain types of restaurants for years, services like Uber Eats and Grubhub, Food Panda have made it easy to get food delivered to your door. Contact-less delivery options can also help cut down the need to stand at the door and wait.

Last year, food delivery apps earned $26.5 billion USD in revenue. Compare that to the $8.7 billion the industry produced back in 2015, and it's easy to see that the market is booming.[1]

With apps, you can order from your favorite restaurants simply by pressing a few buttons, but which are the best food delivery apps? We've gathered all the essential info for the best food delivery apps for. We've also found some of the best recipe apps and best meal planning apps if you decide to make your own meal.

Best food-delivery service apps

- Grubhub (iOS/Android/Web)
- Doordash (iOS/Android/Web)
- UberEats (iOS/Android/Web)
- FoodPanda(ios/Android/Web)
- Postmates (iOS/Android/Web)
- Instacart (iOS/Android/Web)
- Delivery.com (iOS/Android/Web)
- goPuff (iOS/Android/Web)
- ChowNow (iOS/Android/Web)
- Zomato(iOS/Android/Web)

Chapter 3
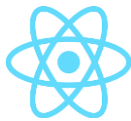# Features and Functionality

Tools & Technologies Used

- React-Native.
- Javascript.
- Mongo DB.
- Visual Studio.
- Expo.
- Canva Pro.
- Figma
- Draw.io

Features

- Register
- Log in/Log Out.
- Search by Food Name.
- High quality Food images.
- Organized list Food's item.
- Food with proper details.
- Cash On Delivery.

Project Development

Tools

Tools	Product of	Tool	Usage	Work experience
	Facebook	React Native	Framework	UI activity
	Brendan Eich	Javascript	Language	Coding
	Adobe	Photoshop	Color combination, Image filtering	Layout model
	Visual Studio	VS Code	IDE	Devolopment activity
	draw.io	Web Application	Vector graphics editor	Diagram design

System's Requirement

- Visual Studio

    Microsoft Visual Studio is an integrated development environment (IDE) from Microsoft. It is used to develop computer programs, as well as websites, web apps, web services and mobile apps. The open source Visual Studio Code has become the No. 1

option for many developers, with a vast extension library that effectively turns the lightweight, cross-platform editor into a full-fledged integrated development environment (IDE).

- React Native

    In 2012 Mark Zuckerberg commented, "The biggest mistake we made as a company was betting too much on HTML as opposed to native".Using HTML5 for Facebook's mobile version resulted in an unstable application that retrieved data slowly. He promised Facebook Would soon Deliver a better mobile experiences. [2]

    In 2015, after months of development,Facebook released the first version for the React Javascript Configuration.

    React Native is a wonderful frame work of mobile apps development. The working principles of React Native are virtually identical to React except that React Native does not manipulate the DOM via the Vritual DOM. Raact components wrap existing native code and intereact with native APIs via React's declared UI paradigm and Javascript.

    While Native styling has a similar syntax to CSS, it does not use HTML or CSS instead, message from JavaSript thread are used to manipulate native views. React native also allows devolopers to write native code in languages such as Java or Kotlin for Android/ios.

- MongoDB

    MongoDB is a source-available cross-platform document-oriented database program. Classified as a NoSQL database program, MongoDB uses JSON-like documents with optional schemas. MongoDB is developed by MongoDB Inc. and licensed under the Server Side Publics License. It's designed to make life easier for developers by handling much of the pushing and pulling of data. MongoDB provides high availability with replica sets. A replica set consists of two or more copies of the data. Each replica-set member may act in the role of primary or secondary replica at any time. All writes and reads are done on the

primary replica by default. Secondary replicas maintain a copy of the data of the primary using built-in replication. When a primary replica fails, the replica set automatically conducts an election process to determine which secondary should become the primary [3]. Secondaries can optionally serve read operations, but that data is only eventually consistent by default

How does the app work?

When a user enter our apps they get welcome Screen first. After that he/she will get a Log In screen with *email, password* required boxes. And in the bottom of Log in part he get an option to move Register screen .It's important that you must be register first .Otherwise you can't log in this apps.

In register screen you need to put your First Name, Last Name, Valid E-mail, Password(Min:6 length),Address. After put your all info you will get back in Log In screen and right now you may Log In if you put right info you gave when you register.

