Project Name : Farmers' Marketplace

Project Members :

PRN No.	Name
230943120049	Omkar Chhagan Mahakal Patil
230943120040	Krushnakant Suklal Bag
230943120090	Dhiraj Abhiman Suryawanshi
230943120084	Shubham Sanjay Shirke

Introduction of Project:

Online Shopping of farming related tools opens up a new world of options. Users won't have to go from store to store to hunt for spare parts. They won't have to worry about wondering whether there are getting quality material or not.

Our system offers one stop solution to all farming related tools needs. Users can log into their accounts and then they will be taken to products offered by the Manufacturer company.

Customer can pick what parts they want to order and add to the cart. Once they are done selecting what they require, after reviewing cart summary they can simply click on check out button to pay bill and they will get an order details pdf on their registered email for the same. Their cart will be delivered to their houses.

This can be done from any place, at any time all from the internet, thus making it easy to get the mechanic spare part you need.

Objective and Scope of Projective :

The Farmers' Marketplace, as the name suggested is about farmers and their showcased merchandise. It is about connecting sellers to the customers, through middle man. This ensure that customers get farming related tools at a reasonable price.

"Farmers Market Place" aims to deliver a web-based application that hosts a wide collection of the farming related tools that users can browse through. Users can place orders and make payment. They can update their profile, add delivery address .They can view their order history as well.

Project Plan :

Users :

In this project, admin and customers are the users that will use project's product or service.

A. Admin Controls

a. Login & Logout – Similar to customers, admins can login & logout to access their account.

b. Add / Update Seller –Only admin is responsible for adding and updating the details of seller.

c. Delete Seller –The admins can delete a seller account if they need to for any purpose.

d. Add New Category – Admins can add category.

e. Delete Category – Admins can remove category.

f. Add New Products – Admin can add new product with details as stock, price, name, quantity, image, category, etc.

g. Manage Products– Admin can update the product details.

h. View Users – Admin can view all registered users.

i. Delete User – Admin can delete a user if need arises.

j. View order details – Admin can view order details for all users.

B. Customers Controls

a. Browse – Customers can browse the homepage to explore the entire products available.

b. Register, Login & Logout – New customers can register on the site. Existing customers can then login to access their account information and logout when the account is not in use.

c. View & Update Profile – When logged in, customers can view their profile and update their details.

d. Update Delivery Address – When purchasing listed items, a customer can update delivery addresses which they can associate with their account.

e. Add to Cart & Place Orders – If customers finds the tools of their choice they can save the item in the cart until they decide to purchase it. If at any point they want to cancel certain item they can simply remove it from the cart on one click. When they wish to purchase it, they can place orders for those items by selecting a delivery address on their account and pay the bill.

f. View Order History – Every customer can view their order history in order to get an idea about their past spending. Also the customer will get email notification for respective order details.

Technology :

    i.   FRONT END
- HTML
- CSS
- JavaScript
- React
- Axios

  ii. BACK END

- Spring Boot
- Spring Data JPA
- Hibernate

  iii. DATABASE MANAGEMENT SYSTEM

- MySQL

Roles and Responsibilities :

Roles And Responsibilities		
1	Role	
	Member Name	Omkar Chhagan Mahakal Patil
	PRN No	230943120049
	Description	
2	Role	
	Member Name	Krushnakant Suklal Bag
	PRN No	2309423120040
	Description	
3	Role	
	Member Name	Dhiraj Abhiman Suryawanshi
	PRN No	2309423120090
	Description	
4	Role	
	Member Name	Shubham Sanjay Shirke
	PRN No	2309423120084
	Description	

Data Flow Diagram :

