

FOOD DELIVERY MANAGEMENT SYSTEM

A project submitted to

UKA TARSADIA UNIVERSITY

in partial fulfilment of the requirements
for the degree of

Bachelors of Science in Information Technology

for 5th Semester

2024-25

Group Number: 07

Submitted By:

Varun Dankhara -202206100110031

Harsh Bavlawala -202206100110015

Harsh Gandhi – 202206100110016

Vatsal Bhataria -202206100110017

Guided By:

Mr. Rakesh Savant

Professor



Babu Madhav Institute of Information Technology

Uka Tarsadia University

Bardoli – 394350

December 2024

CERTIFICATE

This is to certify that the project report entitled **“Food Delivery Management System”** has been carried out by Mr. Varun Dankhara (202206100110015), Mr. Harsh Bavlawala (202206100110015), Mr. Harsh Gandhi (202206100110015) and Mr. Vatsal Bhataria (202206100110015) under my guidance in partial fulfillment of the requirement for the Bachelors of Science in Information Technology during the academic year 2024-25.

Date: 14-10-2024

Dr. Preeti Bhatt

Project Guide

Dr. Jitendra Nasriwala

Programme Coordinator

External Examiner(s)



**BABU MADHAV INSTITUTE OF
INFORMATION TECHNOLOGY**

Table of Contents

Chapters	Particulars	Page no.
1	Introduction	
	1.1 Problem Definition	5
	1.2 Purpose	5
	1.3 Scope	5
2	Overall Description	
	2.1 Product Perspective/ Environment Description	6
	2.1.1 Hardware Interface/ Hardware Specification	6
	2.1.2 Software Interface/ Software Specification	6
3	System Specific Requirements	
	3.1 Functional Requirement	7
	3.2 Non-functional Requirement	12
4	System Analysis	
	4.1 Use case Diagram	13
	4.2 Activity Diagrams	14
5	System Design	
	5.1 Database Design	19
	5.1.2 Data Dictionary	21
6	System Implementation	
	6.1 Screenshots	33
7	Testing	
	7.1 Test Cases	37
8	Future Enhancement	38
9	Conclusion	39
10	Bibliography	40

List of Figures and Diagrams

Figure No.	Figure Description	Page No.
Figure 1	Use Case Diagram for the Food Delivery System	13
Figure 2	Activity Diagrams for the Food Delivery System	14
Figure 3	Database Schema for the Food Delivery System	19
Figure 4	Data Dictionary for the Food Delivery System	21
Figure 5	Screenshot of the Food Delivery System	33
Figure 6	Test Case Execution Results Table	37

Chapter 1: Introduction

1.1 Problem Definition

A food delivery management system is needed to handle more food orders quickly and smoothly. It will make the whole process easier, from ordering food to delivering it to the customer's door. The system will help make deliveries faster and more reliable, keeping customers happy. It will also help manage delivery drivers, track orders live, and find the best routes to avoid delays. Overall, this system will make food delivery faster and more accurate.

1.2 Project Purpose

The purpose of a Food delivery System web application is to provide a convenient and efficient way for users to order food from local restaurants and have it delivered to their location.

1.3 Project Scope

The Food Delivery System will operate within Surat city, managing all aspects of food ordering and delivery. The main features of this system include:

1. **Service Area:** The system will handle food deliveries throughout Surat, covering all areas within the city.
2. **User Roles:** It will serve customers, delivery drivers, and restaurant managers:
 - **Customers** can browse restaurant menus, place orders, and track their delivery.
 - **Delivery Drivers** can accept delivery tasks, view optimized routes, and update the delivery status.
 - **Restaurant Managers** can manage menus, monitor orders, and track deliveries.

Chapter 2: Overall Description

2.1 Product Perspective/Environment Description

The Food Delivery Management System is designed to create an efficient and user-friendly platform for managing various aspects of a food delivery service. This system will streamline processes for administrators, restaurant owners, delivery agents, and customers. Key functionalities include managing food menus, orders, delivery logistics, payments, and customer feedback.

2.1.1 Hardware Interface/ Hardware Specification

Processor	Intel core i5
RAM	8 GB
HDD	1TB

2.1.2 Software Interface/ Software Specification

Operating System	Microsoft Windows 11
Front-End	HTML, CSS, JS

Back-End	PHP, phpmyadmin
Tools	Visual Studio code, phpmyadmin

Chapter 3: System Specific Requirements

3.1 Functional Requirements

MODULE 1: MANAGE USER

Requirement No.	Description	Comment
FR1	This Module will provide following facilities to the Customer, Restaurant-Owner, Delivery-Person: • Registration	Registration Page
FR2	This Module will provide following facility to the users: ❖ Forget Password • Login • Change Password	Forgot password, Login Page , Change Password
FR3	This Module will provide following facility to Admin: ❖ Approve/Decline Delivery-Person or Restaurant.	Delivery-Person/Restaurant request

MODULE 2: MANAGE PROFILE

Requirement No.	Description	Comment
FR1	This Module will provide following facility to the Users: <ul style="list-style-type: none">• Add Profile Details• Update Profile Details• View Profile Details• Remove Profile Details	Profile Page

MODULE 3: MANAGE FOOD CATEGORY

Requirement No.	Description	Comment
FR1	This Module will provide following facility to the Admin: <ul style="list-style-type: none">• Add Food Category• Remove Food Category• Update Food Category• View Food Category	Manage Category Page
FR2	This Module will provide following facility to the Restaurant-Owner: <ul style="list-style-type: none">❖ View Food Category	Add Food item Page
FR3	This Module will provide following facility to the Customer: <ul style="list-style-type: none">❖ View Food Category	View Food Page

MODULE 4: MANAGE FOOD ITEM

Requirement No.	Description	Comment
-----------------	-------------	---------

FR1	<p>This Module will provide following facility to the Restaurant-Owner:</p> <ul style="list-style-type: none"> • Add Food Items • Remove Food Items • Update Food Items • View Food Items 	Add Food item Page
FR2	<p>This Module will provide following facility to the Customer:</p> <ul style="list-style-type: none"> ❖ View Food Items 	View Food Page

MODULE 5: MANAGE CART

Requirement No.	Description	Comment
FR1	<p>This Module will provide following facility to the Customer:</p> <ul style="list-style-type: none"> • Add Cart Items • Remove Cart Items • Update Cart Items • View Cart Items 	View Cart Page

