

**A**  
**PROJECT REPORT**  
**ON**  
**“Delicious-Dairy”**  
Submitted in partial fulfilment of the requirement of  
**Post Graduate Diploma in Advance Computing**  
**(PG-DAC) from**  
**INSTITUTE OF EMERGING TECHNOLOGIES**  
**Authorized Training Centre**



**Under the Guidance of Mr. Saleel Bagde**

**BY**

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## **CERTIFICATE**

This is to certify that the project report entitled **Delicious Dairy** is a bonfire work carried out by **1. Ravi Kumar, 2. Shamim Ahemad, 3. Rushikesh Pachore, 4. Shubham Mahajan** submitted in partial fulfilment of the requirement for the C-DAC ACTS, DAC course in the Institute of Emerging Technology in the batch of March 2023.

**Course Coordinator**

**External Examiner**

## ACKNOWLEDGEMENT

This project “**Delicious Dairy**” web-based application for dairy product services was a great learning experience for us and we are submitting this work to Advanced Computing Training School (CDAC).

We are very glad to mention **Mr. Saleel Bagde** for his valuable guidance to work on this project. His guidance and support helped us to overcome various obstacles during the course of project work.

Our most heart-full thanks goes to **Mr. Sangram Patil (Director, IET)** who gave all the required support and kind coordination to provide all the necessities like required hardware, internet facility and extra lab hours to complete the project and throughout the course up to the last day here in IET, Pune.

**Sign of Students**

**Name of Students**

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## **ABSTRACT**

The Dairy Services Web Application is a comprehensive and user-friendly platform designed to streamline and enhance various aspects of dairy management and operations. Developed using the Java programming language, the application leverages modern web technologies to provide dairy farmers, producers, and stakeholders with an efficient and intuitive tool for managing dairy-related tasks.

The application encompasses a range of features aimed at optimizing daily dairy operations. It will enable users to order all milk products, users will be able to order dairy products so easily from the nearest store available and it will deliver as soon as possible. Users can track their order accordingly.

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# **1 INTRODUCTION**

The Delicious-Dairy System is a tool for ordering the products of MILK through online by the Customer.

## **1.1 Purpose**

This Delicious-Dairy Software Requirement Specification (SRS) main objective is to provide a base for the foundation of the project. It gives a comprehensive view of how the system is supposed to work and what is to be expected by the end users. Client's expectation and requirements are analysed to produce specific unambiguous functional and non-functional requirements, so they can be used by development team with clear understanding to build a system as per end user needs.

This SRS for HMS can also be used for future as basis for detailed understanding on how project was started. It provides a blueprint to upcoming new developers and maintenance teams to assist in maintaining and modifying this project as per required changeability.

## **1.3 Overview**

The remaining sections of this documentations describes the overall descriptions which includes product perspective and functions, characteristics of users. It also consists of Assumptions, and Constraints. Overall description is listed in section 2. Section 3 includes Specific Requirements which consists of Functional and Non-functional requirements, External Interface Requirements, Software System Attributes, Performance Requirements, Capacity Requirements, Availability Requirements, Safety Requirements and Requirement Traceability Matrix.

## **2.2 Goals and Objective**

The Web based and App based Delicious-Dairy dairy product service is intended to provide complete solution for Customers. It will enable users to order all milk products, users will be able to order dairy products so easily from the nearest store available and it will deliver as soon as possible. Users can track their order accordingly.



## **2.3 Product Functions**

Our Product General functions are:

- Customer Registration
- Check for Availability of products
- Add product to cart
- Display the Rate
- Confirmation of Order
- Email – SMS Notification
- Payment
- Set Product Details
- Manage Order Details
- Generate Report
- Customer Service

## 2.4 Major Constraints and Outcomes

1. **Scalability:** The system needs to be able to handle a large number of users and orders, as well as handle spikes in traffic during peak seasons.
2. **Security:** The system must ensure the security of user data, including personal information, payment details, and order history.
3. **Reliability:** The system must be available and responsive at all times to ensure that users can make orders and access their information without interruption.
4. **Integration:** The system must be able to integrate with other systems such as payment gateways, social media, and third-party APIs.
5. **User experience:** The system must be easy to use and navigate for both customers and staff to ensure a smooth process.
6. **Data privacy:** The system must comply with data privacy regulations.
7. **Customizability:** The system must allow for customization to meet the unique needs of different customers.
8. **Accessibility:** The system must be accessible for differently abled users and comply with web accessibility standards.
9. **Maintenance:** The system must be easy to maintain and update to ensure that it stays up-to date with the latest technologies and features.

### **3. SOFTWARE REQUIREMENT SPECIFICATION**

#### **3.1 Proposed System and Scope:**

**# Delicious Dairy**

#### **## Document:**

System Requirement Specification

#### **## Title:**

System Requirement for Online Dairy Products delivery portal

#### **## Product Description:**

Delicious-Dairy Platform can be the greatest blessing for the customer's everyday morning needs of dairy products. With this platform customer can register and order their daily requirements of dairy products and receives assured delivery at the desire time every day at their doorstep.

#### **## Problem Statement:**

Daily needs like milk and other dairy products are critical every morning for a household and it is extremely important to have timely delivery as one's schedules depend on these items.

#### **## Scope of Project:**

The scope of the Dairy services web application encompasses various Functionalities and features that address the identified problem and meet the needs of consumers, producers, and other stakeholders in the dairy industry.

#### **## System Objectives:**

To provide a Web platform for Online shopping of dairy products.

## **## System Requirements:**

Processor- intel core i5 (minimum)

Windows 10 & 11

Ram- 8GB (minimum)

## **## Functional Requirements:**

Any anonymous User will be able to view different products available for sale. Any User will be able to select product to view from categories available. Employee will be able to track and maintain stock of products available for sale. Employee will be able to raise requests for product updation to Admin.

### **### For Consumer Panel**

- Register and manage profile
- Add address
- Browse and sort through milk products
- Place an order
- Ratings and reviews
- Get order invoice via mail
- Refer a friend
- View discounts and offer
- View order history
- Select preferred delivery time
- Set vacation days for no deliver

### **### For Admin Panel**

- Add product inventory
- Manage to the price of products
- Manage order and deliveries
- Manage payments
- Secure login to the admin dashboard

- Manage delivery executives
- Manage offers and discounts
- Manage orders
- Manage CMS (content management system)
- Manage Employees
- Track order deliveries
- View ratings and reviews
- Generate reports

#### **### For Delivery Executive Panel**

- Create and manage profile
- View orders assigned
- View order details
- View customer location for delivery
- In-app call and chat with customer
- View order history

#### **## Non-Functional Requirement:**

##### **### Security**

Registered Customer will be allowed to place an order. Each stakeholder will access system through authentication process. System will provide access to the content, operations using Role based security (Authorization) (Permissions based on Role) Using SSL in all transactions which will be performed stakeholder. It would protect confidential information shared by system to stake holder of Shared by stakeholder to system. System will automatically log of all stakeholder after some time due to inactiveness. System will block operations for inactive stakeholder and would redirect for authentication. System will internally maintain secure communication channel between Servers (Web Servers, App Servers, database Server) Sensitive data will be always encrypted across communication. Uses proper firewall to protect servers from outside fishing, vulnerable attacks.

##### **### Reliability**

The system will backup business data on regular basis and recover in short time duration to keep system operational continuous updates are maintained, continuous Administration is done to keep system operational. During peak hours system will maintain same user experience by managing load balancing.

### **### Availability**

uptime: 24\* 7 available 99.999%

### **### Maintainability:**

A Commercial database software will be used to maintain System data Persistence. A readymade Web Server will be installed to host online Delicious-Dairy portal (Web Site) to management server capabilities. IT operations team will easily monitor and configure System using Administration tools provided by Servers. Separate environment will be maintained for system for isolation in production, testing, and development.

### **### Portability:**

PDA: Portable Device Application System will provide portable User Interface (HTML, CSS, JS) through users will be able to access online Delicious-Dairy portal. System can be deployed to single server, multi-server, to any OS, Cloud (Azure or AWS)

### **### Accessibility:**

Only registered customer will be able to place an order after authentication. BOD (business operation data) team will be able to view daily, weekly, monthly, annual business Growth through customized dashboard.

### **### Durability:**

System will retain customer shopping cart for 15 minutes even though customer loose internet connection and join again. System will maintain wish-list for customer. customer will be able to add products from wish-list and add to shopping cart whenever needed. System will implement backup and recovery for retaining stakeholders data, business operation data and business data over time.

### **### Efficiency:**

On Festival season, maximum number of users will place order, view products with same response time. System will be able to manage all transactions with isolation.

### **### Modularity:**

System will design and develop using reusable, independent or dependent business scenario in the form of modules. These modules will be loosely coupled and highly cohesive. System will contain CRM (customer relationship management), Inventory, shopping cart, order processing, payment processing, Delivery module, membership and Roles management modules.

### **### Scalability:**

System will be able to provide consistent user experience to stake holder as well as visitors irrespective of load.

### **### Safety:**

Online Delicious-Dairy portal will be secure from malicious attack, fishing. online Delicious-Dairy portal functionalities are protected from outside with proper firewall configuration. online Delicious-Dairy portal will be always kept updated with latest antivirus software. Business data will be backed up periodically to ensure safety of data using incremental back up strategy. Role based security will be applied for Application data and operations accessibility.

## 4. PERFORMANCE REQUIREMENTS

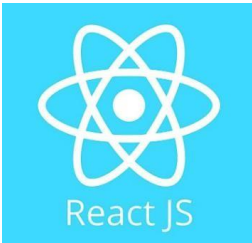


Performance requirements in a dairy product services system typically include fast loading times, reliable and secure data storage, and the ability to handle a high volume of simultaneous users and orders. Other important factors may include user-friendly navigation and order interface, mobile compatibility, and integration with payment systems. Additionally, a good dairy product services system should also have robust reporting and analytics capabilities to help the dairy services track revenue, and other important performance metrics.

