A PROJECT REPORT
ON

ONLINE FRESH MARKET

SUBMITTED IN PARTIAL

FULFILMENT OF

PG DIPLOMA IN ADVANCED COMPUTING (PG-DAC)

UNDER THE GUIDANCE OF

Mr. Onkar Mirashe

PRESENTED BY

230340120066	Ganesh Godse
230340120160	Pranay Sonsare
230340120167	Premkumar Danav
230340120182	Samiksha Soor
230340120205	Sukanya Suralkar

AT

CENTER FOR DEVELOPMENT OF ADVANCED COMPUTING C-DAC, PUNE

ACKNOWLEDGEMENT

The project "ONLINE FRESH MARKET" was a great learning experience for us and we are submitting this work to Advanced Computing Training School (C-DAC ACTS, Pune).

We are very glad to mention the name of Mr. Onkar Mirashe for his valuable guidance to work on this project.

We are highly grateful to Ms. Risha P. R., Manager of ACTS Training Centre, CDAC, for her guidance and support whenever necessary during the course of our journey to acquire PG-Diploma in Advanced Computing (PG-DAC) through CDAC ACTS, Pune.

Our heartfelt thanks go to Dr. Priyanka Ranade (Course Coordinator, PG-DAC) who gave us all the required support and kind coordination to provide all the necessities to complete the project and throughout the course up to the last day of the course.

From:

230340120066	Ganesh Godse
230340120160	Pranay Sonsare
230340120167	Premkumar Danav
230340120182	Samiksha Soor
230340120205	Sukanya Suralkar

TABLE OF CONTENTS

ABSTRACT

The rapid growth of e-commerce has transformed the way consumers shop for a wide array of products, and the agricultural sector is no exception. The Online Fresh Market project encapsulates the essence of this digital transformation, offering a modern and convenient platform for purchasing fresh vegetables and fruits. In a world that values convenience and quality, our project aims to provide a seamless and user-friendly online shopping experience for individuals seeking fresh produce.

In this bustling era, the **Online Fresh Market** stands out by offering an extensive selection of products meticulously categorized for easy navigation. Our project caters to the modern lifestyle, where time is of the essence, by enabling customers to browse, select, and purchase a diverse range of fresh items from the comfort of their homes. With a secure and intuitive interface, customers can explore different categories, learn about the produce's origins, and even read customer reviews before making their purchase decisions.

The **Online Fresh Market** project represents an exciting venture into the digitalization of traditional industries. Through this platform, we strive to enhance the way consumers access fresh produce, foster stronger connections between producers and buyers, and contribute to a more sustainable and efficient supply chain. By combining technology, quality, and convenience, our project envisions a future where fresh produce shopping becomes a hassle-free and enjoyable experience for all.

1. INTRODUCTION

The concept of an online fresh market has its roots intertwined with the timeless practice of buying and selling fresh produce. From the early days of local marketplaces to the bustling stalls of modern grocery stores, the essence of connecting consumers with fresh, quality food has remained unchanged. However, it is only in recent years, spurred by technological advancements and changing consumer preferences, that the online fresh market has truly come into its own.

Unlike the traditional approach to purchasing groceries, the online fresh market is redefining the way we shop for fruits, vegetables, and other perishable items. By leveraging technology, customers can now browse through an extensive array of produce, read about their origins, and make well-informed decisions from the comfort of their homes. This evolution is fueled not only by the desire for convenience but also by a growing consciousness about the importance of knowing where our food comes from.

Our online fresh market project is a step towards revolutionizing the grocery shopping experience. With a focus on quality, freshness, and sustainability, our platform aspires to bridge the gap between farmers and consumers, ensuring that the journey from the farm to your table is as direct and efficient as possible. By providing a user-friendly interface, secure transactions, and timely deliveries, we aim to transform grocery shopping into a seamless and enjoyable activity.

In essence, our online fresh market project stands as a testament to the intersection of tradition and innovation, where centuries-old practices of buying fresh produce are seamlessly integrated with the possibilities of the digital age. It is a celebration of good food, community, and the shared values of freshness and quality that resonate with consumers across the globe.

2. PROJECT OVERVIEW AND SUMMARY

2.1 PURPOSE :

The purpose of the Online Fresh Market is to revolutionize how consumers access and purchase fresh produce. By creating a seamless digital platform, we aim to provide convenient, high-quality, and locally sourced products to customers. Our mission is to bridge the gap between producers and consumers, ensuring transparency, sustainability, and efficiency in the supply chain. Through this initiative, we strive to empower individuals to make informed choices about their food while supporting local farmers and promoting a healthier and more accessible way of shopping for fresh goods.

2.2 SCOPE :

The scope of the Online Fresh Market encompasses providing an extensive online platform for customers to access a diverse range of fresh produce. It includes features like intuitive browsing, detailed product information, secure transactions, and efficient delivery services. The project aims to connect consumers with local farmers, promote sustainable agriculture practices, and facilitate transparent transactions. Additionally, the scope involves catering to a broad audience, from individual buyers to restaurants and businesses, ensuring accessibility, convenience, and quality in the realm of fresh food procurement.

2.3 OVERVIEW TECHNOLOGIES USED :

2.3.1 FRONT END

- CSS
- Bootstrap
- JavaScript
- React
- Reactstrap
- Axios

2.3.2 BACK END

- Spring Boot
- Spring Dev Tools
- Spring Data JPA

2.3.3 DATABASE MANAGEMENT SYSTEM

- MySQL

B. FEATURES PROVIDED

I. FOR ADMIN:

1. Homepage:
- **Add Category**: Manage product categories.
- **All Orders**: View all orders placed.
- **Assign Order Delivery**: Assign delivery personnel to orders.
- View All products by categories

2. Admin Registration and Login:

- Registration Form: Collect Admin information for account creation.
- Login Form: Allow admin to log in using their credentials.

3. Admin Profile:

- Name of Admin.

4.Search Order Id Page:

- Search ID: Allow admin to search results by Order ID, To assign Delivery.

5.Commenting System:

- Comment Box: Provide a text box for users to write and submit comments.
- Reply Option: Allow users to reply to specific comments.

6.Navigation Menu:

- Home: Link to the homepage.
- About Us: Information about the Online Fresh Market.
- Contact: A way for users to get in touch with Online Fresh Market Management.
- FAQ: Frequently Asked Questions about the order and its policies.
- Logout: The admin can log out by pressing the logout key

II. FOR CUSTOMER

1 Registration and Login: Customers can login after registration and then add products to the cart.

2. Home Page Overview: Customer can see all products by categories and add them into the cart.

.

3. My Cart : The product added by the customer will be visible in cart and Customer can delete and checkout products.

4. My Order: The customer can see its order history.

5.Navigation Menu:

- Home: Link to the homepage.
- About Us: Information about the Online Fresh Market.
- Contact: A way for users to get in touch with Online Fresh Market Management.
- FAQ: Frequently Asked Questions about the order and its policies.
- Logout: The admin can log out by pressing the logout key

III. FOR SUPPLIER

1. The supplier can add products.

2. Navigation Menu:

- Home: Link to the homepage.
- About Us: Information about the Online Fresh Market.
- Contact: A way for users to get in touch with Online Fresh Market Management.
- FAQ: Frequently Asked Questions about the order and its policies.
- Logout: The admin can log out by pressing the logout key

IV. FOR DELIVERY PERSON

1. My Deliveries: A delivery person can see its deliveries history.

2. Update Order Delivery: delivery person can search for customer order using order ID to update delivery status.

2.4 FEASIBILITY STUDY

Feasibility study for the Online Fresh Market confirms its viability. It examines technical capability to create a user-friendly platform, financial prospects to sustain operations, and operational potential to connect farmers and consumers. Ensuring success before implementation is essential.

2.4.1 TECHNICAL FEASIBILITY

In this type of feasibility study, the system analyst has to check whether it is possible or not to develop the requested system with the available manpower, software, hardware, etc.

This project makes use of cross-platform software and solutions like Java, and hence can run on any operating system. React, used in front-end, is swift and versatile technology when it comes to delivering the requested page. The combination of Spring Boot, Spring Data JPA for backend make for a fast, easy to set-up and reliable system to interact with the database, as they are secure and transactional in nature. Since the sensitive data of customers and admins need to be stored in a robust and secure database, MySQL database management system was chosen as it is an industry standard.

2.4.2 OPERATIONAL FEASIBILITY

In this type of feasibility study, the operation of the system is considered. An analysis is performed on whether it is feasible for the user department to use the application. Thus, the proposed system is said to be operationally feasible only if clients are able to understand the system clearly and correctly, and can use it with ease.In the design of this project, we always kept user experience in mind. We made an effort to have a good user interface with consistent theme and alluring design to keep the users interested and engaged. In our project, the use of universally known icons and instructions that are easy to understand makes sure that the user will not need any special technical know-how to use the application. We made sure that the information available throughout the application is arranged in a logically coherent and consistent manner, guaranteeing that the users will have a smooth and effortless experience and even enjoy using the application.

2.4.3 ECONOMIC FEASIBILITY

In this type of feasibility study, the benefits of the system to the organization are considered by taking into consideration the cost-benefit analysis. All the software and technologies used in our project free, open-source, and widely available, with each of the technologies having an extensive community support. This makes “ONLINE FRESH MARKET” an economically feasible solution to implement it.