A. Admin Side DFD
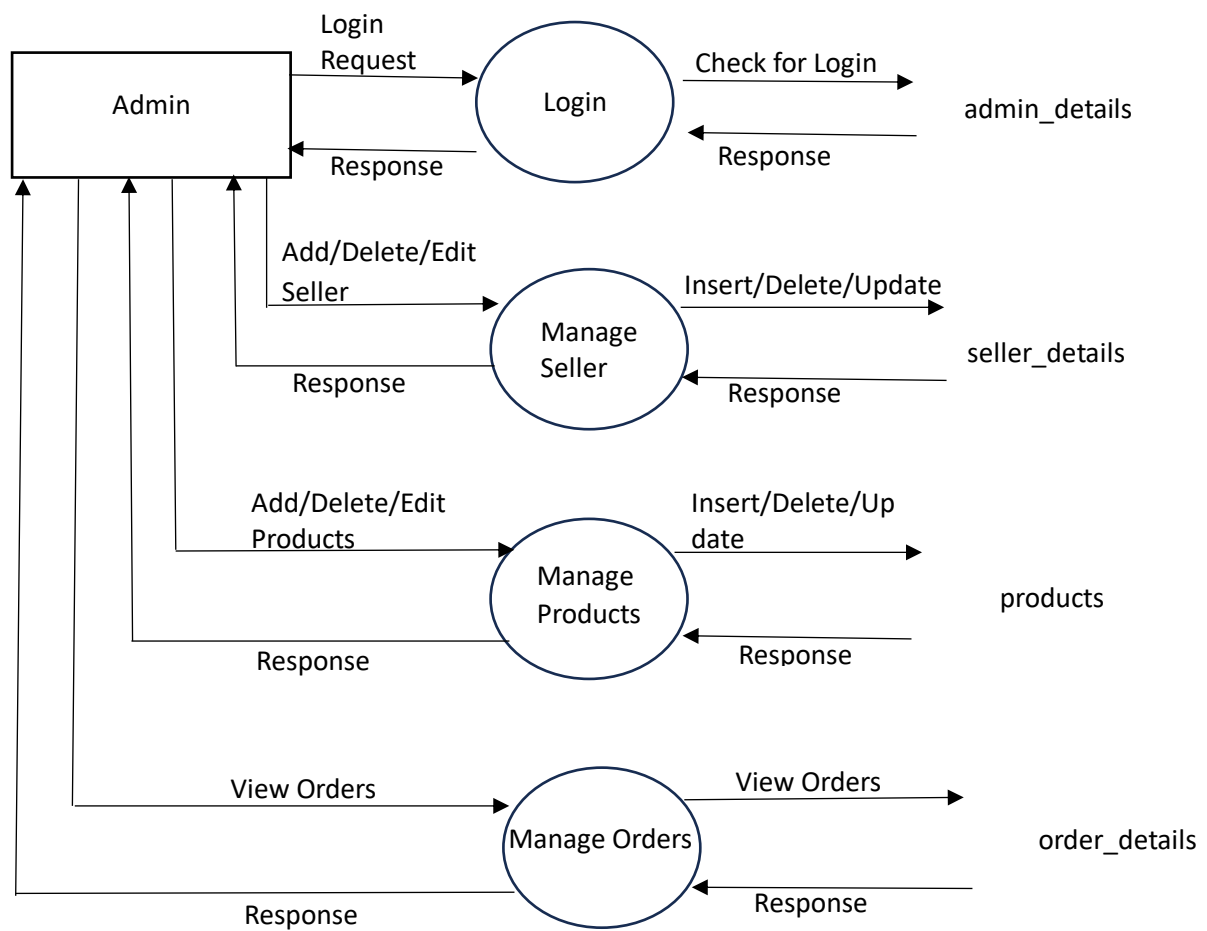
Admin Side DFD

B. Customer Side DFD

