Report On

DeshiEats

Prepared for

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&

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CSE3224

Information System Design and Software Engineering Lab

Prepared by

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Date: 15/03/2022

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Executive Summary

The following is a report for a website named “DeshiEats”, a cloud kitchen platform for home cooks, small entrepreneurs, and food enthusiasts all over the country. The purpose of this project is to create a website where home cooks and small entrepreneurs who share a passion for cooking have a platform to show their culinary skills and serve people a variety of cuisines. It’s a website where food enthusiasts get the opportunity to taste cuisines that represent the traditions of different parts of the country.

In every part of our country, there are many men and especially women who are highly skilled in cooking. As much as they would like to display their culinary skill and share their cooked meals with others, they fail to do so for various reasons. First of all, owning a restaurant nowadays requires a huge investment, and the cost of promotion of the restaurants is high. Besides, finding a suitable property for the restaurant is hard. Moreover, most home cooks who are highly skilled in cooking and serving lack management skills.

On the other hand, many food enthusiasts in our country love to taste different cuisines that represent the traditions of different parts of the country. In this era of globalization, a majority of restaurants in Bangladesh are now focusing on foreign cuisines. As a result, many authentic cuisines from different regions of our country are now getting lost. Food enthusiasts cannot find traditional food options in restaurants. Besides, many people in Bangladesh want to eat homemade food on a regular basis but cannot cook because of their busy schedules or lack of culinary skills.

Our “DeshiEats” website is aimed to remove the obstacles of the home cooks and food enthusiasts by creating a platform that will be a great alternative to a restaurant where home cooks can own a cloud kitchen and share their homemade meals with everyone and food enthusiasts get to eat a variety of authentic cuisines just in one platform.

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Letter of Transmittal

March 15, 2022

A. K. M. Ahsanul Hoque,

Adjunct Professor,

Ahsanullah University of Science and Technology,

Tejgaon, Dhaka.

Subject: Submission of a Report on DeshiEats Project

Dear Sir,

With due respect, as per your instruction, we have submitted a report for the project entitled “DeshiEats” as the requirements of the Information System Design and Software Engineering Lab.

The project aims to develop a web-based platform for home cooks, small entrepreneurs, and food enthusiasts of our country. The platform allows home cooks to own a cloud kitchen, connect them with consumers, create employment opportunities for men and women, lead women empowerment, and work towards a developed society where small entrepreneurs can come forward.

In writing this report, we have followed the instructions that you have given us in the class, and we have also applied relevant concepts that we have learned throughout our course. However, we will be glad to clarify any discrepancies that may arise.

Finally, we would love to express our gratitude for your supportive thoughts and kind consideration in and outside of the class.

Yours faithfully,

Sanjay Kumar Mandal, 18.02.04.039

Mustavi Ibne Masum, 18.02.04.040

Abdullah Al Noman, 18.02.04.042

Neloy Barman, 18.02.04.053

Ashfiqun Mustari, 18.02.04.067

Introduction

a. Project Introduction

The “DeshiEats” is a web-based platform for home cooks, small entrepreneurs, and food enthusiasts of our country. This platform allows home cooks and small entrepreneurs to own a cloud kitchen of their own and start their business with a very low investment. There are many men and women in our country who have expertise in cooking and serving but cannot own restaurants due to insufficient funds, shortage of suitable property, and lack of management skills. Our platform is a great replacement for owning a physical restaurant. In our platform, the home cooks and small entrepreneurs can be an owner of their own cloud restaurant without the hassle of owning and maintaining a physical restaurant. The owners can reach out to their customers and showcase their culinary skills with a very low-cost promotion and advertisement. Our platform is also a community of food enthusiasts who love to try a variety of cuisines and share the love for home-cooked meals. With a simple and user-friendly design, easy to use features, a variety of well-functioned features, online bill payment systems, and own delivery system; our website aims to connect all home cooks and food enthusiasts under one platform.

b. Team Introduction

Team Optimist is composed of 5 members who have come together with a dream project to offer a platform for the home cooks and small entrepreneurs of our country. First of all, we have Asfiqun Mustari, a professional content writer who loves designing and front-end development. Then we have Mustavi Ibne Masum, who has expertise in backend development. Then we have Sanjay Kumar Mandal, Neloy Barman, and Abdullah Al Noman, aspiring to be software developers. We are a team of computer science and engineering students who, with their expertise in a certain area, are working to transform our dream project into reality.

Background of the Study

a. Project Background

Bangladesh is a least developed country. Though the unemployment rate was on the decline from 2013 to 2019, it is again on the rise due to the impact of Covid-19 on the economy (World Bank, 2022). In the past two years, many offices have been shut down, and many men and women have lost their jobs and find it hard to get new employment opportunities. But in Bangladesh, there are many men, especially women, who are highly skilled in cooking. Given the opportunity, they would love to demonstrate their culinary skill and share their made meals with others, but they fail to do so for lack of opportunity. Running a restaurant nowadays involves a significant financial investment, and restaurant promotion is expensive. Besides, finding a good location for the restaurant is difficult.

Furthermore, most highly trained home cooks and servers lack management abilities. On the other hand, many food enthusiasts in our country enjoy trying a variety of cuisines that reflect the traditions of various regions of the country. But in the current era of globalization, most Bangladeshi restaurants are now focusing on international cuisines. As a result, numerous authentic cuisines from various parts of our country have become extinct. Restaurants do not provide traditional food options for food enthusiasts. Furthermore, many people in Bangladesh wish to eat home-cooked meals daily but are unable to do so due to their hectic schedules or a lack of culinary abilities. To overcome such obstacles, team optimist has decided to come up with a website named “DeshiEats”, a platform for home cooks, small entrepreneurs, and food enthusiasts of our country.

Objectives

a. Primary Objective

The primary objective of our project is to create a platform for small home cooks and small entrepreneurs. The platform will be an alternative to owning a physical restaurant. This platform will allow home cooks and small entrepreneurs to have a virtual space of their own where they can showcase their culinary skills, reach out to customers, and run their business with a minimal promotion cost. The platform will create new employment opportunities for women and men who share the love of cooking. Besides, this platform will also create an opportunity for food lovers to taste all kinds of cuisines under one platform.

Overall, "DeshiEats" aims to be a platform and a community of home cooks and food enthusiasts who love to try a variety of cuisines and share the love for home-cooked meals.

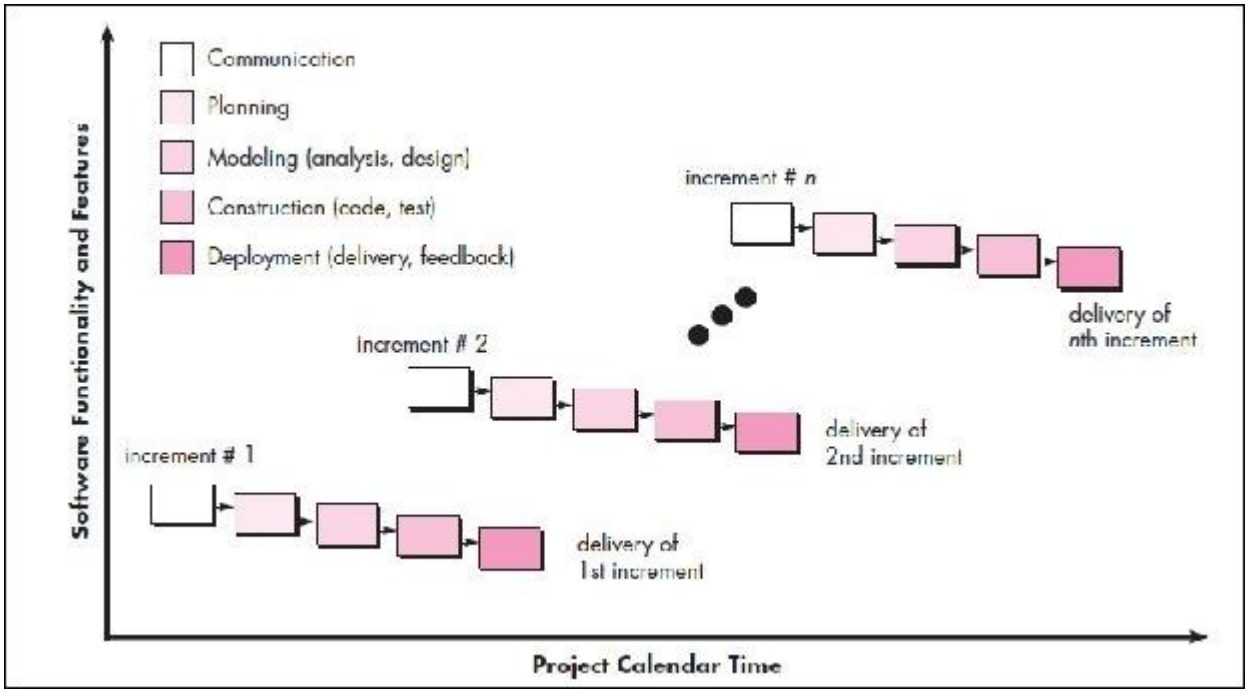
b. Secondary Objective

Most of the restaurants nowadays don't focus on the quality control of the food and the hygiene of the kitchens. As a result, the poor quality of food is taking a toll on the health of the people. Besides, as they add the restaurant management and interior maintenance cost, it ends up being a high charge on the meals despite the poor quality. Even though many people want to lead healthy lifestyle, they cannot do so for lack of healthy meals. Our platform aims to encourage healthy lifestyle by promoting affordable home cooked meals.

Methodology

a. Process Model

We are following Incremental Process Model for our project. The Incremental Process Model is a software development process in which the model is created, built, and tested incrementally until the product is complete (a little more is added each time). It entails both development and upkeep. When a product meets all of its specifications, it is said to be done (Pressman, R.S., 2009). The product is broken down into several parts, each of which is designed and constructed separately. When each component is finished, it is delivered to the client. This allows for partial product utilization while avoiding a lengthy development period.



We are developing a website that has multiple functionalities. There are cloud kitchens for owners who can register, create a profile, upload a menu, take orders, manage bill payments. Then there are customers who can register, create profiles, order, and pay bills online. There will be an admin to

manage and maintain everything. Since such functionality will require different modules, with the Incremental Process Model, we will be able to develop a working website quickly and early during the life cycle. Besides, during a small iteration, it will be easy to test and debug. Throughout the project's life cycle, if we want to change or add requirements and scopes of the projects, it will be less costly.

The Project

1. Communication

Survey

To get to know about the obstacles that home cooks, small entrepreneurs, and food enthusiasts face, and how they perceive the "DeshiEats" platforms and what they expect from it, we have surveyed 61 people from different age groups. The survey was performed through social media. For more details, please see after Appendix

2. Planning

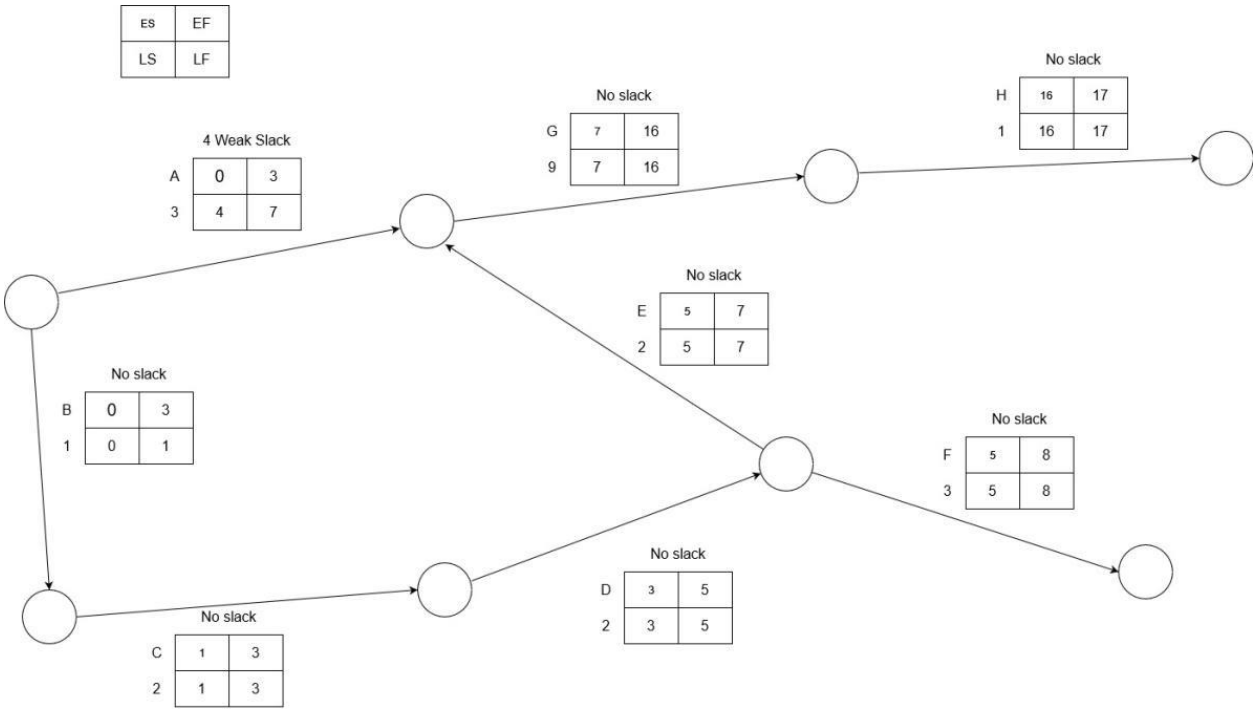
a. PERT

Activity	Predecessor	Time (Weeks)
Planning	0	3
Group Discussion	0	1
Resource Manage	Group Discussion	2
Survey	Resource Manage	2
Project analysis	Survey	2
Project Proposal	Survey	3
Start development	Planning, Project analysis	9
Customer feedback	Start development	1

Mapping	Activity
A	Planning

B	Group Discussion
C	Resource Manage
D	Survey
E	Project analysis
F	Project Proposal
G	Start development
H	Customer feedback

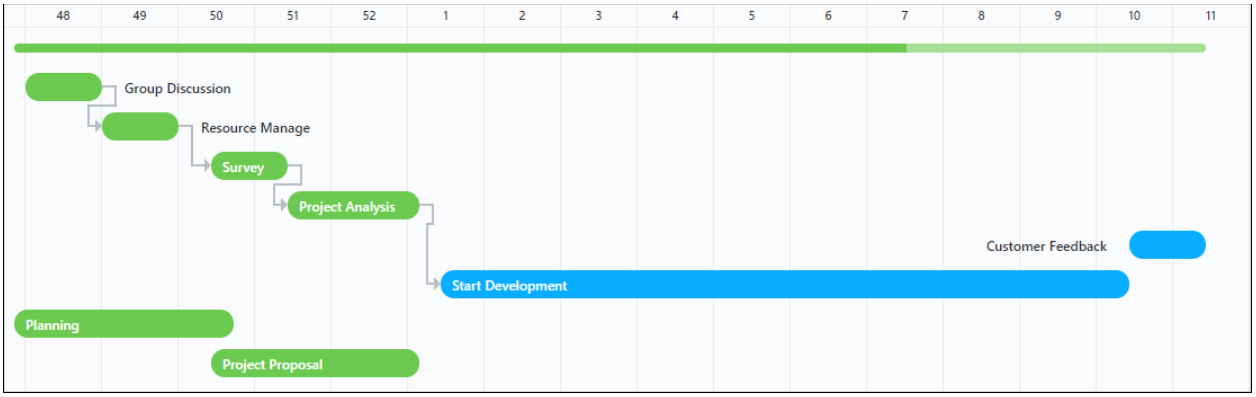
Activity	Predecessor	Time (Weeks)
A	0	3
B	0	1
C	B	2
D	C	2
E	D	2
F	D	3
G	A, E	9
H	G	1



b. CPM

As we can see from the PERT diagram above and calculating slack time by subtracting early finish and late finish and as there is no slack we can determine the critical paths as shown below: B -> C -> D -> F B -> C -> D -> E -> G -> H

c. Gantt Chart



d. Project Planning

Before we initiate our project, we have created a roadmap of how we complete this project. In planning we are considering various factors such as time, technical issues during development, communication, task distribution and management etc.

