A Mini Project Report

on

"DOOR-STEP FARM SUPPLY"

Submitted by

33221 Ellika Mishra

33224 Ajinkya Ghuge

33227 Sahil Jadhav

33232 Prathamesh Kulkarni

Department Of Information Technology

Pune Institute of Computer Technology College of Engineering

Sr. No 27, Pune-Satara Road, Dhankawadi, Pune - 411 043.

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Contents

ABSTRACT

Doorstep farm supply is a medium to connect customers who need organic products fresh from the farms and farmers who work hard to produce this supply. During the lockdown, we faced the problem of supply of fruits and vegetables. And we have also seen the problems of farmers during this situation, so we wanted to create a medium for the benefit of both parties, the farmer and the customer by eliminating the middleman. The aim of our project is to build a system where farmers can directly sell their goods to the customer and both get benefitted from that and to eliminate the middle in the supply chain.To create a database system where farmers can add their products and customers can place the order.To benefit farmers and customers by keeping the track of pricing. This way the farmer ends up selling the product at a much better price than what he would have received and similarly the consumer or the customer ends up buying groceries at a much cheaper price than the market.

ACKNOWLEDGEMENT

We would like to thank our teacher and guide professor Dr. Emmanuel who gave us his valuable suggestions and ideas when we were in need of them. He encouraged us to work on this project as well as helped us out in the technical problems we faced.We are immensely grateful to our college for providing us the opportunity to work on this project and providing us with the necessary resources for it. We would also like to thank all of the staff who helped us to complete this project. We are thankful to all involved in this project as without their inspiration and valuable suggestions it would not have been possible to develop the project within the prescribed time.

1) Introduction

Doorstep farm supply is a medium to connect customers who need organic products fresh from the farms and farmers who work hard to produce this supply.

1.1) Purpose

Providing fresh,organic produce at low cost to public and make management of sales easier.

1.2) Scope

As of now both farmers and customers are indirectly dependent on each other as producers and consumers , which means intervention of retail suppliers creates issues like farm produce being medicined,exporting of organic produce to supermarkets abroad, and farmers being paid bare minimum . Doorstep farm supply can be used to provide a direct link between farmers and customers to avoid all the issues of having a retailer in between,by creating User roles for farmers too.

1.3) Definition, Acronym, and Abbreviations

DBMS: Database management system

RDBMS: Relational Database management system.

DB: Database

SQL: Structured Query Language

JS: JavaScript

1.4) References

www.wikipidea.org

-www.tutorialspoint.com

-www.oracle.com

www.w3schools.com

www.mysql.org

www.youtube.com

Books and Tutorials

1. Codd E. F., "A Relational Model of Data for Large Shared Data Banks", Communications of the ACM, vol. 13, issue 6, pp. 377–387, June 1970.
2. (For Java Programmers) "JDBC Basics", Java Online Tutorial @ http://download.oracle.com/javase/tutorial/jdbc/basics/index.html.
3. Paul DuBois, "MySQL Developer's Library", 4th ed, 2009 (5th ed is probably available).
4. Russell Dyer, "MySQL in a Nutshell", 2nd ed, O'reilly, 2
5. PICT - DMSL LAB MANUAL

1.5 Developers' Responsibilities: An Overview:

- Make UI
- Link to database
- Perform queries

- Add constraints
- Update database and tables on requirement basis.

OVERVIEW

2) General Description

Door step farm supply is a platform on which every user will be benefitted either by selling their products or buying them. Currently, all the farmers sell their products to a dealer and then the supply those products to the customers. Door step farm supply allows the farmers to sell their products directly to the customers.

2.1) Product Function Perspective:

This door-step farm supply is a management system is a user-friendly system that enables easy sales to farmers and a medium for customers to buy farm fresh products.

2.2)User Characteristics

User has rights to sign up,login further select items for purchase ,increase-decrease the quantity of selected items and submit the cart.

Admin can view details like most selling crop,profit etc and also update the farmer values.

2.3) General Constraints:

If we see the performance constraints, as we are using the Node.js, and MySQL, the performance will be on top.

Again, web interface is very user friendly and users can easily manipulate it.

2.4)Assumptions and dependencies

Assumptions made include that a User can purchase any no. of items and the cost is calculated by the program itself and displayed to Users.

The cost due depends on this cost for payment by User.

Other dependencies include a signup requirement to view product details and list.

Admin needs to login to be able to add new farmers and view the report.

3) Specific Requirements

3.1)Input and Output

Inputs include data fed by Users in signup and output in form of verification in login.

Also Users create cart and inputs of this are saved in database.

Output for this function results in alerts/pop-ups.

Admin can view updates after login like most selling crops,farmers,profit etc and also add new farmers.

3.2)Functional Requirements

The purchase function requires the new User to first signup,then login and place order.

While placing orders User must provide a unique id and Name for order verification.

The crops and Product details are added in the Database.

3.3)Functional Interface Requirements

Interface includes welcome message with short description and image carousel automatic play.

It has options to login ,signup and home navigation on navbar.

The cart contents are added and User can sort the products according to categories on the page.

The design is Responsive and is flexible on all sizes of screens.

3.4) Performance Constraints

Mysql rdbms is suitable for large databases ,this along with Node js development environment using react results in robust applications.The constraints include Pool connection limit with the database for queries.Port listening constraints for get/post requests and correct data type inputs to required fields.