Customer Side DFD

ER Diagram :
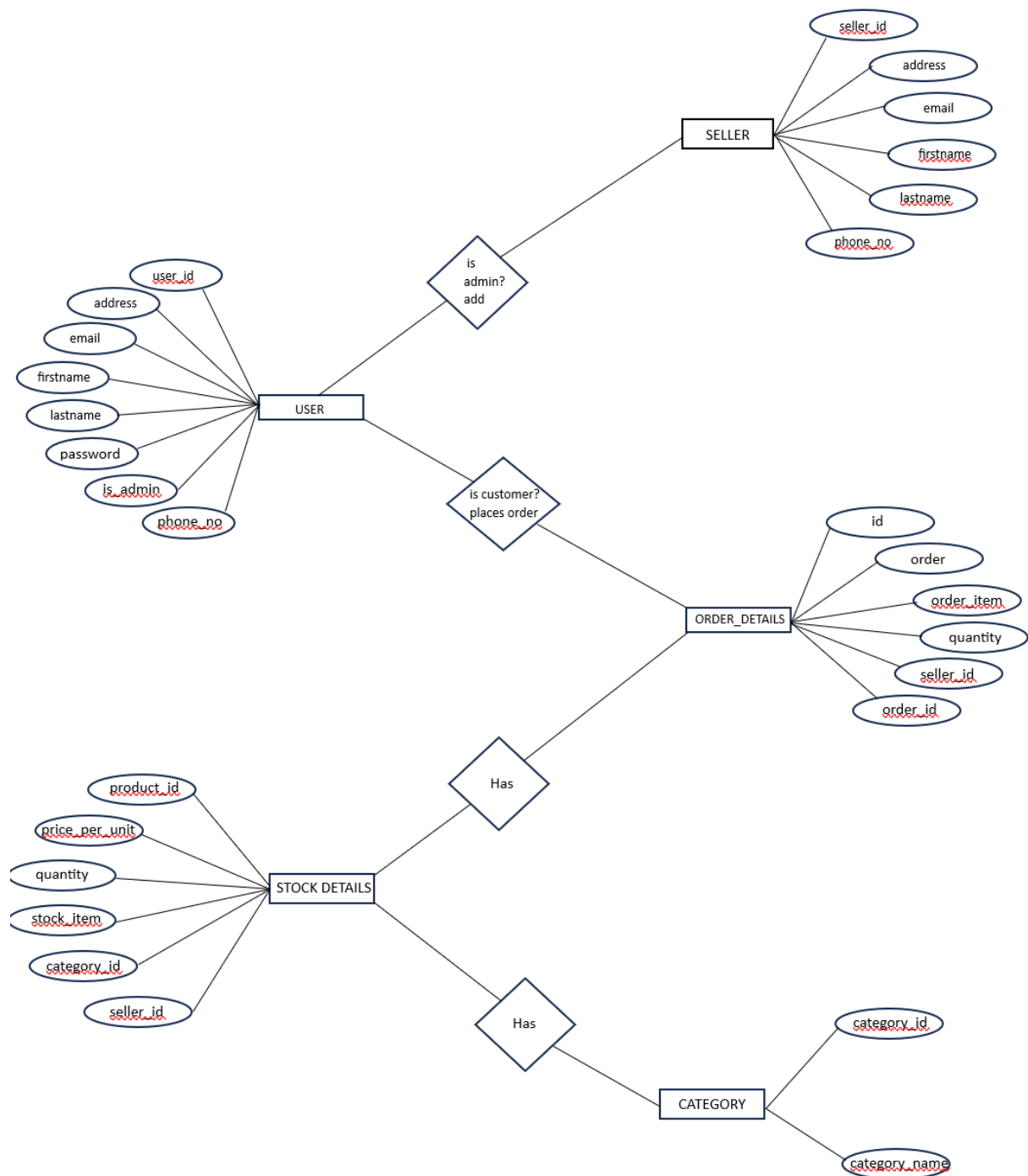
Fig.: ER Diagram

Database Tables :