Discussion:

First we will communicate with our team members about our project. By sharing our ideas, pointing out problems and coming up with possible solutions we will set the goal of our project. We will estimate the basic requirement for our project. To get the overall requirements and the scale of our project, we will communicate with the audience. Our next step is to take a survey.

Survey:

We will communicate with the audience and take their opinion on our project, figure out if it's actually solving the problems we have pointed out. We will also get some unique ideas and features for our project. Based on audience opinion and our observation we will estimate the technological and economical requirements for our project. In this process we will also point out the limitations of our project and try to solve them. Solving problems is a very crucial part of our project.

Set Objectives:

Then we will set our tasks. We have created a Gantt chart which shows the timeline of our project progression.

e. Software Estimation

i. FP Estimation:

Analyzing the DFD we get,

Number of user inputs (EI): 2

Number of user outputs (EO): 1

Number of user online queries (EQ): 6

Number of logical files (ILF): 3

Number of external interfaces (ELF): 0

- User Inputs: Userinfo, Iteminfo
- User outputs: PaymentOrder
- Query processing: Processing request to UserDB & requesting validation from UserDB, Customer requesting to show from iteminfo Showing Iteminfo from ItemDB, storing data into paymentDB & Processing payment from paymentDB) /3(Processing validation from UserDB, Showing Iteminfo from ItemDB, Processing payment from paymentDB

Internal logical files: User DB, Item DB, Payment DB

External logical files: No external system files.

Weight:

EI = LOW, weight= 3

EO = LOW, weight = 4

EQ = LOW, weight = 3

ILF = HIGH, weight = 5

ELF = HIGH, weight = 15

Total value:

EI = 2 X 3 = 6

EO = 1 X 4 = 4

ELF = 0 X 3 = 0

EQ = 6 X 5 = 30

ILF = 3 X 15 = 45

Total = 85

So, unadjusted function point(UFP) = 85.

VAF based on GSC:

Subject	**Grade (0 to 5)**	**Reason**
Data communications	3	3 database tables for data communication
Distributed data processing	5	handled
Performance	5	Runs smoothly
Heavily used configuration	2	php, html, css, jss

Transaction rate	5	Daily basis
On-line Data entry	5	Total data input is through website
End-user efficiency	3	Not wholly
On-line update	3	3 ILF's can be updated by online update.)
Complex processing	3	Some process's queries are complex)
Reusability	5	It's built to meet many user' needs
Installation ease	0	It's a website)
Operational ease	4	Effective
Multiple sites	1	Website belongs to 1 company
Facilitate change	3	(To substitute some food ordering websites unimplemented features
Total / VAF	**47**	

So, value adjustment factor is = 47

We know,

FP = UFP x (0.65 + 0.01 x VAF)

= 85 x (0.65 + 0.01 x 47)

= 86.12

So, the function point is 86.12.

ii. Process Based Estimation:

Login() - UC01

ViewItems() - UC02

OrderingItems() – UC03

GivingReview() – UC04

AddItems() – UC05

MangeOrders() – UC06

SettingUpProfile() – UC07

AssignDeliveryMan() – UC08

OverviewingSystem() – UC09

Activity	CC	Planning	Risk analysis	Engineering		Construction release		CE	Totals
Task ->				Analysis	Design	Code	Test		
UC01				0.50	0.50	2.0	1.0	n/a	4.00
UC02				0.25	5.0	0.25	0.25	n/a	1.25
UC03				0.75	0.5	5.0	3.0	n/a	9.25
UC04				0.75	1.0	3.0	2.50	n/a	7.25
UC05				0.25	1.25	2.50	2.50	n/a	6.50
UC06				0.75	0.25	5.0	5.0	n/a	11.0
UC07				0.50	2.50	4.0	3.0	n/a	10.0
UC08				0.25	0.25	1.0	0.25	n/a	1.75
UC09				0.25	1.00	2.0	5.0	n/a	8.25
Totals	0.25	0.25	0.25	4.25	16.25	24.75	22.5		59.25
% effort	1%	1%	1%	17%	65%	99%	90%		

CE = Customer evolution CC = Customer communication

Analysis part takes 17%, Design part takes 65%, Code part takes 99%, Test part takes 90% effort.

So, based on average burdened labor rate of 2000/= tk per some hours as contract, total estimated project cost will be 1,18000/= .

e. Project Estimation

Due to our project being a middleman project, we only have to endure the cost of making and maintaining the web app and pay for servers. We also need to hire some employees. So, our project development cost is around 50,000tk and monthly cost will be around 7,000tk depending on how many sellers we will have.

f. Cost Benefit Analysis

DeshiEats gets paid by taking commission from the sellers. Sellers also have to pay a monthly subscription. Riders get paid from DeshiEats depending on the deliveries they complete. The sellers/cooks get the benefit of selling their cuisines at a fast, secure and trusted platform. DeshiEats is a middleman site that promotes cloud kitchen, so the cost of establishing and running DeshiEats is rider costs, the server costs and hosting the website.

g. Training

Since our project is a web based application, we will train employees to properly handle technical issues faced by the users and provide proper solutions quickly. This will include call-center training as well as technical instruction on how to use specialized software to communicate with our databases to resolve typical problems. We will also run advertising campaigns to indirectly train our users how to use the platform properly to their interest. Furthermore, technical training will be required to keep our project and business running smoothly.

h. Risk Analysis

Risk	Probability	Effects
Lack of Kitchen Owners	High	Catastrophic
Insufficient Customers	High	Catastrophic
Database not able to process huge data	Moderate	Catastrophic
Inactive Kitchen Owners	Low	Critical

Required training for staff is not available	Moderate	Critical
Software tools not integrated	High	Critical
Budget Issue	Moderate	Marginal

i. Resource Requirements

Currently we are working as a team containing 5 members. Our team is enough for making the prototype. But for the final release, we will need other people who will manage the database, monitoring traction and activities.

3. Modeling

a. Project Features

i. Separate sections for Home cooks, Clients, Deliverymen.

ii. There will be verification for all home cooks for safe food services.

iii. Users can share their dishes here and showcase it.

iv. People can set up their profile.

v. After spending a certain amount users can get free delivery from our own delivey systems.

vi. New employment opportunity for women and men who share the love of cooking

vii. Encourages entrepreneurs.

viii. There will be verification for all users for safe transaction.

b. Function Definitions

UplAdmin: The admin panel will monitor all the activities from owner to delivery.

Kitchen Owner:

i. **Register:** The people who want to sell through our website should make a genuine & trusted profile to grab more customers.

ii. **Upload menu:** The kitchen owner needs to upload attractive menu. So that, visitors come & order something, taste different cuisines.

iii. **Profile:** Owners will have their own profile to manage their presentation.

iv. **Take & manage order:** When a customer orders something from the menu, the kitchen owner should take time to prepare or manage food, & hand it over to the delivery man properly. So, the quality of the food doesn't get damaged.

v. **Collect payment:** We'll have many online payment methods. After the customer pays for the food their desired proportion will be sent to the kitchen owners.

Customer:

i. **Register:** Here the customers will have to register with his genuine identities. So that, whenever he orders food online, we can send it to them correctly.

ii. **Login page:** They should login with their username & password to place an order.

iii. **Profile:** The profile page of the buyers will contain the order history of them & along with that other additional information.

iv. **Place order:** Customers can place order if he wants to taste food.

v. **Feedback:** The buyers can drop reviews for the owners which will be public & sometimes motivate them to continue or sometimes let them find their mistakes or try to improve.

Delivery:

i. **Register:** If anyone wants to work in delivery sector, he will have to register with proper information. He should have either a bike or cycle. Bikers must have their license card.

The delivery system will mainly consist of home cook, delivery man & customer. It will work if after visiting the kitchen profile, any customer places order. After that, our registered delivery man will take food from the place & deliver it timely to the customers.

c. Use Case Diagram

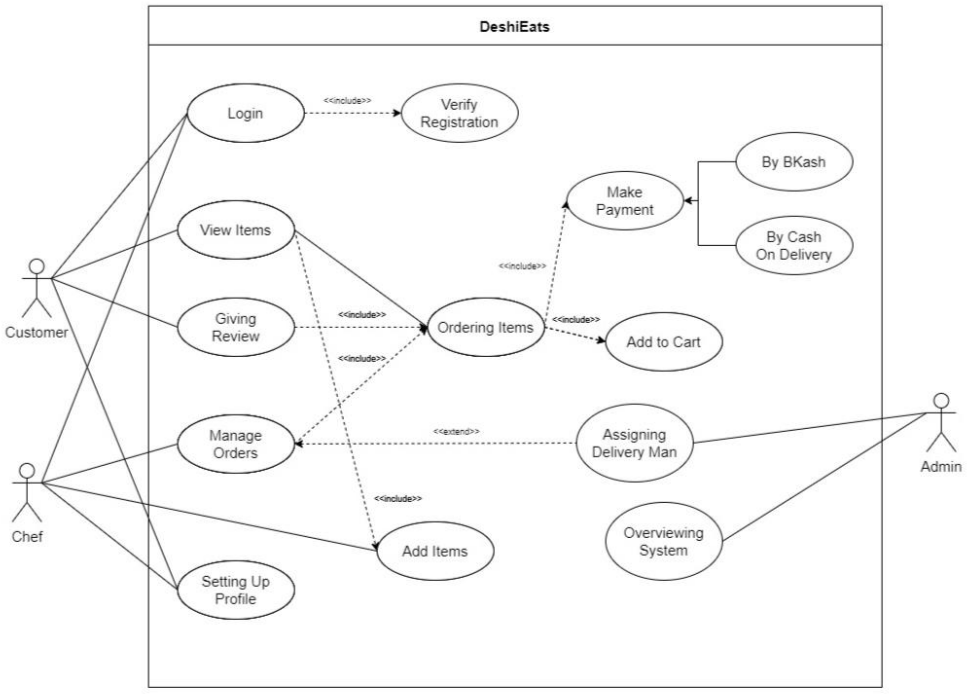


Figure 1. Use Case Diagram of DeshiEats

i. Use Case Narratives

1.

ID:	**UC01**
Title:	Login
Description:	To access the features of the website, the users have to log in with their registered email address and password.
Primary Actor:	Customer, Chef
Preconditions:	Users must register to the system by entering their correct information and agreeing with the terms of policy.
Postconditions:	Users will be redirected to their respective homepage after a successful login.
Main Success Scenario:	i. The user goes to our website and then goes to the login page. ii. There, she fills up her email address and registered password. iii. Then she selects the login button. If her email address and password are verified to the system, she successfully logs in to the website and sees her homepage.
Extensions:	1. Email Address is not verified. 2. The user is not registered to the website.
Frequency of Use:	Very frequent.

Status:	Work in progress.
Owner:	
Priority:	High

2.

ID:	**UC02**
Title:	View Items
Description:	Customers views items from their homepage to make a purchasing decision.
Primary Actor:	Customer
Preconditions:	Users must login to the system with their email address and password.
Postconditions:	Users will be able to view the available items and their details.
Main Success Scenario:	i. When the user is on the homepage, she views the available items that are uploaded by the chefs. ii. When she clicks on a specific item, she can view the picture of the item, its descriptions, price and which cloud kitchen the item is from.
Extensions:	1. The user is not logged in. 2. Chefs have not uploaded any item.
Frequency of Use:	Very frequent.
Status:	Work in progress.
Owner:	
Priority:	High

3.

ID:	**UC03**
Title:	Ordering Items
Description:	The customers can order meals according to their preference.
Primary Actor:	Customer
Preconditions:	i. Users must login to the website. ii. Users must add items to their cart. iii. Users must complete payment requirements.
Postconditions:	Users will successfully place an order.
Main Success Scenario:	i. The user views food items from her homepage. ii. She selects items, and adds to the cart. iii. Then she fills up her order information which are item quantity, address of the receiver, and delivery instructions. Then the system calculates her total price. iv. Upon proceeding, she is asked to choose her preferred payment method from Bkash Payment, and Cash on Delivery Methods. v. After selecting a payment method, she clicks on “”Confirm Order” and her items are successfully ordered, and she views the message “Your order has been placed successfully!” and then she is redirected to the homepage.
Extensions:	i. The item is not available.

	ii. The Chef has cancelled the order. iii. Payment requirements are not met.
Frequency of Use:	Very frequent.
Status:	Work in progress.
Owner:	
Priority:	High

4.

ID:	**UC04**
Title:	Giving Review
Description:	The system allows the users to give reviews to the specific food items that she has ordered.
Primary Actor:	Customer
Preconditions:	Users must successfully order the specific item to give review to it.
Postconditions:	Users will successfully give review to a specific food item.
Main Success Scenario:	i. The user goes to a specific food item that she has successfully ordered. ii. She selects the "Ädd Review" option. iii. Then she selects a specific rating from 1 to 5 stars. She can also enter a descriptive review about the item or leave it blank. iv. Then she selects the "Post" option and her review is successfully given.
Extensions:	1. The user has not ordered the specific item.
Frequency of Use:	Sometimes.
Status:	Work in progress.
Owner:	

Priority:	Moderate

5.

ID:	**UC05**
Title:	Manage Orders
Description:	The users can accept or cancel orders, request for delivery, manage payment requirements of the orders.
Primary Actor:	Chef
Preconditions:	Users must log in to system with their verified email address and password.
Postconditions:	Users will successfully manage the orders.
Main Success Scenario:	i. When the user is logged in to the website, she can view the order history of her cloud kitchen. ii. She can view order requests, pending orders, pending payments. iii. When she has new order request she can either accept the order or reject the order. iv. If she accepts the order, she can request for delivery to the system. v. She can view online payment information and approve when the online transaction of a specific order has been completed.
Extensions:	1. There is no order.
Frequency of Use:	Very frequent.
Status:	Work in progress.

Owner:	
Priority:	High

6.

ID:	**UC06**
Title:	Add items
Description:	The users can add items from the menu.
Primary Actor:	Chef
Preconditions:	Users must log in to system with their verified email address and password.
Postconditions:	Users will successfully update items in the menu.
Main Success Scenario:	i. The user goes to the website and logs in with her email address and password. ii. She goes to her menu. iii. She selects the “add item” option. iv. She uploads a picture of the meal, and inputs the item descriptions which are item name, short description, detailed description, available quantity, and price of them item. v. She selects the “upload” option
Extensions:	1. The user is not logged in.
Frequency of Use:	Sometimes
Status:	Work in progress.
Owner:	

Priority:	High

7.

ID:	**UC07**
Title:	Setting up Profile
Description:	The users modify their profile.
Primary Actor:	Customer, Chef
Preconditions:	Users must log in to system with their verified email address and password.
Postconditions:	Users will successfully set up their profile.
Main Success Scenario:	vi. The user goes to the website and logs in with her email address and password. vii. She goes to her profile. viii. If she is a customer, she can edit her name, address, and area. ix. If she is a chef, she can upload or change her display picture. She can also edit her cloud kitchen's name, description, address, area, and contact number.
Extensions:	2. The user is not logged in.
Frequency of Use:	Sometimes
Status:	Work in progress.
Owner:	
Priority:	Moderate

8.

ID:	**UC08**
Title:	Assign Delivery Man
Description:	The user can assign a delivery man to complete the order.
Primary Actor:	Admin
Preconditions:	i. Users must log in to system with their verified email address and password. ii. There has to be a delivery request from the chef.
Postconditions:	Users will successfully assign and manage the delivery of the order.
Main Success Scenario:	i. The user goes to the website and logs in with her email address and password. ii. She goes the delivery requests page. iii. She views the delivery requests made by the chefs. iv. She assigns delivery men to the orders. v. She overviews the delivery and updates the order status according to it.
Extensions:	i. There is no delivery request.
Frequency of Use:	Frequent
Status:	Work in progress.
Owner:	

Priority:	High

9.