MODULE 6: MANAGE OFFERS

Requirement No.	Description	Comment
FR1	<p>This Module will provide following facility to the Restaurant-Owner/Admin:</p> <ul style="list-style-type: none"> • Add Offers • Remove Offers • Update Offers • View Offers 	Manage Offers Page

FR2	This Module will provide following facility to the Customer: • View Offers	View Food Page
-----	---	----------------

MODULE 7: MANAGE OFFERS

Requirement No.	Description	Comment
FR1	This Module will provide following facility to the Restaurant-Owner/Admin: • Add Coupon • Remove Coupon • Update Coupon • View Coupon	Manage Coupon Page
FR2	This Module will provide following facility to the Customer: • Apply Coupon	View Cart Page

MODULE 8: MANAGE PAYMENT

Requirement No.	Description	Comment
FR1	This Module will provide following facility to the Customer/Admin: • Make Payment	View Cart Page/Payment Page
FR2	This Module will provide following facility to the Users: • View Payment	View Cart Page/Payment Page

MODULE 9: MANAGE FEEDBACK

Requirement No.	Description	Comment
-----------------	-------------	---------

FR1	This Module will provide following facility to the Customer: • Give Feedback • Update Feedback • Delete Feedback	Order Page
FR2	This Module will provide following facility to the Users: • View Feedback	Feedback Page

MODULE 10: MANAGE ORDER

Requirement No.	Description	Comment
FR1	This Module will provide following facility to the Customer: • Place Order • Track Order	Order Page
FR2	This Module will provide following facility to the Delivery-Person/Customer: • Cancel Order • View Order	Order Page
FR3	This Module will provide following facility to the Restaurant-Owner: • View Order	Order Page

MODULE 11: MANAGE COMPLAINT

Requirement No.	Description	Comment
FR1	This Module will provide following facility to the Users: • Raise Complaint	Complaint Page

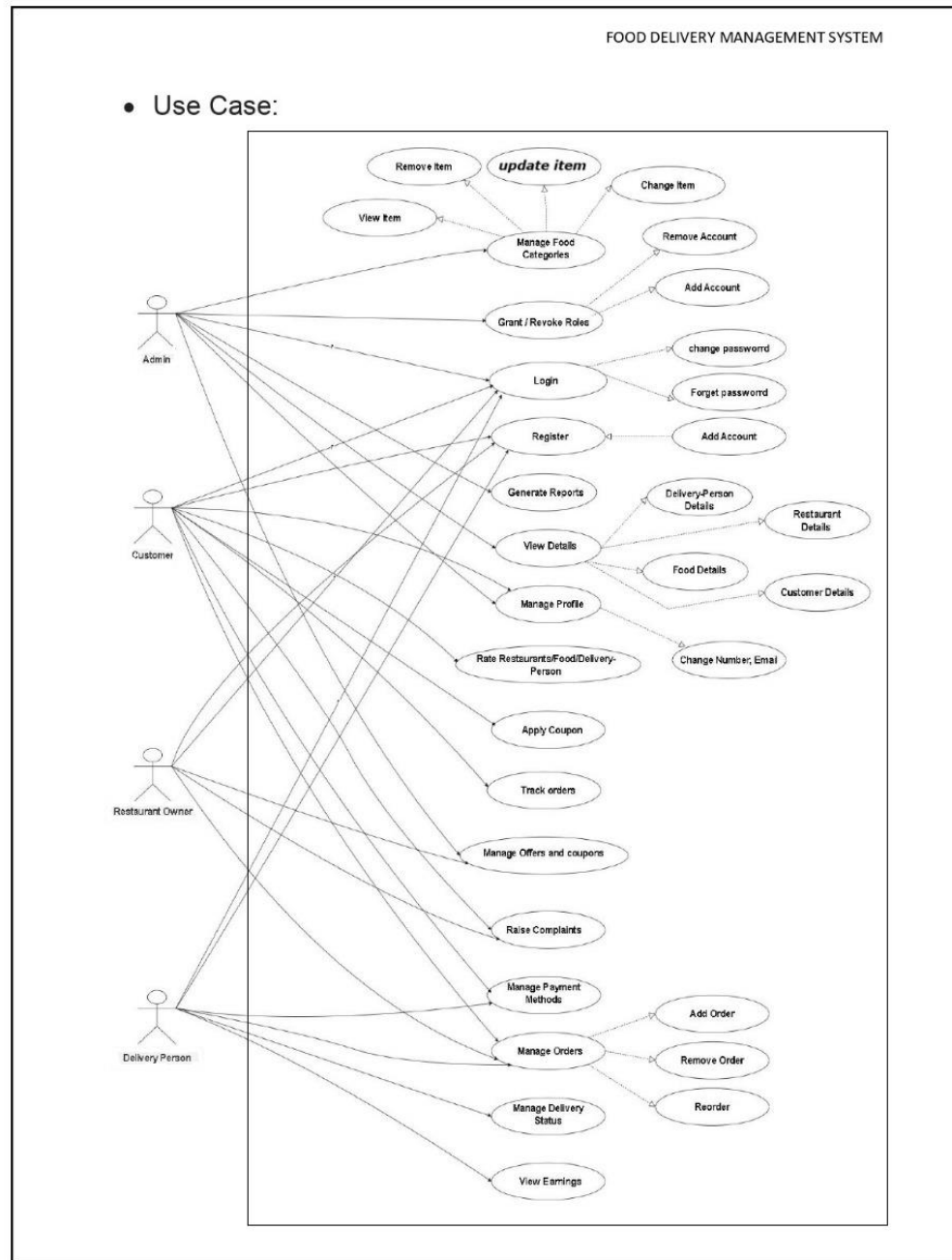
	<ul style="list-style-type: none"> • Update Complaint • Delete Complaint • View Complaint 	
--	--	--

3.2 Non- Functional Requirements

Requirement No.	Description	Comment
NFR1	Access to the system is 24x7 with proper internet connection.	Availability
NFR2	The system will provide the basic security requirement by using password encryption and hiding the URL whenever someone tries to enter using the URL directly	Security
NFR3	The system can adopt different browsers which support HTML and JS for user friendliness	Adoptability