### 4.1 Hardware and Software REQUIREMENTS. External Interface Requirements.

#### User Interfaces

The user interface for system shall be compatible to any type of web browser such as Mozilla Firefox, Google Chrome, and Microsoft EDGE, Opera, BING

#### Software Interfaces

	FRONT END	BACKEND	DATABASE
1	 REACT JS	 J2EE	 MySQL



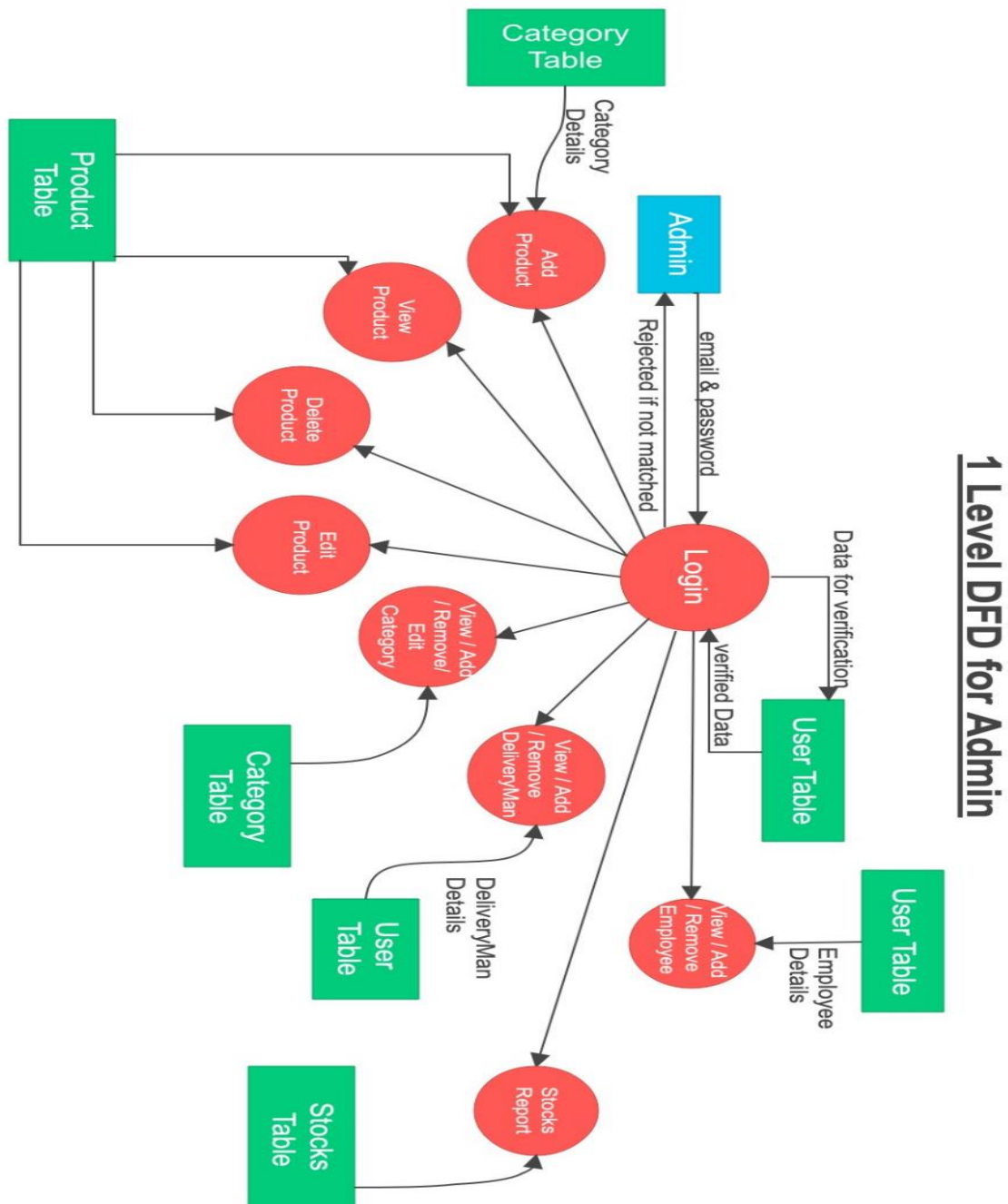
---

## Hardware Interfaces

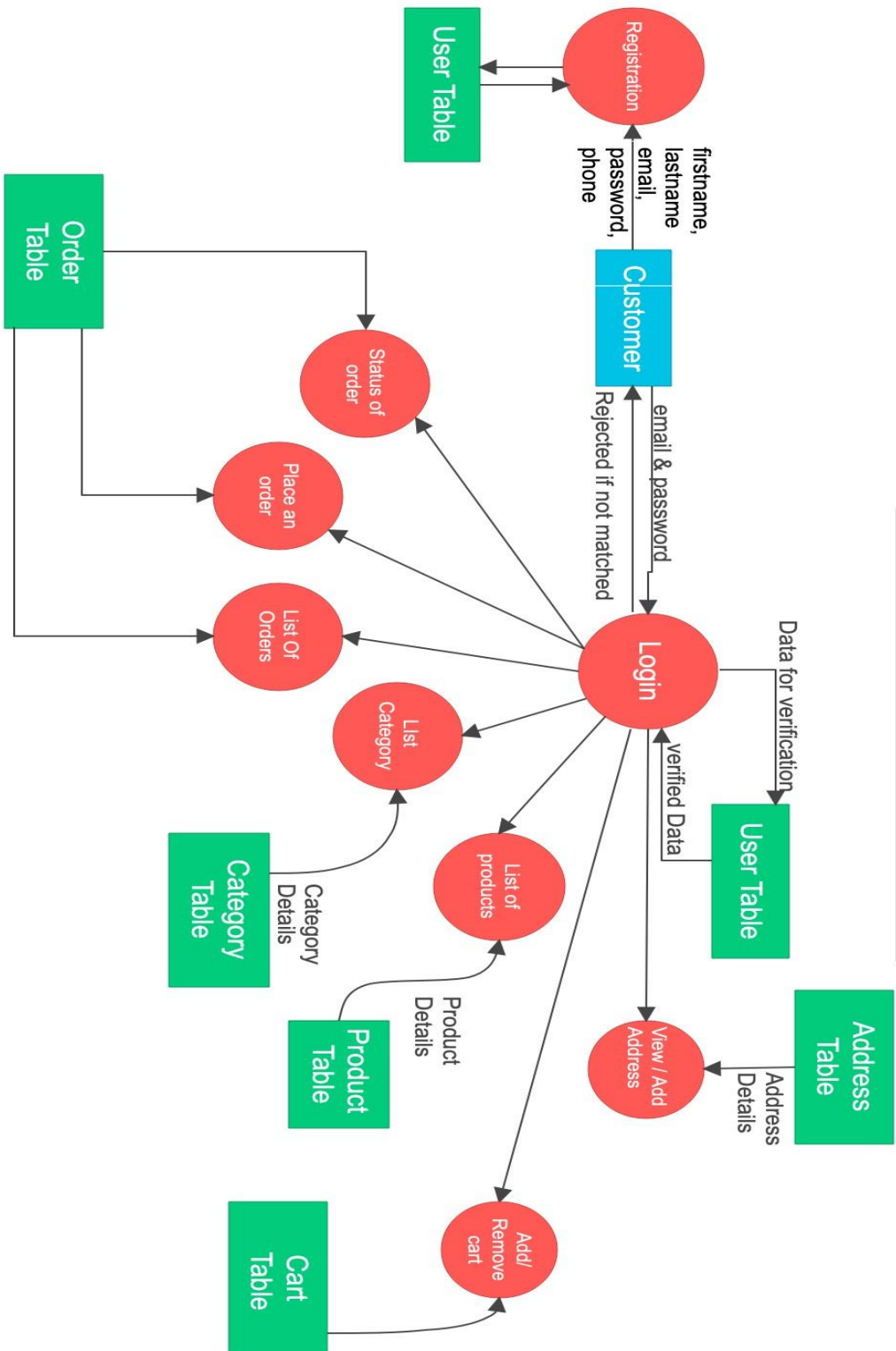
Server Side			
Monitor	Processor	RAM	Disk Space
Resolution: 1024x768	Intel or AMD 2GHZ OR HIGHER	4GB	10GB
Client Side			
Monitor	Processor	RAM	Disk Space
Resolution: 1024x768	Intel or AMD 1GHZ DUAL CORE MIN	2 GB	128 GB