3. REQUIREMENTS FULFILLED

3.1 FUNCTIONAL REQUIREMENTS

Following are the functional requirements fulfilled by our project:

CUSTOMER

- Customer can login from the system.
- Customer can add product into the cart.
- Customer can see order history

3.2 NON-FUNCTIONAL REQUIREMENTS

Following are the non-functional requirements fulfilled by our project:

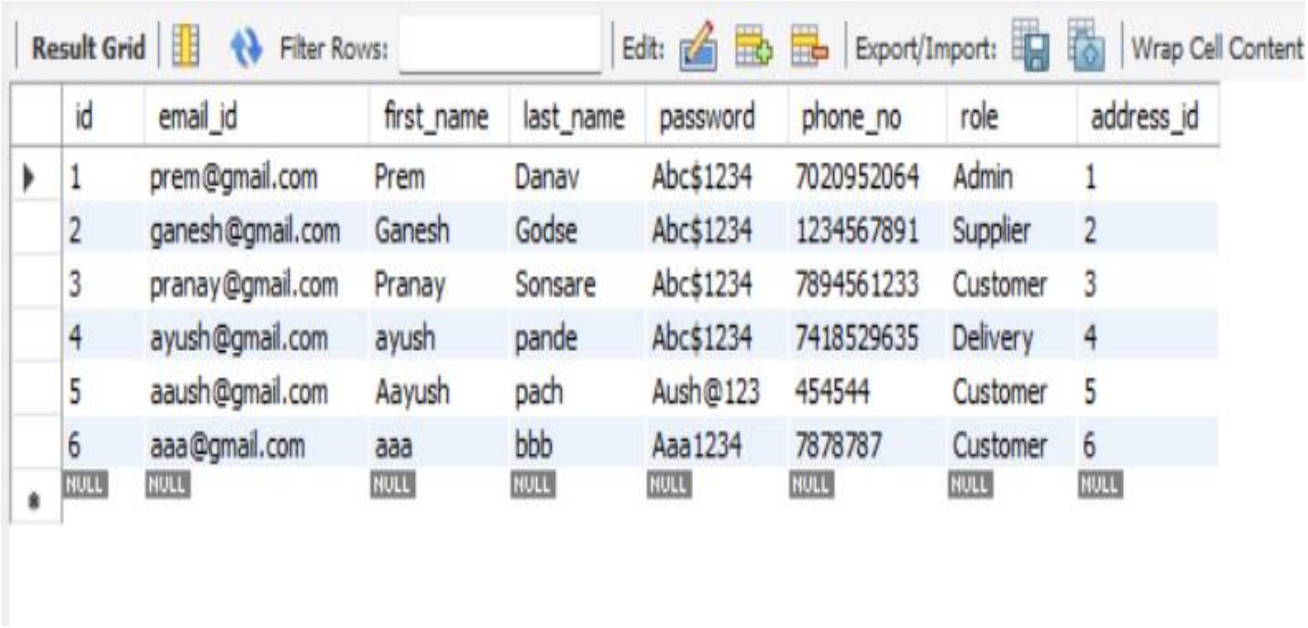
- Since the application uses lightweight and established software components that are also cross-platform, it is remarkably performant and has good supportfor every operating system.
- The use of JavaScript and React for front end and Spring Boot, Spring Data JPA quick response times toadmins and customers.
- Card-style UI and well-known icons and symbols used throughout the application provides a consistent theme and user-friendly interface that anyone can grasp easily, even without a technical background.

4. PROJECT DESIGN

4.1 DATA MODEL

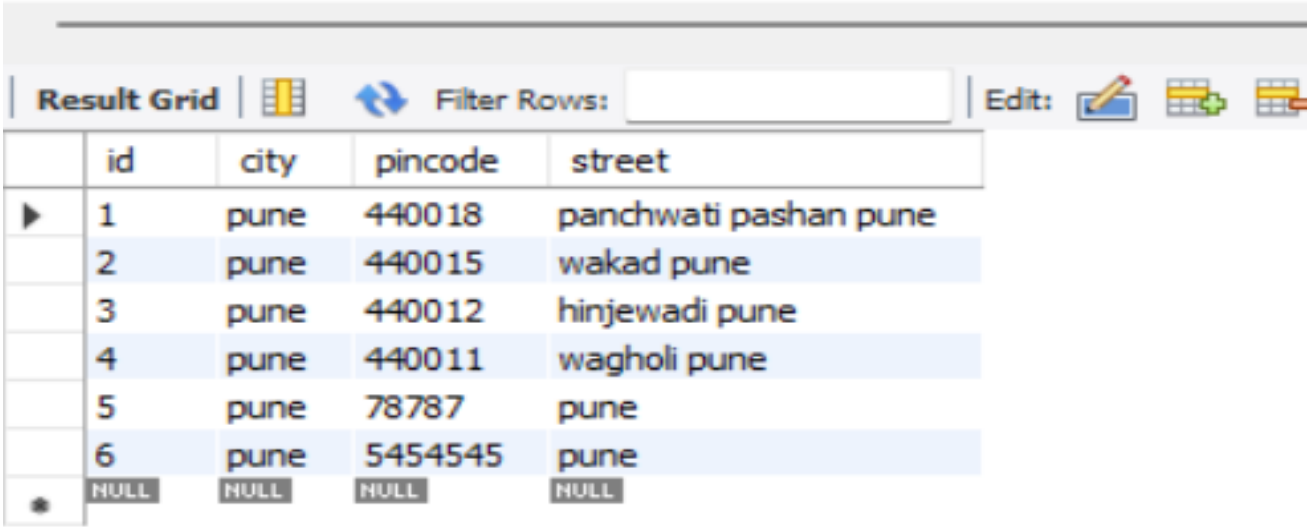
The following tables depict the database design used for “ONLINE FRESH MARKET” application:

A. User Table :



id	email_id	first_name	last_name	password	phone_no	role	address_id
1	prem@gmail.com	Prem	Danav	Abc$1234	7020952064	Admin	1
2	ganesh@gmail.com	Ganesh	Godse	Abc$1234	1234567891	Supplier	2
3	pranay@gmail.com	Pranay	Sonsare	Abc$1234	7894561233	Customer	3
4	ayush@gmail.com	ayush	pande	Abc$1234	7418529635	Delivery	4
5	aaush@gmail.com	Aayush	pach	Aush@123	454544	Customer	5
6	aaa@gmail.com	aaa	bbb	Aaa1234	7878787	Customer	6
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

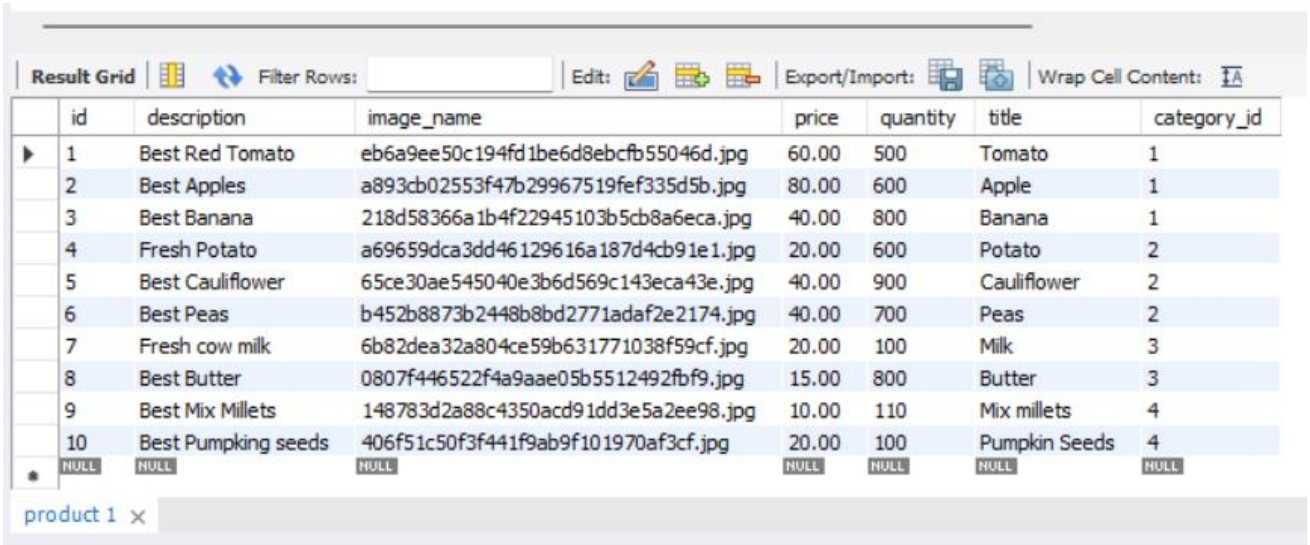
B. Address Table :



Result Grid | Filter Rows: | Edit:

id	city	pincode	street
1	pune	440018	panchwati pashan pune
2	pune	440015	wakad pune
3	pune	440012	hinjewadi pune
4	pune	440011	wagholi pune
5	pune	78787	pune
6	pune	5454545	pune
NULL	NULL	NULL	NULL