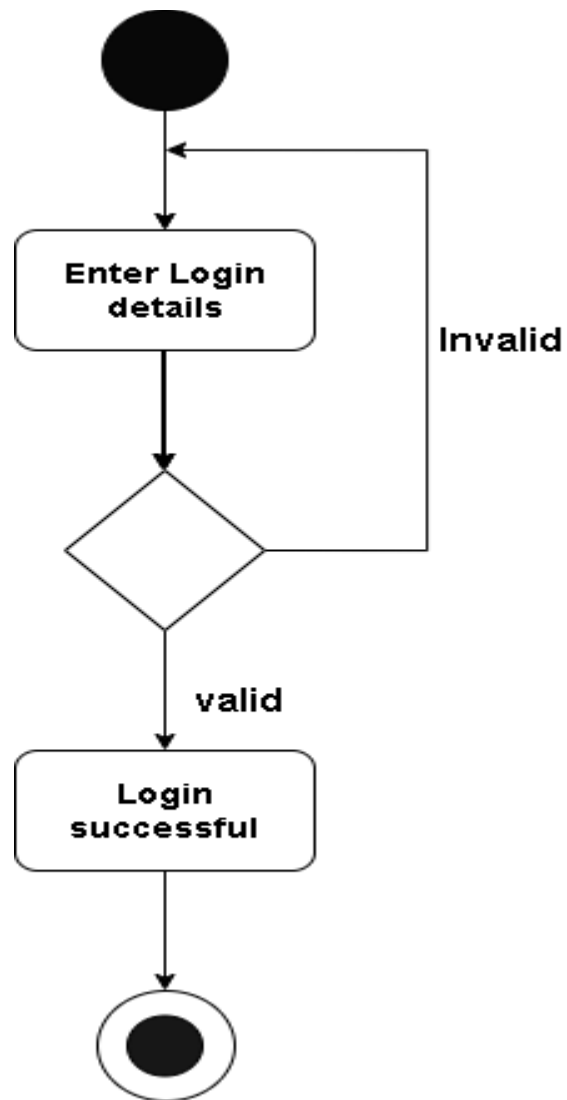
Chapter 4: System Analysis

4.1 Use Case Diagrams

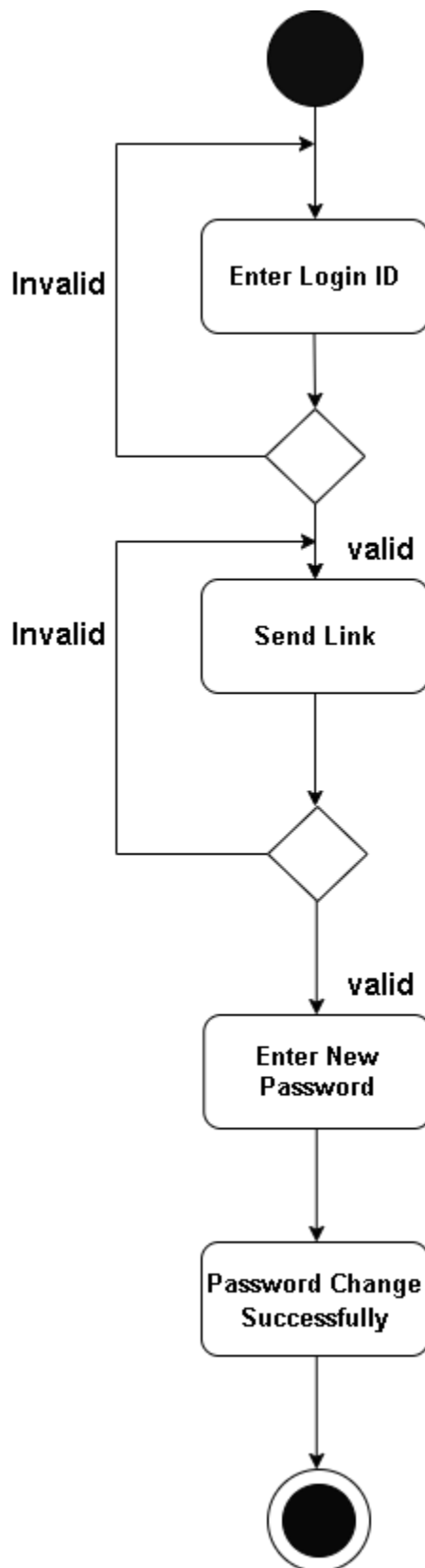


4.2 Activity Diagrams

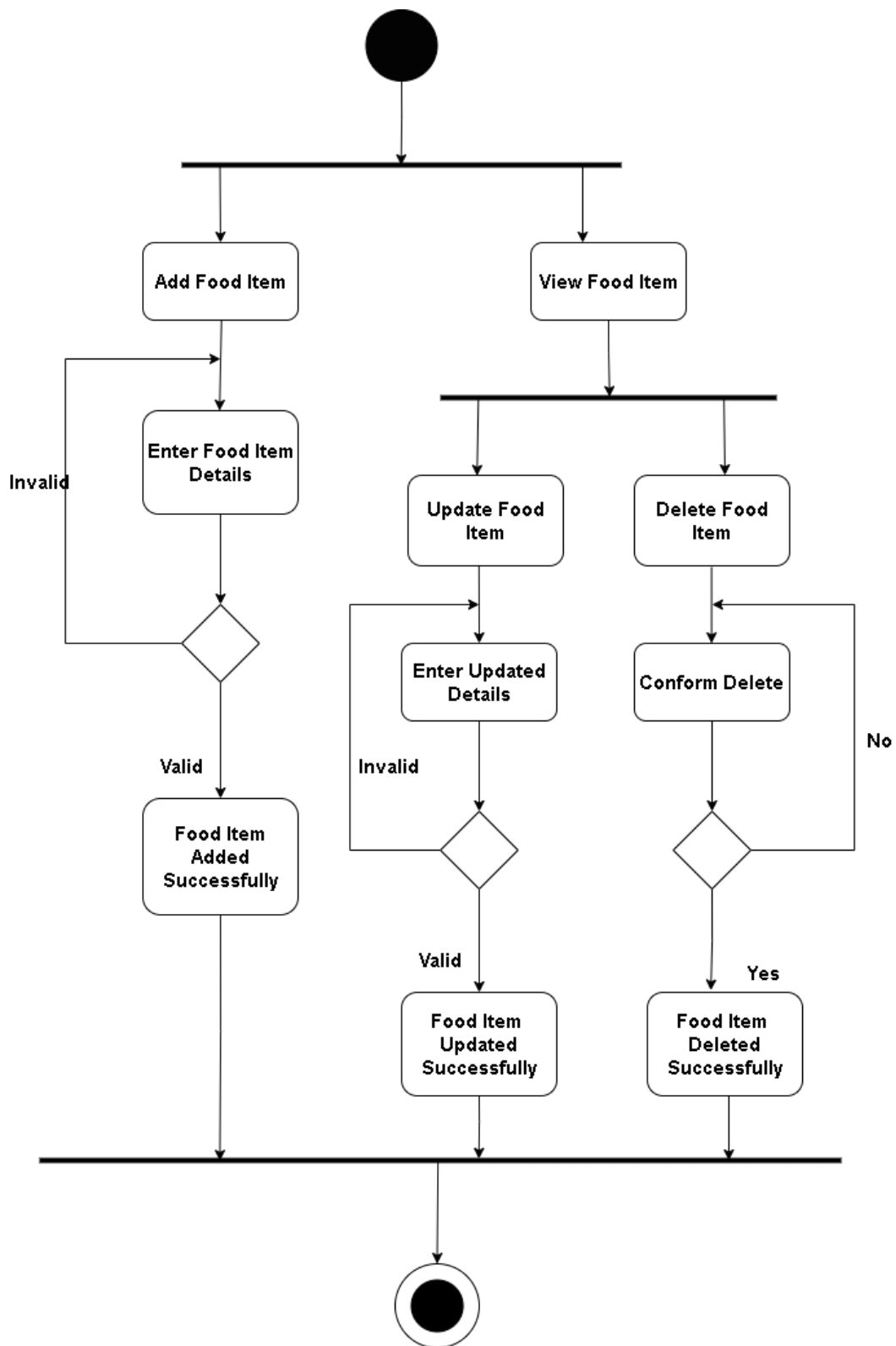
- Activity Diagram for Login:



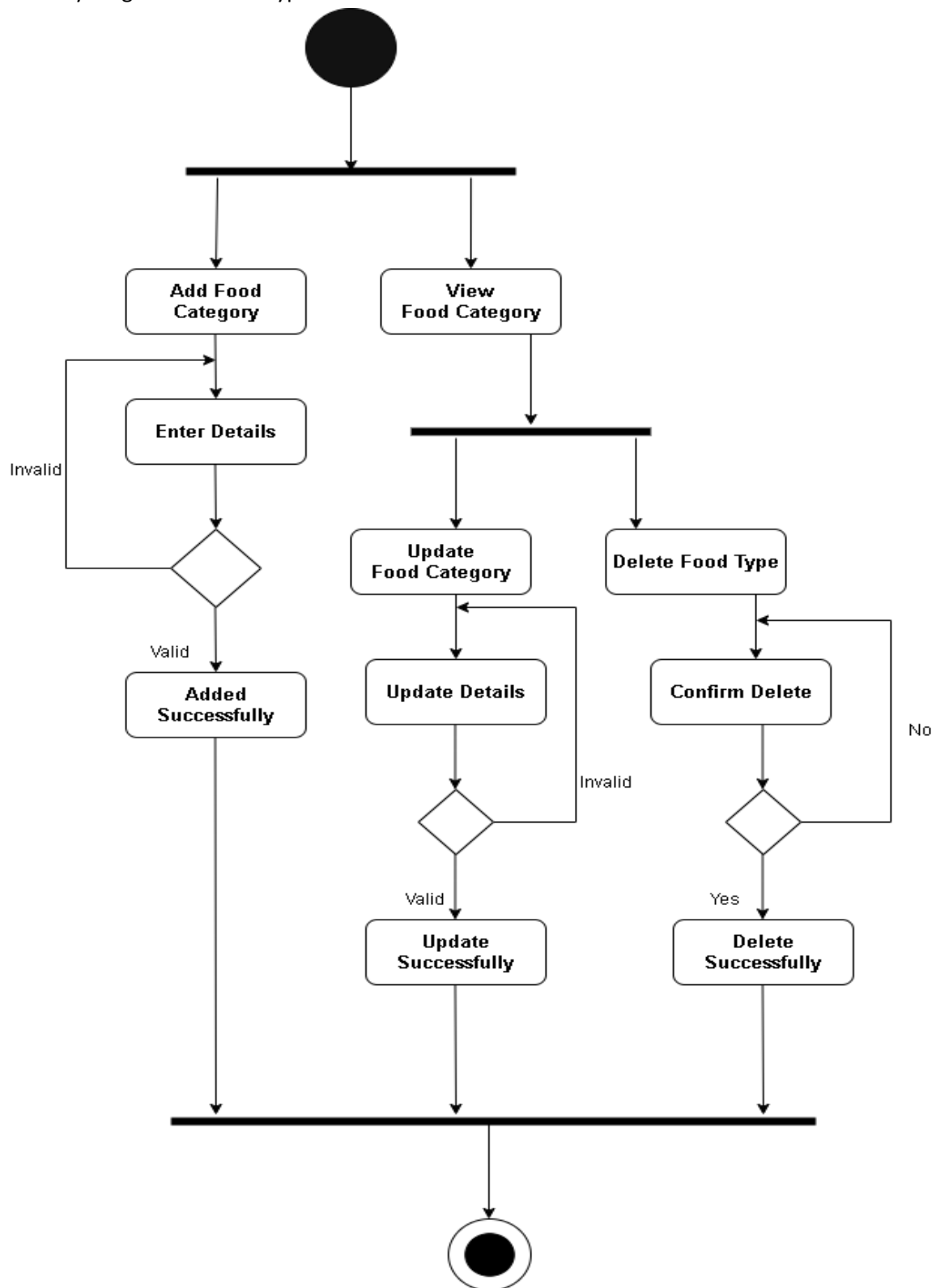
- Activity Diagram for Forget Password:



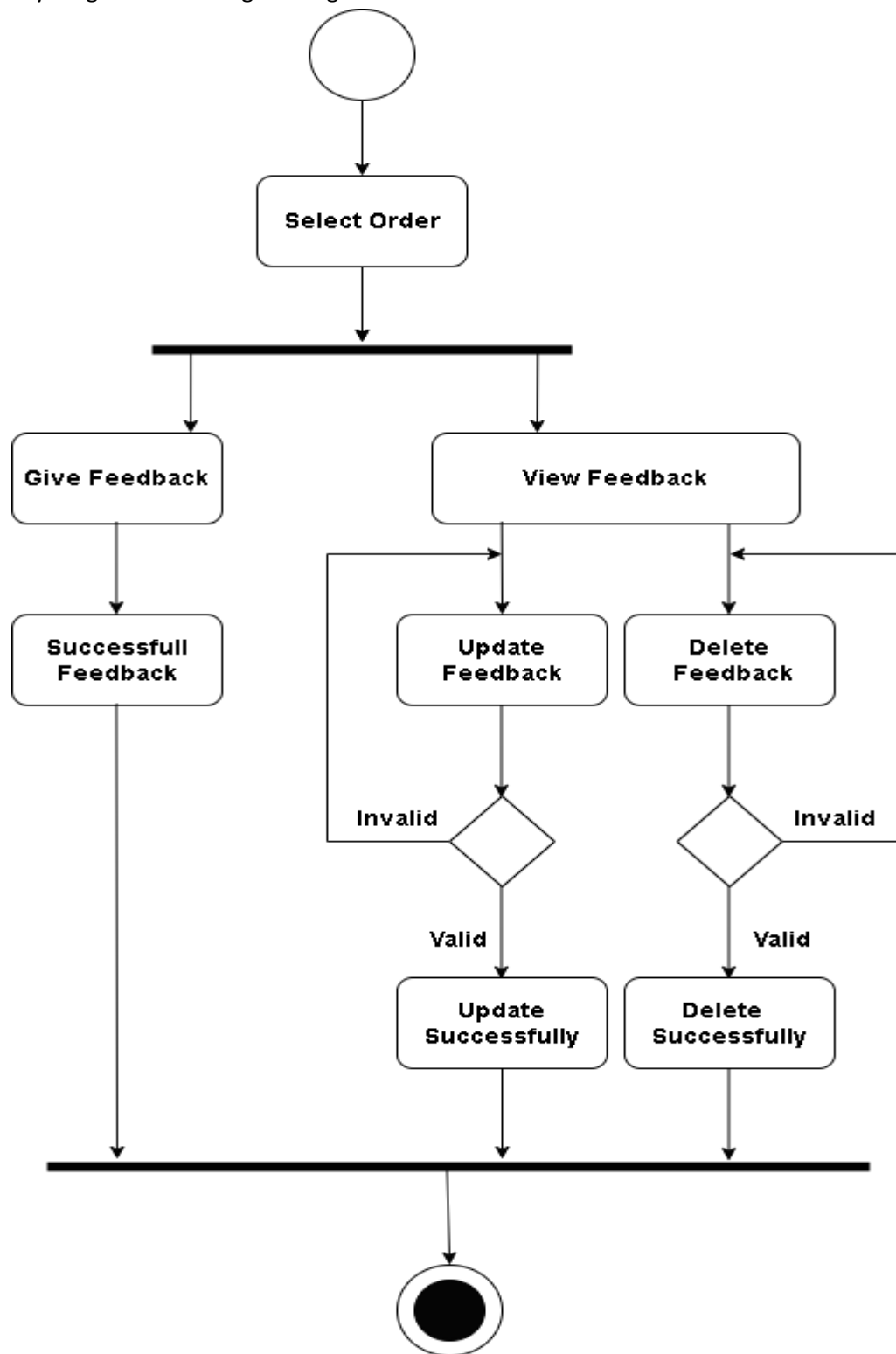
- Activity Diagram for Manage Food Item:



- Activity Diagram for Food Type:



- Activity Diagram for Manage Rating:



Chapter 5: System Design

5.1 System Design

Manage User:

- Schema: Tbl_users (Userid[PK], Name, Email, PhoneNo, Gender, Status, Password, Image, Dob, Accounthash, Reset_token, Reset_token_expires_at)
- Functional Dependency: Userid[PK] -> Name, Email, PhoneNo, Gender, Status, Password, Image, Dob, Accounthash, Reset_token, Reset_token_expires_at
- Schema: Tbl_restaurant (ID[PK], Name, Status, Address, Contact, Areaid, Userid, Gstno, Licenseno, OpeningTime, ClosingTime, Licenseimage)
- Functional Dependency: ID[PK] -> Name, Status, Address, Contact, Areaid, Userid, Gstno, Licenseno, OpeningTime, ClosingTime, Licenseimage
- Schema: Tbl_delivery_man (ID[PK], Onlinestatus, License_no, Licenseimage, Aadharcardno, Aadharcardimage, Status, Userid)
- Functional Dependency: ID[PK] -> Onlinestatus, License_no, Licenseimage, Aadharcardno, Aadharcardimage, Status, Userid

Manage Food Category:

- Schema: Tbl_category (ID[PK], CategoryName, Status)
- Functional Dependency: ID[PK] -> CategoryName, Status

Manage Food Items:

- Schema: Tbl_fooditem(ID[PK], RestaurantID[FK], CategoryID[FK], Name, Price, Status, Description, Image)
- FD: ID -> RestaurantID, CategoryID, Name, Price, Status, Description, Image

Manage Cart:

- Schema: Tbl_cart(ID[PK], UserID[FK], Status)

- FD: ID -> UserID, Status

Manage Coupon:

- Schema: Tbl_coupon(ID[PK], RestaurantID, CategoryID[FK], CouponCode, Discount, MaxUses, Status)
- FD: ID -> RestaurantID, CategoryID, CouponCode, Discount, MaxUses, Status

Manage Payments:

- Schema: Tbl_payment(ID[PK], orderid, transcationid, Payment_mode)
- FD: ID -> orderid, transcationid, Payment_mode

Manage Order:

- Tbl_order(ID[PK], cartid, amount, couponid, status, date)
- FD: ID -> cartid, amount, couponid, status, date
- Tbl_order_cart(ID[PK], fooditemid, cartid, quantity)
- FD: ID -> fooditemid, cartid, quantity

Manage Complaint:

- Schema: Tbl_complaint(ID[PK], OrderID, Description, Role, Image, UserID[FK])
- FD: ID -> OrderID, Description, Role, Image, UserID

5.1.1 Data Dictionary

- Tbl_users:

Sr. No.	Field Name	Data Type	Size	Constraints	Description
1	UserID	int		Primary Key	Uniquely Identifies the User
2	Name	Varchar	50	Not Null	Defines the Name of the User
3	Email	Varchar	254	Not Null	Defines the email-id of the user
4	PhoneNo	Varchar	10	Not Null	Defines the phone number of the user
5	gender	tinyint	1	Not Null	Defines the gender of the user
6	status	tinyint	1	Not Null	Defines the status of the User
7	passsword	Varchar	38	Not Null	Defines the password of the User
8	image	Varchar	255	Not Null	Defines the profile picture path of the User