ID:	**UC09**
Title:	Overviewing System
Description:	The user overviews the whole system.
Primary Actor:	Admin
Preconditions:	Users must log in to system with their verified email address and password.
Postconditions:	Users will successfully maintain the system.
Main Success Scenario:	i. The user goes to the website and logs in with her email address and password.
Extensions:	i. The user is not logged in.
Frequency of Use:	Very frequent.
Status:	Work in progress.
Owner:	
Priority:	High

d. Class Diagram

i. CRC

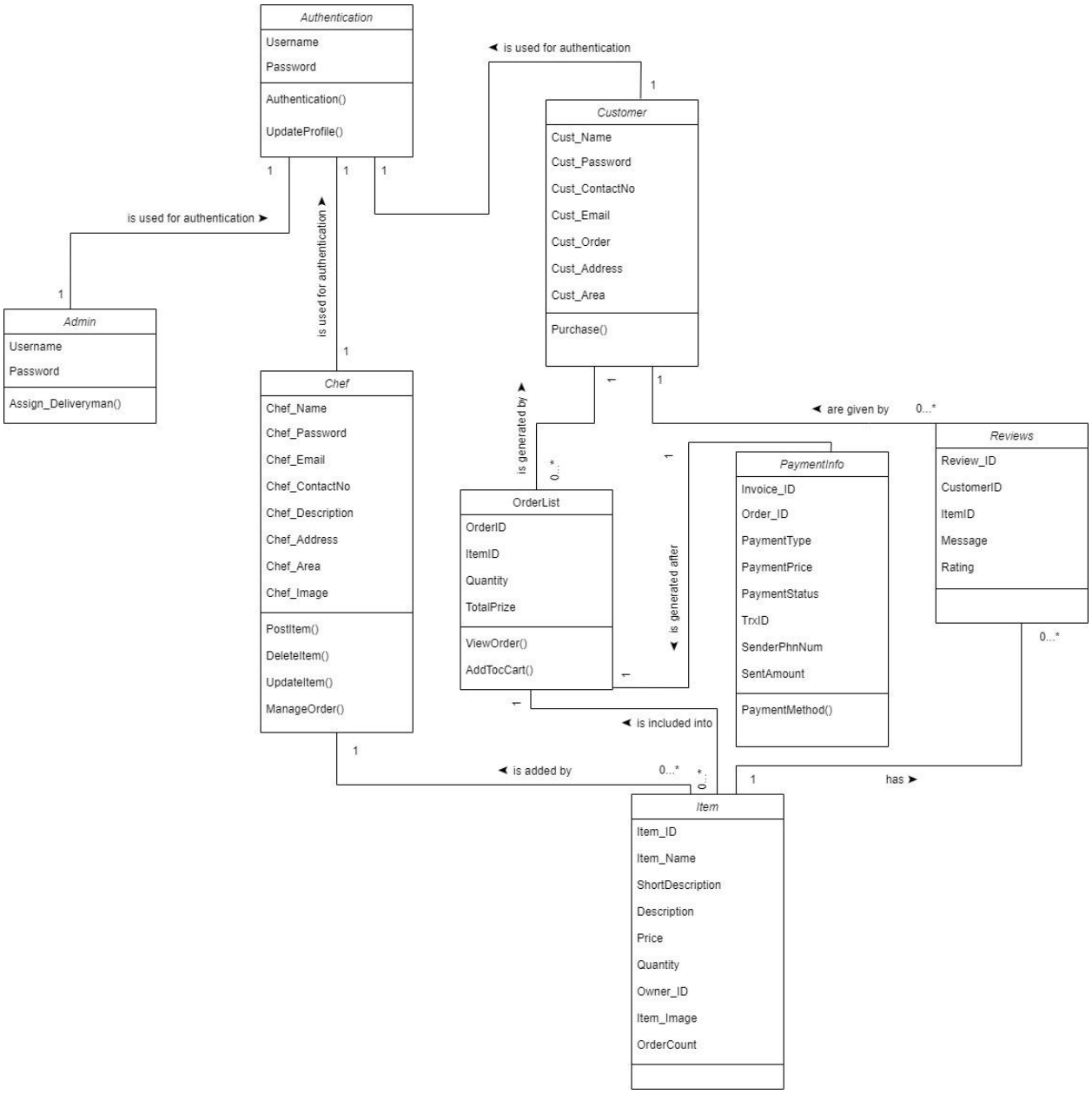


Figure 2. CRC of DeshiEats

e. Sequence Diagram

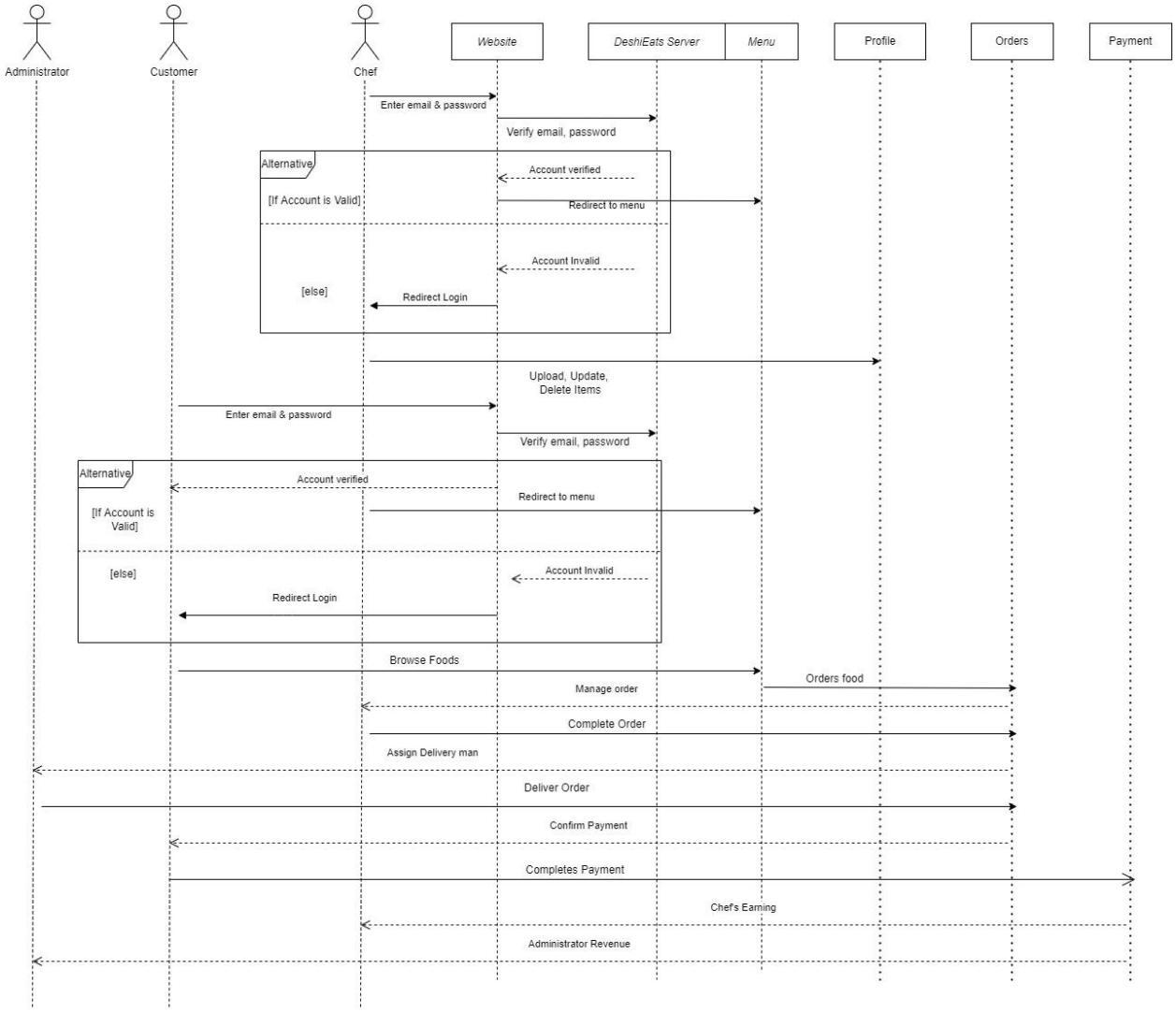


Figure 3. Sequence Diagram of DeshiEats

f. Activity Diagram