    A. Tables related to user details :

        a. Users table:

```
mysql> desc user;
+-----------+--------------+------+-----+---------+----------------+
| Field     | Type         | Null | Key | Default | Extra          |
+-----------+--------------+------+-----+---------+----------------+
| user_id   | int          | NO   | PRI | NULL    | auto_increment |
| address   | varchar(200) | YES  |     | NULL    |                |
| email     | varchar(50)  | YES  | UNI | NULL    |                |
| firstname | varchar(20)  | YES  |     | NULL    |                |
| is_admin  | bit(1)       | YES  |     | NULL    |                |
| lastname  | varchar(20)  | YES  |     | NULL    |                |
| password  | varchar(30)  | YES  |     | NULL    |                |
| phone_no  | varchar(15)  | YES  |     | NULL    |                |
+-----------+--------------+------+-----+---------+----------------+
8 rows in set (0.00 sec)
```
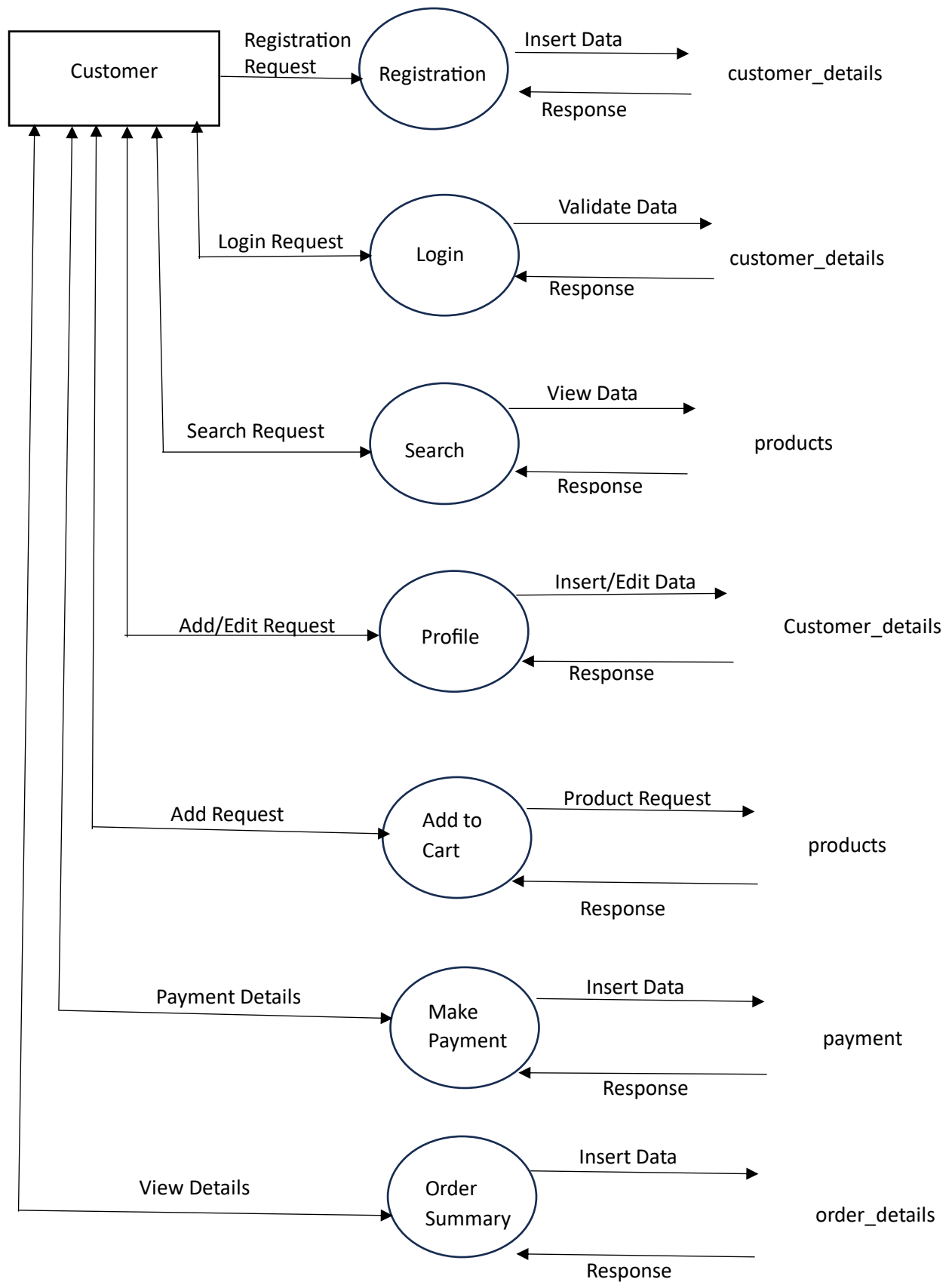
        b. Seller table:

```
mysql> desc seller;
+-----------+--------------+------+-----+---------+----------------+
| Field     | Type         | Null | Key | Default | Extra          |
+-----------+--------------+------+-----+---------+----------------+
| seller_id | int          | NO   | PRI | NULL    | auto_increment |
| address   | varchar(200) | YES  |     | NULL    |                |
| email     | varchar(50)  | YES  |     | NULL    |                |
| firstname | varchar(20)  | YES  |     | NULL    |                |
| lastname  | varchar(20)  | YES  |     | NULL    |                |
| phone_no  | varchar(15)  | YES  |     | NULL    |                |
+-----------+--------------+------+-----+---------+----------------+
6 rows in set (0.00 sec)
```