9	dob	data	-	Not Null	Defines the birth date of the User
10	accounthash	Varchar	64	Foreign Key	Defines the account hash of the User
11	reset_token	Varchar	64	Foreign Key	Defines the reset token of the User
12	reset_token_expires_at	datetime	-	Not Null	Defines the reset token expiry date of the User

- Tbl_restaurant:

Sr. No.	Field Name	Data Type	Size	Constraints	Description
1	ID	int		Primary Key	Defines the unique id of the Restaurant
2	name	varchar	50	Not Null	Defines the name of the Restaurant
3	status	tinyint	1	Not Null	Defines the status of the Restaurant
4	address	varchar	255	Not Null	Defines the address of the Restaurant

5	Contact	varchar	10	Not Null	Defines the contact number of the Restaurant
6	areaid	int	-	Foreign Key	Defines the area id of the Restaurant
7	userid	int	-	Foreign Key	Defines the user id of the Restaurant
8	gstno	varchar	15	Not Null	Defines the gstno of the Restaurant
9	Licesnseno	varchar	14	Not Null	Defines the Licesnseno of the Restaurant
10	OpeningTime	time	-	Not Null	Defines the Opening Time of the Restaurant
11	ClosingTime	time	-	Not Null	Defines the ClosingTime of the Restaurant
12	Licesnseimage	varchar	255	Not null	Defines the Licesnseimage of the Restaurant

- Tbl_delivery_man:

Sr. No.	Field Name	Data Type	Size	Constraints	Description
1	ID	int		Primary Key	Defines the unique id of the delivery person
2	onlinestatus	tinyint	1	Not Null	Defines the online status of the delivery person
3	License_no	varchar	15	Not Null	Defines the license number of the delivery person
4	Licenseimage	varchar	255	Not Null	Defines the license image path of the delivery person
5	adharcardno	varchar	15	Not Null	Defines the aadhar card number of the delivery person
6	addharcardi mage	varchar	255	Not Null	Defines the path of aadhar card image of the

					delivery person
7	status	tinyint	1	Not Null	Defines the status of the delivery person
8	userid	int	-	Foreign Key	Defines the user id of the delivery person

- Tbl_area:

Sr. No.	Field Name	Data Type	Size	Constraints	Description
1	ID	int		Primary Key	Defines the unique id of the area
2	name	varchar	50	Not Null	Defines the name of the area

- Tbl_cart:

Sr. No.	Field Name	Data Type	Size	Constraints	Description
1	ID	int		Primary Key	Defines the unique id of the cart
2	userid	int	-	Foreign Key	Defines the userid of the cart
3	status	tinyint	1	Not Null	Defines the status of the cart

- Tbl_category:

Sr. No.	Field Name	Data Type	Size	Constraints	Description
1	ID	int		Primary Key	Defines the unique id of the category
2	CategoryName	varchar	20	Not null	Defines the unique id of the category
3	status	tinyint	1	Not null	Defines the status of the category

- Tbl_complaint:

Sr. No.	Field Name	Data Type	Size	Constraints	Description
1	ID	int		Primary Key	Defines the unique id of the complaint
2	orderid	int	-	Not Null	Defines the order id of the complaint
3	description	varchar	255	Not Null	Defines the description of the complaint
4	role	char	1	Not Null	Defines the role of the complaint
5	image	varchar	255	Not Null	Defines the image path of the complaint
6	userid	int	-	Foreign Key	Defines the user id of the complaint

- Tbl_cupon:

Sr. No.	Field Name	Data Type	Size	Constraints	Description
1	ID	int		Primary Key	Defines the unique id of the cupon
2	restaurantid	int		Not Null	Defines the unique id of the cupon
3	categoryid	int		Foreign Key	Defines the categorid of the cupon
4	couponcode	varchar	12	-	Defines the couponcode of the cupon
5	discount	tinyint	2	-	Defines the discount of the cupon
6	maxuses	smallint	6	-	Defines the discount of the cupon
7	status	tinyint	1	Not null	Defines the Stats of the cupon

- Tbl_customer_address:

Sr. No.	Field Name	Data Type	Size	Constraints	Description
---------	------------	-----------	------	-------------	-------------

1	ID	int		Primary Key	Defines the unique id of the customer address
2	userid	int	-	Foreign Key	Defines the user id of the customer address
3	address	varchar	255	Not Null	Defines the address of the customer address
4	areaid	int	-	Foreign Key	Defines the areaid of the customer address
5	type	char	1	Not Null	Defines the type of the customer address
6	status	tinyint	1	Not Null	Defines the status of the customer address
7	doorno	varchar	7	Not Null	Defines the of doorno the customer address

- Tbl_delivery:

Sr. No.	Field Name	Data Type	Size	Constraints	Description
1	ID	int		Primary Key	Defines the unique id of the delivery
2	orderid	int	-	Foreign Key	Defines the order id of the delivery

3	deliverymanid	int	-	Foreign Key	Defines the delivery person id of the delivery
4	amount	decimal	10,2	Not Null	Defines the amount of the delivery

- Tbl_fooditem:

Sr. No.	Field Name	Data Type	Size	Constraints	Description
1	ID	int		Primary Key	Defines the unique id of the food item
2	name	varchar	50	Not Null	Defines the name of the food item
3	Description	varchar	255	Not Null	Defines the description of the food item
4	price	decimal	7,2	Not Null	Defines the price of the food item
5	image	varchar	255	Not Null	Defines the image path of the food item
6	type	tinyint	1	Not Null	Defines the type of the food item
7	categoryID	int		Not Null	Defines the categoryID of the food item

8	restaurantID	int	-	Foreign Key	Defines the restaurant id of the food item
9	rating	tinyint	4	Not Null	Defines the rating of the food item
10	totalratingdone	int	-	Not Null	Defines the total rating done of the food item
11	status	tinyint	1	Not Null	Defines the status of the food item
12	dateadded	Data-time		Not Null	Defines the date added of the food item

- Tbl_order:

Sr. No.	Field Name	Data Type	Size	Constraints	Description
1	ID	int		Primary Key	Defines the unique id of the order
2	cartid	int		Foreign Key	Defines the cart id of the order
3	amount	decimal	8,2	Not Null	Defines the amount of the order
4	couponid	int		Foreign Key	Defines the coupon id of the order

5	status	char	1	Not Null	Defines the status of the order
6	date	date		Not Null	Defines the date of the order

- Tbl_order_cart:

Sr. No.	Field Name	Data Type	Size	Constraints	Description
1	ID	int		Primary Key	Defines the unique id of the order cart
2	fooditemid	int		Foreign Key	Defines the of fooditemid the order cart
3	cartid	int		Foreign Key	Defines the of carid the order cart
4	quantity	tinyint	4	Not Null	Defines the of quantit the order cart

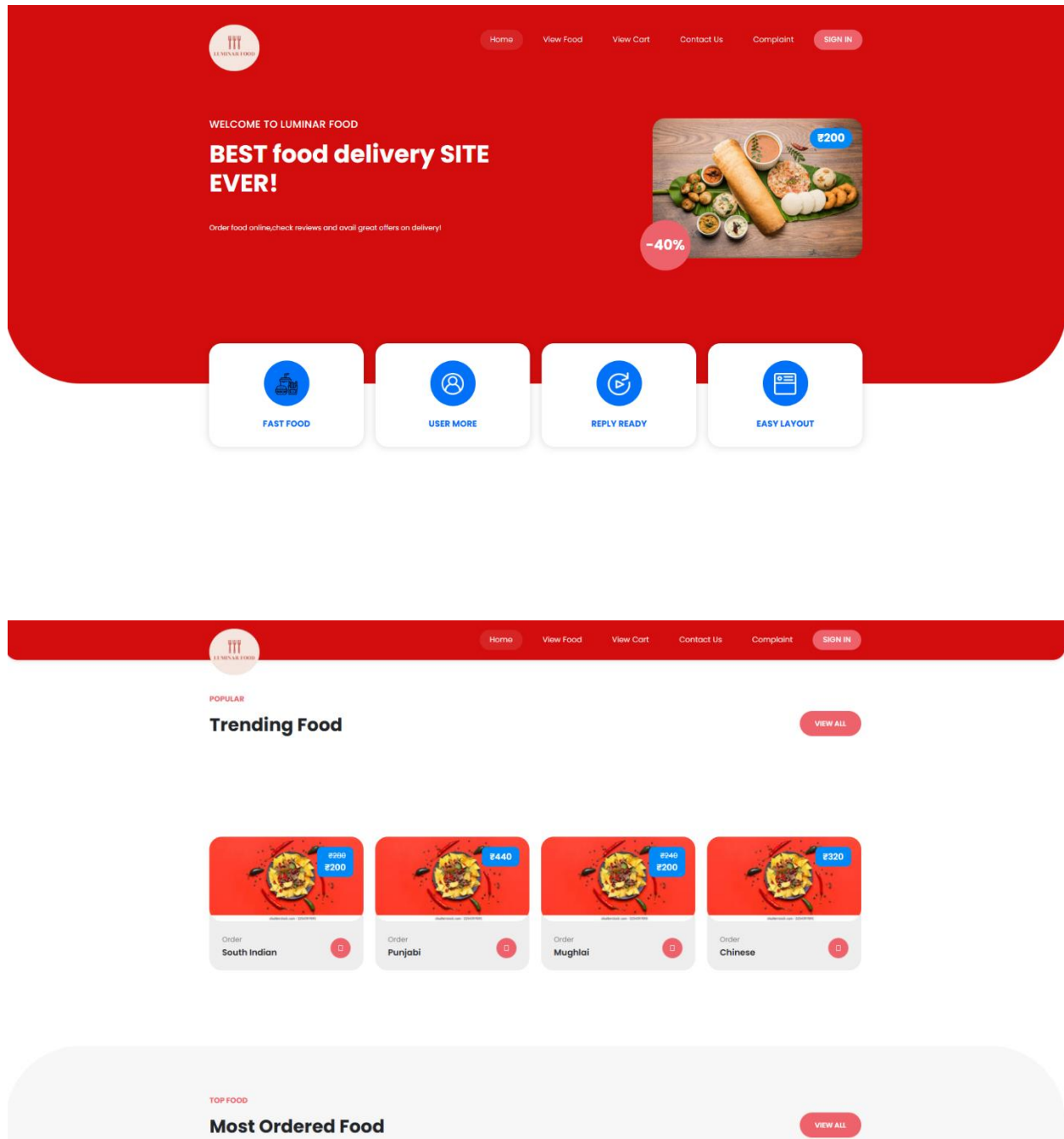
- Tbl_payment:

Sr. No.	Field Name	Data Type	Size	Constraints	Description
1	ID	int	-	Primary Key	Defines the unique id of the payment

2	orderid	int		Foreign Key	Defines the orderid of the payment
3	transcationid	varchar	25	Null	Defines the transcationid of the payment
4	Payment_mode	char	1	Not Null	Defines the Payment_mode of the payment

Chapter 6: System Implementation

6.1 Screenshots



Email:


Password:


[Forgot Password?](#)

[Login as Restaurant or Delivery-Man?](#)

Login

Sign-up





[Home](#)
[Our Shop](#)
[Product Details](#)
[Contact US](#)
[Sign In](#)
[Complaint](#)

Customer Registration

Name:

Password:

Phone:

Email:

Date of Birth

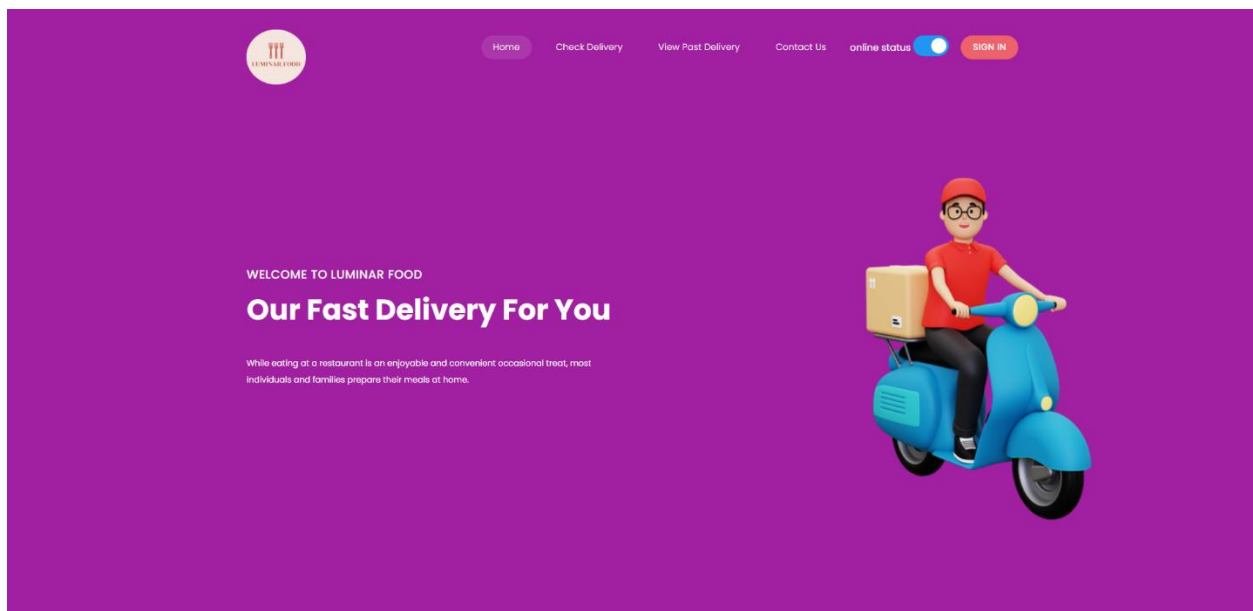
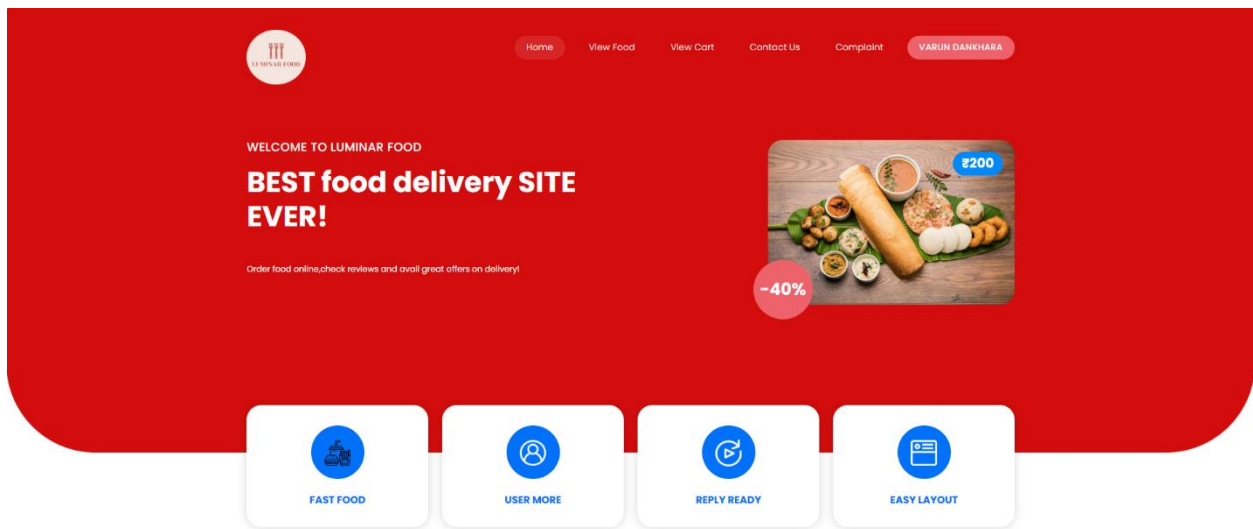
File upload:

Choose File

No file chosen


Gender

Submit



WhatsApp x Luminar Food x Meet - sfo-nl x Hardware and Softw x Google Meet x Untitled Diagram.d x Login Test Cases Su x

https://luminor-del.shop/Food-Delivery-System/Food%20Delivery%20System/pages/Landing/login_rd.php


[Home](#) [Our Shop](#) [Product Details](#) [Contact US](#) [SIGN IN](#)

Enter You're User Registered Details

Email:

Password:


[Submit](#)


[Home](#) [Add Product](#) [Order History](#) [Contact Us](#) [online status](#) [BASUKA DHABA](#)

WELCOME TO LUMINAR FOOD


Food that makes you're Customer happy

While Cooking is you're favorite job, Delivering is Our







FAST FOOD



USER MORE



REPLY READY



EASY LAYOUT

Chapter 7: Testing

7.1 Test cases

(List the test cases, describing inputs, expected outputs, and actual outputs.)

Test Case ID	Test Case	Inputs	Expected Output	Actual Output	Status
TC1	Verify User Login	Username: user123 Password: User@123	Redirected to user dashboard	Redirected to user dashboard	Pass
TC2	Verify Delivery Man Login	Username: delivery1 Password: Del@123	Redirected to delivery dashboard	Redirected to delivery dashboard	Pass
TC3	Verify Restaurant Owner Login	Username: owner456 Password: Rest@456	Redirected to restaurant management dashboard	Redirected to restaurant management dashboard	Pass
TC4	Invalid Password Handling	Username: user123 Password: WrongPass	"Invalid credentials" error displayed	"Invalid credentials" error displayed	Pass
TC5	Verify Case Sensitivity	Username: USER123 Password: User@123	"Invalid credentials" error displayed	"Invalid credentials" error displayed	Pass
TC6	Verify Empty Input Handling	Username: (empty) Password: (empty)	"Username and password required" error displayed	"Username and password required" error displayed	Pass

Chapter 8: Future Enhancement

Partner Restaurants and Delivery Agents will have dedicated dashboards to manage orders, menus, schedules, and payments more efficiently.

Integrated Payment System: The system will handle payments for orders directly, making the process seamless for customers and ensuring secure transactions.

Real-Time Order Tracking and Analytics: A tracking system will provide live updates on delivery status, helping users and admins ensure timely deliveries and monitor order progress.

Comprehensive Reporting System: The system will generate detailed reports for restaurant owners, delivery partners, and administrators, ensuring clear records for transactions and performance tracking.

Customer Feedback and Rating Integration: Future versions will enable better management of complaints, ratings, and reviews to improve service quality continuously.

Chapter 9: Conclusion

The Food Delivery Management System (FDMS) project was developed to address challenges in managing food orders, deliveries, payments, and customer feedback effectively. Our goal was to create a platform that simplifies the food ordering process while providing transparency and improving management for all stakeholders involved—customers, restaurant partners, and delivery agents.

Using technologies such as HTML, CSS, JavaScript, PHP, and MySQL, we built a web-based system accessible to multiple users, including restaurant owners and delivery partners. This platform streamlines operations, ensures real-time tracking, and improves the overall user experience, helping restaurants grow their business and customers enjoy seamless deliveries.

Chapter 10: Bibliography

<https://www.w3schools.com/>

Free Bootstrap Admin Template – <https://templatemo.com/tm-589-lugx-gaming>