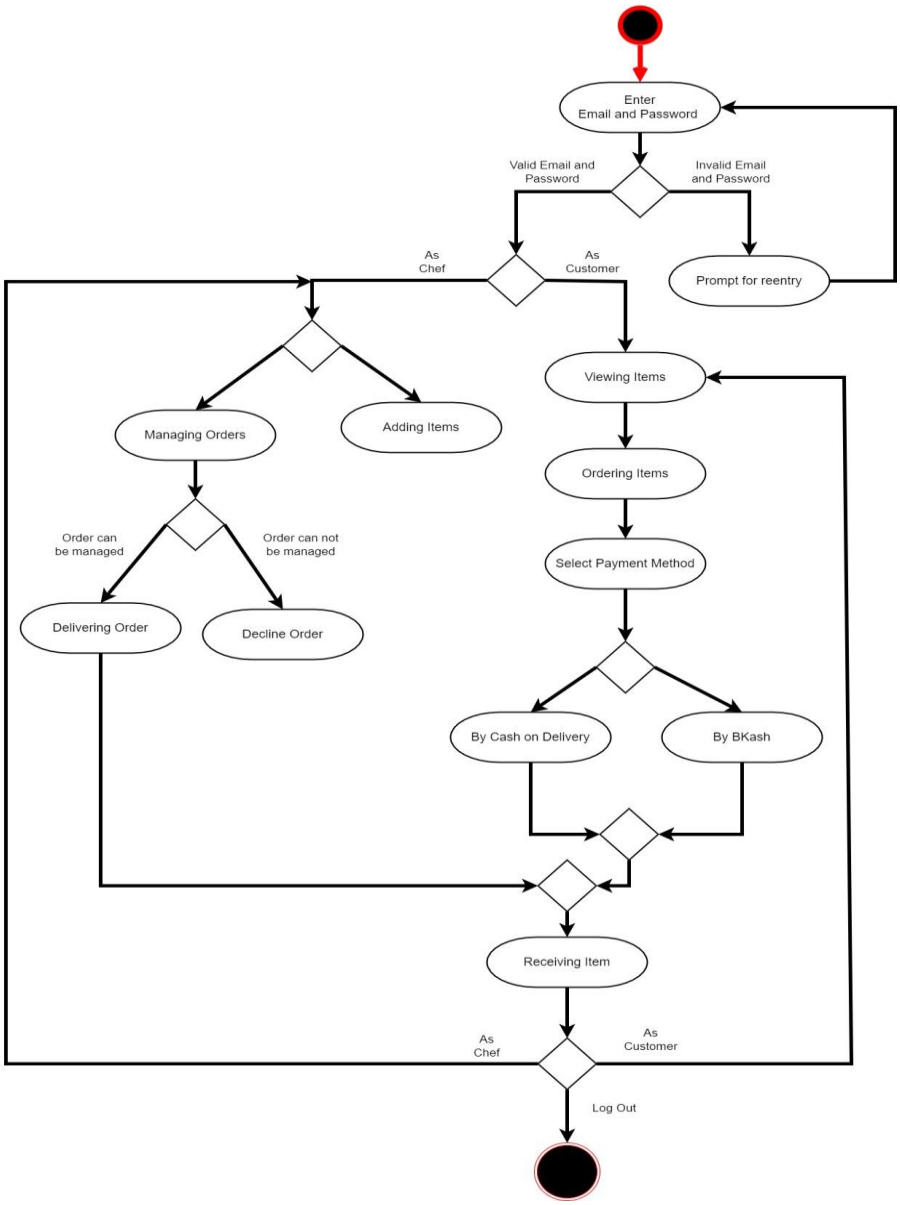


Figure 4. Activity Diagram of DeshiEats

g. Swim Lane Diagram

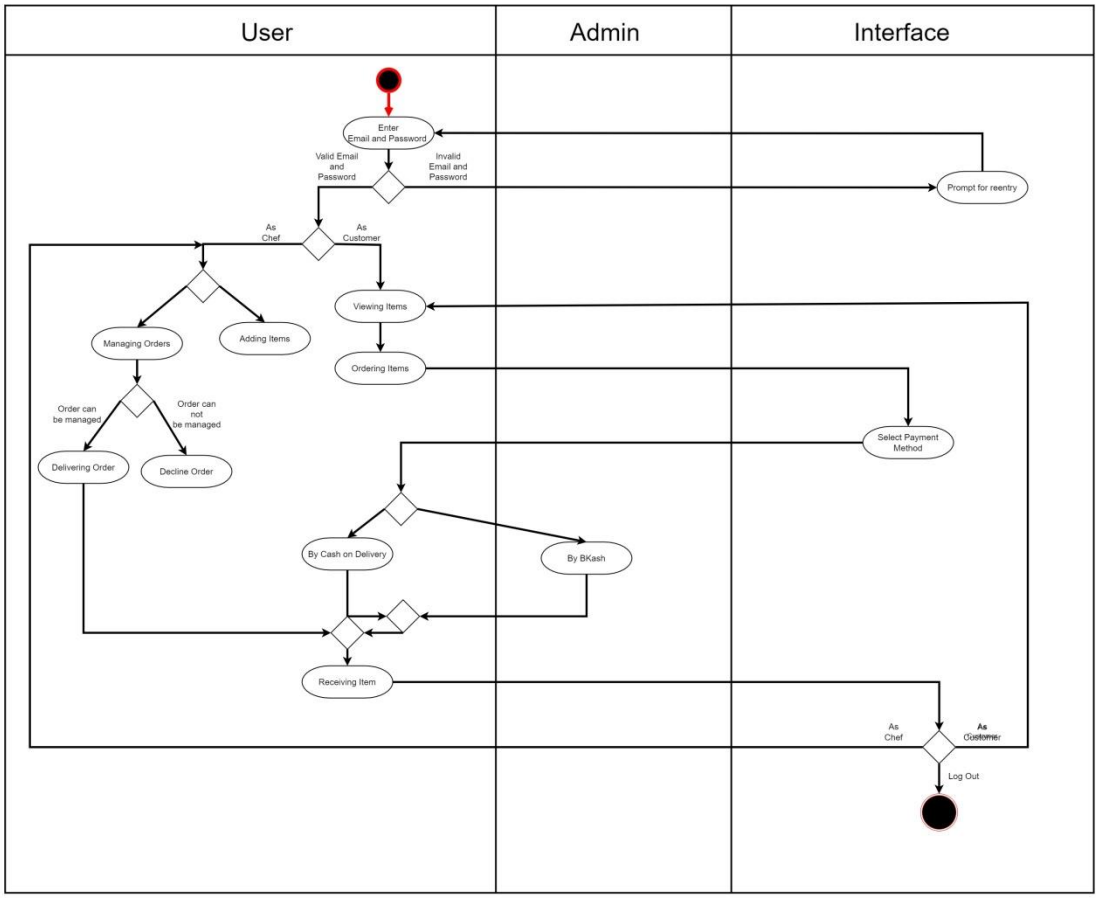


Figure 5. Swim Lane Diagram of Deshieats

h. Collaboration Diagram

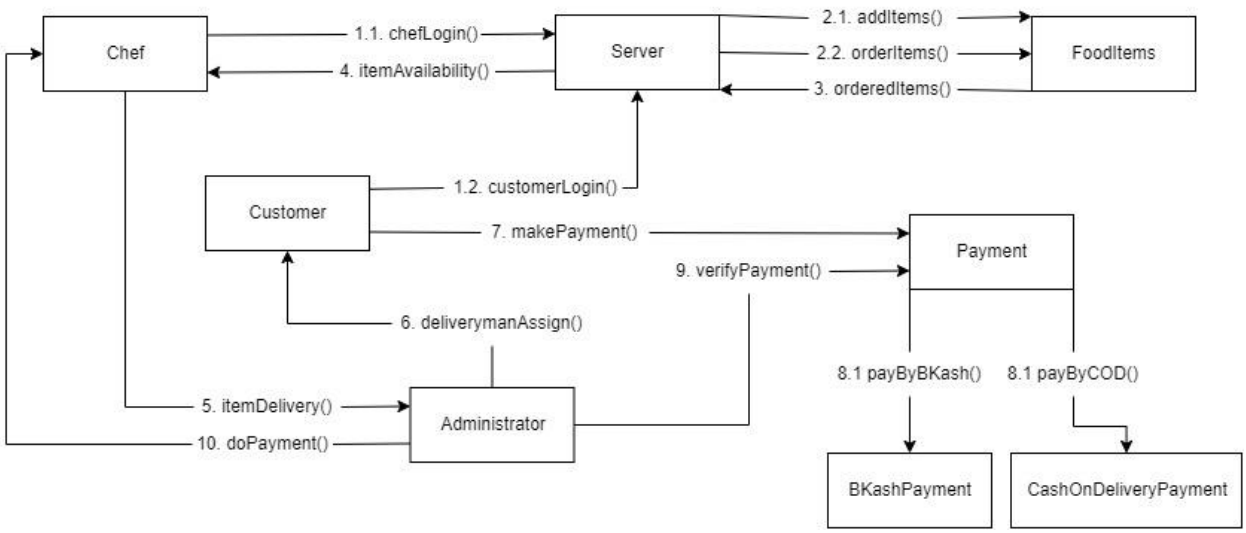
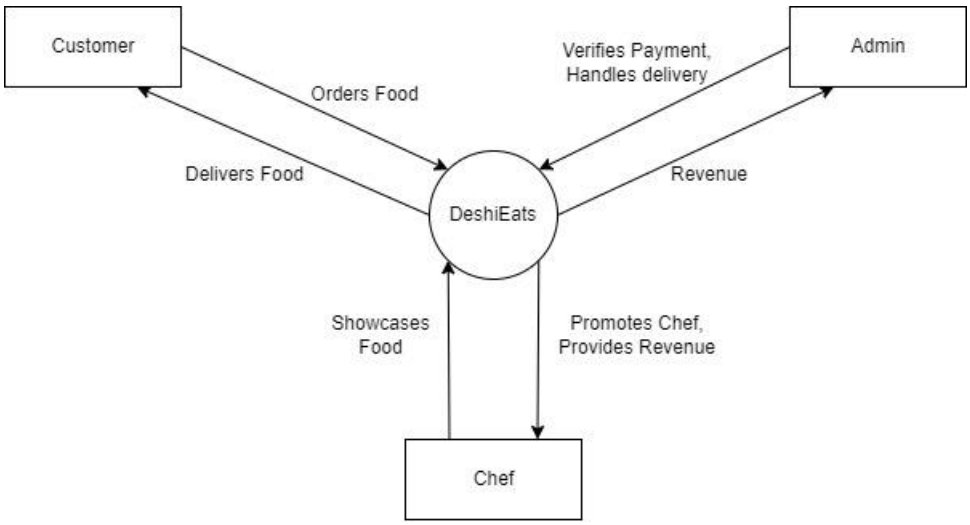


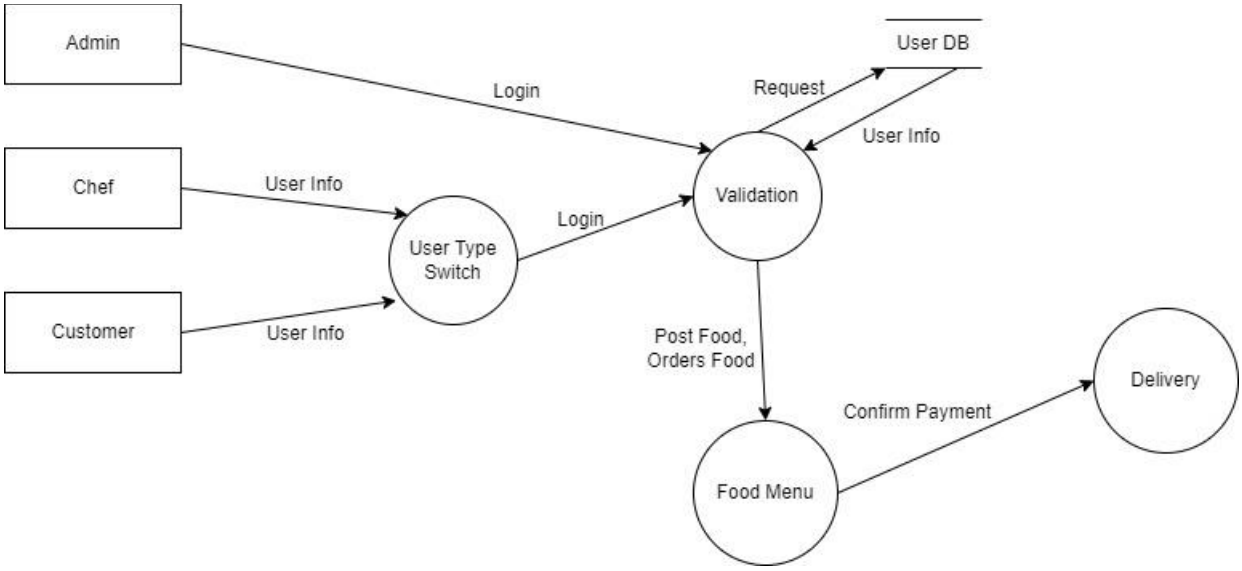
Figure 6. Collaboration Diagram of DeshiEats

i. Data Flow Diagram

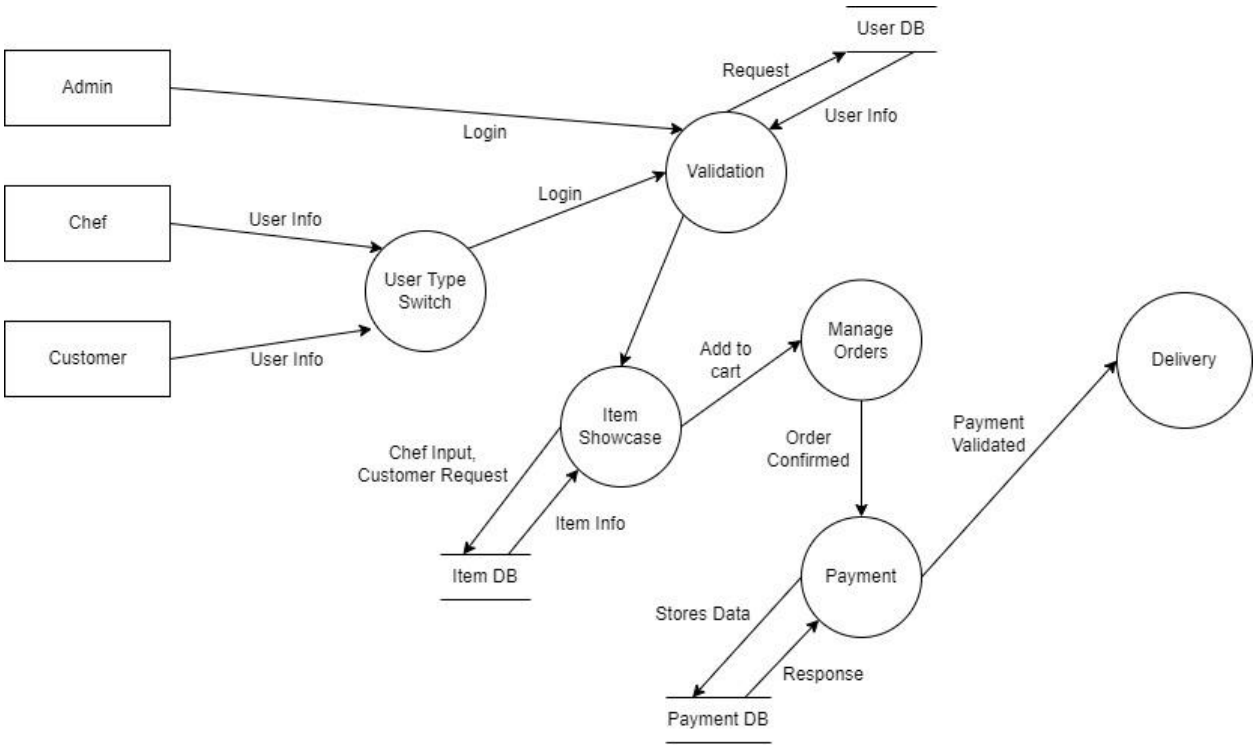
Level 0



Level 1



Level 2



j. Architecture Flow Diagram (System Architecture)

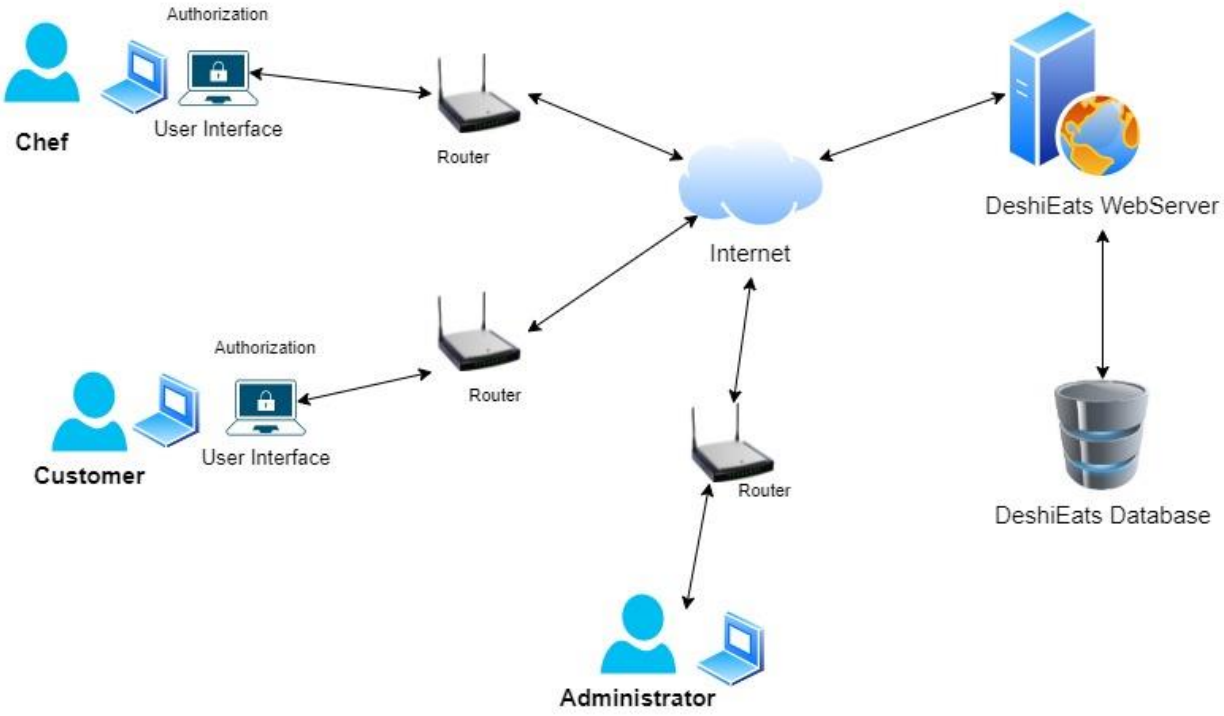
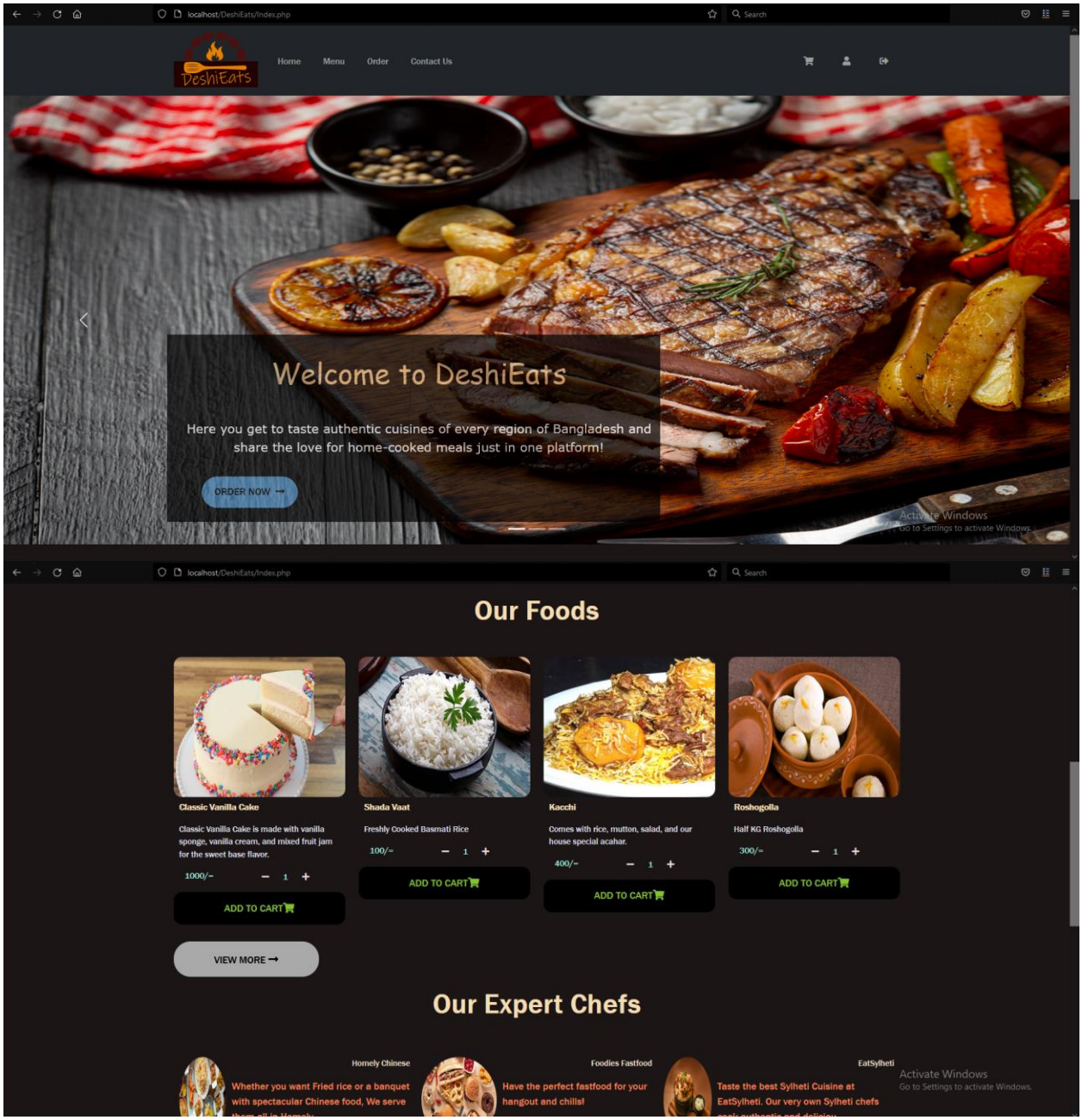
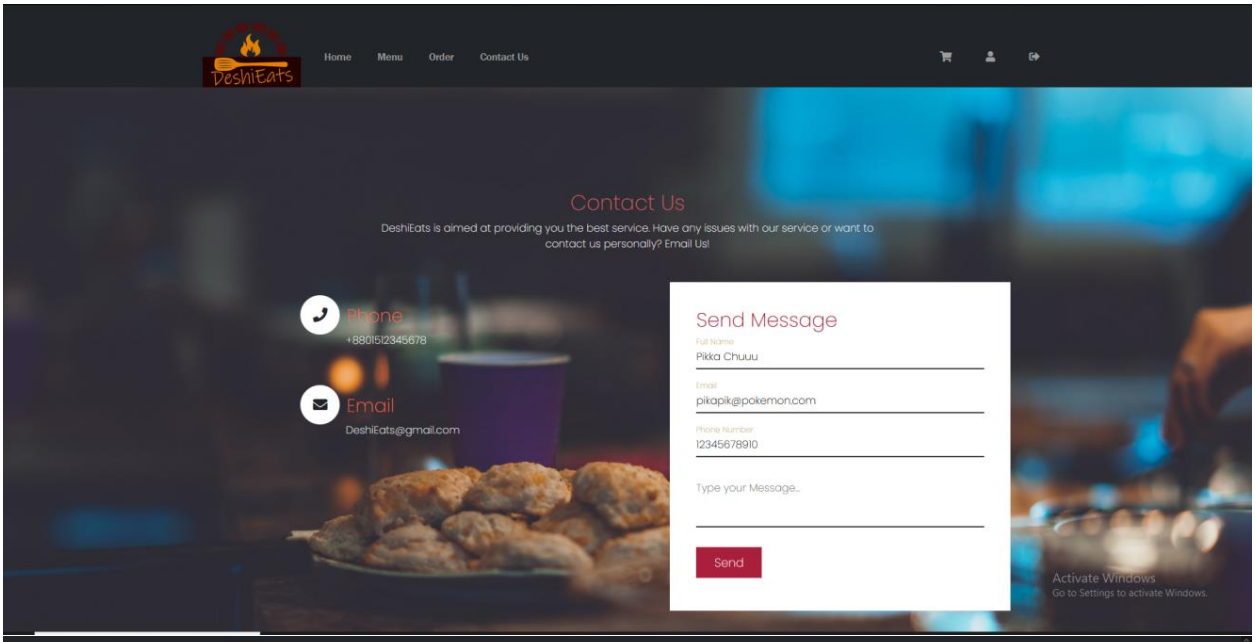
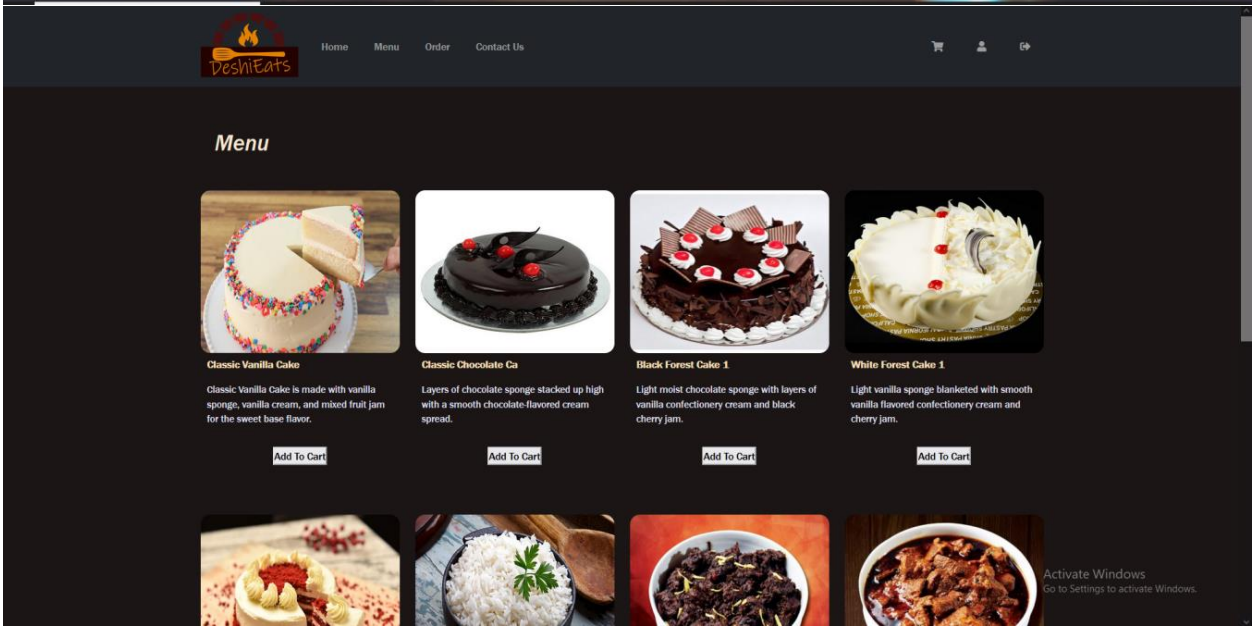