After enter in apps in the top of screens you get a Hell with your name ex: Hello John. In the below of hello section you get a search button in top and in the below you get all foods images with prices. You can scroll the full screen and you can find your desire foods, or you can search by food name in the search box ex: Burger, Briyani, icecream etc.

When choose your food, you can press on it's and you get a new screen with foode images and price and the bottom of screen you get a ORDER NOW button. You can press on it and you get an alert message "Your Order Received Successfully! We'll Deliver it within Few Moments".

And you press on LOG OUT Button you may land on Log In Screen. On the other hand. When a user put his valid information admin can read or access in database. And when a user order a food admin get user information, address and food information to deliver the food on right location.
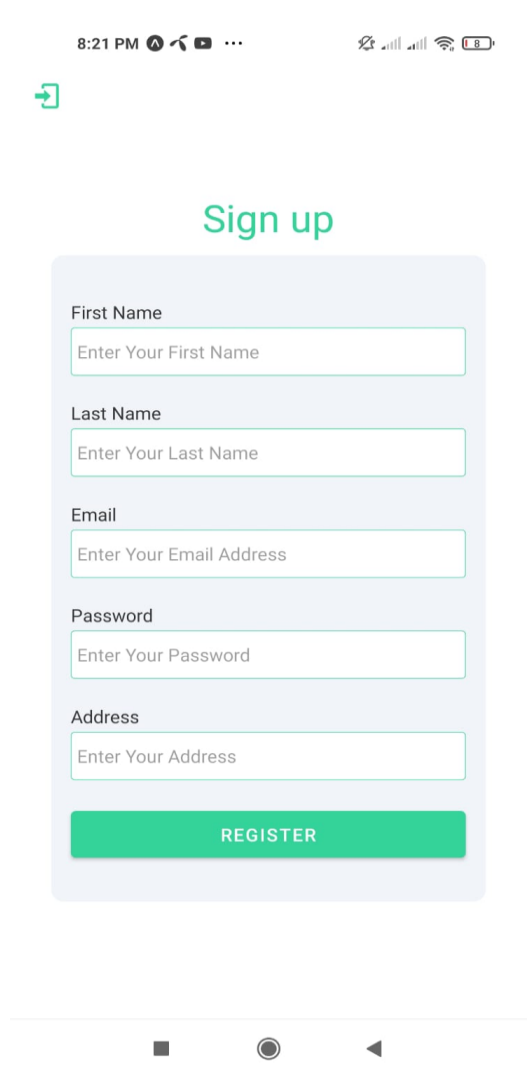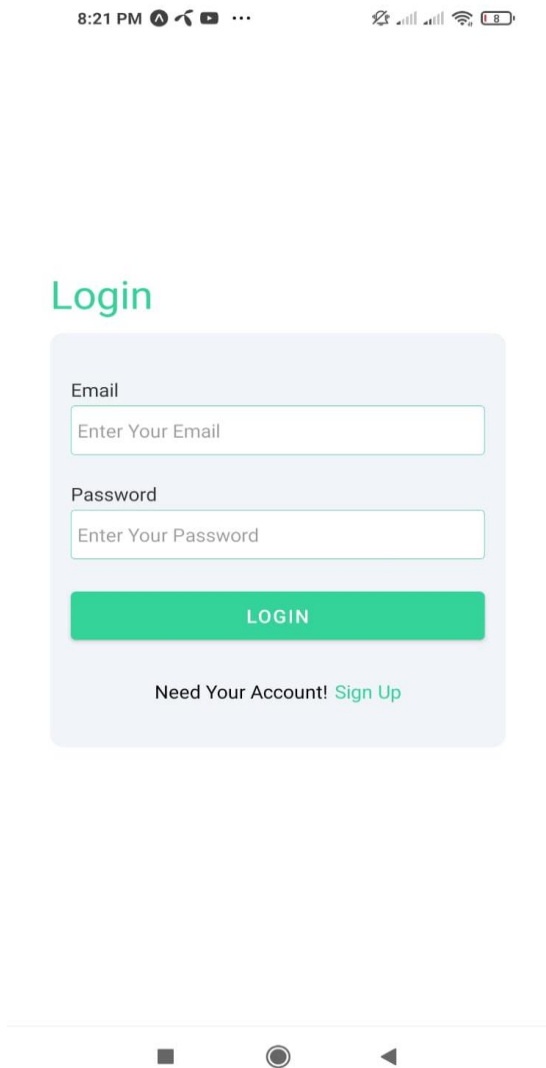
Scenario of Apps
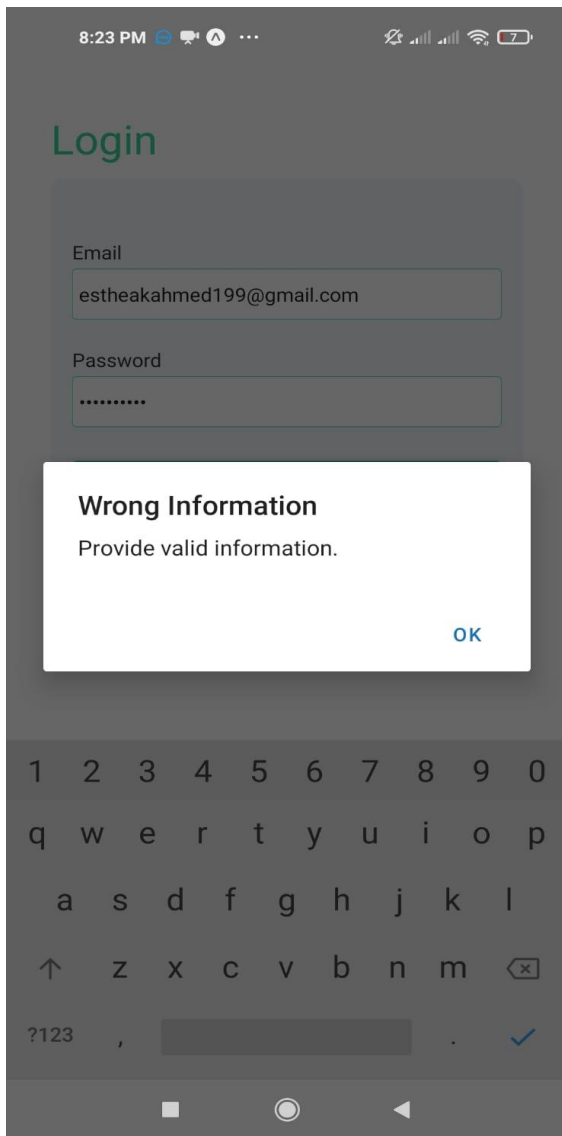