## 5 UML DIAGRAMS

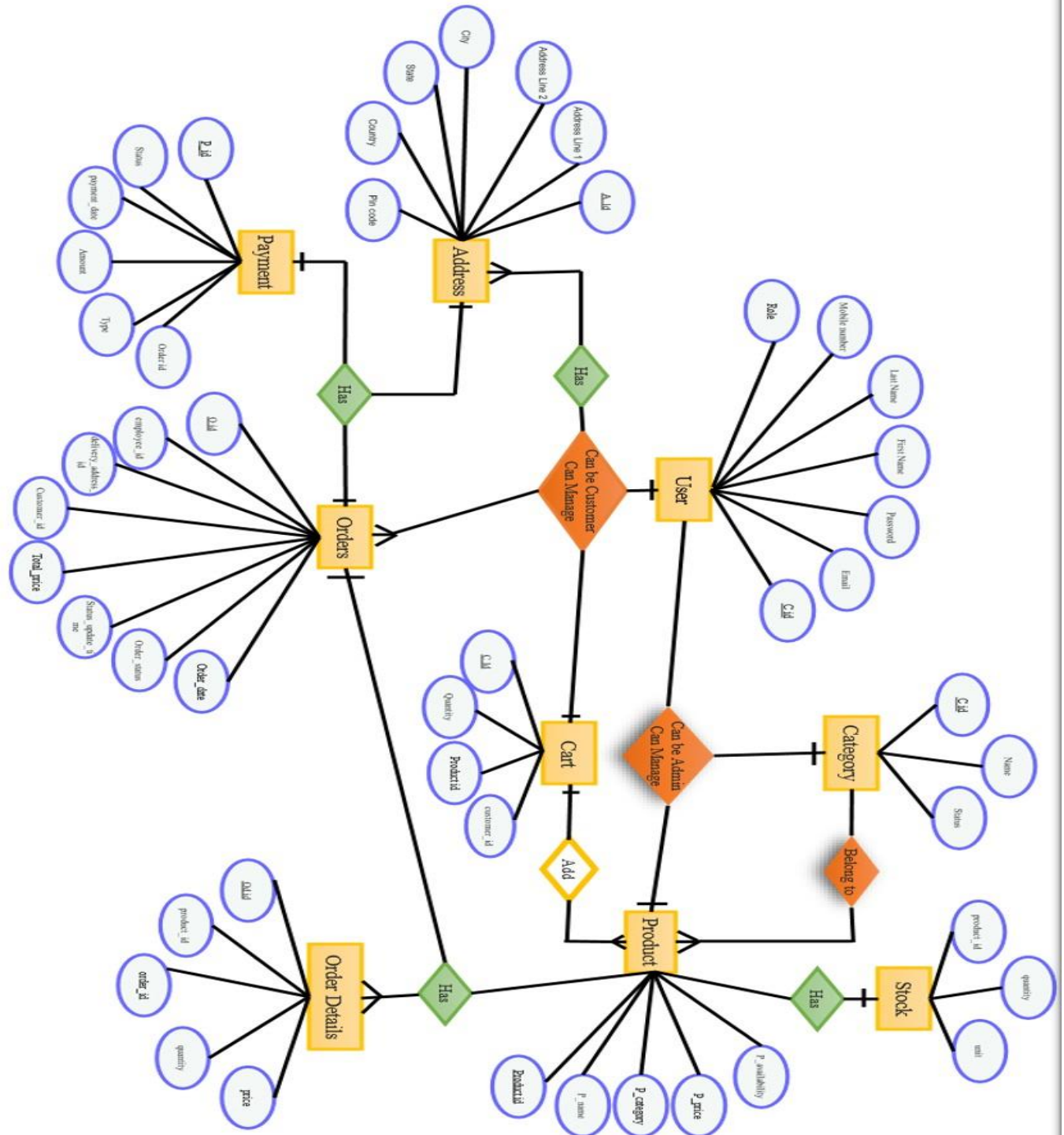
### 5.1 Data Flow Diagram



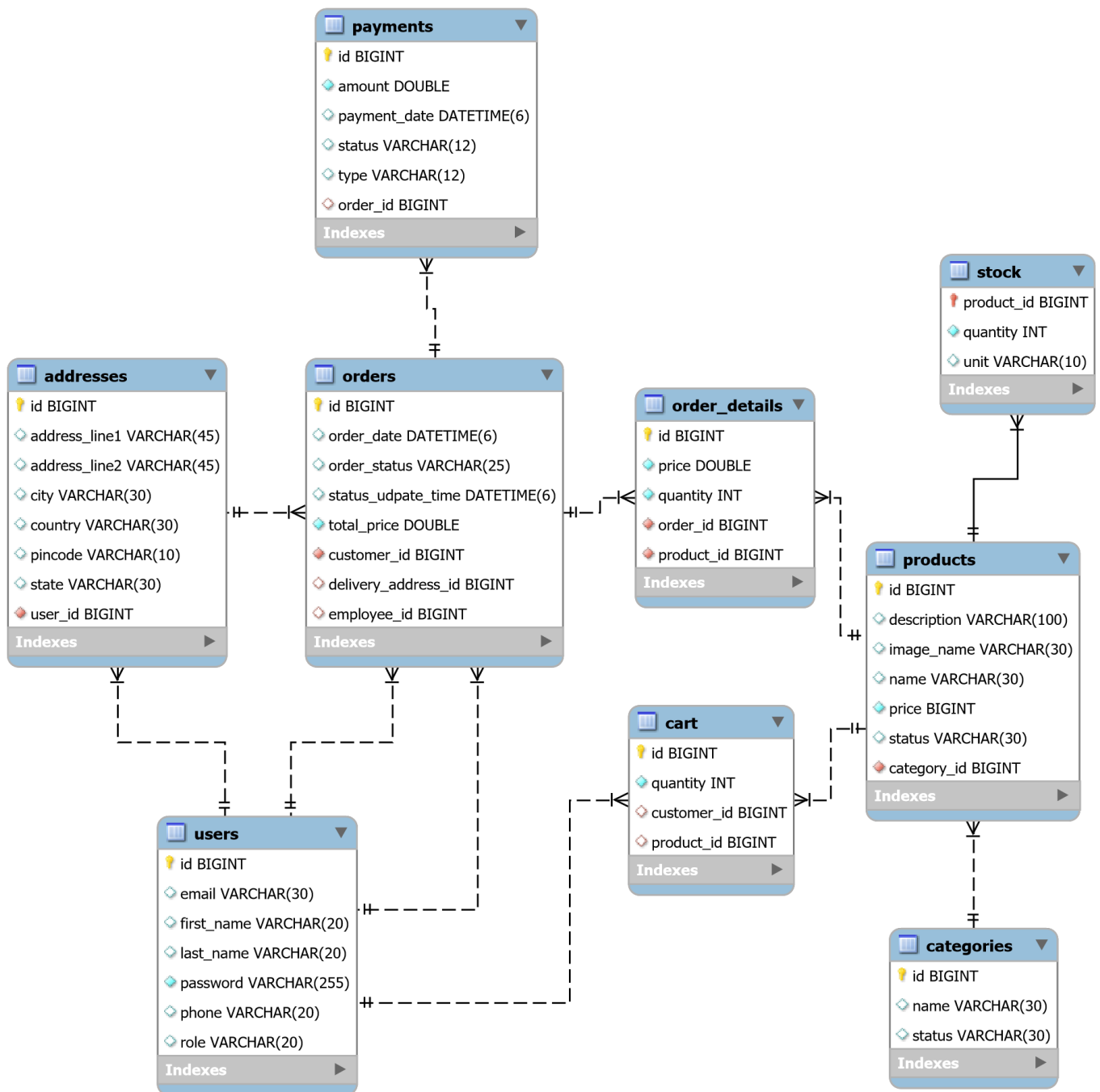
## 1 Level DFD for Customer



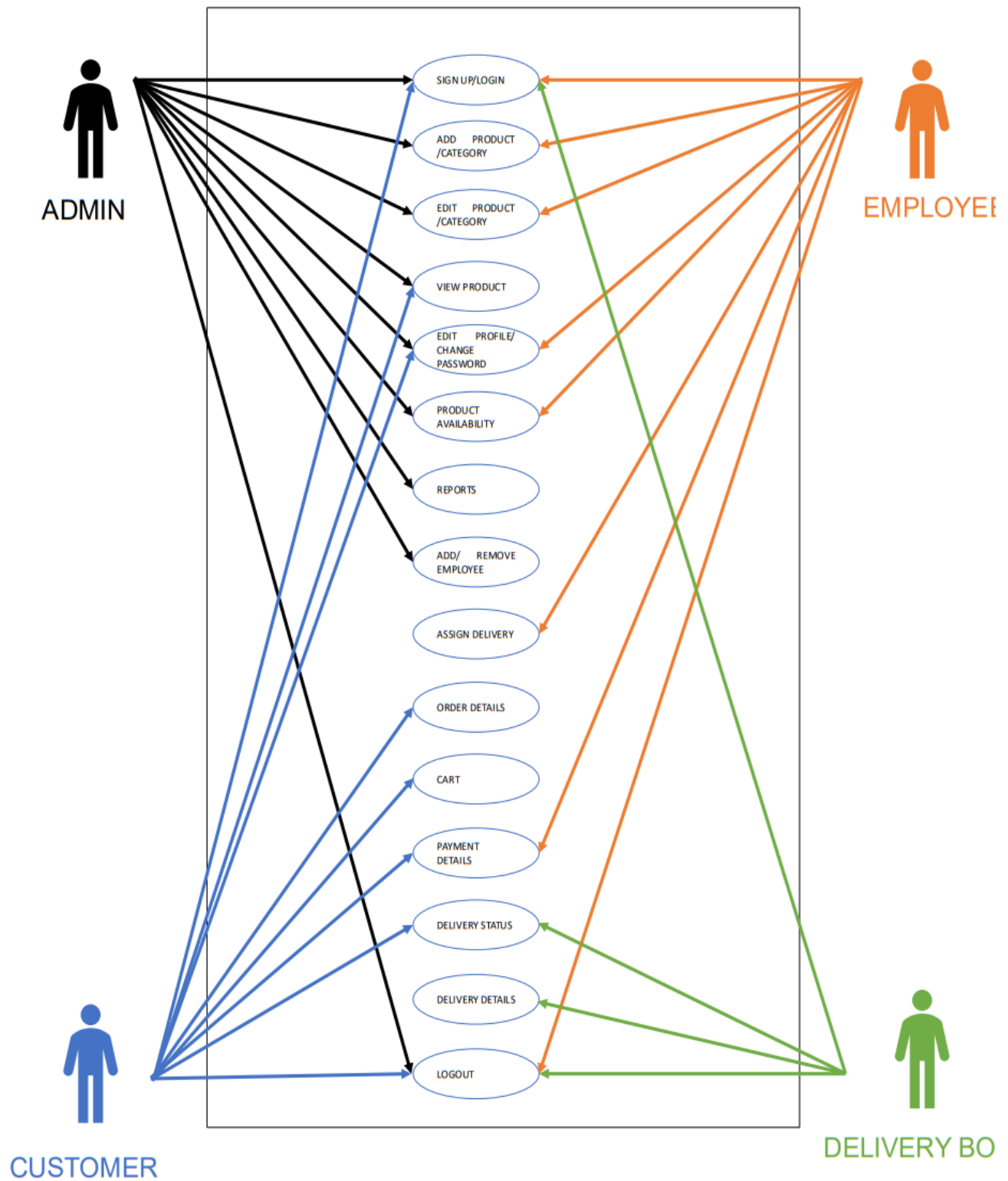
## 6.1 Entity Relationship Diagram



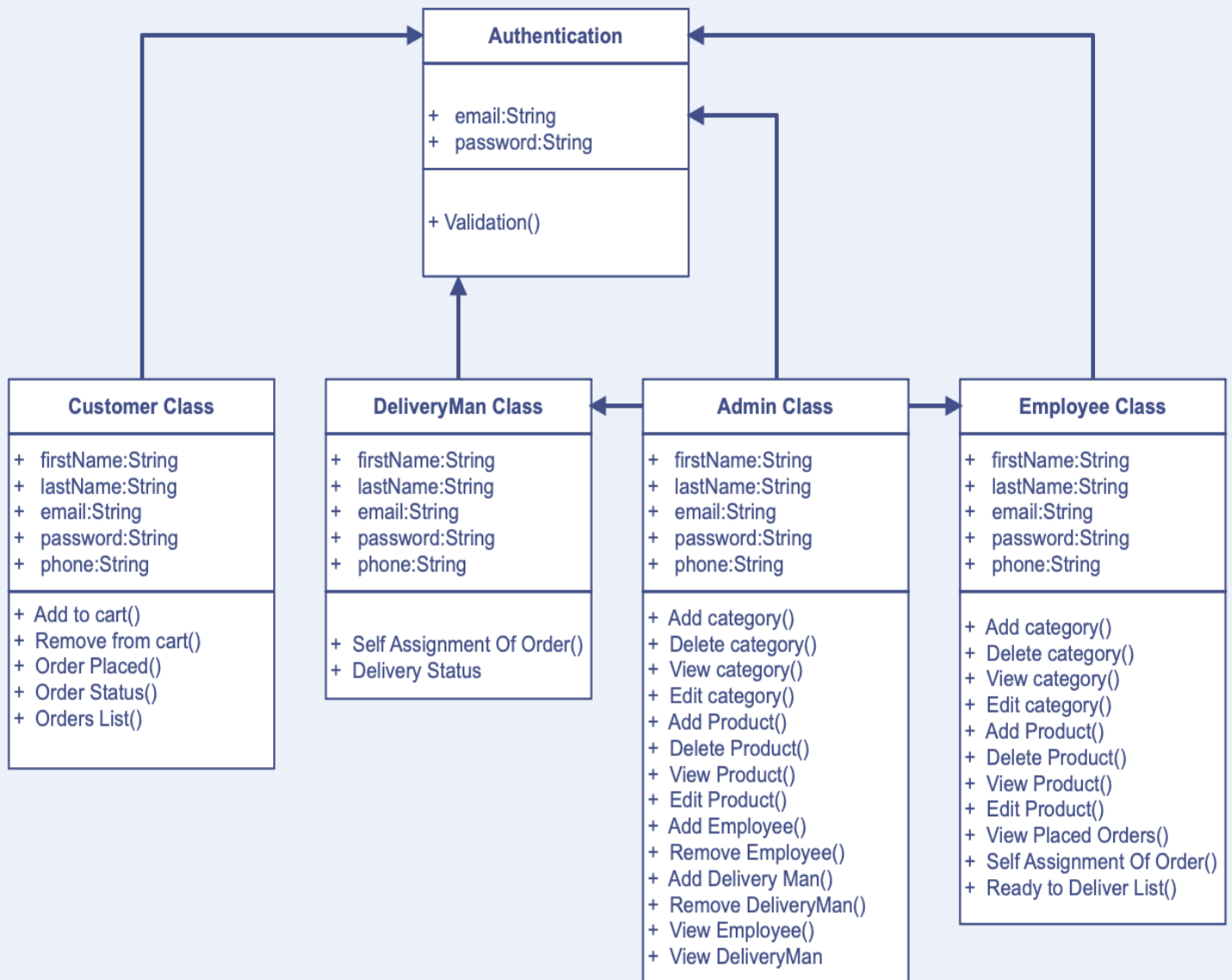
## 6.2 Entity Relationship Diagram



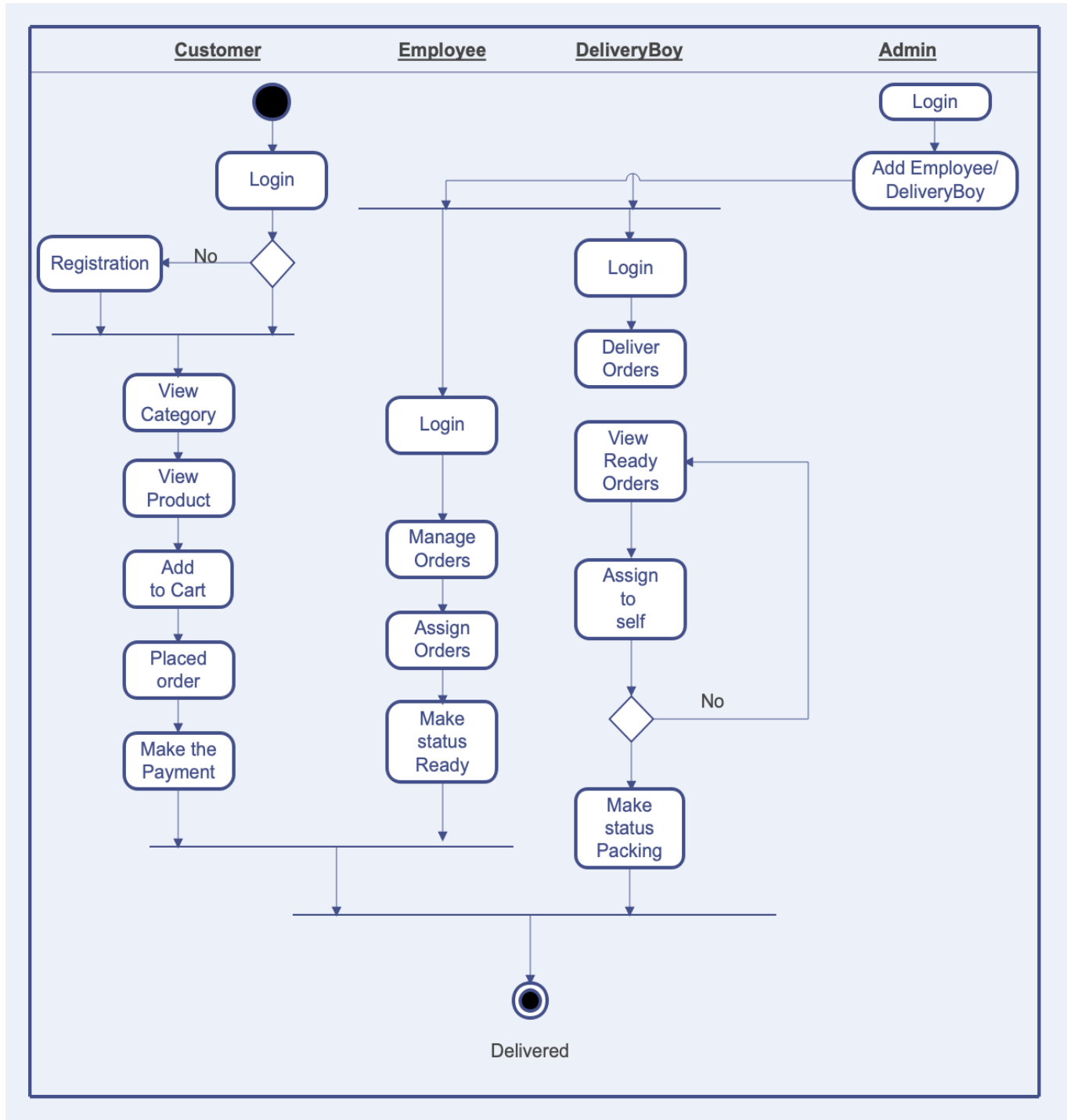
### 6.3 Usecase Diagram



## 6.4 Class Diagram

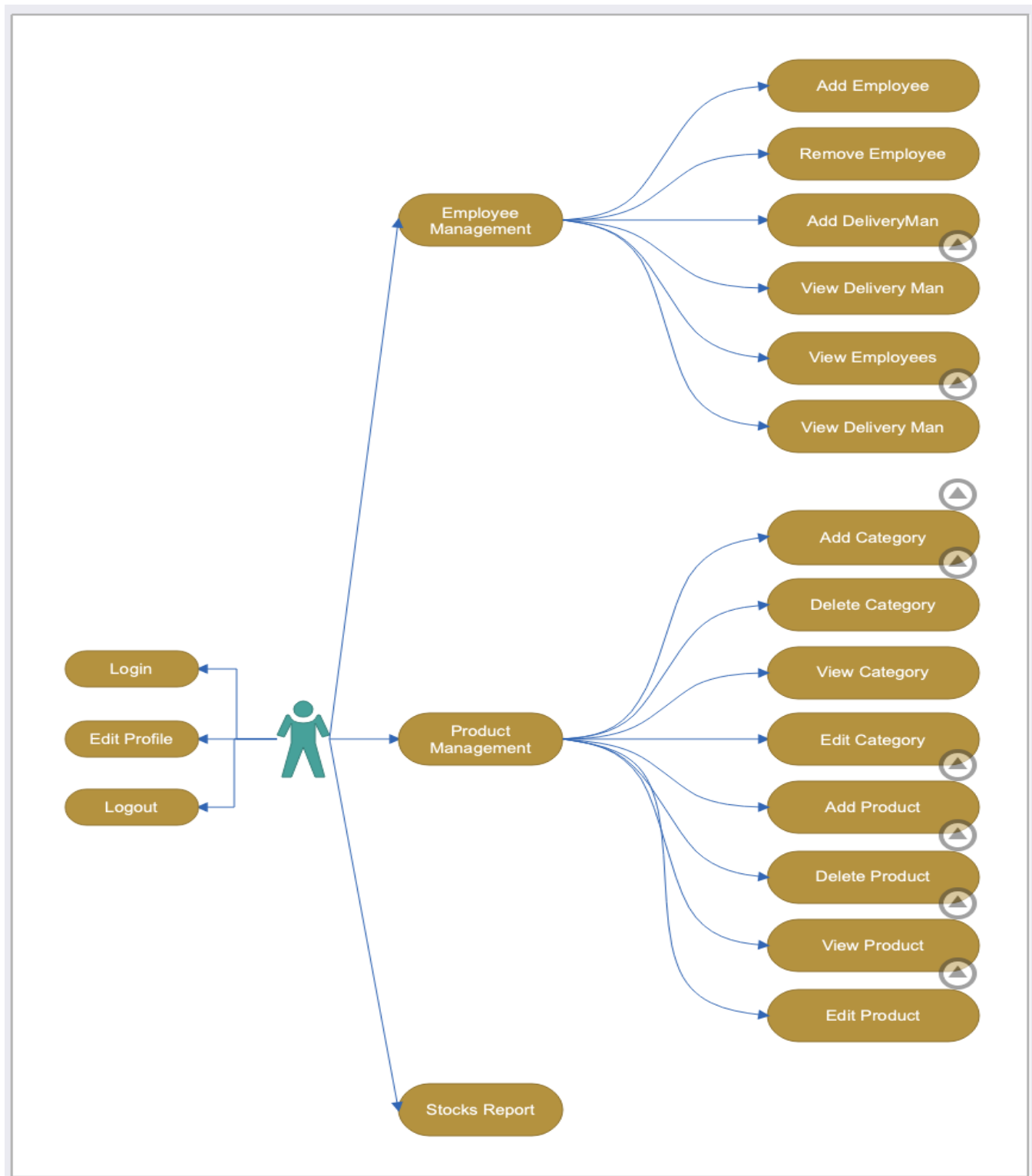


## 6.5 Activity Diagram

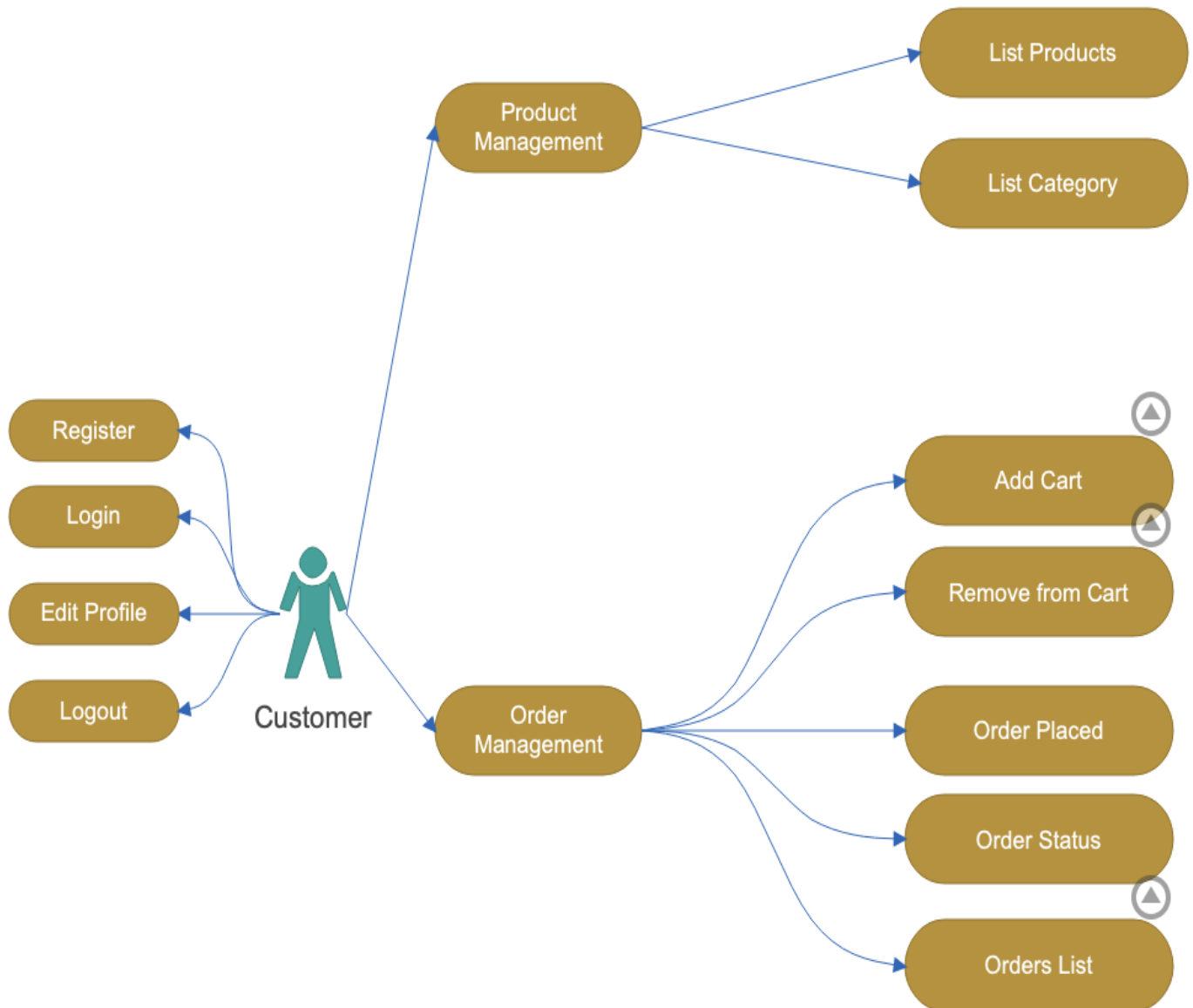




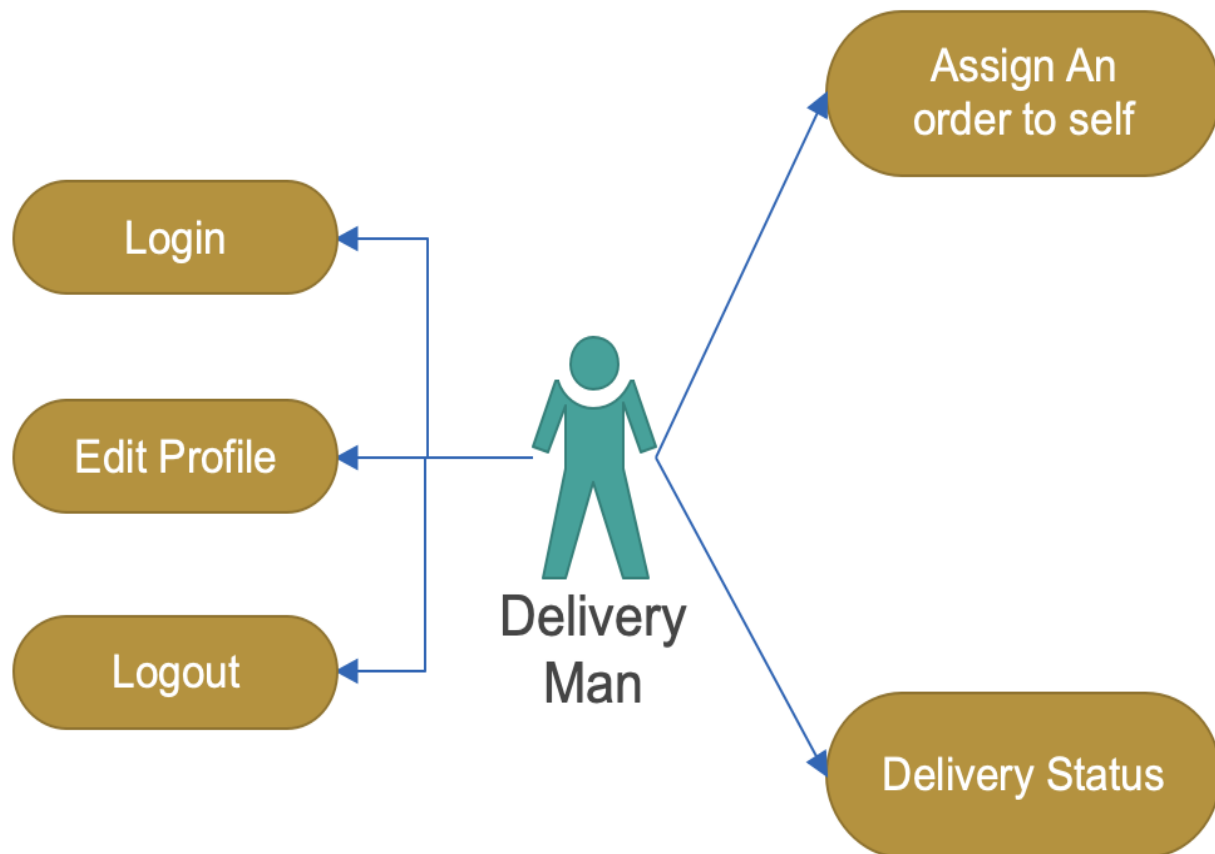
### 6.6.1 Admin



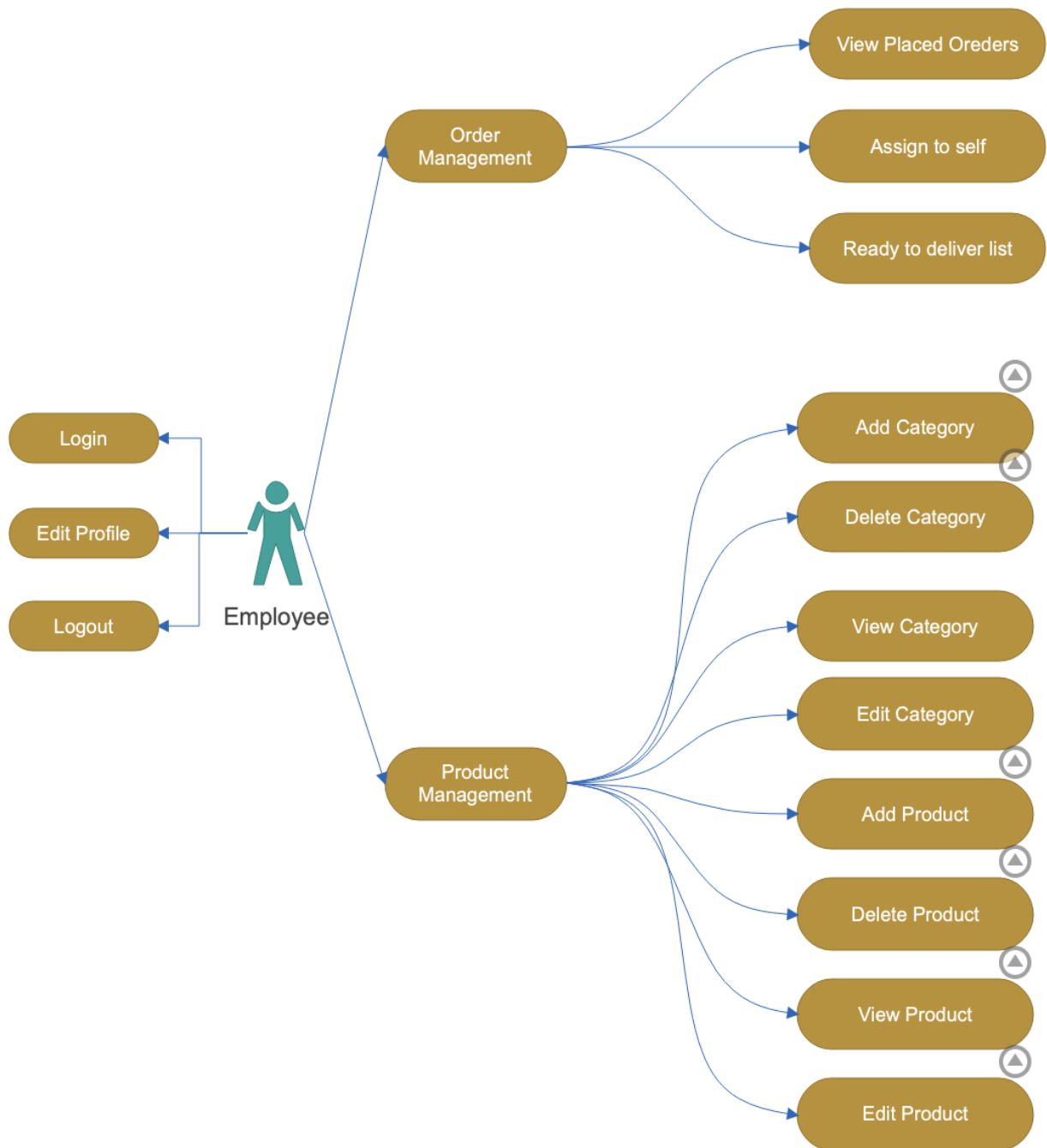
### 6.6.2 Customer



### **6.6.3 Delivery-Man**



### 6.6.4 Employee



## 7. Test Case

Test Case ID	Test Case	Test Case I/P	Actual Result	Expected Result	Test case criteria(P/F)