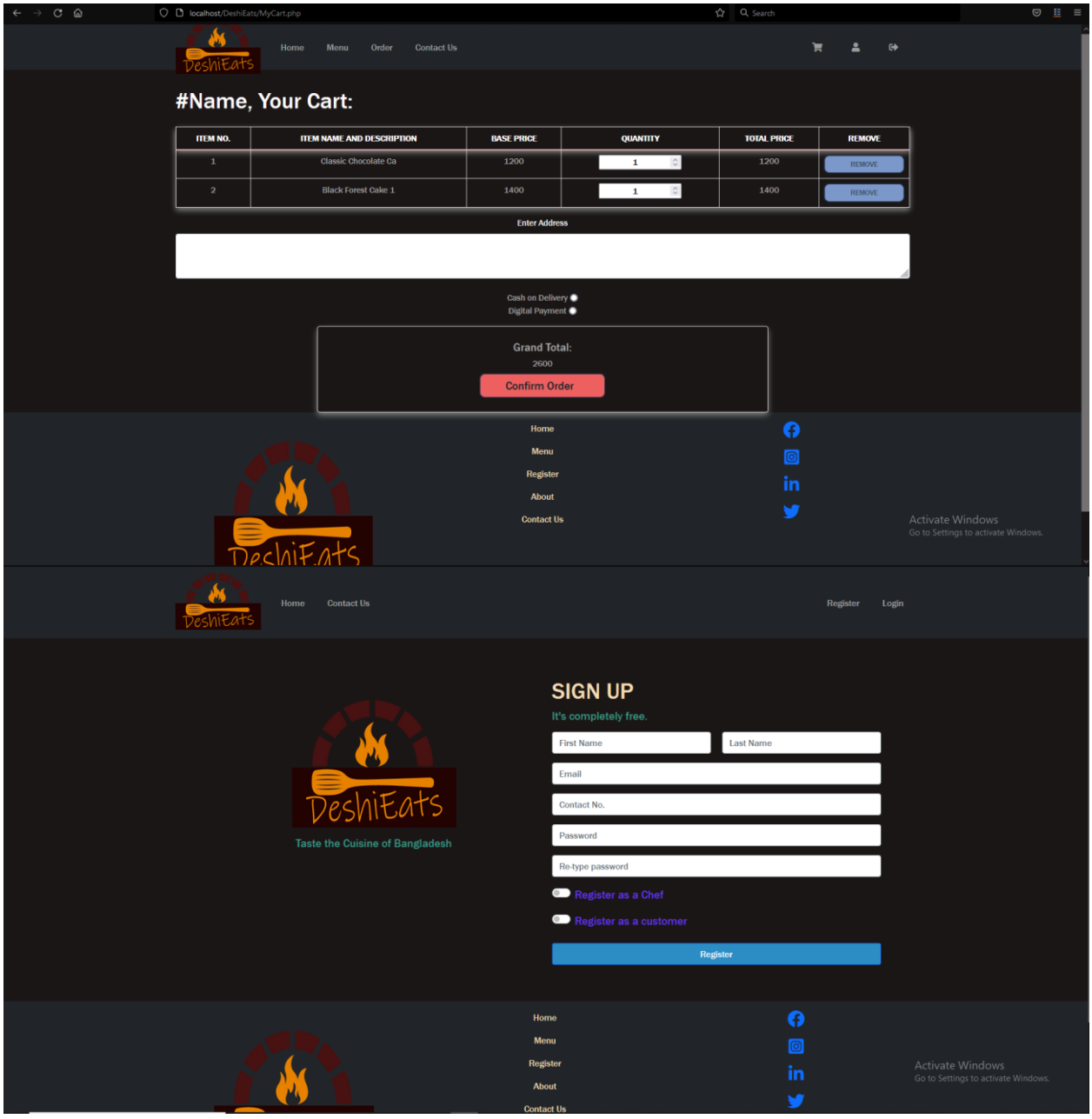
Figure 7. System Architecture of DeshiEats

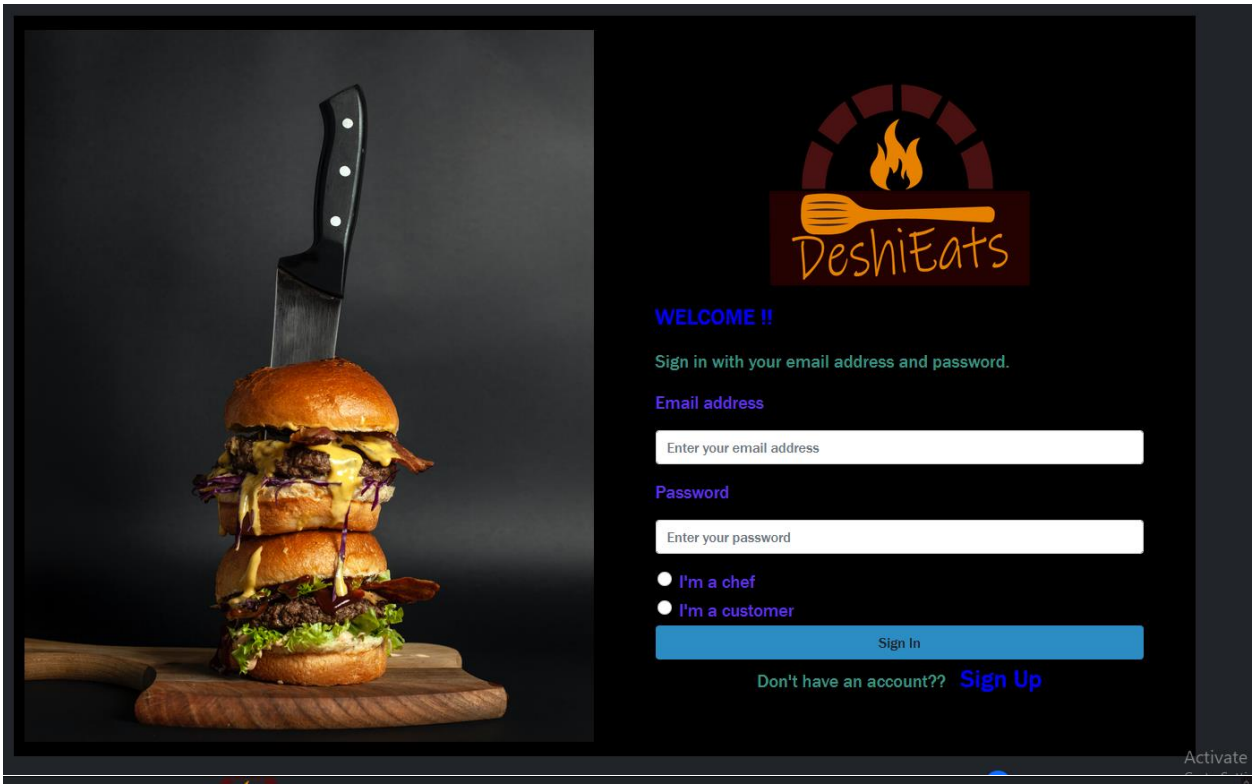
k. UI/UX Design

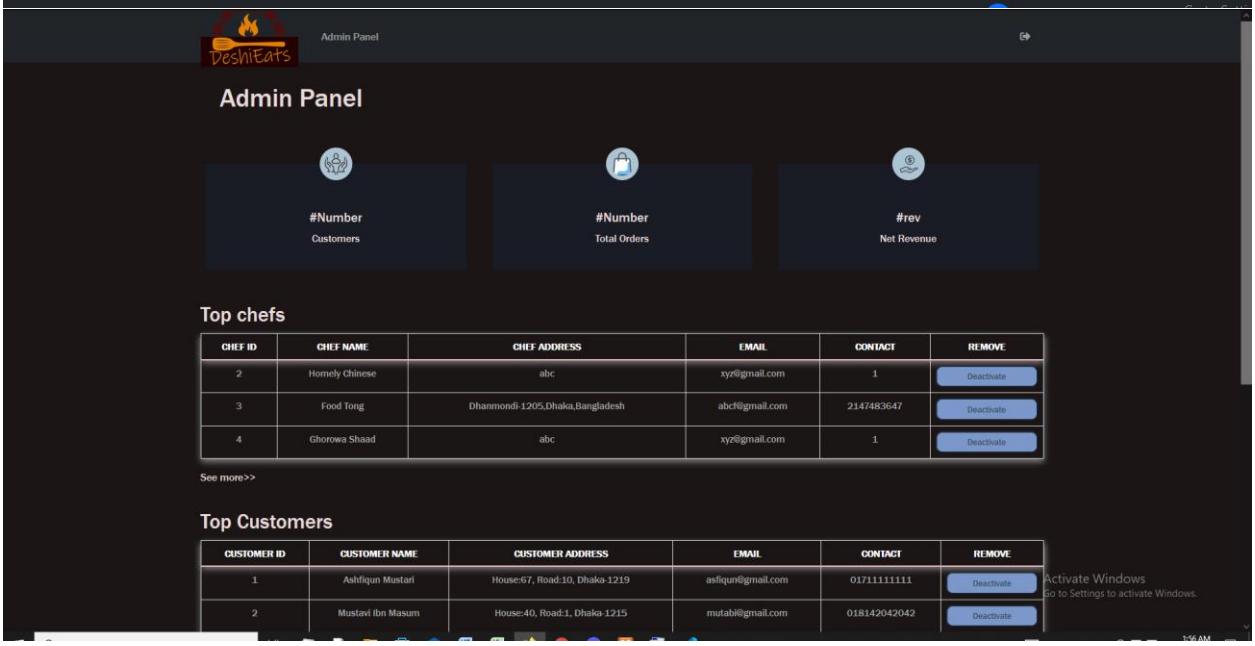



DeshiEats
Home
Menu
Order
Contact Us
Contact Us
DeshiEats is aimed at providing you the best service. Have any issues with our service or want to contact us personally? Email Us!
Phone
+8801512345678
Email
DeshiEats@gmail.com
Send Message
Full Name
Pikka Chuuu
Email
pikapik@pokemon.com
Phone Number
12345678910
Type your Message...
Send
Activate Windows
Go to Settings to activate Windows.


DeshiEats
Home
Menu
Order
Contact Us
Menu
Classic Vanilla Cake
Classic Vanilla Cake is made with vanilla sponge, vanilla cream, and mixed fruit jam for the sweet base flavor.
Add To Cart
Classic Chocolate Ca
Layers of chocolate sponge stacked up high with a smooth chocolate-flavored cream spread.
Add To Cart
Black Forest Cake 1
Light moist chocolate sponge with layers of vanilla confectionery cream and black cherry jam.
Add To Cart
White Forest Cake 1
Light vanilla sponge blanketed with smooth vanilla flavored confectionery cream and cherry jam.
Add To Cart
Activate Windows
Go to Settings to activate Windows.


localhost/DeshiEats/MyCart.php
Search
DeshiEats
Home
Menu
Order
Contact Us
#Name, Your Cart:
ITEM NO.
ITEM NAME AND DESCRIPTION
BASE PRICE
QUANTITY
TOTAL PRICE
REMOVE
1
Classic Chocolate Ca
1200
1
1200
REMOVE
2
Black Forest Cake 1
1400
1
1400
REMOVE
Enter Address
Cash on Delivery
Digital Payment
Grand Total:
2600
Confirm Order
Home
Menu
Register
About
Contact Us
Activate Windows
Go to Settings to activate Windows.
DeshiEats
Home
Contact Us
Register
Login
DeshiEats
Taste the Cuisine of Bangladesh
SIGN UP
It's completely free.
First Name
Last Name
Email
Contact No.
Password
Re-type password
Register as a Chef
Register as a customer
Register
Home
Menu
Register
About
Contact Us
Activate Windows
Go to Settings to activate Windows.