C. Product Table :

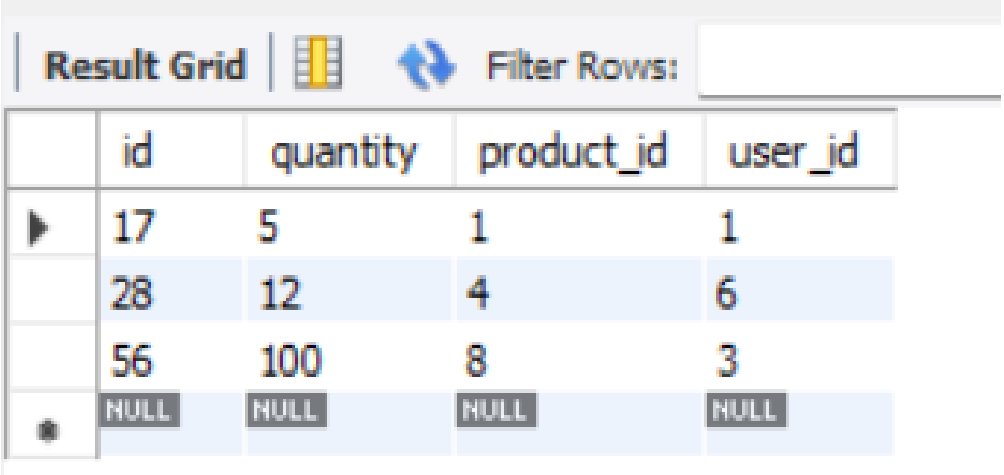


Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

id	description	image_name	price	quantity	title	category_id
1	Best Red Tomato	eb6a9ee50c194fd1be6d8ebcfb55046d.jpg	60.00	500	Tomato	1
2	Best Apples	a893cb02553f47b29967519fef335d5b.jpg	80.00	600	Apple	1
3	Best Banana	218d58366a1b4f22945103b5cb8a6eca.jpg	40.00	800	Banana	1
4	Fresh Potato	a69659dca3dd46129616a187d4cb91e1.jpg	20.00	600	Potato	2
5	Best Cauliflower	65ce30ae545040e3b6d569c143eca43e.jpg	40.00	900	Cauliflower	2
6	Best Peas	b452b8873b2448b8bd2771adaf2e2174.jpg	40.00	700	Peas	2
7	Fresh cow milk	6b82dea32a804ce59b631771038f59cf.jpg	20.00	100	Milk	3
8	Best Butter	0807f446522f4a9aae05b5512492fbf9.jpg	15.00	800	Butter	3
9	Best Mix Millets	148783d2a88c4350acd91dd3e5a2ee98.jpg	10.00	110	Mix millets	4
10	Best Pumpking seeds	406f51c50f3f441f9ab9f101970af3cf.jpg	20.00	100	Pumpkin Seeds	4
NULL	NULL	NULL	NULL	NULL	NULL	NULL

product 1

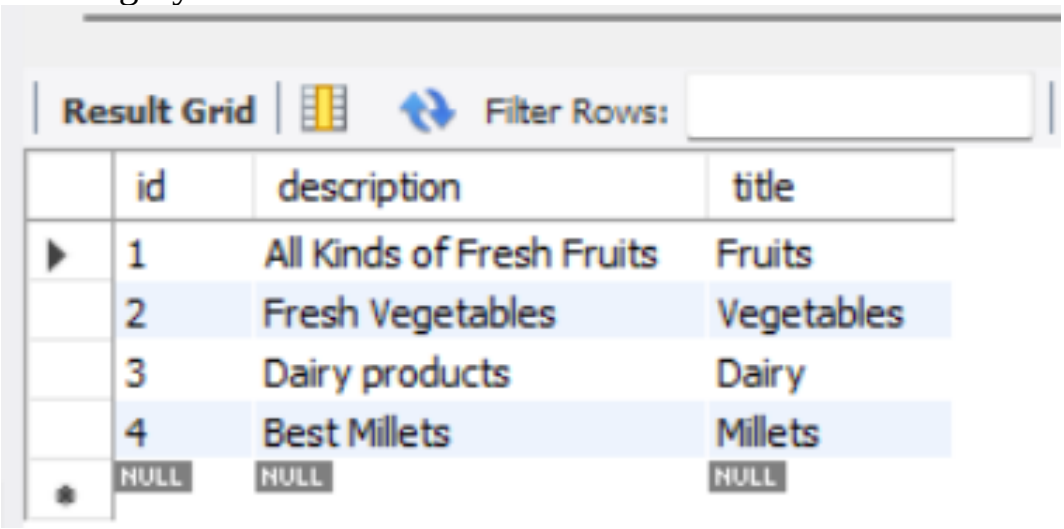
D. Cart Table



Result Grid | Filter Rows:

	id	quantity	product_id	user_id
▶	17	5	1	1
	28	12	4	6
	56	100	8	3
*	NULL	NULL	NULL	NULL

E. Category Table



Result Grid | Filter Rows:

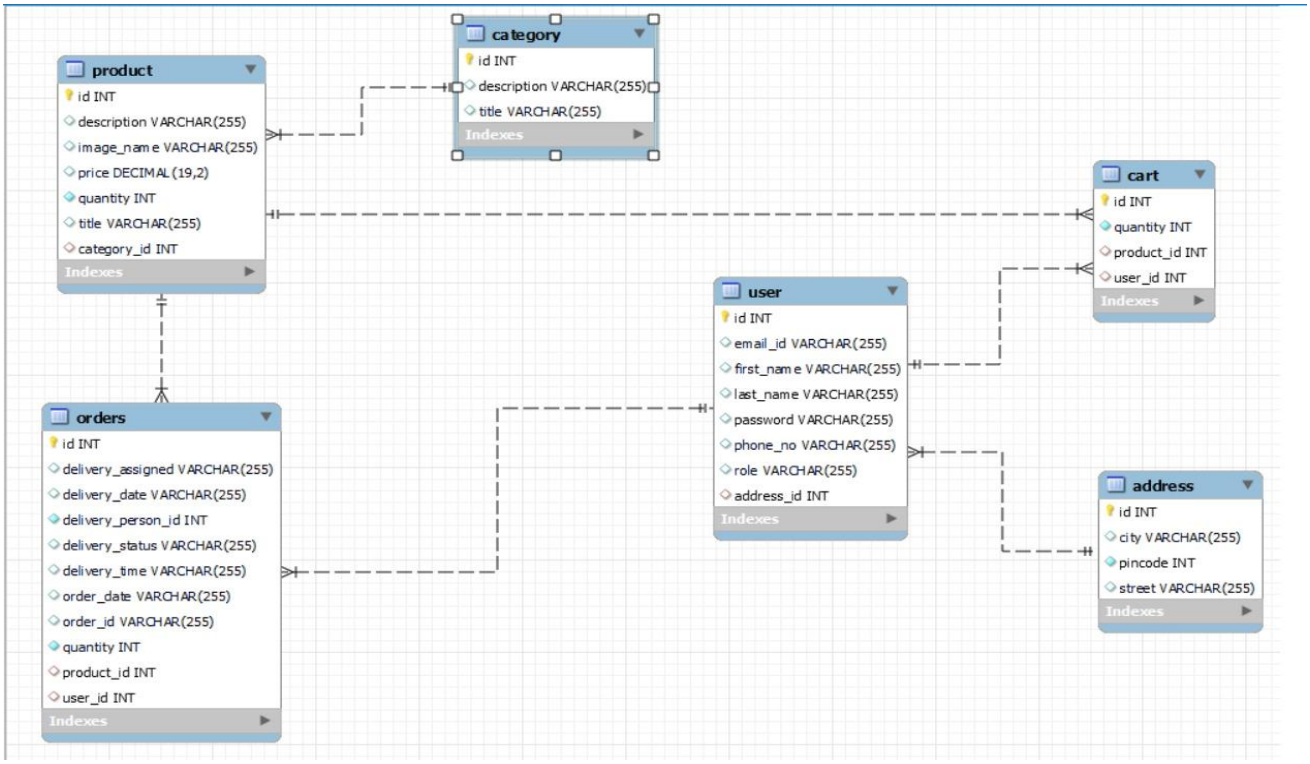
	id	description	title
▶	1	All Kinds of Fresh Fruits	Fruits
	2	Fresh Vegetables	Vegetables
	3	Dairy products	Dairy
	4	Best Millets	Millets
*	NULL	NULL	NULL