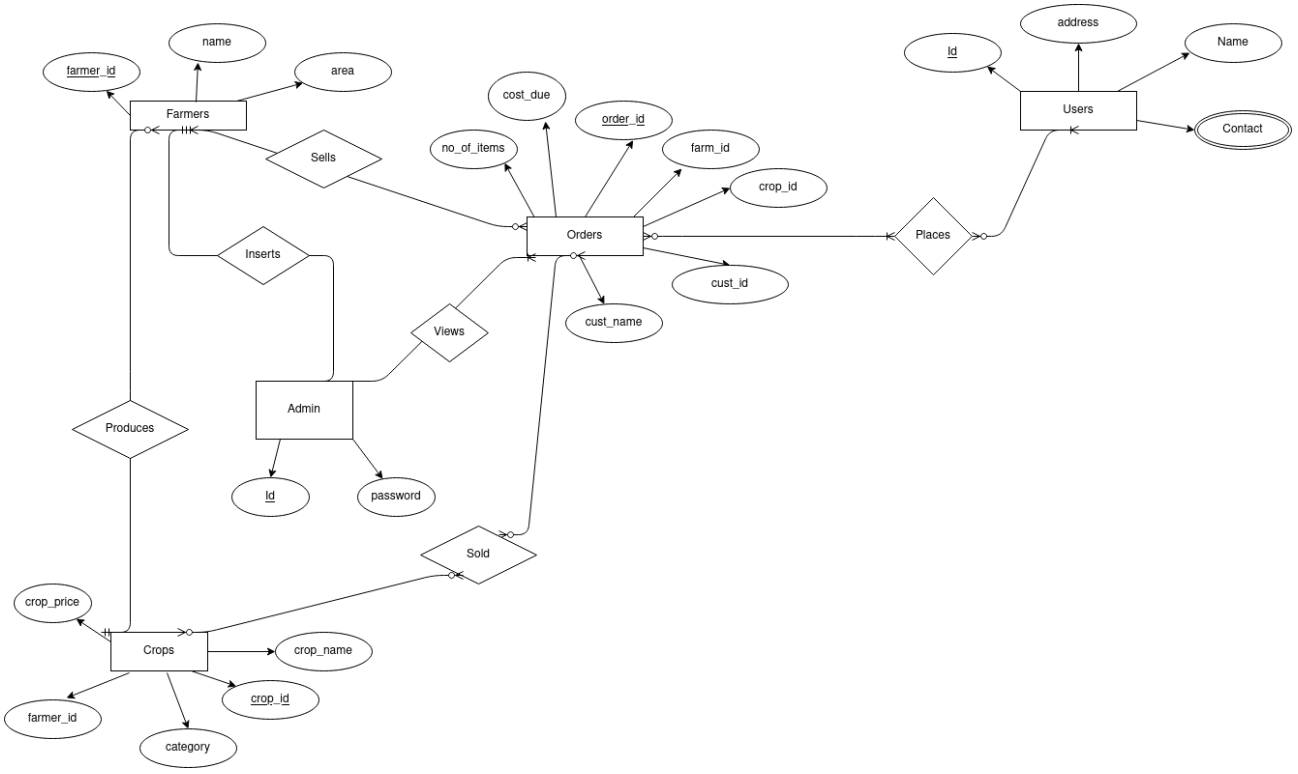
3.5)Acceptance criteria:

A user cannot view products without signing in. Once a user is logged he/she can view the products offered by various farmers and order their products of choice.Also Users must provide unique ID and Name for verification of order placement.Empty cart or Users with no account cannot place orders.

Admin can view report of orders after logging in with valid credentials.