Fig: Welcome Screen

Fig: Sign in/Sign up Screen
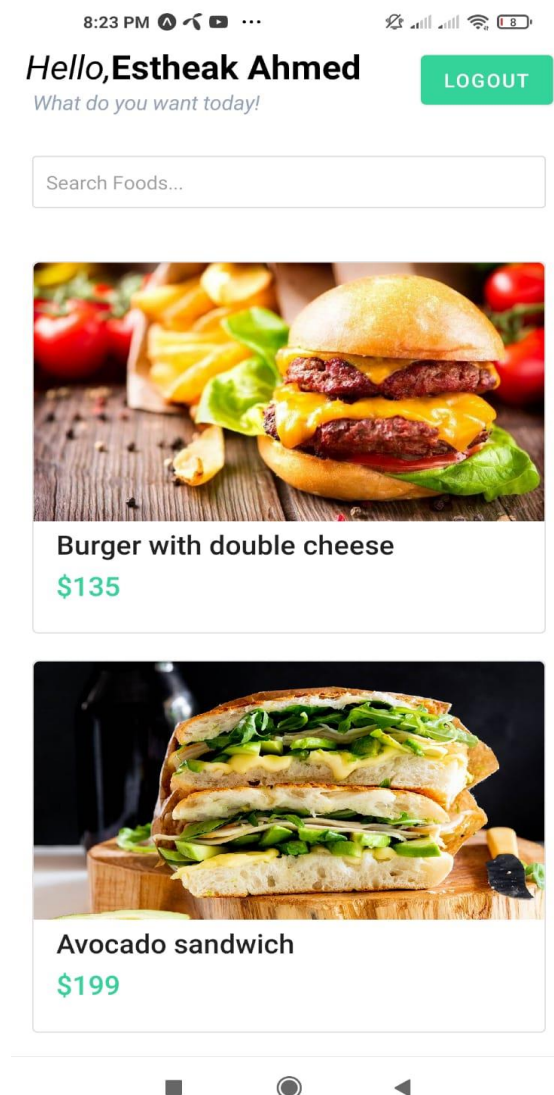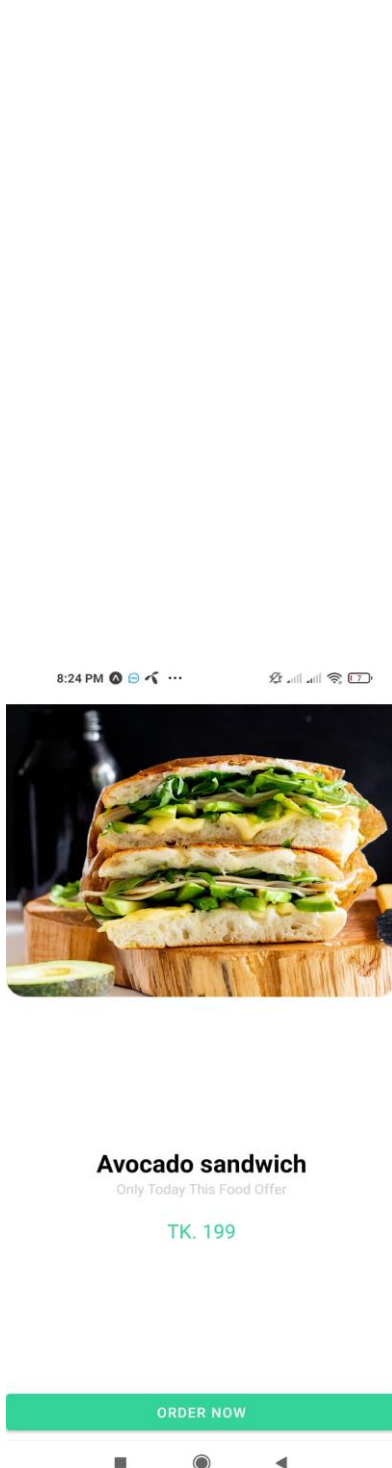
Fig: Alert!if you try with wrong info.