F. Orders Table

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

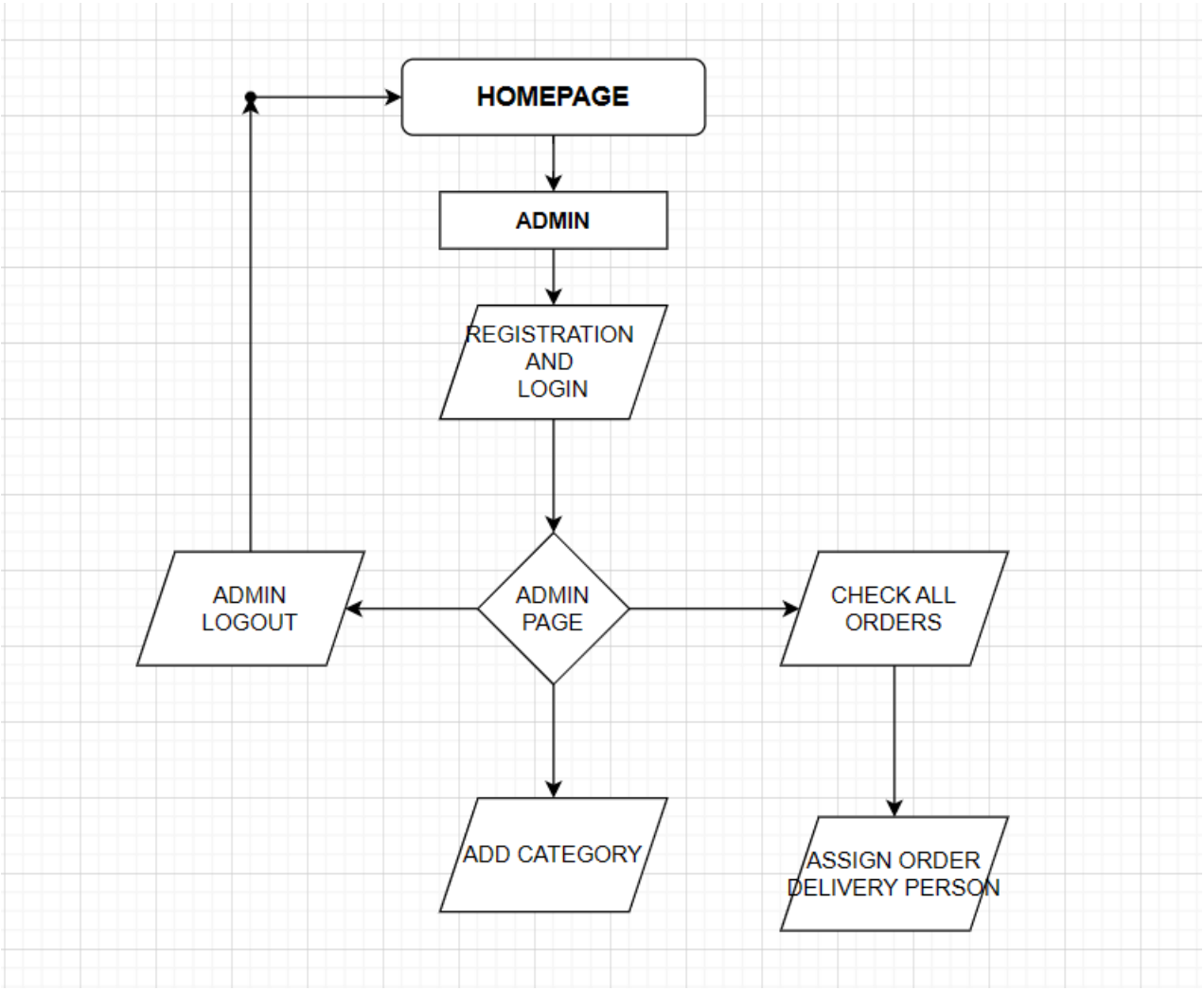
id	delivery_assigned	delivery_date	delivery_person_id	delivery_status	delivery_time	order_date	order_id	quantity	product_id	user_id
1	Yes	2023-08-29	4	Delivered	Morning	29-08-2023 13:12	9O5GIOZZ1U	10	1	3
2	Yes	2023-08-29	4	Delivered	Morning	29-08-2023 13:12	9O5GIOZZ1U	10	1	3
3	Yes	2023-08-30	4	Delivered	Afternoon	29-08-2023 14:52	TMSVA57I17	5	1	3
4	No	Pending	0	Pending		29-08-2023 15:14	A0Y9P6MDRE	71	4	3
5	No	Pending	0	Pending		29-08-2023 15:14	A0Y9P6MDRE	71	4	3
6	No	Pending	0	Pending		29-08-2023 15:26	GEKIRMOR1N	5	1	3
7	No	Pending	0	Pending		29-08-2023 15:28	B6IADVLCWU	10	2	3
8	No	Pending	0	Pending		29-08-2023 15:30	DXTY86GWBR	10	3	3
9	No	Pending	0	Pending		29-08-2023 15:34	NZUVZEC29W	10	3	3
10	Yes	2023-08-30	4	Delivered	Afternoon	29-08-2023 22:47	HU6JMBR2UA	5	3	3
11	Yes	2023-08-30	4	Delivered	Afternoon	29-08-2023 22:47	HU6JMBR2UA	20	4	3
12	No	Pending	0	Pending		30-08-2023 11:57	DOODECBTDQ	50	8	3
13	No	Pending	0	Pending		30-08-2023 12:05	BO0FBTERE4	100	8	3
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