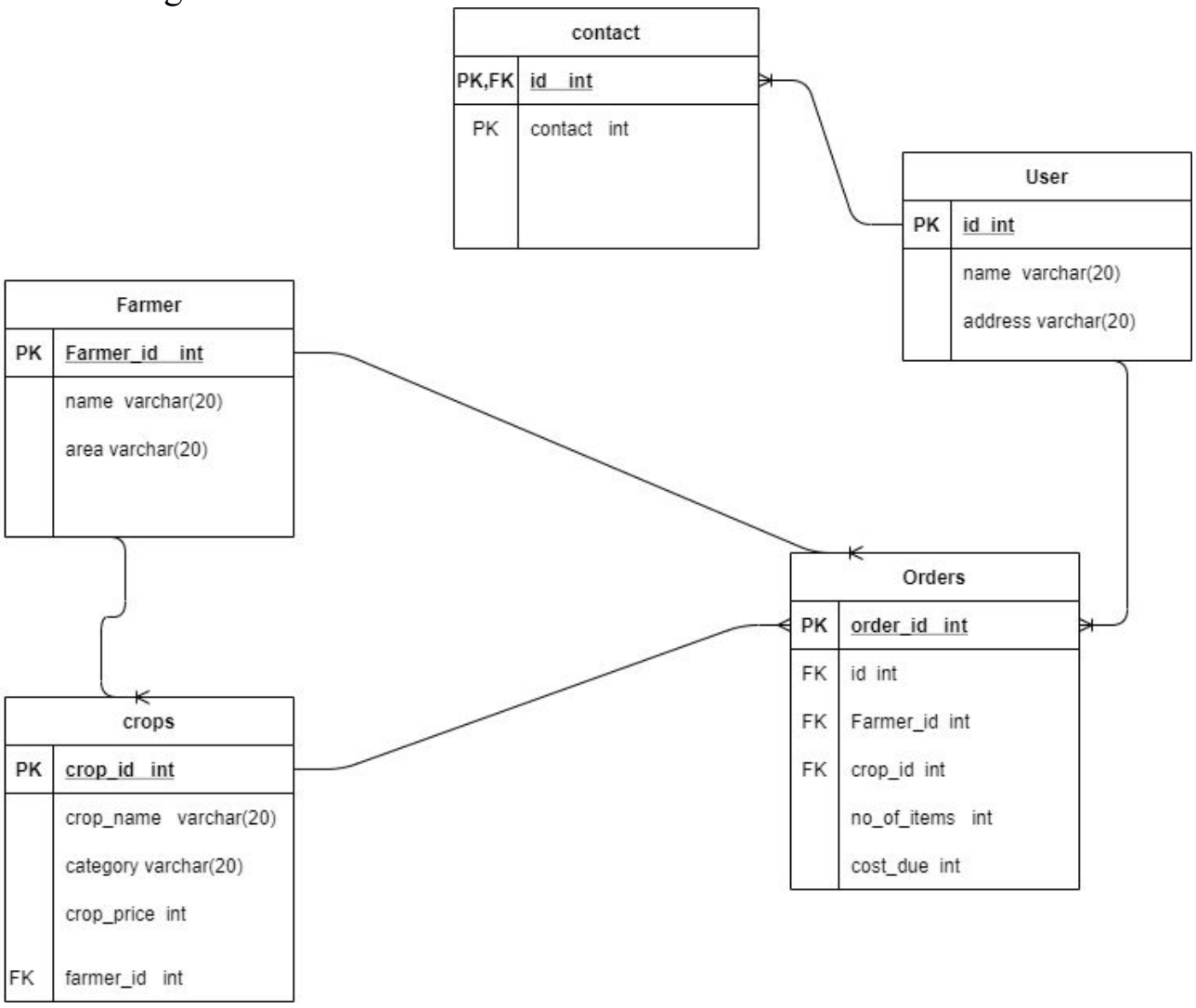
4. System Design

4.1 ER Model



4.2 Schema Description

Schema diagram



4.3 Tables Description

mysql> show tables;
+---------------------+

```
| Tables_in_farmsupply |
+----------------------+
| Admin                |
| Users                |
| contact              |
| crops                |
| farmer               |
| orders               |
+----------------------+
6 rows in set (0.03 sec)
```

```
mysql> desc crops;
+-----------+-------------+------+-----+---------+----------------+
| Field     | Type        | Null | Key | Default | Extra          |
+-----------+-------------+------+-----+---------+----------------+
| crop_id   | int         | NO   | PRI | NULL    | auto_increment |
| crop_name | varchar(50) | YES  |     | NULL    |                |
| category  | varchar(50) | YES  |     | NULL    |                |
| farmer_id | int         | YES  | MUL | NULL    |                |
| price     | float       | YES  |     | NULL    |                |
+-----------+-------------+------+-----+---------+----------------+
5 rows in set (0.00 sec)
```

```
mysql> desc farmer;
+-------+-------------+------+-----+---------+-------+
| Field | Type        | Null | Key | Default | Extra |
+-------+-------------+------+-----+---------+-------+
| fid   | int         | NO   | PRI | NULL    |       |
| name  | varchar(50) | YES  |     | NULL    |       |
| area  | varchar(50) | YES  |     | NULL    |       |
+-------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

```
mysql> desc Users;
+--------+-------------+------+-----+---------+----------------+
| Field  | Type        | Null | Key | Default | Extra          |
+--------+-------------+------+-----+---------+----------------+
| id     | int         | NO   | PRI | NULL    | auto_increment |
| name   | varchar(50) | YES  |     | NULL    |                |
| pswd   | blob        | YES  |     | NULL    |                |
```

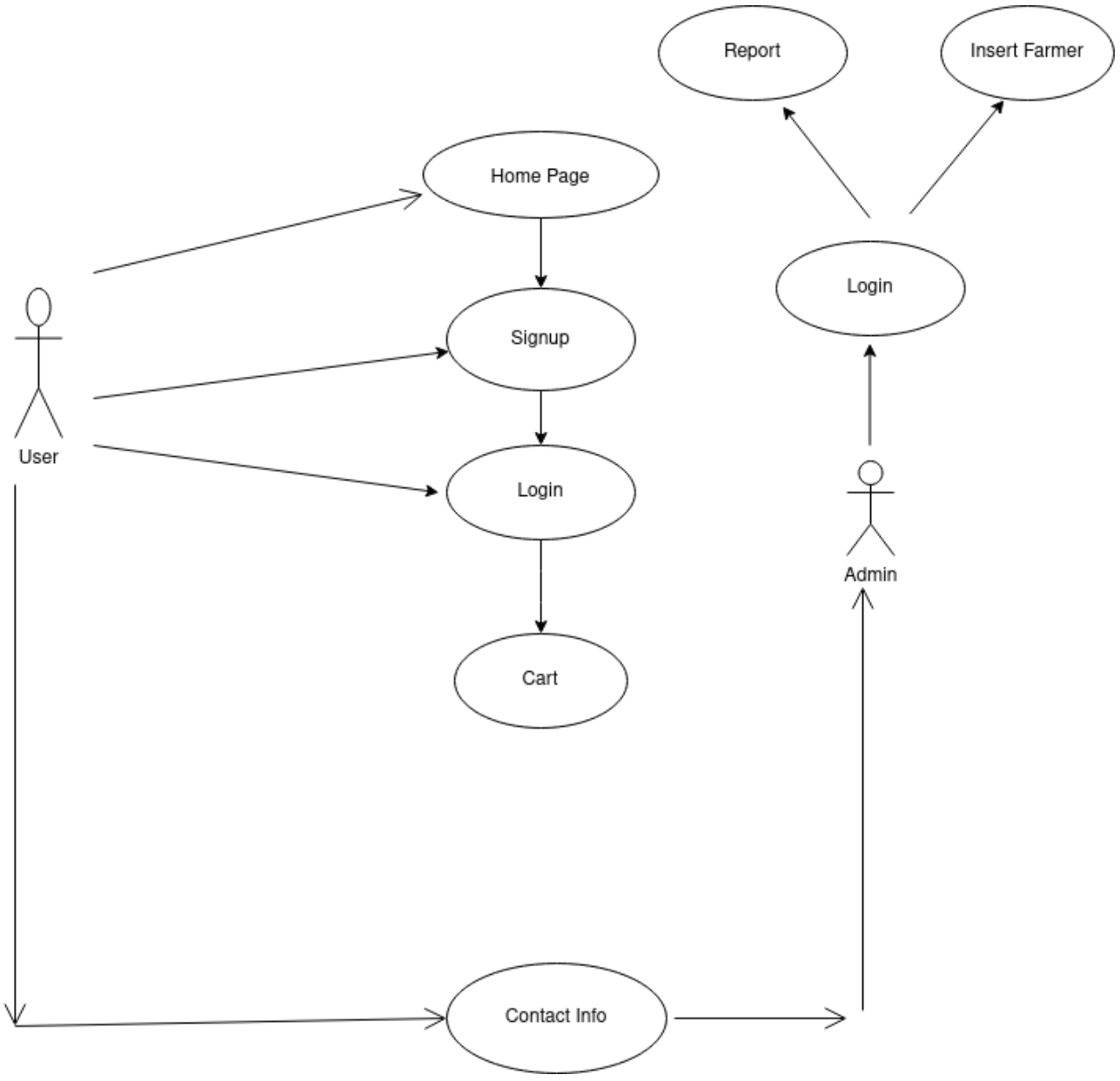
```
| address | varchar(255) | NO   |       | NULL      |               |
| contact | varchar(255) | YES  |       | NULL      |               |
+---------+--------------+------+-------+-----------+---------------+
5 rows in set (0.00 sec)