001	Admin enter the correct username or password click on submit button	Username or password	Accept	Accept	P
001	Admin enter the wrong username or password click on submit button	Username or password	Error come	Accept	P
002	Employee enter the correct username or password click on submit button	Username or password	Accept	Accept	P
002	Employee enter the wrong username or password click on submit button	Username or password	Error come	Accept	P
003	Delivery person enter the correct username or password	Username or password	Accept	Accept	P

	click on submit button				
003	Delivery person enter the wrong username or password click on submit button	Username or password	Error come	Accept	P
004	Customer enter the correct username or password click on submit button	Username or password	Accept	Accept	P
005	Customer enter the wrong username or password click on submit button	Username or password	Error come	Accept	P

**Login Test Cases**  
**Registration Test Cases**

Test Case ID	Test Case	Test Case I/P	Actual Result	Expected Result	Test case criteria(P/F)
001	Enter the number in username, middle name, last name field	Number	Error Comes	Error Should Comes	P
001	Enter the character in username, middle name, last name field	Character	Accept	Accept	p
002	Enter the invalid email id format in email id field	pp@gmail.com	Error comes	Error Should Comes	P
002	Enter the valid email id format in email id field	pp@gmail.com	Accept	Accept	P
003	Enter the invalid digit no in phone no field	99999	Error comes	Error Should Comes	P
003	Enter the 10 digit no in phone no field	9999999999	Accept	Accept	P
006	Enter the 8 digits password	33333333	Accept	Accept	P