4.2 ER DIAGRAM

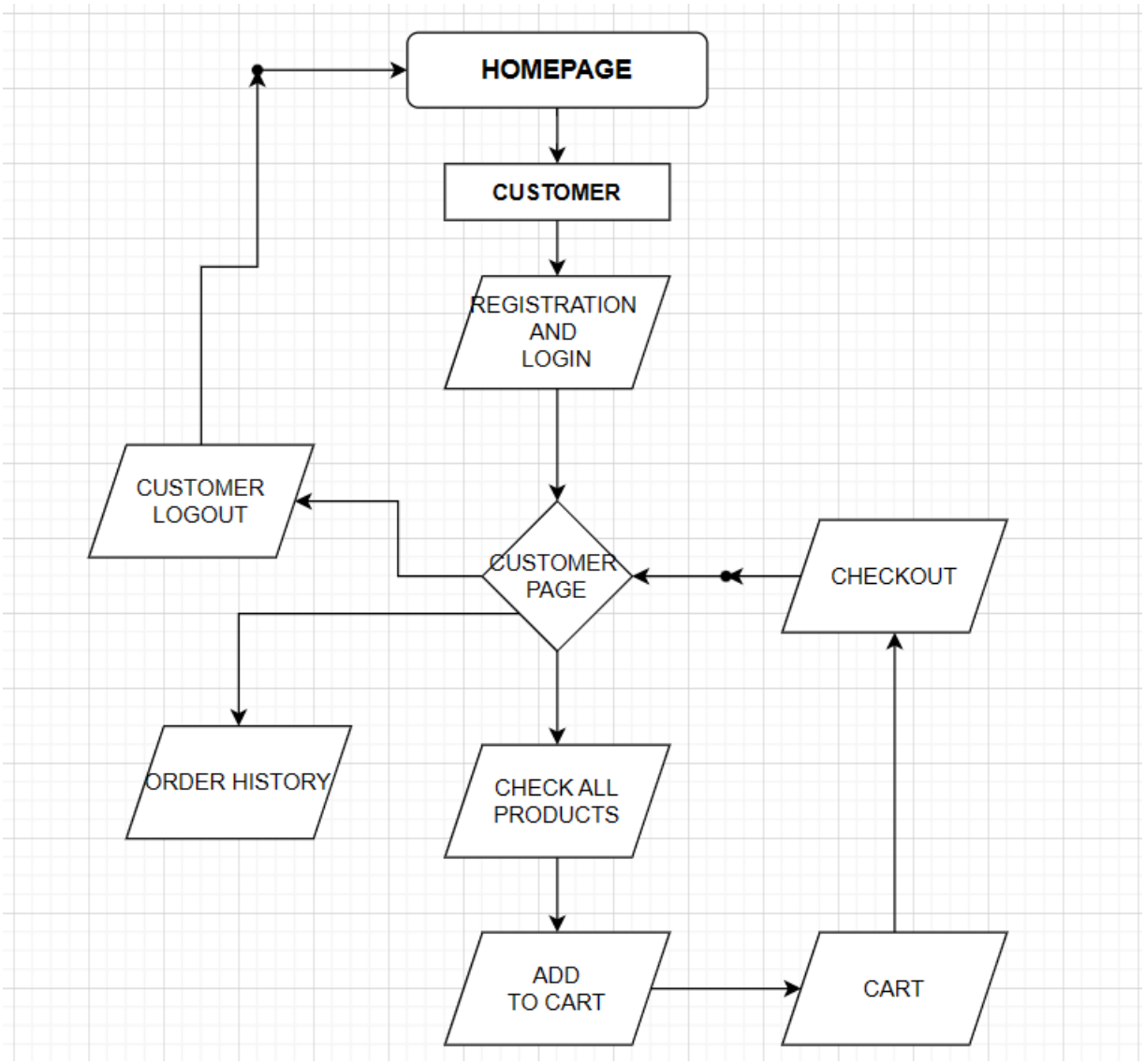


4.3 DATA FLOW DIAGRAM

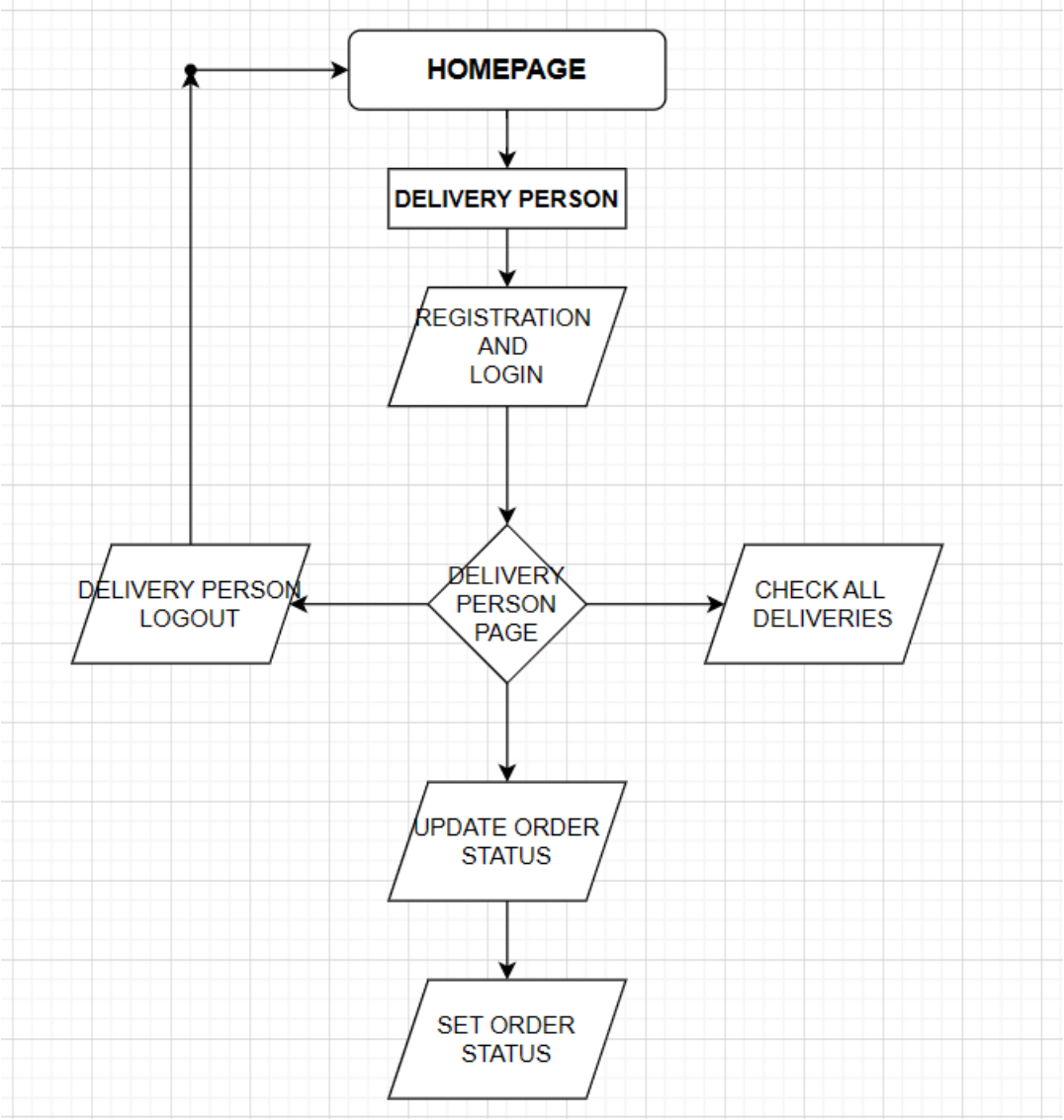
A. Admin flow Diagram



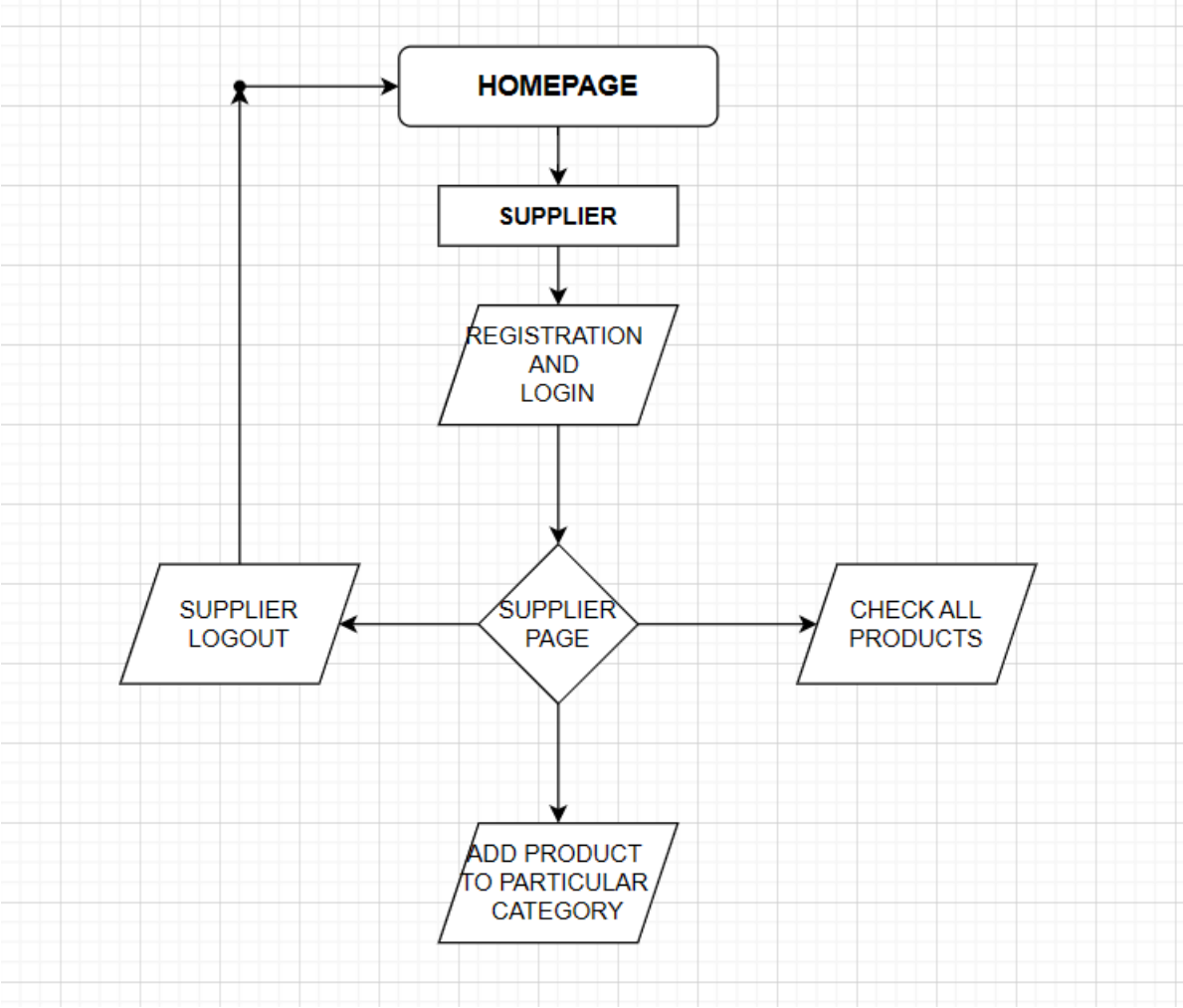
B. Customer Flow Digram



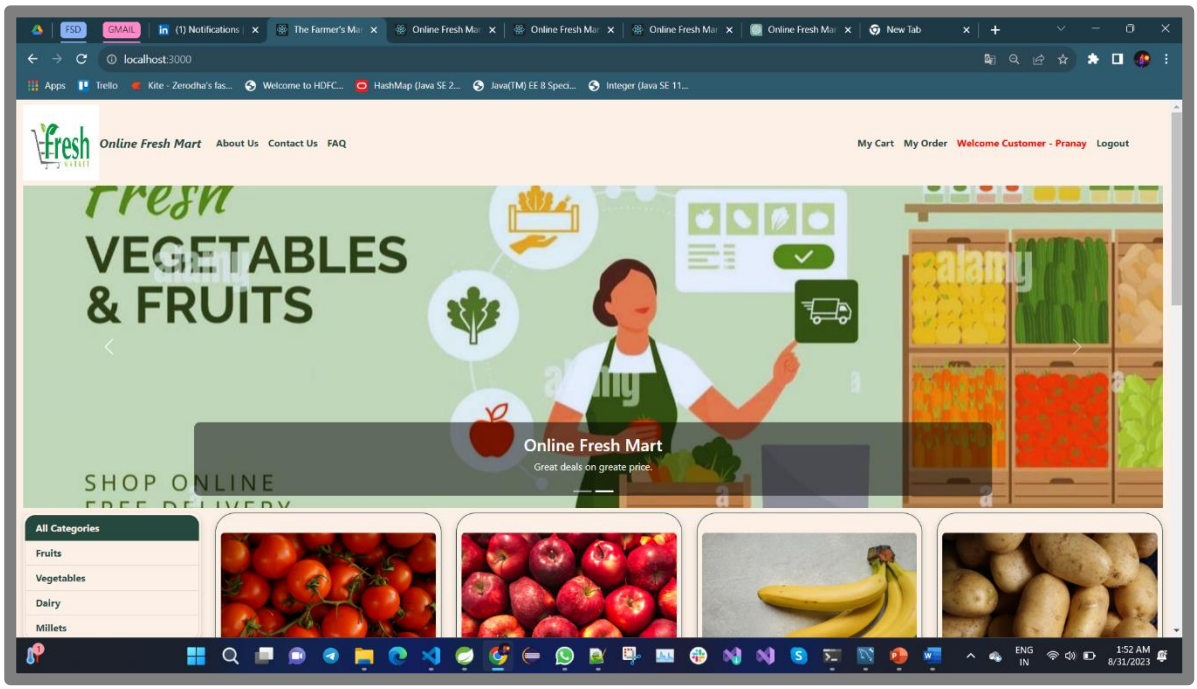
C. DELIVERY PERSON FLOW

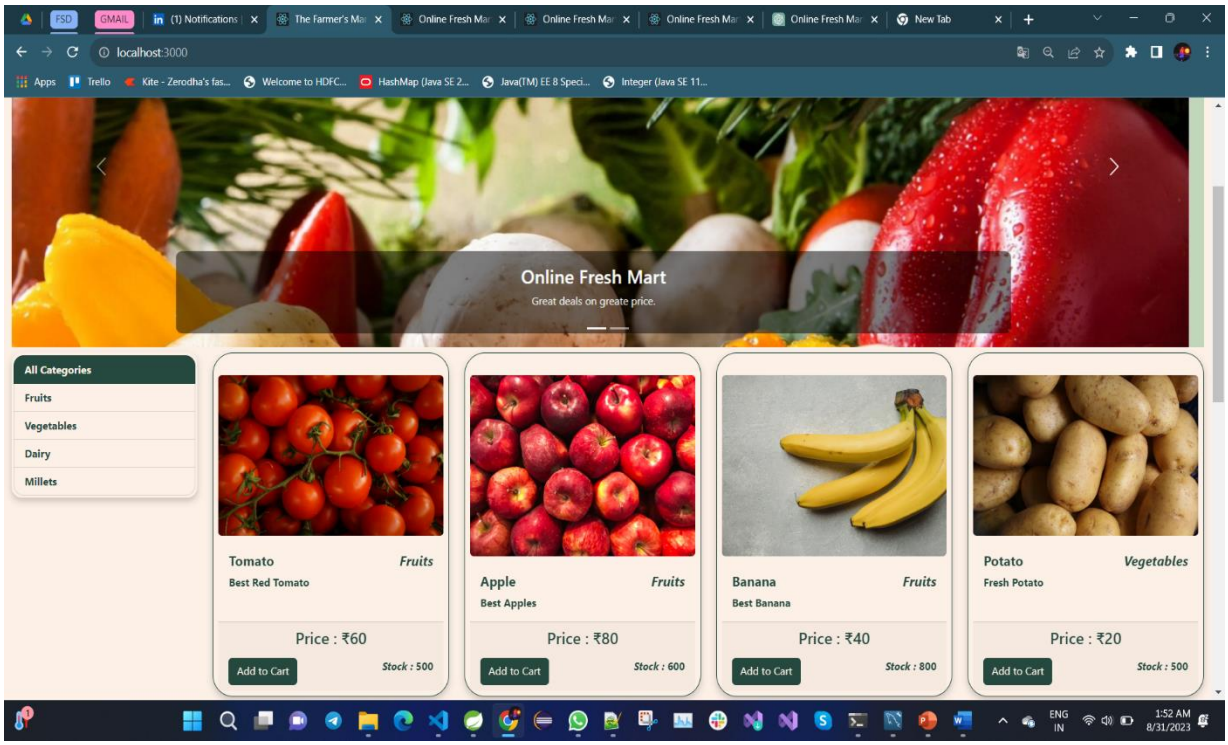