mysql> desc orders;
+------------+------------+------+-----+---------+---------------+
| Field      | Type       | Null | Key | Default | Extra         |
+------------+------------+------+-----+---------+---------------+
| order_id   | int        | NO   | PRI | NULL    | auto_increment |
| cust_id    | int        | YES  | MUL | NULL    |               |
| no_of_items | int       | YES  |     | NULL    |               |
| cost_due   | float      | YES  |     | NULL    |               |
| cust_name  | varchar(50) | YES |     | NULL    |               |
| farm_id    | int        | YES  | MUL | NULL    |               |
| crop_id    | int        | YES  | MUL | NULL    |               |
+------------+------------+------+-----+---------+---------------+
7 rows in set (0.00 sec)

mysql> desc contact;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| uid    | int         | YES  | MUL | NULL    |       |
| detail | varchar(50) | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
2 rows in set (0.00 sec)

mysql> desc Admin;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| uname    | varchar(50) | YES  |     | NULL    |       |
| password | blob        | YES  |     | NULL    |       |
+----------+-------------+------+-----+---------+-------+
2 rows in set (0.31 sec)
```

4.4 System Flow chart / Activity diagram



4.5 Error Messages / Alerts Design

- Alerts on Successful Login
- Alerts on Successful Purchase.
- Disallow incorrect inputs in fields .
- Alerts on contact form submit.

4.6 Test Case Design

- Allow registered users to login
- Redirect on login
- Purchase total and net items displayed dynamically.
- Sort product with category filter.
- Storing Hashed password of Users

5. System Implementation

5.1 Hardware and Software Platform description

Hardware requirements-

- 8 gb ram desktop/laptop
- i5 processor
- Internet connectivity

Software requirements-

- Vs code for editing
- Mysql server
- npm packages
- Express Api’s

5.2 Tools used

Tools used for querying in and connection database-

- Pools by npm-mysql

Tools used for get/post requests-

- Axios
- Express

Tools for UI-

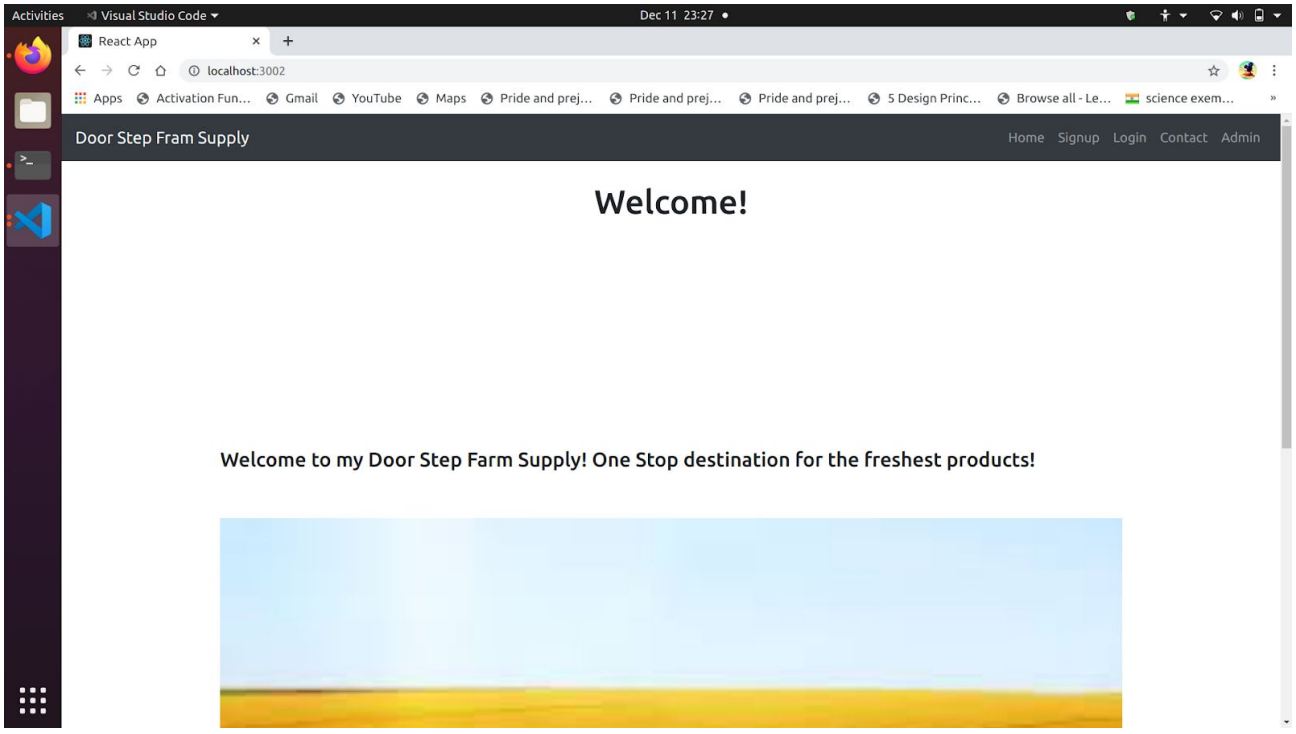
- React-strap
- React-Bootstrap

Tools for linking , rendering and state updates-

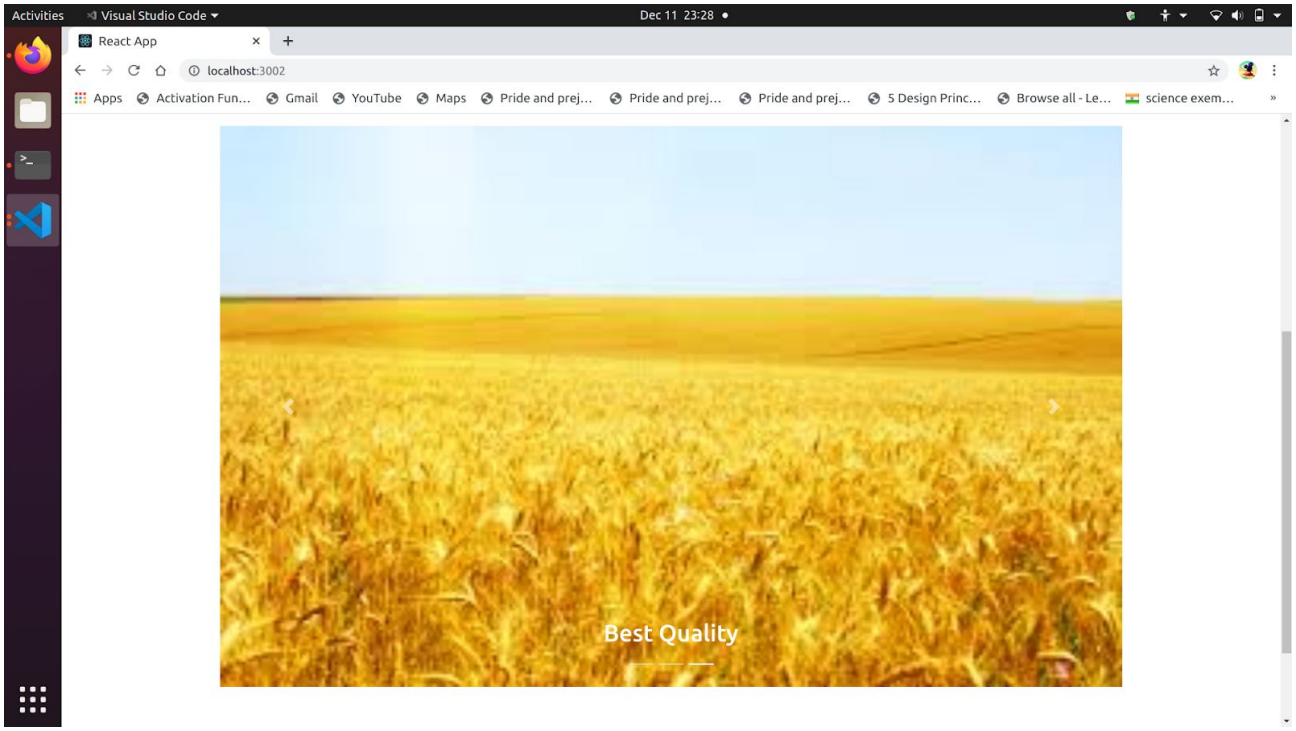