Fig: Home Screen

Fig: Search Button
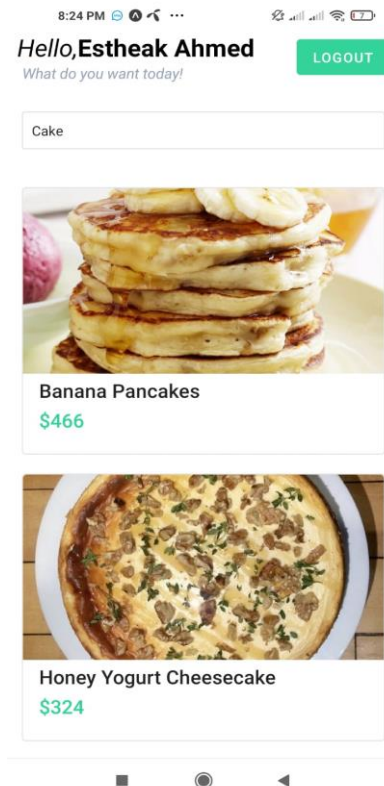

Fig: Order Screen
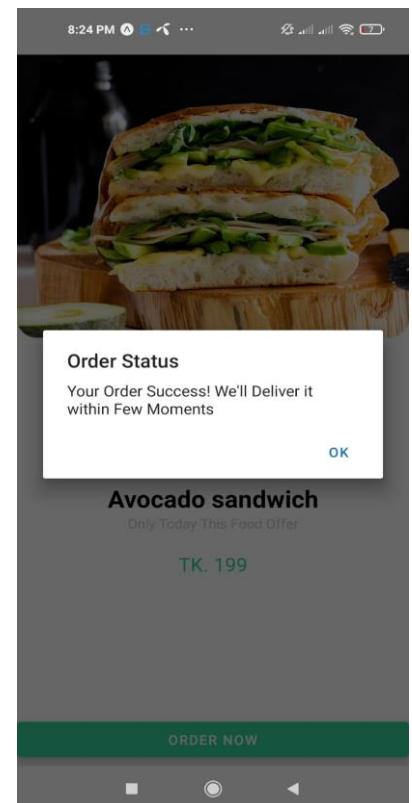

Fig: Notification after Order