DeshiEats
WELCOME !!
Sign in with your email address and password.
Email address
Enter your email address
Password
Enter your password
I'm a chef
I'm a customer
Sign In
Don't have an account?? Sign Up


DeshiEats
Admin Panel
Admin Panel
#Number
Customers
#Number
Total Orders
#rev
Net Revenue
Top chefs
CHEF ID | CHEF NAME | CHEF ADDRESS | EMAIL | CONTACT | REMOVE
2 | Homely Chinese | abc | xyz@gmail.com | 1 | Deactivate
3 | Food Tong | Dhanmondi-1205,Dhaka,Bangladesh | abcf@gmail.com | 2147483647 | Deactivate
4 | Ghorowa Shaad | abc | xyz@gmail.com | 1 | Deactivate
See more>>
Top Customers
CUSTOMER ID | CUSTOMER NAME | CUSTOMER ADDRESS | EMAIL | CONTACT | REMOVE
1 | Ashfiqun Mustari | House:67, Road:10, Dhaka-1219 | asfiqun@gmail.com | 01711111111 | Deactivate
2 | Mustavi ibn Masum | House:40, Road:1, Dhaka-1215 | mutabi@gmail.com | 01814204204 | Deactivate

Top chefs

CHEF ID	CHEF NAME	CHEF ADDRESS	EMAIL	CONTACT	REMOVE
2	Homely Chinese	abc	xyz@gmail.com	1	Deactivate
3	Food Tong	Dhanmondi-1205,Dhaka,Bangladesh	abcf@gmail.com	2147483647	Deactivate
4	Ghorowa Shaad	abc	xyz@gmail.com	1	Deactivate

See more>>

Top Customers

CUSTOMER ID	CUSTOMER NAME	CUSTOMER ADDRESS	EMAIL	CONTACT	REMOVE
1	Ashfiqun Mustari	House:67, Road:10, Dhaka-1219	asfiqun@gmail.com	01711111111	Deactivate
2	Mustavi Ibn Masum	House:40, Road:1, Dhaka-1215	mutabi@gmail.com	01814042042	Deactivate
3	Abdullah Noman	House:42, Road:2, Dhaka-1212	newman@gmail.com	01552321409	Deactivate

See more>>

Customer Complains

MESSAGE ID	CUSTOMER NAME	MESSAGE	REMOVE

Home
Menu
Register
About
Contact Us

DeshiEats

Exhibition Chef's Order Contact Us

Food Tong

Craving light snacks? At our Food Tong, we offer a variety of Bengali snacks prepared in the healthi

+ Add more food items

I'm offering....

Kolija Shingara

Shingara stuffed with potato and beef liver.

20/-

Somucha

Somucha fried with a savory filling.

10/-

Puri

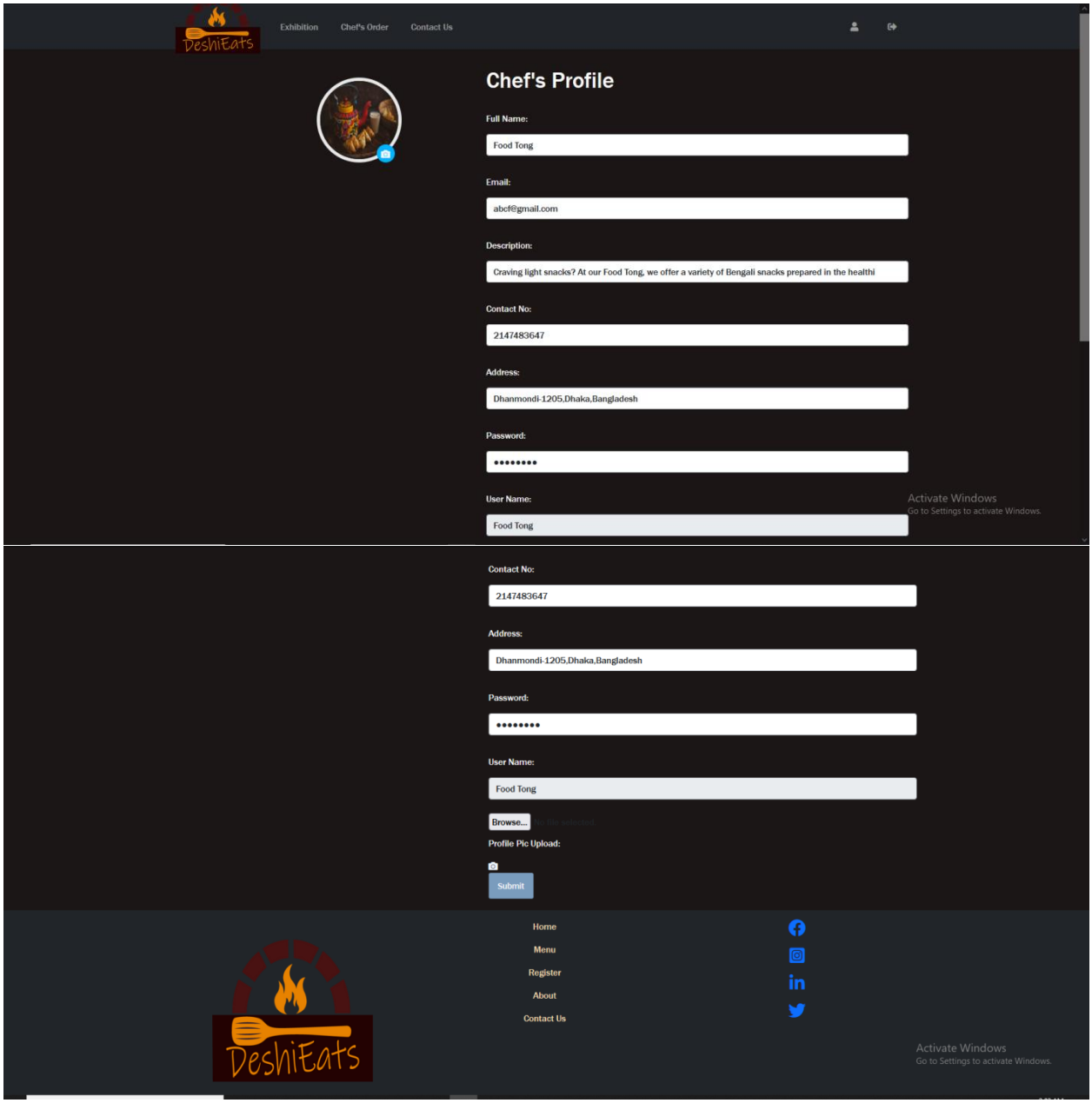
Stuffed with mashed potato.

10/-

Vegetable Roll

Made with fresh herbs and vegetables.

20/-


DeshiEats
Exhibition
Chef's Order
Contact Us
Chef's Profile
Full Name:
Food Tong
Email:
abcf@gmail.com
Description:
Craving light snacks? At our Food Tong, we offer a variety of Bengali snacks prepared in the healthi
Contact No:
2147483647
Address:
Dhanmondi-1205,Dhaka,Bangladesh
Password:
••••••••
User Name:
Food Tong
Activate Windows
Go to Settings to activate Windows.
Contact No:
2147483647
Address:
Dhanmondi-1205,Dhaka,Bangladesh
Password:
••••••••
User Name:
Food Tong
Browse...
Profile Pic Upload:
Submit
Home
Menu
Register
About
Contact Us
DeshiEats
Activate Windows
Go to Settings to activate Windows.

l. Entities and Attributes

The names of the entity and its attributes with their respective data types are listed below-

Chef

1. ChefID: int PrimaryKey
2. ChefName: varchar(30)
3. ChefEmail: varchar(20)
4. ChefPassword: varchar(30)
5. ChefContactNumber: varchar(11)
6. ChefDescription: varchar(255)
7. ChefAddress: varchar(50)
8. ChefArea: varchar(10)
9. ChefImage: varchar(50)

Customer

1. CustomerID: int PrimaryKey
2. CustomerName: varchar(30)
3. CustomerEmail: varchar(20)

4. CustomerPassword: varchar(30)

5. CustomerContactNumber: varchar(11)
6. CustomerAddress: varchar(50)
7. CustomerArea: varchar(10)
8. CustomerOrderCount: int

Admin

1. AdminID: int PrimaryKey
2. AdminName: varchar(30)
3. AdminEmail: varchar(20)
4. AdminPassword: varchar(30)

Item

1. ItemID: int PrimaryKey
2. ItemName: varchar(20)
3. ShortDescription: varchar(30)
4. Description: varchar(100)
5. Price: double
6. Quantity: int

7. OwnerID: int Foreignkey Chef(ChefID)
8. ItemImage: varchar(50)
9. OrderCount: int

Orderlist

1. OrderID: int PrimaryKey
2. CustomerID: int Foreignkey Customer(CustomerID)

3. OrderAddress: varchar(50)
4. OrderDate: datetime
5. Status: varchar(50)
6. OrderPrice: double
7. DeliveryDate: date
8. DeliveryInstruction: varchar(100)

Cartlist

1. ID: int PrimaryKey
2. OrderID: int ForeignKey Orderlist(OrderID)
3. ItemID: int Foreignkey Item(ItemID)
4. Quantity: int
5. TotalPrice: double

Reviews

1. ReviewID: int
2. CustomerID: int ForeignKey Customer(CustomerID)

3. ItemID: int ForeignKey Item(ItemID)

4. Message: varchar(255)

5. Rating: int

PaymentInfo

1. InvoiceID: int PrimaryKey
2. OrderID: int ForeignKey Orderlist(OrderID)
3. PaymentType: varchar(20)
4. PaymentPrice: double ForeignKey Orderlist(OrderPrice)
5. PaymentStatus: varchar(20)
6. TrixID: int null
7. SenderPhoneNumber: varchar(11) null
8. SentAmount: double null

m. Schema Diagram

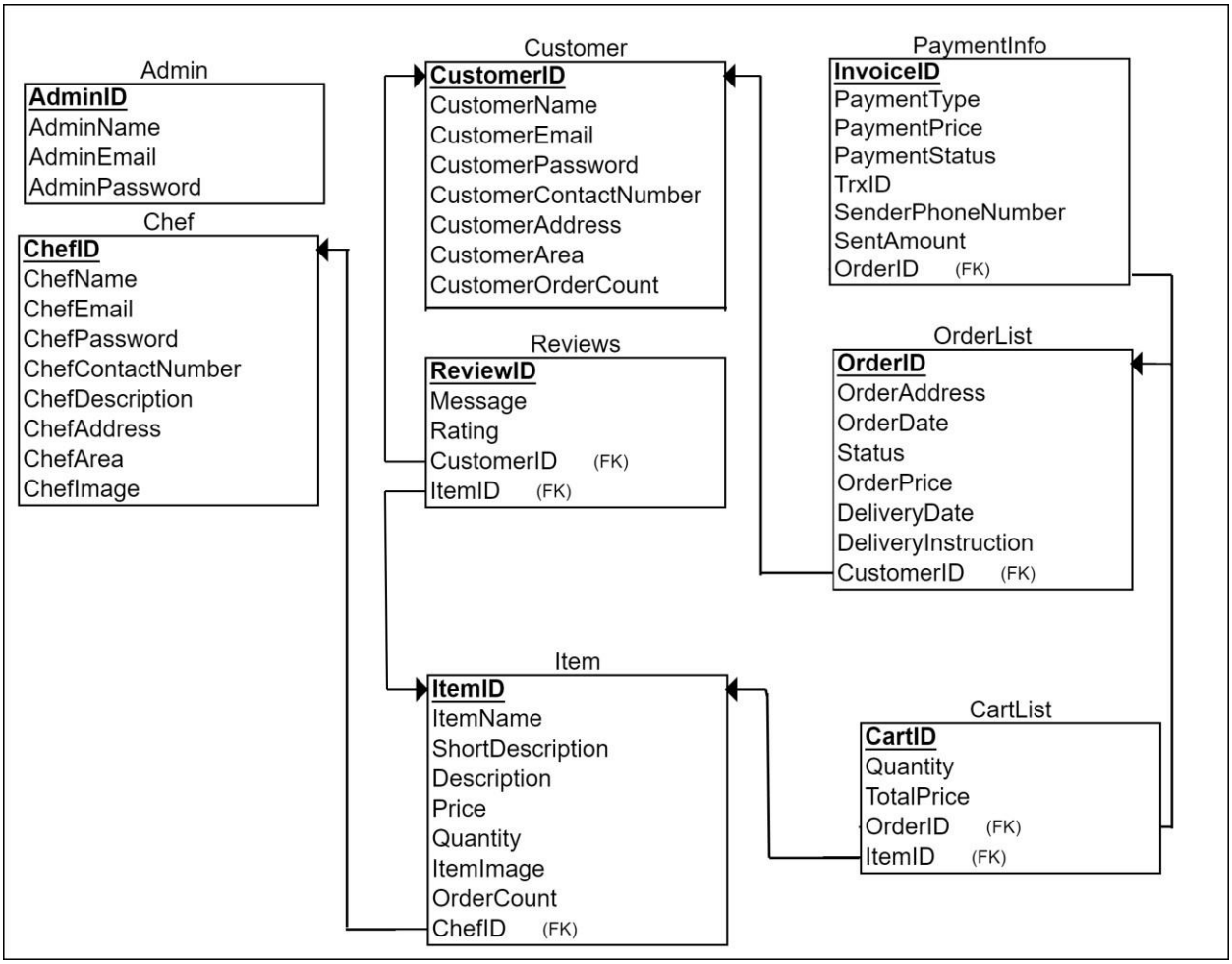


Fig. 2. Schema Diagram

n. Entity Relationship Diagram

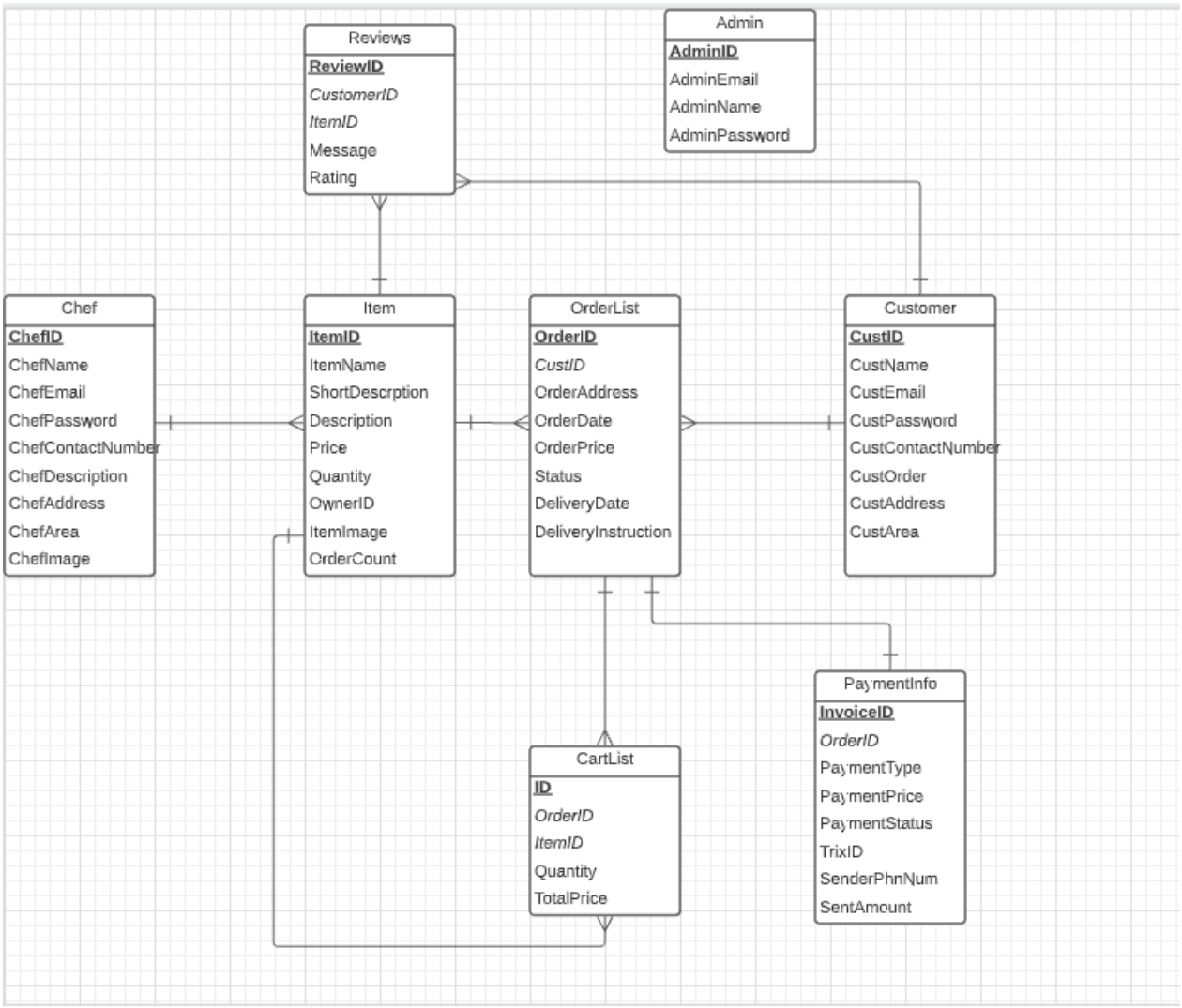


Fig. 1. Entity Relationship Diagram (ERD)

4. Construction

a. Development Environment

i. Language

- **Javascript:** JavaScript is a lightweight, interpreted programming language. It is designed for creating network-centric applications. It is complimentary to and

integrated with Java. JavaScript is very easy to implement because it is integrated with HTML. It is open and cross-platform.