---

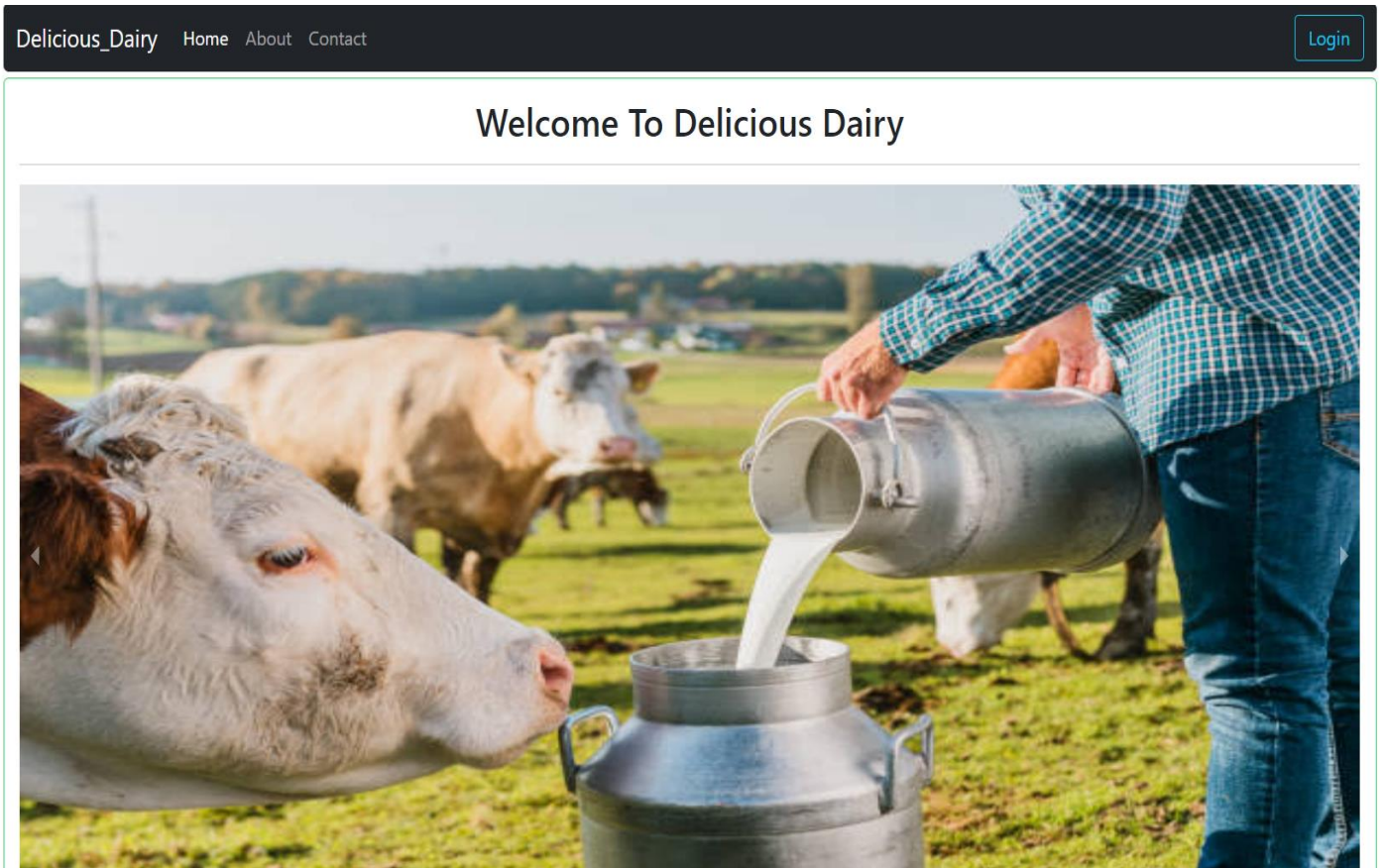
**Logout Test Cases**

Test case ID	Test case	Test case I/P	Actual Result	Expected Result	Test cases criteria(P/F)
001	Logout	User exit	Session exit	Logout successfully	P



## 8. Screenshots

### Home Page-1



## Sign-In page

Delicious\_Dairy Home About Contact [Login](#)

### Login

Email Address  
name@example.com

Password  
password

[Login](#)

New around here? [Sign Up](#)

Developed By Team Delicious\_Dairy ©

## Sign-up page

Delicious\_Dairy Home About Contact [Login](#)

### SignUp

First Name Last Name  
First Name Last Name

Email Address  
name@example.com

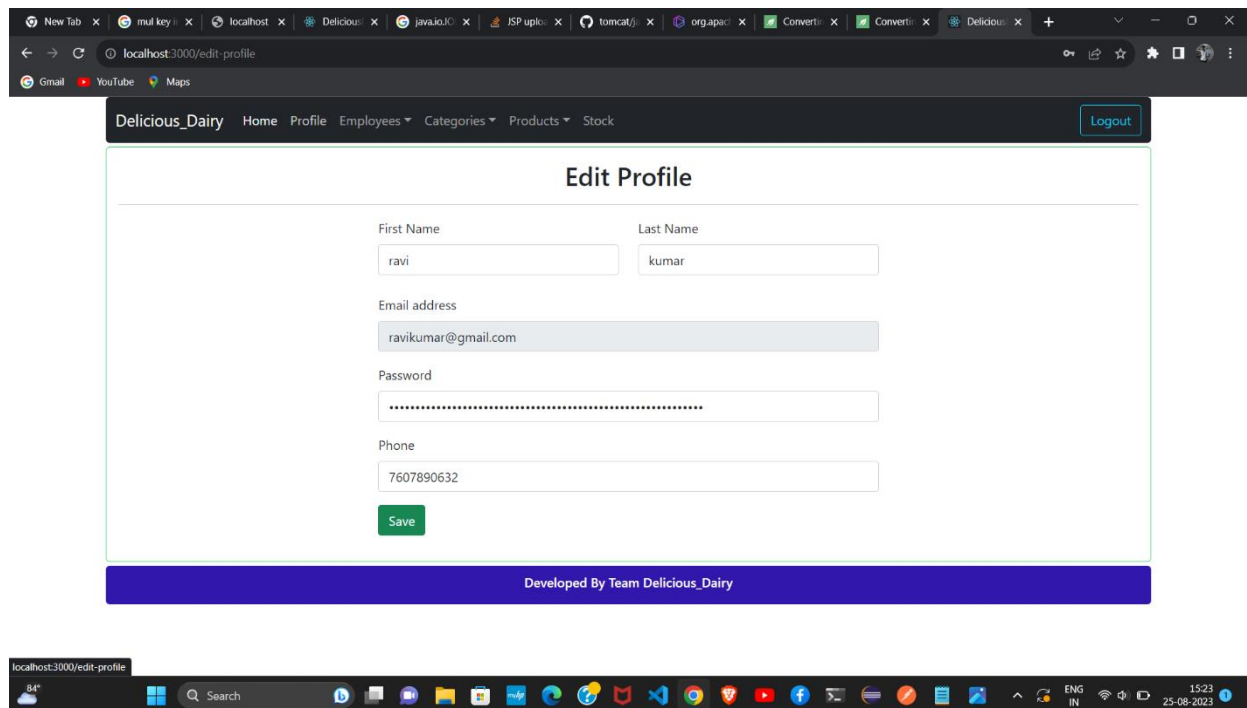
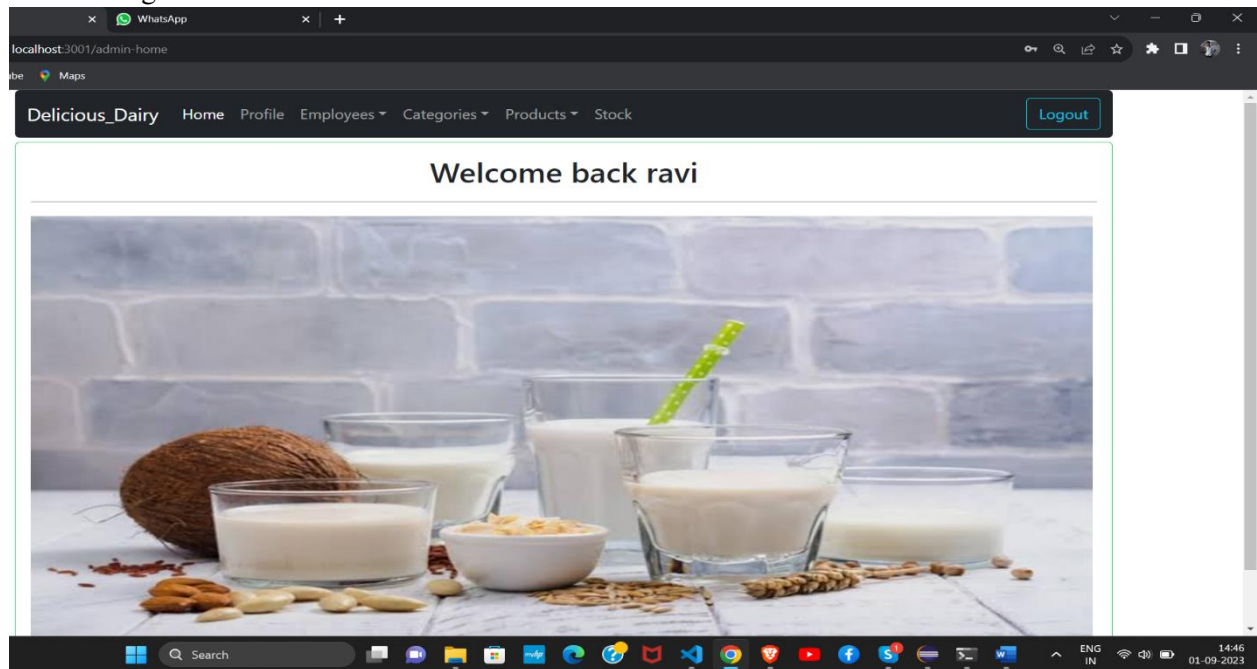
Password  
\*\*\*\*\*

[Register](#)

Already a User? [Signin](#)

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## Admin Login.



Delicious\_Dairy Home Profile Employees Categories Products Stock Logout

## SignUp

First Name: Sagar Last Name: more

Email Address: sagar@gmail.com

Password: .....

Role: -- Select

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Delicious\_Dairy Home Profile Employees Categories Products Stock Logout

## All Employees

View Employees			View Deliverers		
Name	Email	Phone	Name	Email	Phone
sonu	sonu@gmail.com	Not Provided	harshal	harshal@gmail.com	Not Provided
Ayush	ayush@gmail.com	Not Provided	krishna	krisna@gmail.com	Not Provided
Vishal	vishal@gmail.com	Not Provided	Deepak	deepak@gmail.com	Not Provided
Poorwa	poorwa@gmail.com	Not Provided	Ashish	ashish@gmail.com	Not Provided
Anuja	anuja@gmail.com	Not Provided	Gajju	gajju@gmail.com	Not Provided
Jermmy	jermmy@gmail.com	Not Provided	chhailu	chhailu@gmail.com	Not Provided

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Delicious\_Dairy Home Profile Employees Categories Products Stock Logout

### Categories


1	Milk	ACTIVE	Save	Remove
2	Curd	ACTIVE	Save	Remove
3	Cheese	ACTIVE	Save	Remove
4	Butter	ACTIVE	Save	Remove
5	Chocolate	ACTIVE	Save	Remove
6	Paneer	ACTIVE	Save	Remove
7	Ice-Cream	ACTIVE	Save	Remove
8	Sweets	ACTIVE	Save	Remove