- React-router
- React-dom
- React-Hooks

5.3 System Verification and Testing (Test Case Execution)

Home page-



Dynamic carousel on home page-


Activities
Visual Studio Code
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React App
localhost:3002
Apps
Activation Fun...
Gmail
YouTube
Maps
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5 Design Princ...
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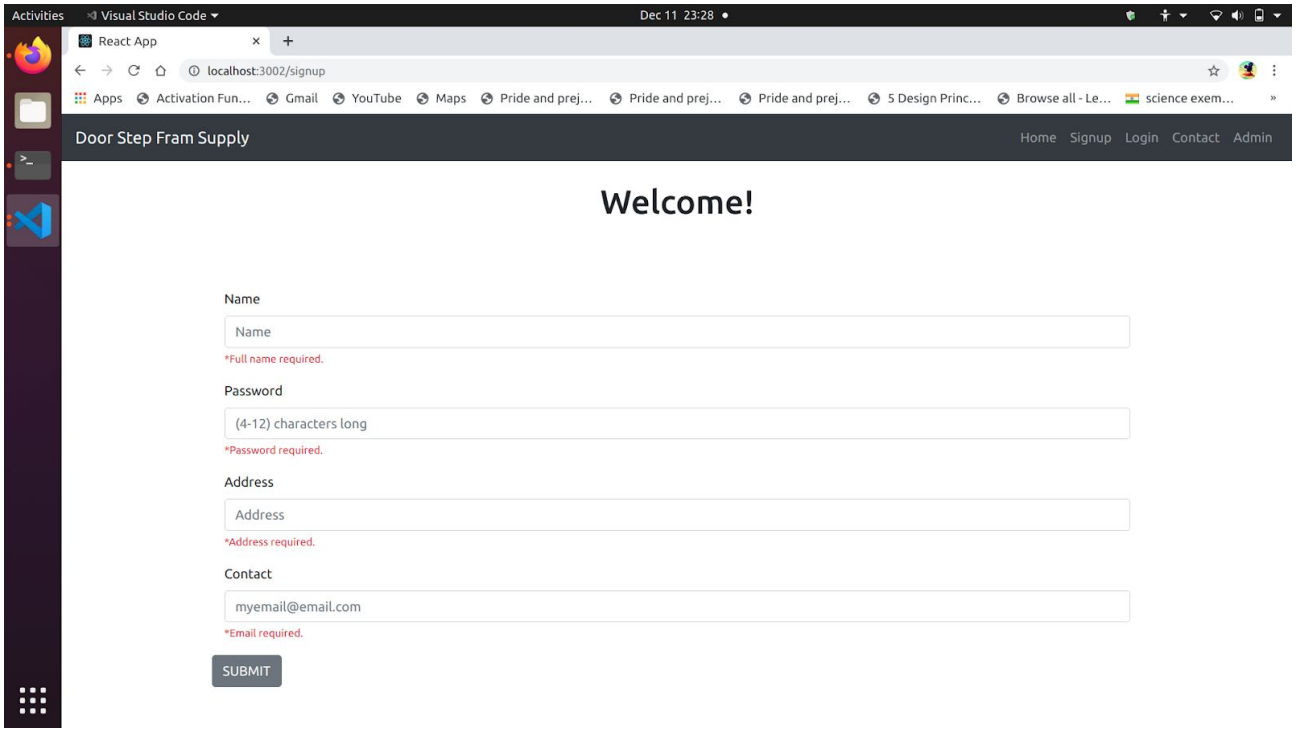
Best Quality

Signup Page-


Activities
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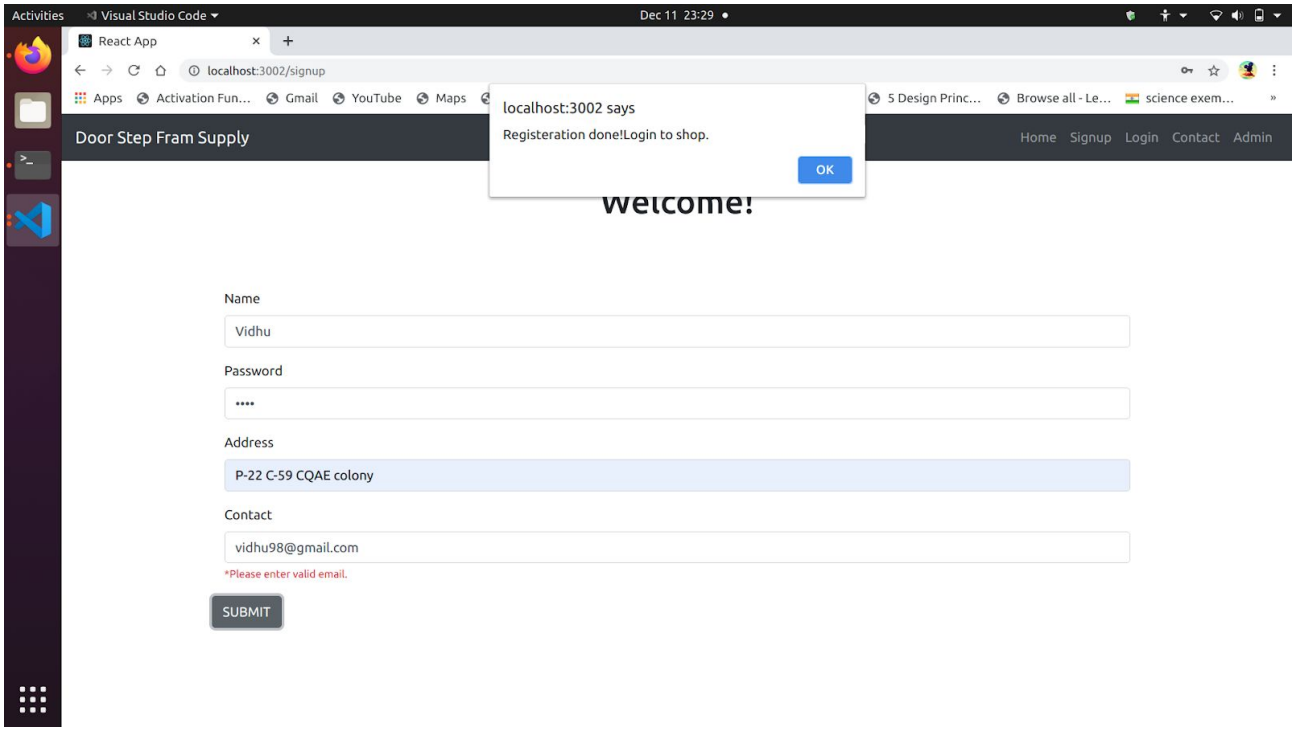
Apps
Activation Fun...
Gmail
YouTube
Maps
Pride and prej...
Pride and prej...
Pride and prej...
5 Design Princ...
Browse all - Le...
science exem...
Door Step Fram Supply
Home
Signup
Login
Contact
Admin
Welcome!
Name
Name
*Full name required.
Password
(4-12) characters long
*Password required.
Address
Address
*Address required.
Contact
myemail@email.com
*Email required.
SUBMIT

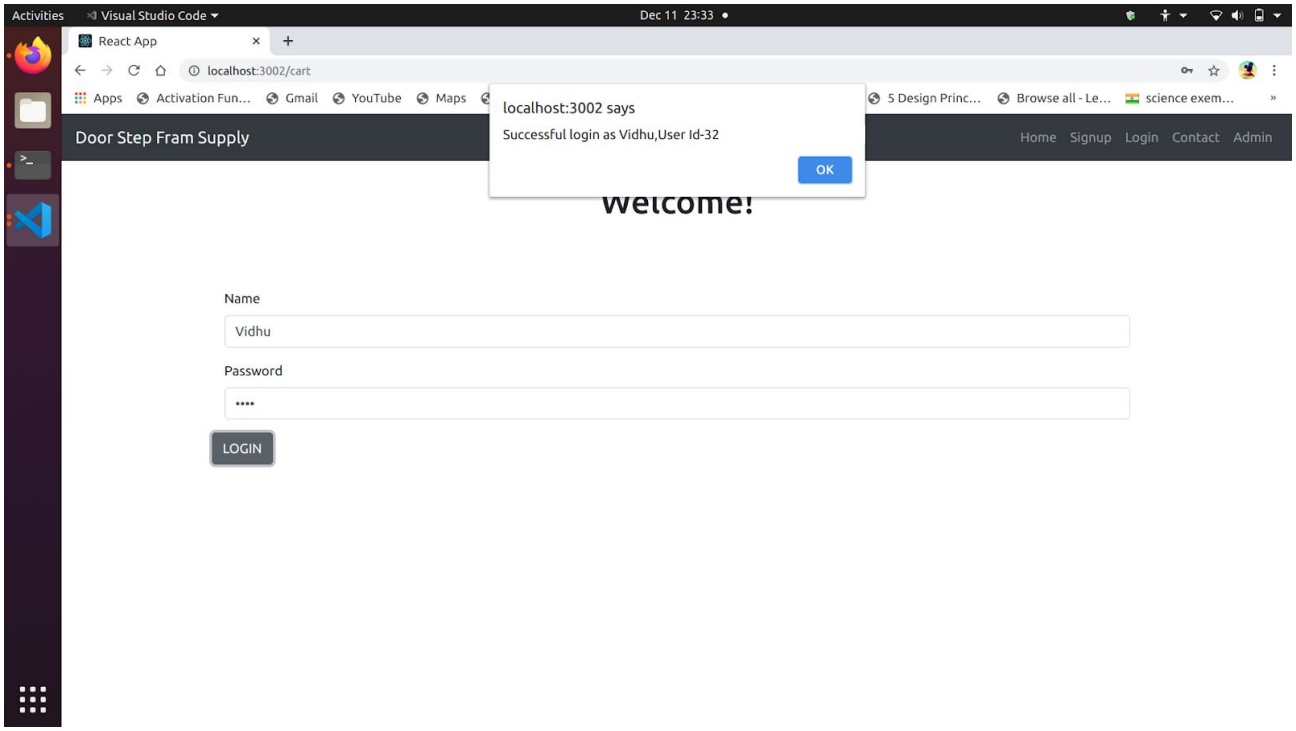


credentials of new user in database-

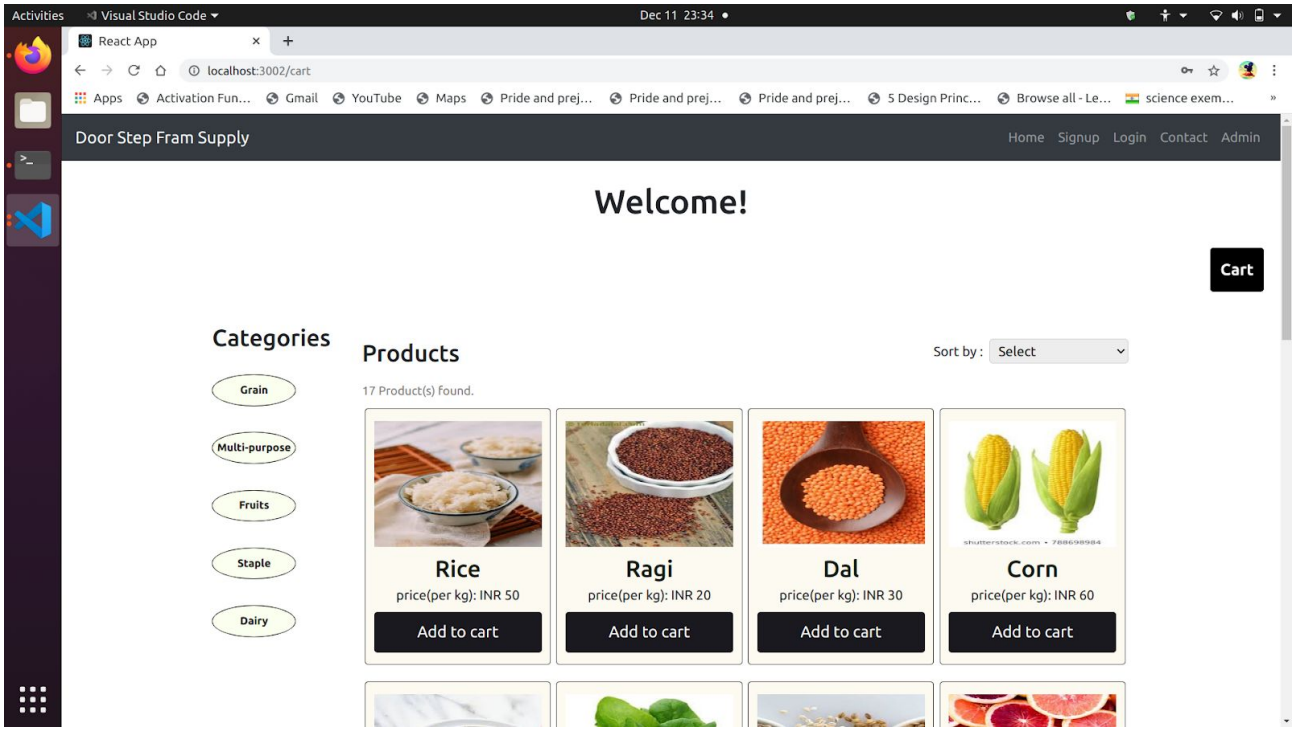
```
mysql> select* from Users;