Chapter 4
Structural Design

ER-Diagram

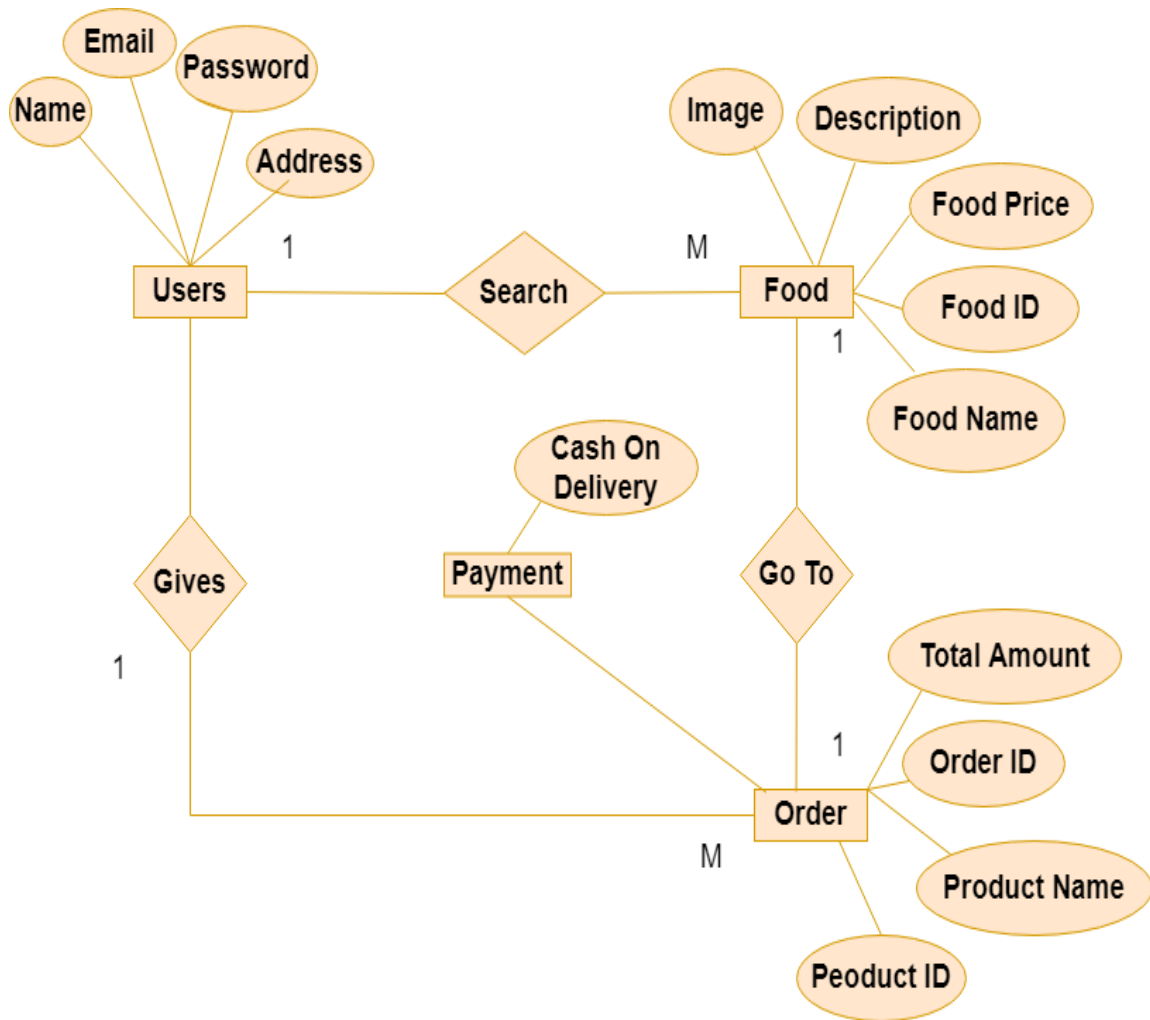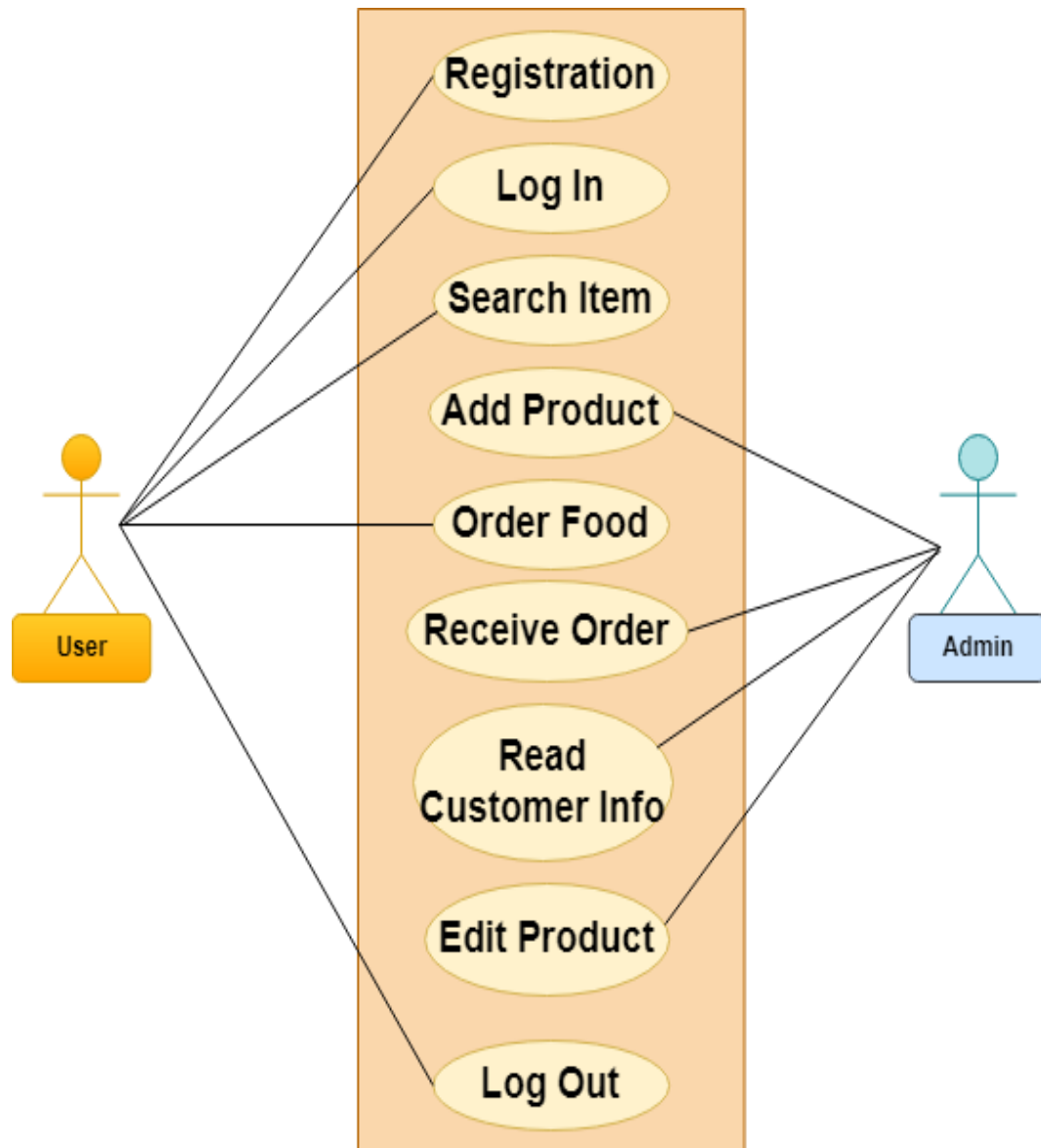Figure: Entity Relationship Diagram