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Sweets category d

Delicious\_Dairy Home Profile Employees Categories Products Stock Logout

### Add Product



Add or Change Image  
Choose File Product1.jpg

Product Name  
Amul Buffalo Milk

Product Description  
500ml

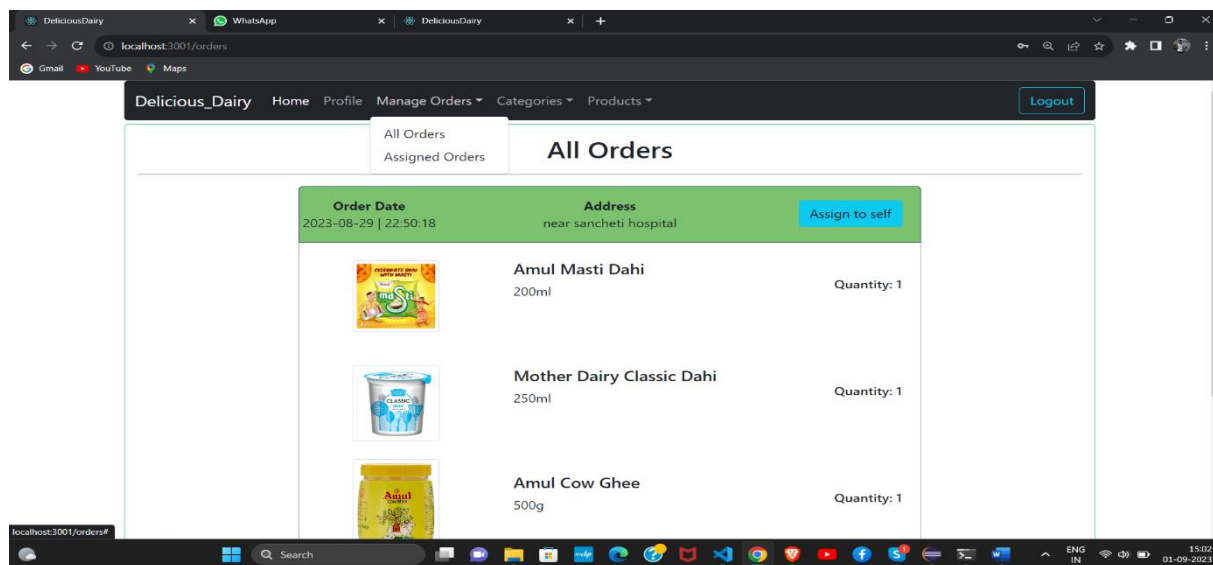
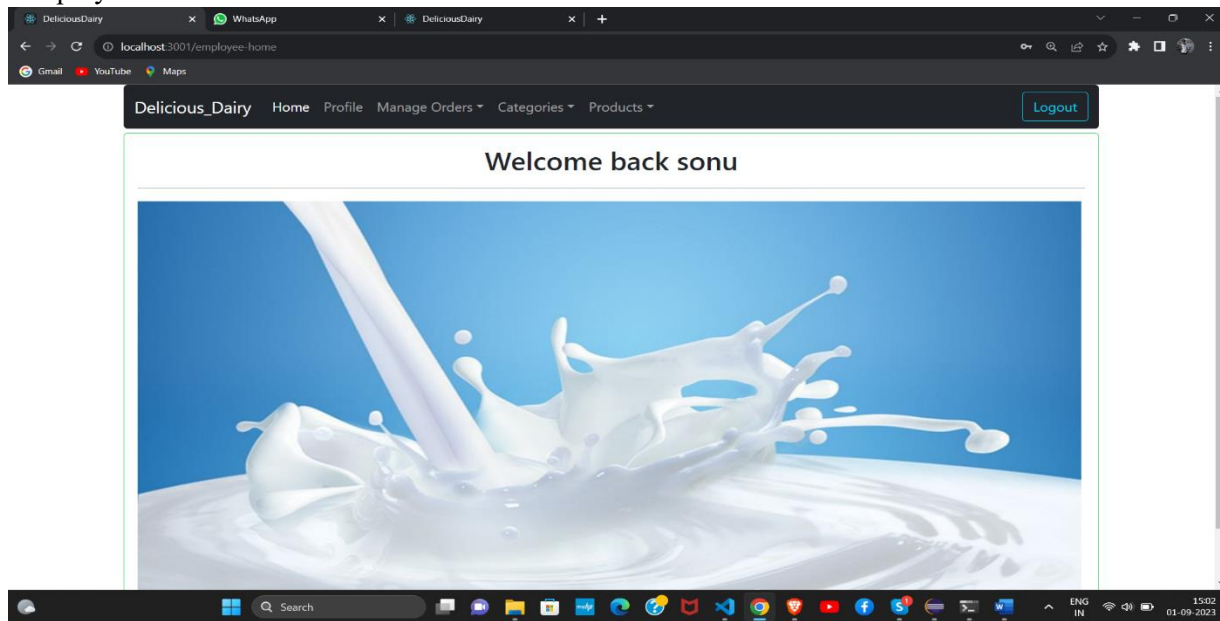
Category: Milk New Category Price: 45

Quantity: 20

Add Product Cancel

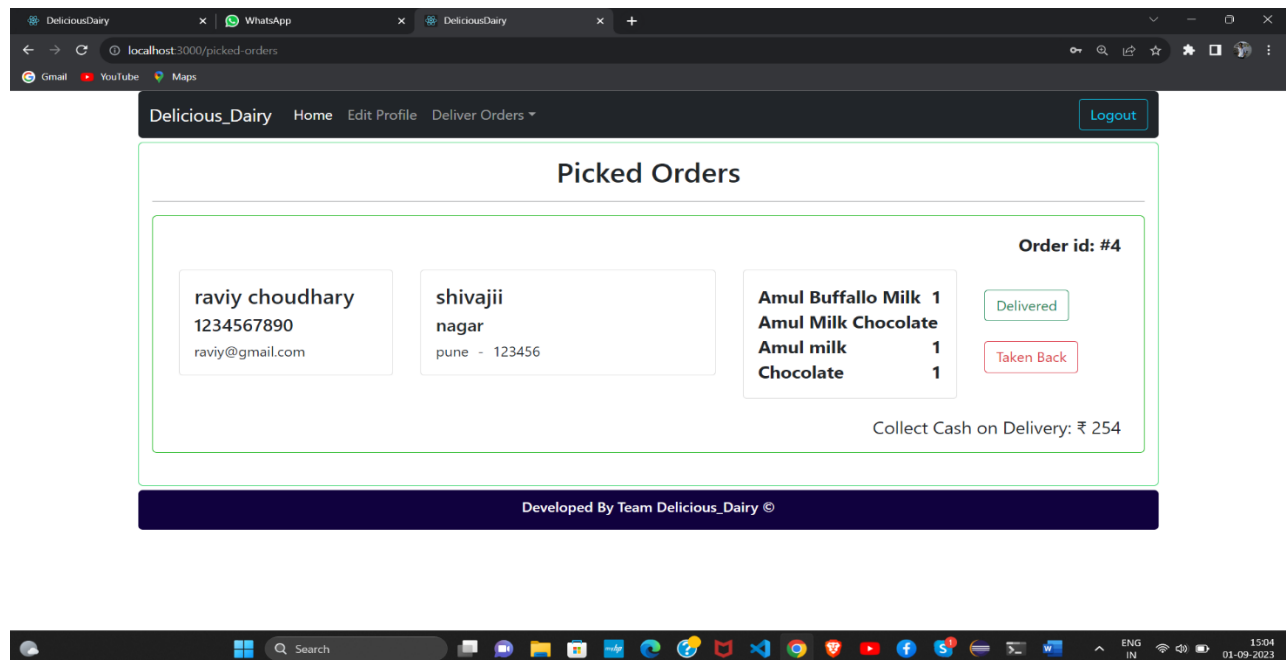
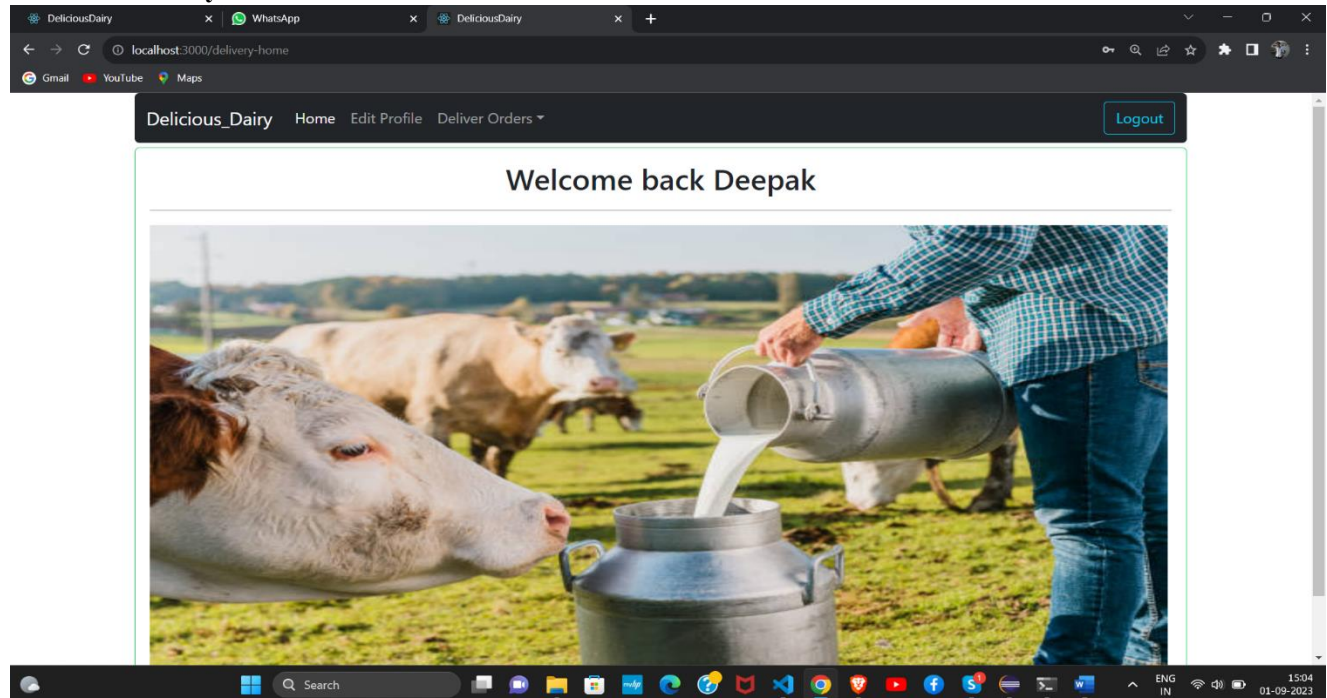
Developed By Team Delicious\_Dairy