+----+---------+------------+-----------------------+---------------------------+
| id | name    | pswd       | address               | contact                   |
+----+---------+------------+-----------------------+---------------------------+
| 23 | Ellika  | 0x31323334 | P-22 C-59 CQAE colony | ellikamishra009@gmail.com |
| 24 | ralieka | 0x31323334 | P-22 C-59 CQAE colony | ralieka009@gmail.com      |
| 25 | ralieka | 0x31323334 | P-22 C-59 CQAE colony | ralieka009@gmail.com      |
| 26 | Neha    | 0x31323334 | Aundh west            | neha98@yahoo.com          |
| 27 | Shekhar | 0x30393837 | ITI road              | shekhar1@gmail.com        |
| 28 | Ajita   | 0x32373132 | P-22 C-59 CQAE colony | ajita@gmail.com           |
| 29 | Raji    | 0x39383931 | P-22 C-59 CQAE colony | raji98@gmail.com          |
| 30 | Rakesh  | 0x31323334 | P-22 C-59 CQAE colony | ramoh09@gmail.com         |
| 31 | Jeetu   | 0x31323334 | P-22 C-59 CQAE colony | ellika98@gmail.com        |
| 32 | Vidhu   | 0x39383931 | P-22 C-59 CQAE colony | vidhu98@gmail.com         |
+----+---------+------------+-----------------------+---------------------------+
10 rows in set (0.00 sec)