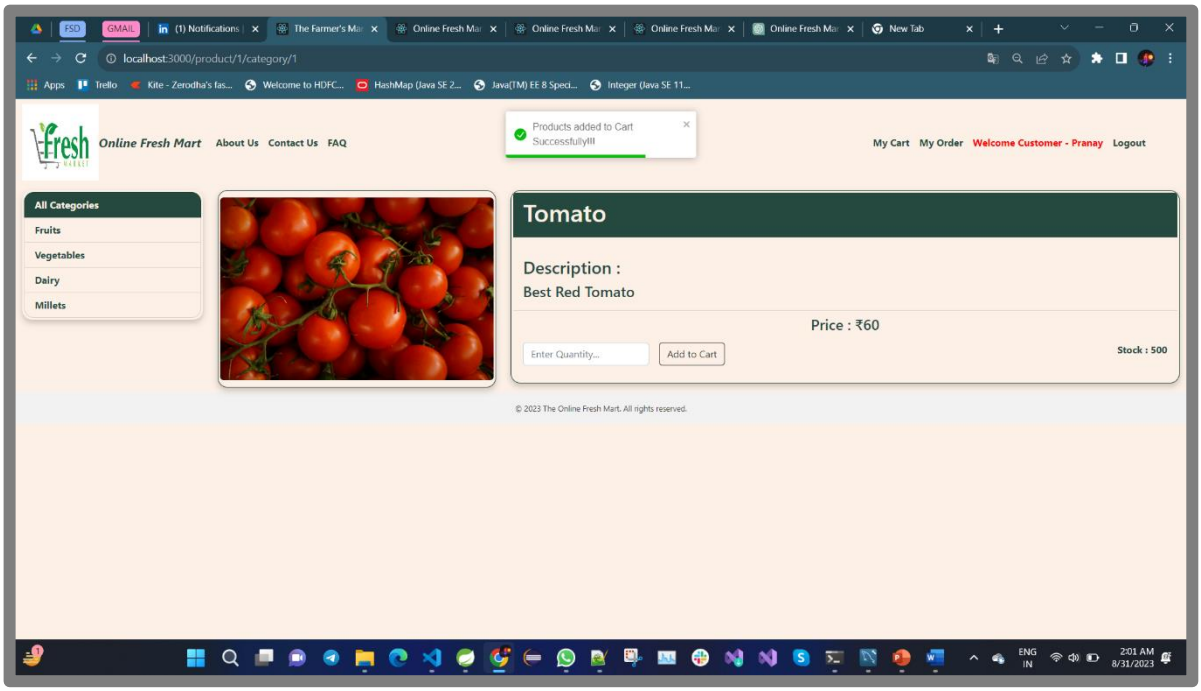
D. SUPPLIER FLOW DIGRAM

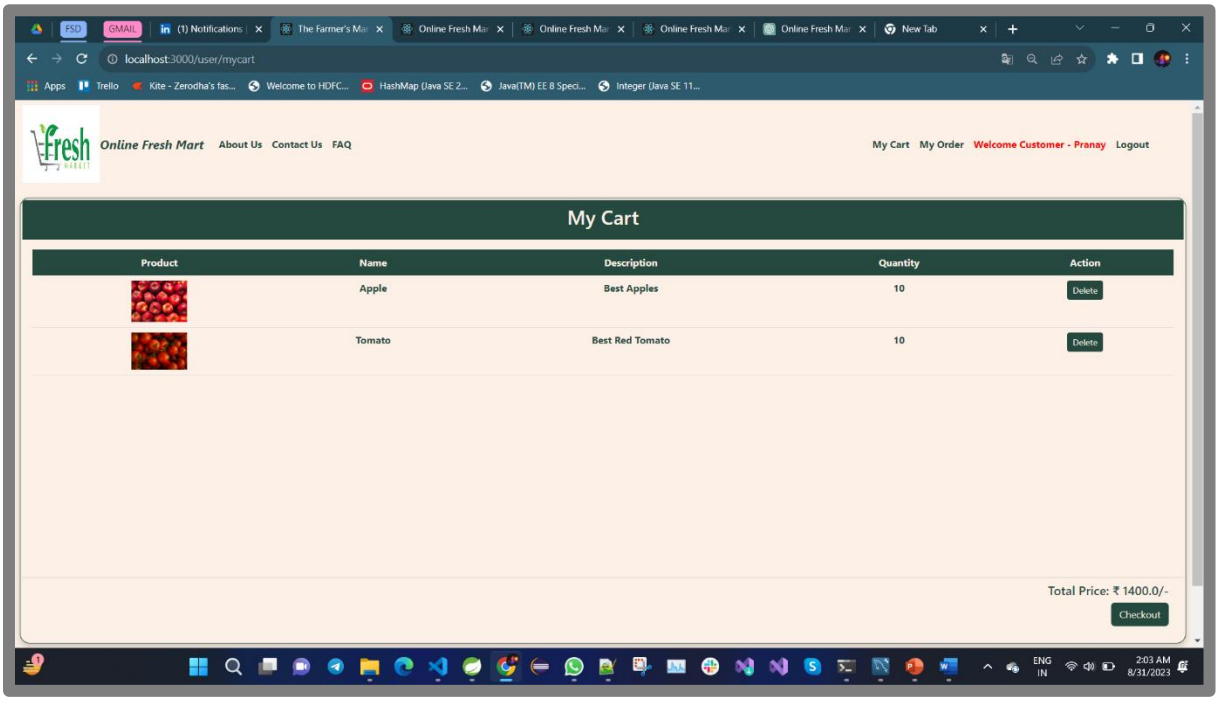


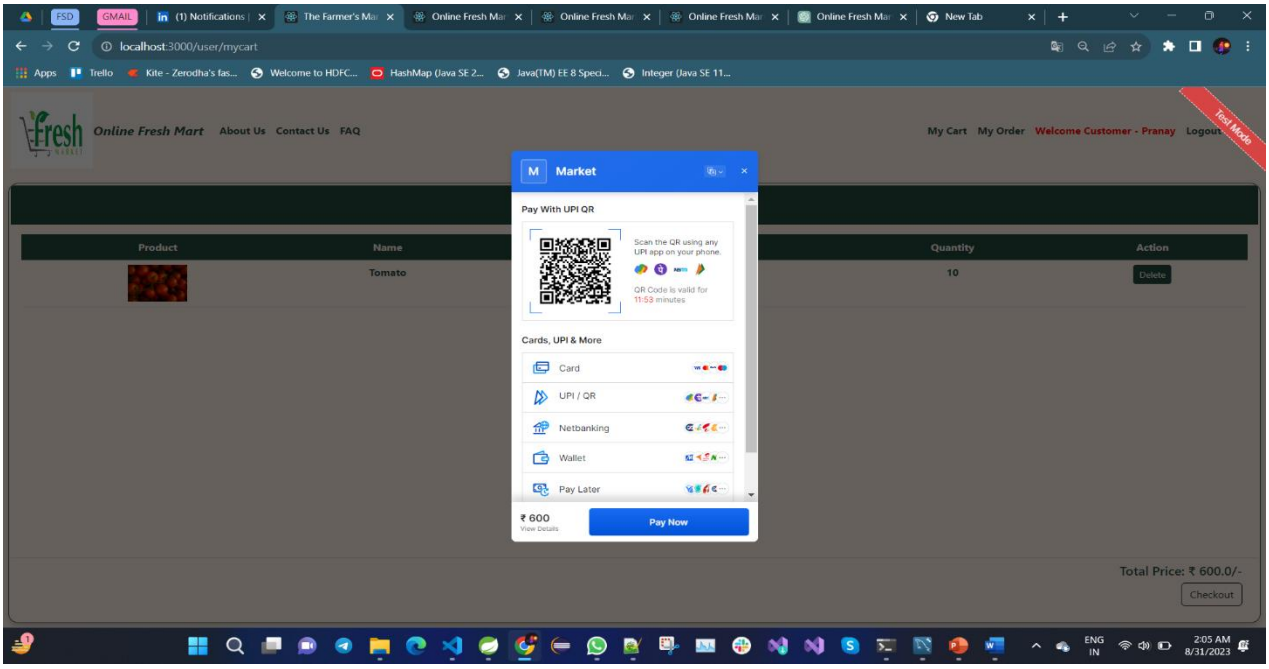
5. PROJECTSCREENSHOTS

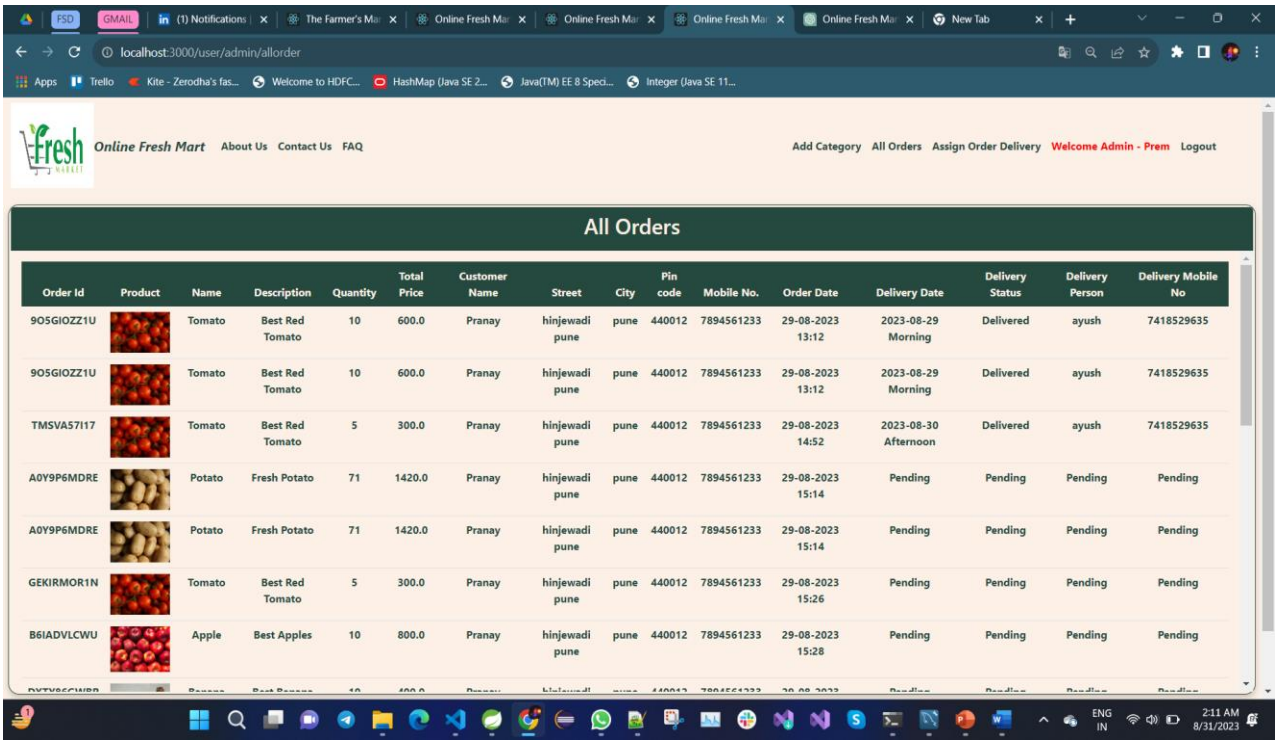




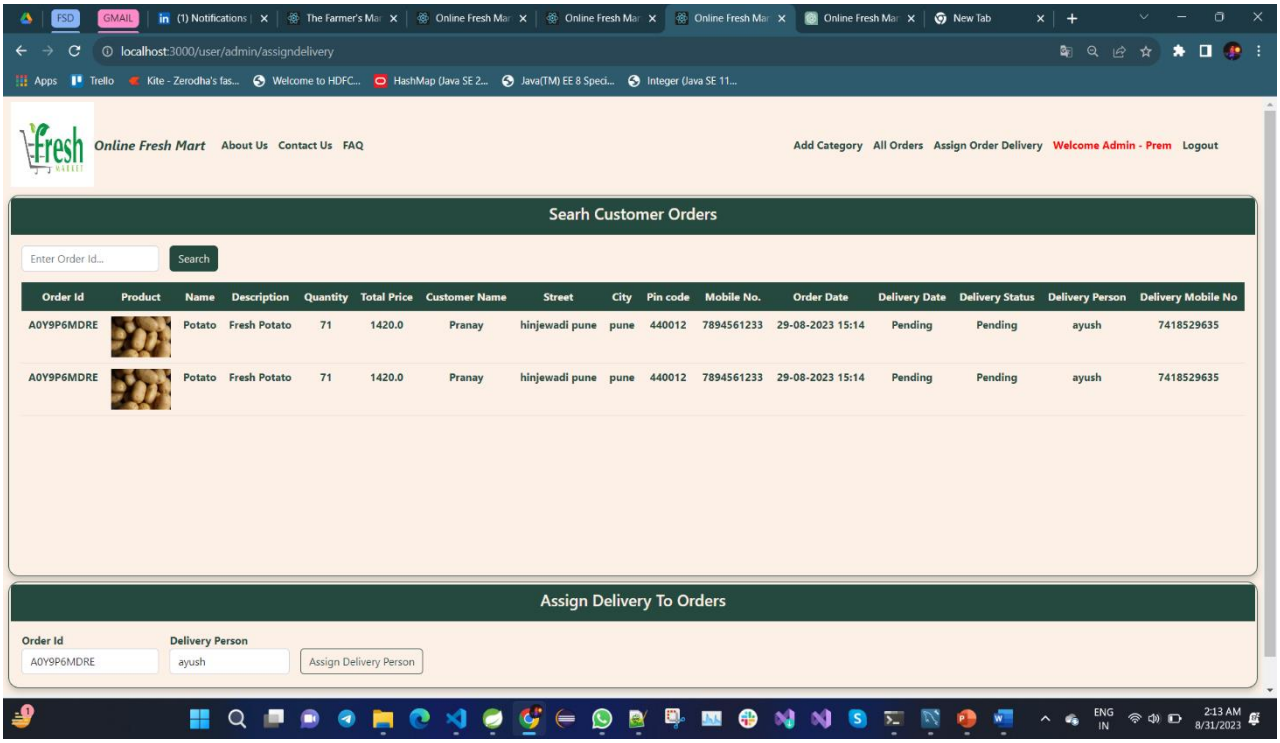

localhost:3000/product/1/category/1
Online Fresh Mart
About Us
Contact Us
FAQ
Products added to Cart Successfully!!!
My Cart
My Order
Welcome Customer - Pranay
Logout
All Categories
Fruits
Vegetables
Dairy
Millets
Tomato
Description :
Best Red Tomato
Price : ₹60
Enter Quantity...
Add to Cart
Stock : 500
© 2023 The Online Fresh Mart. All rights reserved.