- **PHP:** PHP is a server-side language, which means that it runs on your web hosting server. Whenever someone visits your website, their browser contacts your server to request the page. The PHP code runs on the server, and generates an HTML page to send to the visitor.

ii. Framework

➔ **HTML: Hypertext Markup Language (HTML),** allows web users can create and structure sections, paragraphs, and links using elements, tags, and attributes. However, it's worth nothing that HTML is not considered a programming language as it can't create dynamic functionality.

➔ **CSS:** CSS is used to control the style of we document in a simple & easy way. CSS is the acronym for "Cascading Style Sheet". CSS handles the look and feel part of a web page.

➔ **Bootstrap:** Bootstrap is an open-source front-end library for designing websites and web applications. It contains HTML- and CSS-based design templates for everything from typography, forms, buttons, navigation and other interface components as well as JavaScript extensions. Unlike many other web frameworks, bootstrap concerns itself with front-end development only.

iii. Database

➔ **MySQL:** MySQL is an Oracle-backed open source relational database management system (RDBMS) based on Structured Query Language (SQL) (Atzeni, P. and De Antonellis, V., 1993). MySQL runs on virtually all platforms, including Linux, UNIX

and Windows. Although it can be used in a wide range of applications, MySQL is most often associated with web applications and online publishing.

b. Testing Strategy

We have tested our project from small part to larger parts after integrating. As our members have worked in different modules, they have conducted unit testing in their respective works. After that, we have integrated modules according to functions and requirements. We have conducted integration testing in this part. In this case, we have used regression approach in integration testing. So we have made sure that after modules are integrated it gives the same result as before. Finally, as we finish through it we are in validation testing where we have conducted alpha testing.

c. Testing Techniques

Unit Testing

We have individually tested our own modules. The members have prepared several test cases and tested it individually. The modules such as login, sign up, profiles etc. have been tested with previously prepared test cases. Following the steps we find bugs and errors. If we find any bug, we debug and fix the bug.

Integration Testing

First we have developed our Front-End with the UI/UX designs provided. Then we have developed our backend. As we have worked on similar projects before we did not face much

problem connecting both of them. But as we have individually worked on the modules, we found errors for after connecting. Though our Front-End didn't malfunction, some of our function in backend resulted in unexpected errors. We have used Regression testing because we found errors after integrating different modules. So to ensure that the determined data flow works properly we have used the previously prepared test cases in the integrated modules**.** If unexpected bug or error occurs, we debug and fix them before integrating new modules.

Validation testing

Currently we are in alpha testing phase. As our project is still in developing state, it is not ready for end users.

5. Deployment

a. Deployment

We have developed the project with the aim to connect cooks and customers from all around the country. Since it targets a vast audience, we plan to deploy our project as a web application because, in web applications, all users can access the same version so it will eliminate any compatibility issues. Besides, users can access the web application anywhere with only a web browser.

b. AMC

(N/A)

c. Support and Maintenance

We'll have a dedicated call center to assist our customers who run into technical issues while using our services. Support and assistance to our customers will be free of cost. Besides, our

website maintenance will include regular monitoring to check our website for issues and mistakes and keeping it updated and relevant.

6. Learning Experiences

As we have done our project we have learnt new things along the ride. Usually, we make project on a whim. Here we have learned how we produce the software systematically. We have learnt about process models, use case diagrams, data flow diagrams, activity diagram, system architecture etc. We have learnt how to make them according to the project, their importance for the project. We also are a large group in this project. So we have learnt how to work well in a large group and use individual members strong points in the project. If we look at our technical side, we have learnt how to use HTML5, CSS for our Front-End. For our database we have learnt about Mysql. We have learnt about Javascript and PHP for functionality of our project.

7. Conclusion

"DeshiEats" aims to be a platform and a community of home cooks and food enthusiasts who love to try a variety of cuisines and share the love for home-cooked meals. Since, it is a platform for people from all parts of the country; we have decided to bring it as a website to ensure its availability in all devices.

References

i. Atzeni, P. and De Antonellis, V., 1993. Relational database theory. Benjamin-Cummings Publishing Co., Inc..

ii. Pressman, R.S., 2009. Software engineering: a practitioner's approach. Palgrave macmillan.

iii. World Bank, Unemployment, total (% of total labored force) (modeled ILO estimate) [Data file] Retrived from https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS

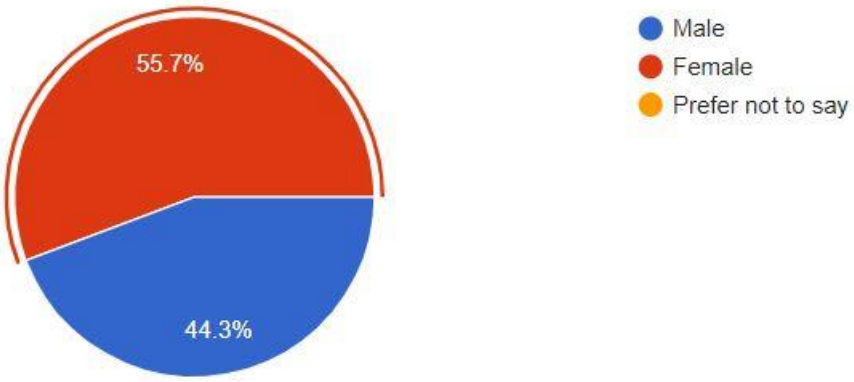
iv. https://sharing.clickup.com/g/h/13jhn6-164/b18649a5fb8254e

Appendix

With DesiEats, our goal is to give the traditional and lost cuisines a platform. This will bring the home cooks and food enthusiasts under one roof. Our team aims to give the cultural art of cooking a official platform so that the variety of food which we Bengalis are so enriched of can never be lost.

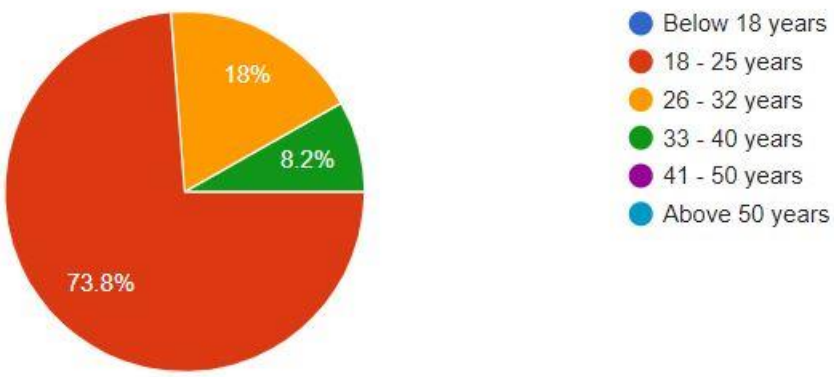
- **Survey**

What is your gender?



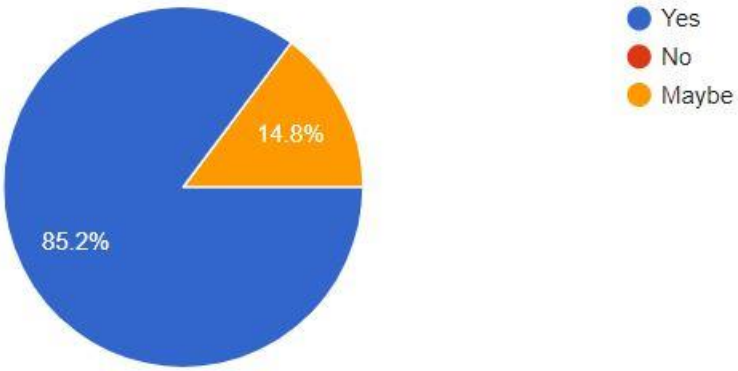
Among the people that took part in our survey, around 55.7% was female and around 44.3% was male. So we can decide that both female and male were interested to be part of our platform.

What age category do you belong to?



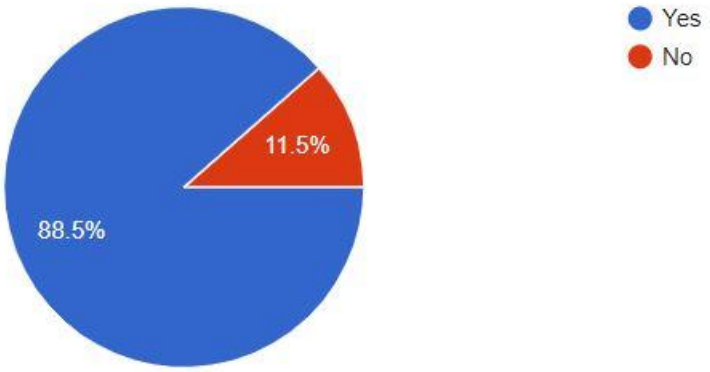
As we can see, around 73.8% of people belong to 18 - 25 years age group. 18% belongs to 26 – 32 years, and 8.2% belongs to 33-40 years age group. According to our survey, both young adults and middle aged people seem to be interested in our platform.

Do you like to eat different cuisines?



In our survey, we asked people if they like to eat different kind of cuisines and around 85.2% responded positively.

Do you order foods online?

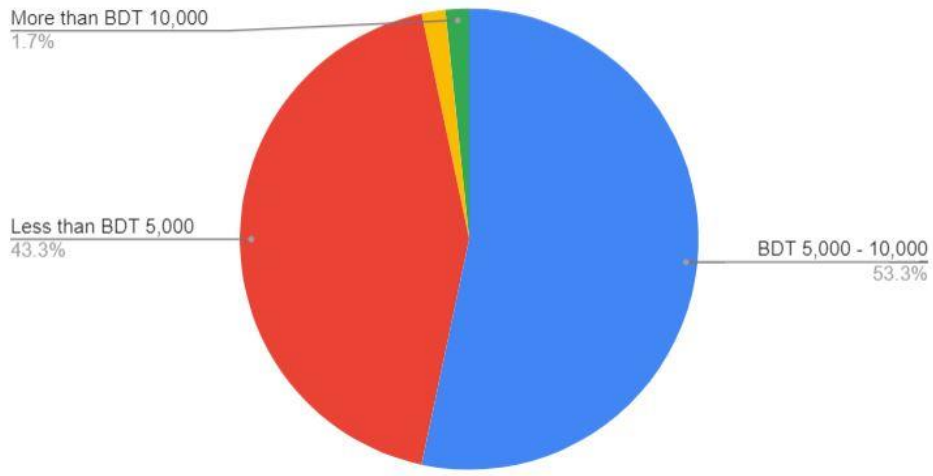


When we asked the people if they order foods online, around 88.5% responded positively that they do order foods online.

How many times do you order food online a month?

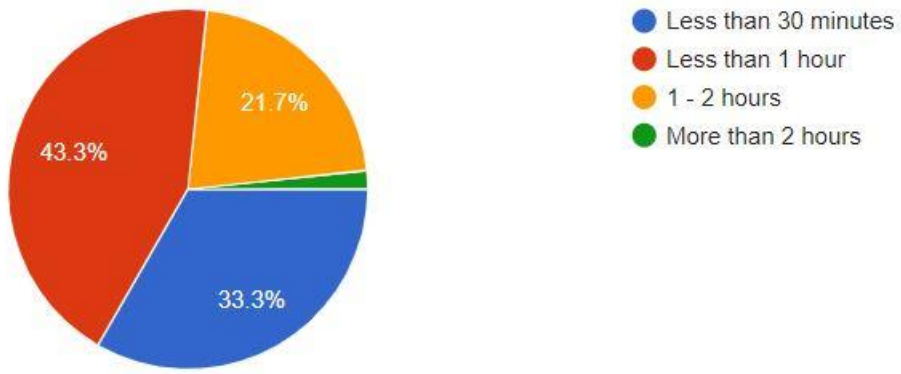
According to our survey, around 40% people order food 5 - 10 times online a month. Around 36.7% order 1 - 2 times a month. Around 11.7% people order 3 - 5 times a month. We can see around 10% people who order 10-30 times online a month.

How much do you spend on average on food delivery per month?



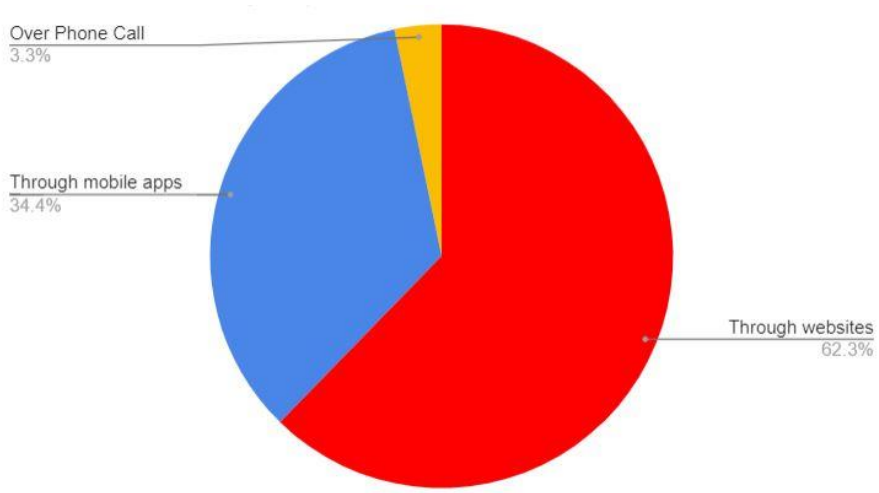
As per our survey, the majority of people (Around 53.3% people) spend 5,000-10,000 on food delivery every month. This finding will have a great impact on the pricing point of meals in cloud kitchens of our platform.

What is your usual waiting time after ordering food online?