B .Tables related to Orders :

    a.   Stock Details order :

```
mysql> desc stock_details;
+----------------+--------------+------+-----+---------+----------------+
| Field          | Type         | Null | Key | Default | Extra          |
+----------------+--------------+------+-----+---------+----------------+
| product_id     | int          | NO   | PRI | NULL    | auto_increment |
| product_image  | varchar(400) | YES  |     | NULL    |                |
| price_per_unit | float        | YES  |     | NULL    |                |
| quantity       | int          | YES  |     | NULL    |                |
| stock_item     | varchar(50)  | YES  |     | NULL    |                |
| catogery_id    | int          | YES  |     | NULL    |                |
| seller_id      | int          | YES  |     | NULL    |                |
+----------------+--------------+------+-----+---------+----------------+
7 rows in set (0.02 sec)
```

    b.   Order Table:

```
mysql> desc orders;
+-----------------+--------+------+-----+---------+----------------+
| Field           | Type   | Null | Key | Default | Extra          |
+-----------------+--------+------+-----+---------+----------------+
| order_id        | int    | NO   | PRI | NULL    | auto_increment |
| delivery_date   | date   | YES  |     | NULL    |                |
| delivery_status | bit(1) | YES  |     | NULL    |                |
| payment_status  | bit(1) | YES  |     | NULL    |                |
| place_order_date| date   | YES  |     | NULL    |                |
| user_id         | int    | NO   | MUL | NULL    |                |
+-----------------+--------+------+-----+---------+----------------+
6 rows in set (0.00 sec)
```

    c.   Order Details table:

```
mysql> desc order_details;
+------------+-------------+------+-----+---------+----------------+
| Field      | Type        | Null | Key | Default | Extra          |
+------------+-------------+------+-----+---------+----------------+
| id         | int         | NO   | PRI | NULL    | auto_increment |
| amount     | double      | YES  |     | NULL    |                |
| order_item | varchar(20) | YES  |     | NULL    |                |
| quantity   | int         | YES  |     | NULL    |                |
| seller_id  | int         | YES  |     | NULL    |                |
| order_id   | int         | YES  |     | NULL    |                |
+------------+-------------+------+-----+---------+----------------+
6 rows in set (0.00 sec)
```

d. Category Table

```
mysql> desc category;
+---------------+--------------+------+-----+---------+----------------+
| Field         | Type         | Null | Key | Default | Extra          |
+---------------+--------------+------+-----+---------+----------------+
| category_id   | int          | NO   | PRI | NULL    | auto_increment |
| category_name | varchar(255) | YES  | UNI | NULL    |                |
+---------------+--------------+------+-----+---------+----------------+
2 rows in set (0.00 sec)
```

Future Scope :

Using whatever we have learnt over the duration of this course, we tried to make our project as user-friendly and gave it as many features as possible in the limited time allotted for the project work. That said, there are certainly more features that can be added to our application. Some of those are mentioned below:

1. The most purchased and/or sponsored products can be highlighted as customer favorites to promote merchandise further.

2. Rating chart for Farmers and Products.

3. Product Display based on Categories, distributing Farmers and respective ratings.

4. Discounts can be given on a per-user basis depending on the customer's purchase history as well as how many products they buy at the same time.

5. Customers can upvote/downvote/report feedbacks.

6. Additional payment means can be added other than cards.

7. In case the user forgets the password, a 'reset password' functionality can be added.

8. CAPTCHA can be added to login page.