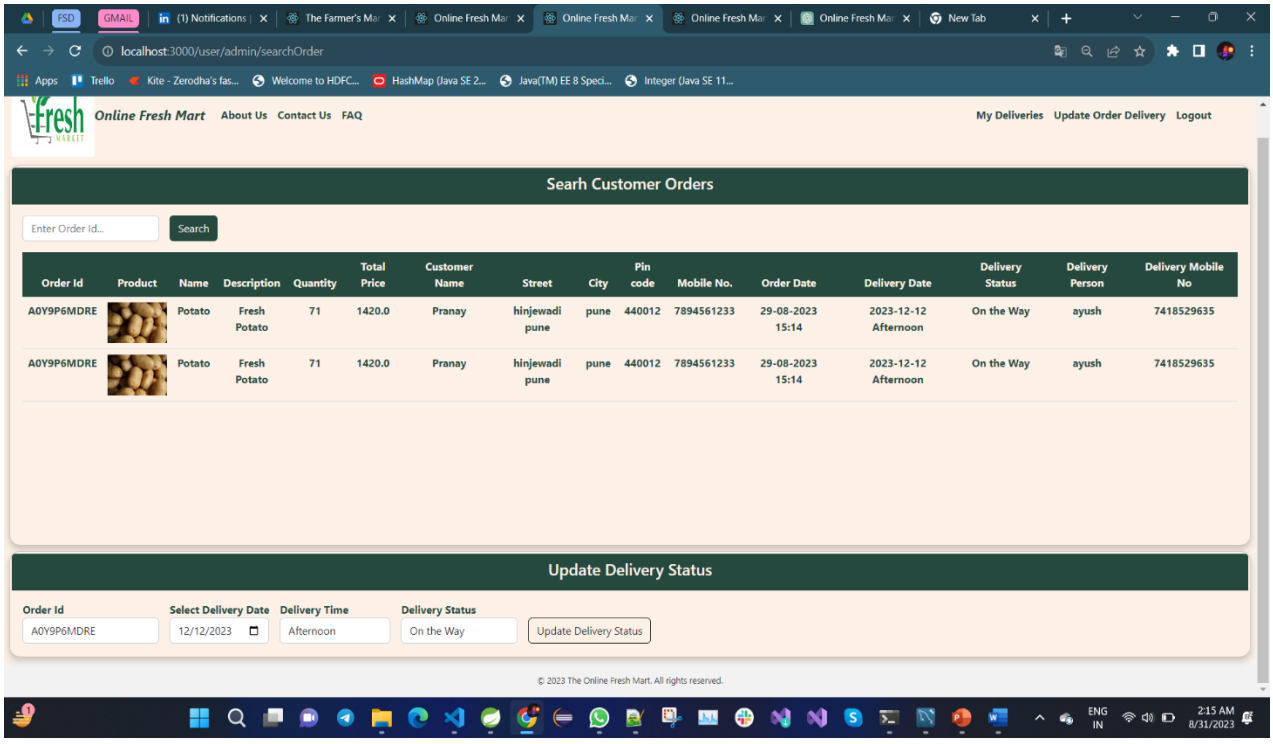

localhost:3000/user/mycart
Online Fresh Mart
About Us
Contact Us
FAQ
My Cart
My Order
Welcome Customer - Pranay
Logout
My Cart
Product
Name
Description
Quantity
Action
Apple
Best Apples
10
Delete
Tomato
Best Red Tomato
10
Delete
Total Price: ₹ 1400.0/-
Checkout





Order Id	Product	Name	Description	Quantity	Total Price	Customer Name	Street	City	Pin code	Mobile No.	Order Date	Delivery Date	Delivery Status	Delivery Person	Delivery Mobile No
9O5GIOZZ1U		Tomato	Best Red Tomato	10	600.0	Pranay	hinjewadi pune	pune	440012	7894561233	29-08-2023 13:12	2023-08-29 Morning	Delivered	ayush	7418529635
9O5GIOZZ1U		Tomato	Best Red Tomato	10	600.0	Pranay	hinjewadi pune	pune	440012	7894561233	29-08-2023 13:12	2023-08-29 Morning	Delivered	ayush	7418529635
TMSVA57I17		Tomato	Best Red Tomato	5	300.0	Pranay	hinjewadi pune	pune	440012	7894561233	29-08-2023 14:52	2023-08-30 Afternoon	Delivered	ayush	7418529635
A0Y9P6MDRE		Potato	Fresh Potato	71	1420.0	Pranay	hinjewadi pune	pune	440012	7894561233	29-08-2023 15:14	Pending	Pending	Pending	Pending
A0Y9P6MDRE		Potato	Fresh Potato	71	1420.0	Pranay	hinjewadi pune	pune	440012	7894561233	29-08-2023 15:14	Pending	Pending	Pending	Pending
GEKIRMOR1N		Tomato	Best Red Tomato	5	300.0	Pranay	hinjewadi pune	pune	440012	7894561233	29-08-2023 15:26	Pending	Pending	Pending	Pending
B6IADVLCWU		Apple	Best Apples	10	800.0	Pranay	hinjewadi pune	pune	440012	7894561233	29-08-2023 15:28	Pending	Pending	Pending	Pending


localhost:3000/user/admin/assigndelivery
Online Fresh Mart
About Us
Contact Us
FAQ
Add Category
All Orders
Assign Order Delivery
Welcome Admin - Prem
Logout
Searh Customer Orders
Enter Order Id...
Search
Order Id
Product
Name
Description
Quantity
Total Price
Customer Name
Street
City
Pin code
Mobile No.
Order Date
Delivery Date
Delivery Status
Delivery Person
Delivery Mobile No
A0Y9P6MDRE
Potato
Fresh Potato
71
1420.0
Pranay
hinjewadi pune
pune
440012
7894561233
29-08-2023 15:14
Pending
Pending
ayush
7418529635
A0Y9P6MDRE
Potato
Fresh Potato
71
1420.0
Pranay
hinjewadi pune
pune
440012
7894561233
29-08-2023 15:14
Pending
Pending
ayush
7418529635
Assign Delivery To Orders
Order Id
A0Y9P6MDRE
Delivery Person
ayush
Assign Delivery Person


localhost:3000/user/admin/searchOrder
Online Fresh Mart
About Us
Contact Us
FAQ
My Deliveries
Update Order Delivery
Logout
Searh Customer Orders
Enter Order Id...
Search
Order Id
Product
Name
Description
Quantity
Total Price
Customer Name
Street
City
Pin code
Mobile No.
Order Date
Delivery Date
Delivery Status
Delivery Person
Delivery Mobile No
A0Y9P6MDRE
Potato
Fresh Potato
71
1420.0
Pranay
hinjewadi pune
pune
440012
7894561233
29-08-2023 15:14
2023-12-12 Afternoon
On the Way
ayush
7418529635
A0Y9P6MDRE
Potato
Fresh Potato
71
1420.0
Pranay
hinjewadi pune
pune
440012
7894561233
29-08-2023 15:14
2023-12-12 Afternoon
On the Way
ayush
7418529635
Update Delivery Status
Order Id
A0Y9P6MDRE
Select Delivery Date
12/12/2023
Delivery Time
Afternoon
Delivery Status
On the Way
Update Delivery Status
© 2023 The Online Fresh Mart. All rights reserved.

6. CONCLUSION

The development of the "Online Fresh Market" website has been a remarkable journey undertaken by our dedicated project team. Our mission was to create a digital haven where fresh produce enthusiasts could come together and explore a world of culinary delight. Through the application of cutting-edge technologies and open-source solutions, we've not only established a robust cross-platform experience but also kept the production costs efficiently minimal.

With user experience at the heart of our design philosophy, we've crafted a platform that offers seamless navigation and effortless interaction. Our website invites you to step into a world where the farm-fresh meets the digital age.

In summary, the "Online Fresh Market" brings the culinary community closer than ever before. It's a space where both seasoned chefs and budding home cooks can find a hub of inspiration, resources, and connections. Our platform celebrates the flavors, aromas, and textures that make food a universal language of joy.

In closing, we're excited to be the go-to destination for all things fresh and delicious. Whether you're a connoisseur of flavors or just beginning your gastronomic journey, our website is here to serve you with the freshest produce, delightful recipes, and a community that shares your passion for good food. Embrace the experience of the "Online Fresh Market" and let your culinary adventure flourish.

.

7. FUTURE SCOPE

JWT Security:

1. JWT Authentication: Implement JSON Web Token (JWT) authentication to enhance security and protect user data during login and API interactions.
2. Token Expiry and Refresh: Set token expiration and implement token refresh mechanisms to ensure secure and uninterrupted user sessions.
3. Role-Based Access Control: Utilize JWT claims to manage role-based access control, ensuring that users have appropriate permissions.
4. HTTPS Implementation: Deploy the system over HTTPS to encrypt data transmission and ensure secure communication between clients and the server

Testing Strategies:

1. Automation Testing **:** Test the various functionalities using automation testing platform like selenium

Deployment Strategies **:**

1. Containerization (Docker): Containerize the application using Docker to ensure consistent deployment across different environments.
2. Continuous Integration and Deployment (CI/CD): Implement CI/CD pipelines to automate the build, test, and deployment processes, ensuring faster and reliable updates.
3. Load Balancing: Use load balancers to distribute incoming traffic across multiple server instances, enhancing system reliability and performance.

8. REFERENCES

Following is the list of websites we referred during the course of our project:

1. https://www.w3schools.com/
2. https://docs.spring.io/spring-data/jpa/docs/current/reference
3. https://javaee.github.io/javaee-spec/javadocs/
4. https://javadoc.io/doc/org.springframework.data/spring-data-jpa/latest/index.html