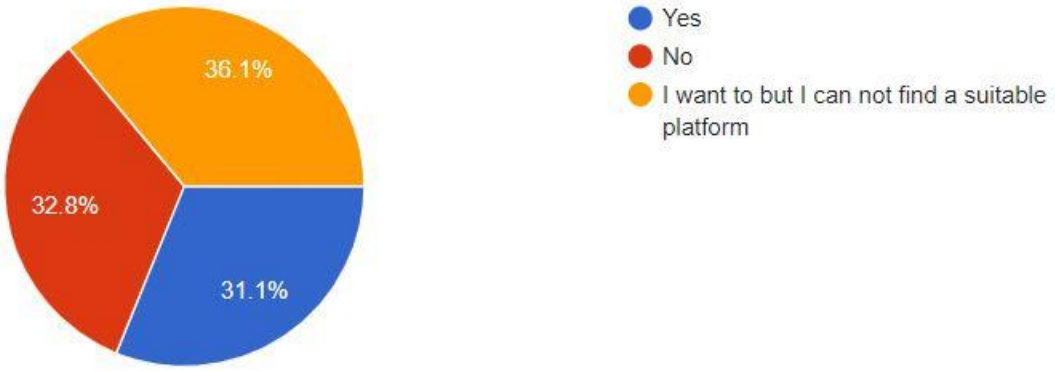
The majority of people (around 43.3%) wait less than an hour after ordering food online. So we have come to a conclusion that we have to provide fast delivery to satisfy our customer.

How do you prefer to order food online?



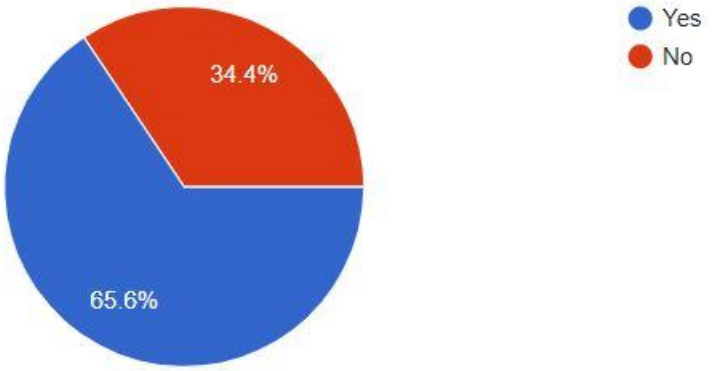
According to our survey, the majority of people prefer to order food online through websites. So we are going to bring our platform as a website.

Have you ever ordered homemade cuisines through online food delivery system?



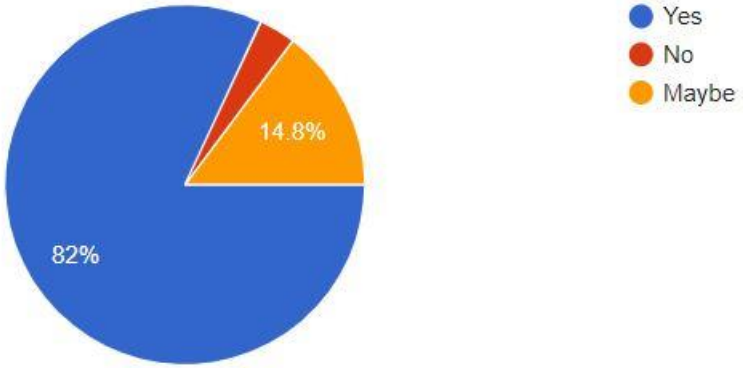
Around 36.1% of people said that they want to order homemade cuisines through online food delivery system but they cannot find a suitable platform. Besides, around 32.8% people responded negatively that they have not ordered homemade cuisines through online food delivery system. So we can say that our website will be a new and welcoming experience for most of the people.

Do you think there is no suitable platform for small home cooks?



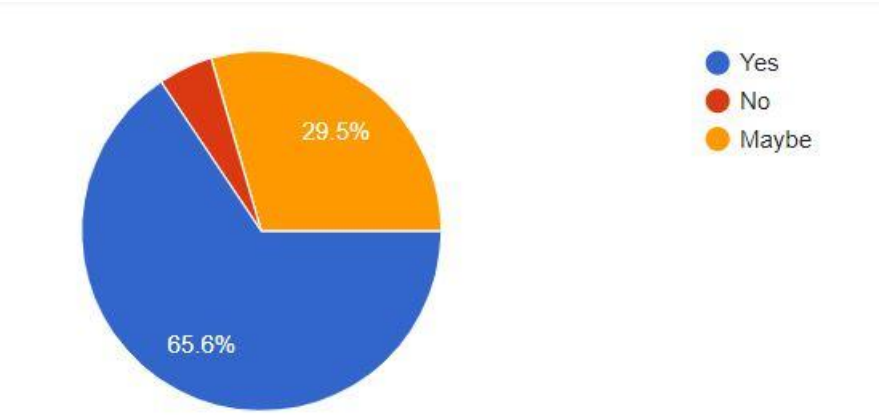
The majority of people agree that there is no suitable platform for home cooks. So our platform will be a solution to this problem.

Would you prefer a variety of cuisines from highly skilled home cooks in one platform?



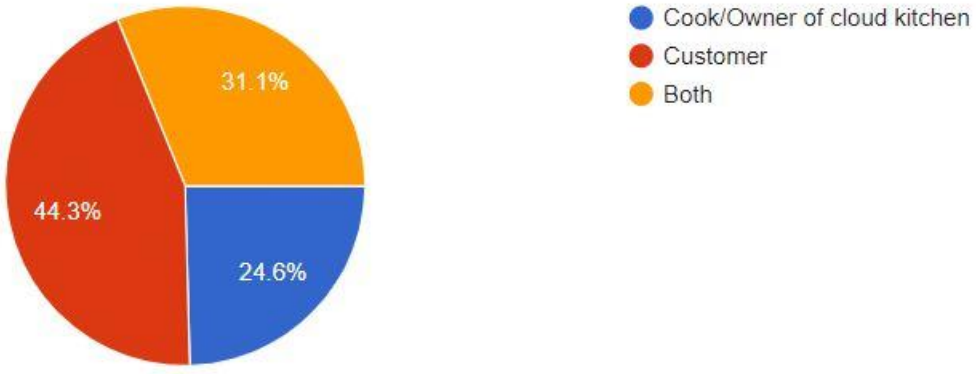
According to our survey, the majority of people would prefer a variety of cuisines from highly skilled home cooks in one platform. So our website will be a welcoming experience for most of the people.

We are offering a platform named "DeshiEats" where home cooks offer different cuisines and culinary traditions of different regions of the country. Here you can order all kinds of cuisines from just one platform. Do you think the platform will be useful for you?



Majority of the people (65.6%) responded positively that our platform will be useful to them.

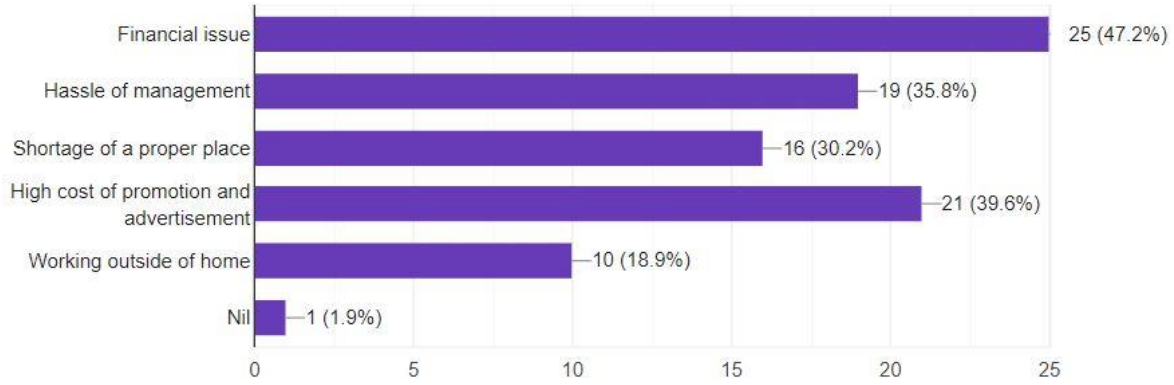
If you want to take part, which one do you prefer to be in our website?



According to our survey, around 44.3% of people prefers to be customers in our website, around 24.6% people prefers to be owners of cloud kitchen, and around 31.1% people wants to

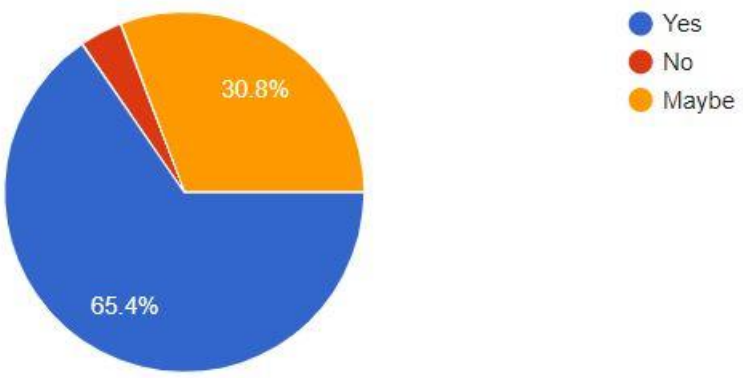
be both. So we can say that our platform will be a community of home cooks and food enthusiasts who love to try a variety of cuisines and share the love for home-cooked meals.

As a cook, what is your obstacle of opening up a restaurant?



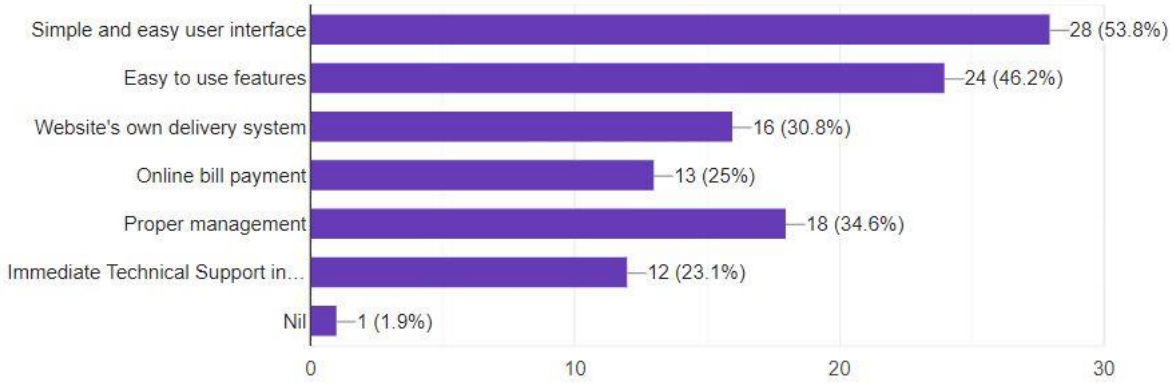
In our survey, we have found out that as a cook, people face a lot of obstacle that keep them from opening up a restaurant. Majority of the people (47.2 %) have financial issue as opening up a restaurant requires a great investment. 39.6% people is unable due to high cost of promotion and advertisement. Around 35.8% people don't open up a restaurant due to hassle of management. Around 16% of people have shortage of a proper place. Around 18.9% people face problems working outside of home. Our platform is a solution to all such problems of cooks.

As a cook, do you think our website will be beneficial for you?



The majority of people responded positively that as a cook, our website will be beneficial to them.

As a cook, which feature do you need most in our website?



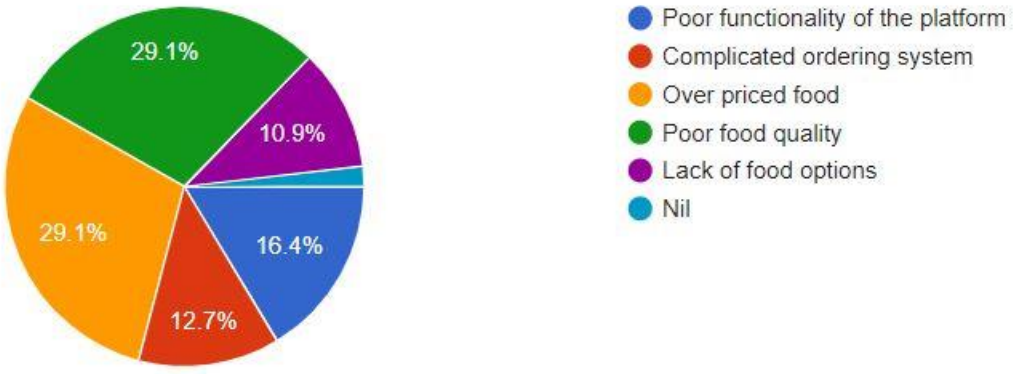
As a cook, 53.8% people need simple and easy user interface in our website. Around 46.2% people require easy to use features. Around 34.6% people require proper management. Around 30.8% people require website's own delivery system. Around 25% people require online bill payment, and around 23.1% requires immediate technical support in case of any issues. We keep these in mind while developing our website.

As a cook/ cloud kitchen owner, do you have any suggestion for us?

Maintain food quality
the kitchen area should be spacious and hygienic.
Cook with love then the taste will be double
.
Try to do fast delivery.
Halal food
Include payment system
Special orders options where the customer can directly discuss the specifications of their order with the cook.
It should be easy to use

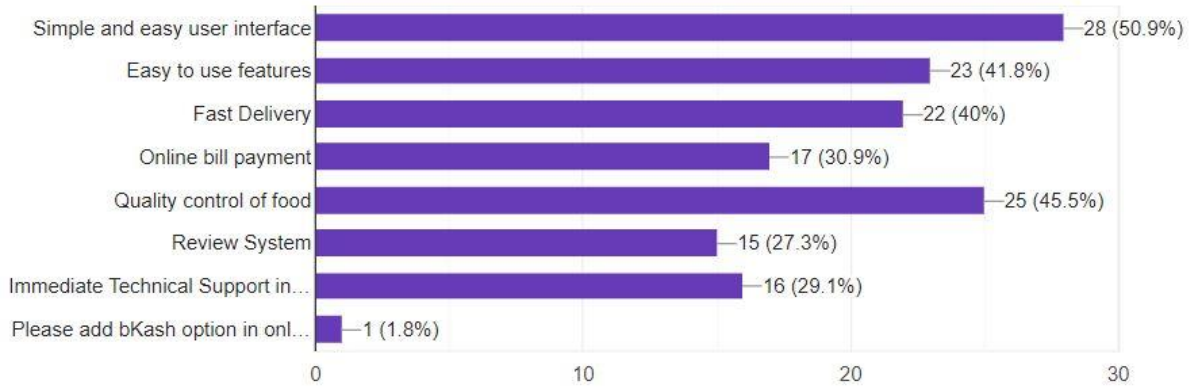
We have received some suggestions from people who want to be cook/cloud kitchen owners in our platform. We keep these in mind while developing our website.

As a customer, what kind of problems do you face during ordering foods online?



As a customer, around 29.1% of people suffer from poor food quality. Around another 29.1% people face over-priced food. Around 10.9% of people find lack of food options. Around 12.7% of people face poor functionality of their platforms. Our website will be a solution to these problems.

As a customer, which feature do you need most in our website?



As a customer, 50.8% people need simple and easy user interface in our website. Around 41.8% people require easy to use features. Around 45.5% people require quality control of food. Around 40% people require fast delivery. Around 30.9% people require online bill payment, around 27.3% of people require review system and around 29.1% requires immediate technical support in case of any issues. We keep these in mind while developing our website.

As a customer, do you have any suggestion for us?

I hope the website will be easy to use

no

Cash on delivery

Should maintain same quality and service

Nope

Same

Cook with love and be loyal to your customers.

Set menu with cheap prices

We have received some suggestions from people who want to be customers in our platform. We keep these in mind while developing our website.