User Case Diagram
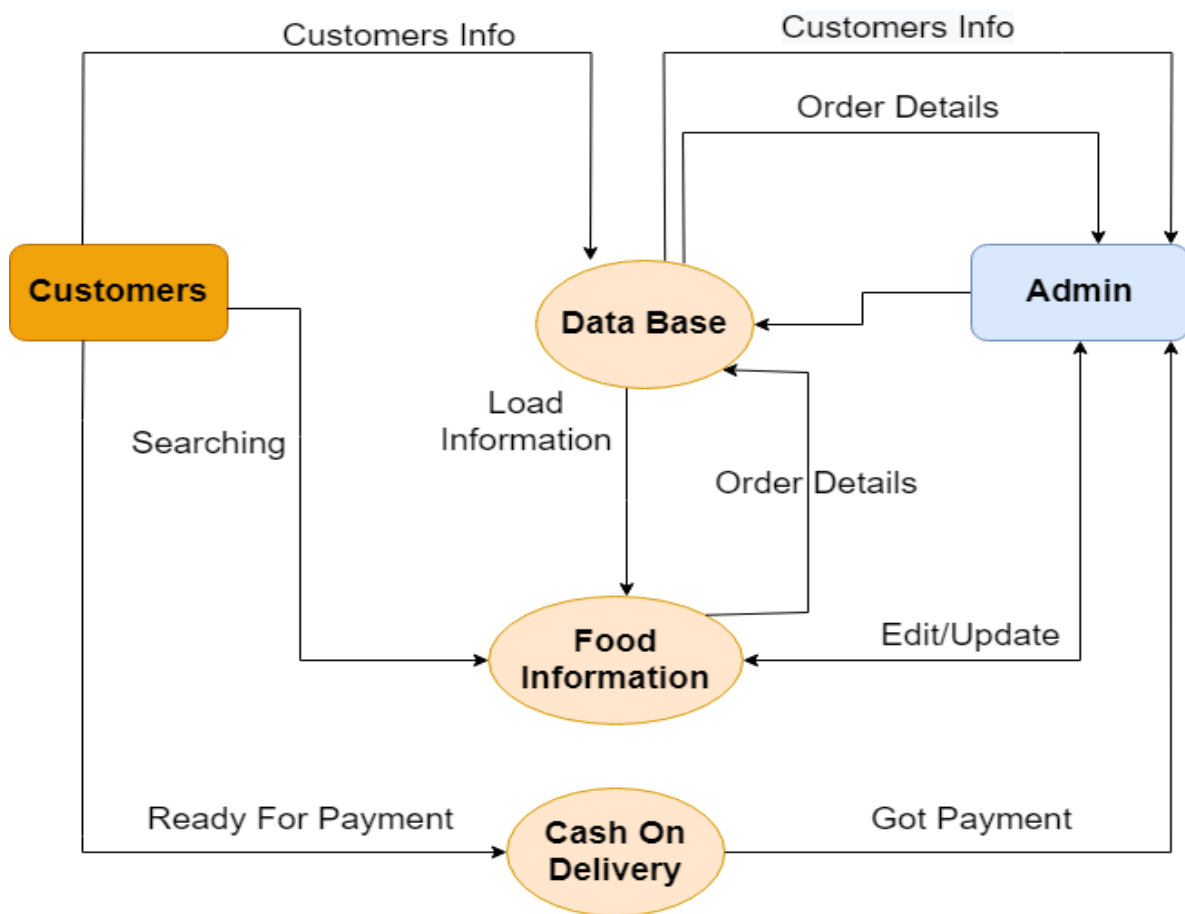

Figure: User Case Diagram

Data flow Diagram

Figure: Data Flow Diagram

Chapter 5
Limitations and Future Work

Limitations

There are always drawbacks for every new production. We were careful full to avoid all of it if such thing occurs. However, there are some limitations for the application do exist and will be deal with in different approach in future modification. One of those limitations is the unavailability of cart, online payment gateway,order cancellation although the users can pay the price via 'Cash on Delivery' option. Another one to be mentioned is the unavailability of tracking delivery after order. This also has been taken under the consideration of future modification.

Future Work

The application is developed only for Android version and is hoped to release a version for App Store as well for iOS. In the newer version some newer features will be added that are under planning and observation. The main focus of the app is to offer a very easy interface and for every newer version modified and stylized easy UI will be introduced. we will add cart ,payment method via card/online ,delivery tracking, food video instead of food images etc.

Chapter 6
Conclusions

The main goal of the project is to introduce the users and customers a different and easier way to purchase food online. It will also work as a plus point to earn the faith on Food Delivery-based platforms. While doing the project we went through many unknown difficulties and were introduced to many unknown and essential platform t with. Even though we have a little feature we had plan to add more and we will add more to give it the perfection likewise we planned it. Hopefully in near future this project will get a marvelous look with a bunch of amazing features and effective functionalities. It's pretty sure our innovative idea and our apps will perform level best in the long run.

References

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        https://www.fool.com/investing/2022/03/09/why-mongodb-stock-was-soaring-today/
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        the-most-used-front-end-web-development-technology/