## Employee

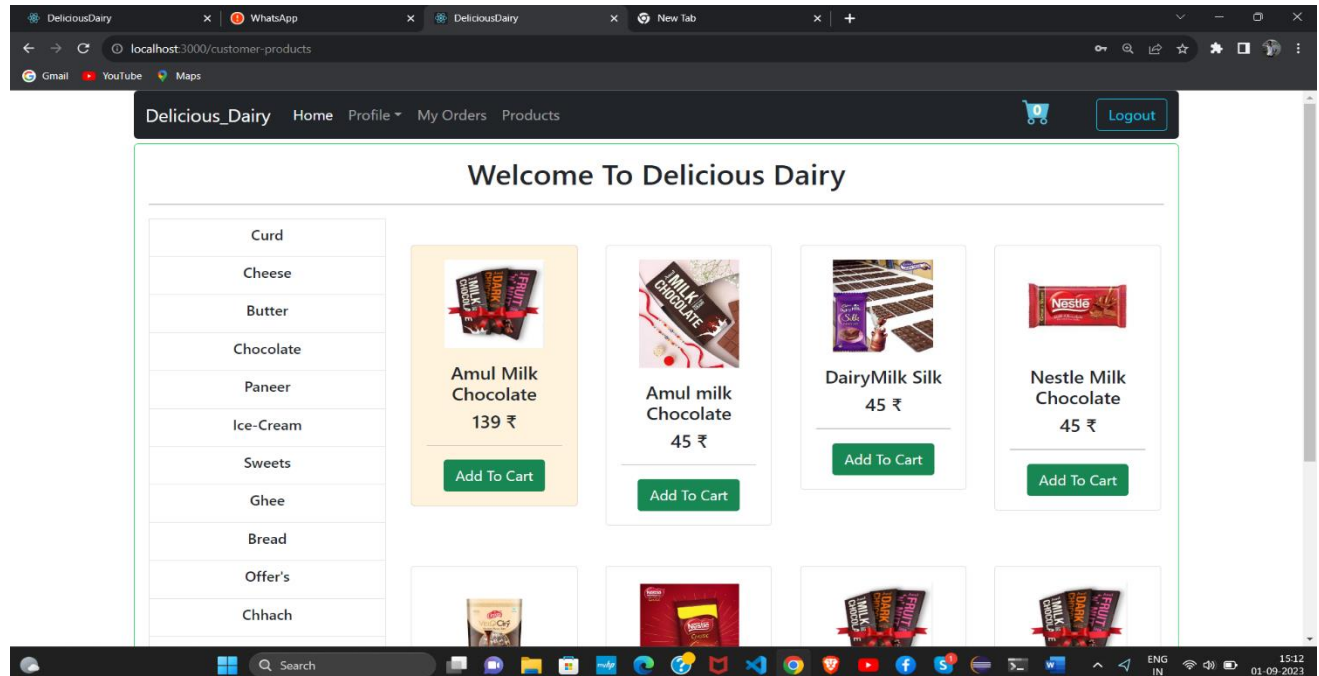
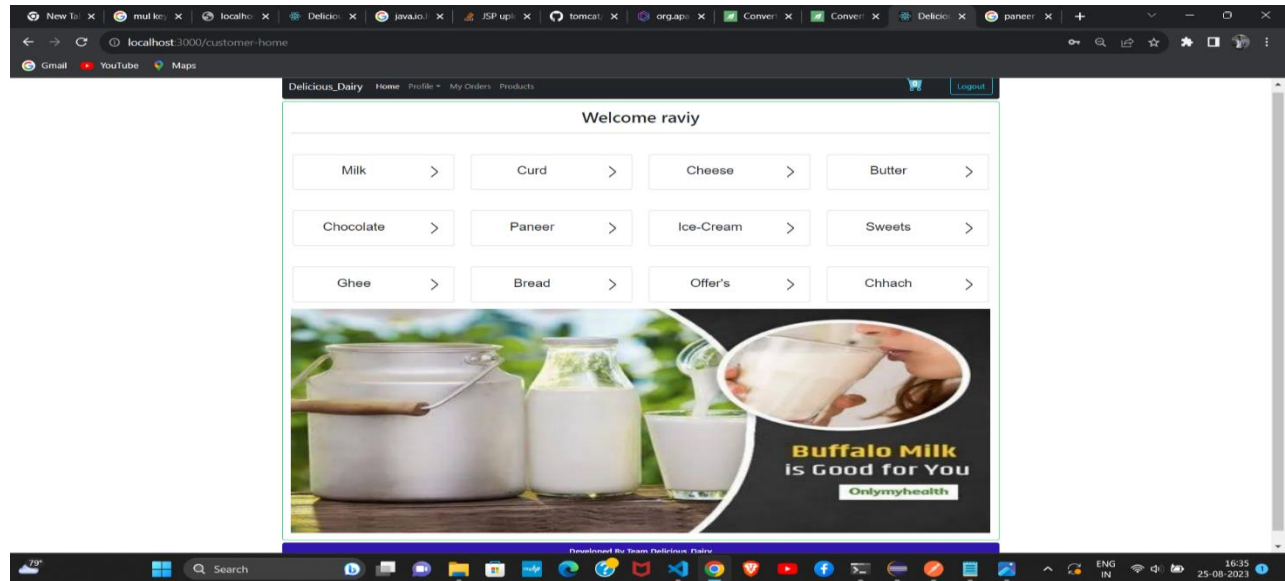




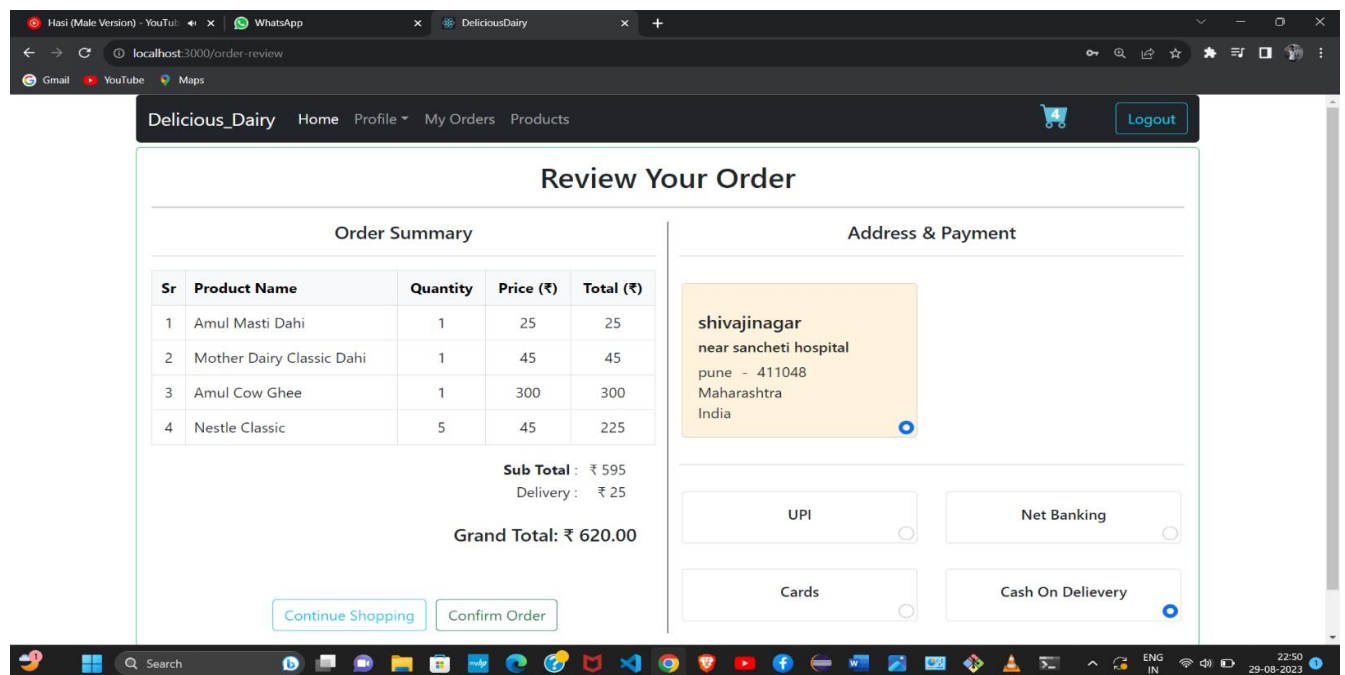
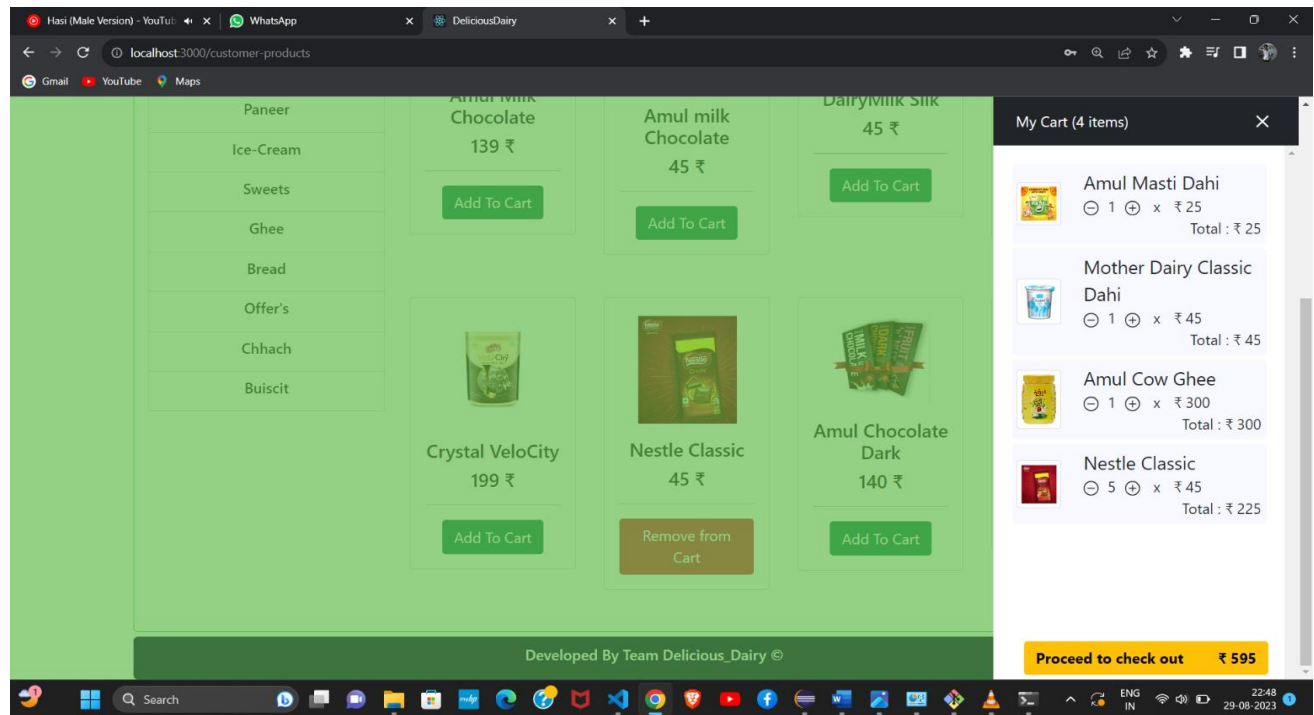
## Delivery Person






## Customer







The screenshot shows a web browser window with multiple tabs for 'DeliciousDairy' and 'WhatsApp'. The address bar displays 'localhost:3000/my-orders'. The browser interface includes a search bar, navigation buttons, and a taskbar at the bottom with various application icons. The main content area features a table with order details.

Order Date	Total Price	Latest Update	Order status
2023-08-28   15:55:48	229	2023-09-01   15:16:35	DELIVERED
<div>  <div> <p><b>Amul Buffalo Milk</b></p> <p>500ml</p> <p>Price: 45 x 1</p> </div> </div>			
<div>  <div> <p><b>Amul Milk Chocolate</b></p> <p>3pc</p> <p>Price: 139 x 1</p> </div> </div>			
<div>  <div> <p><b>Amul milk Chocolate</b></p> <p>15g</p> <p>Price: 45 x 1</p> </div> </div>			