mysql>
```

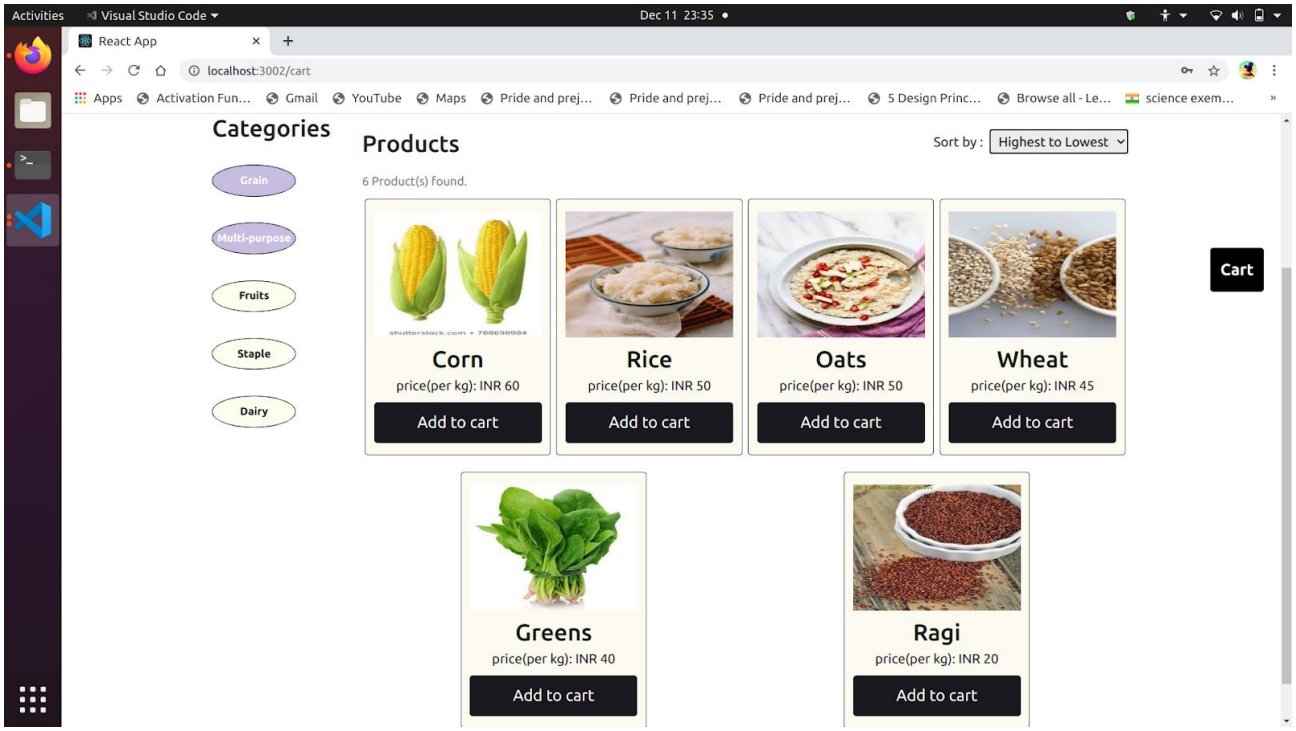
Login Page-



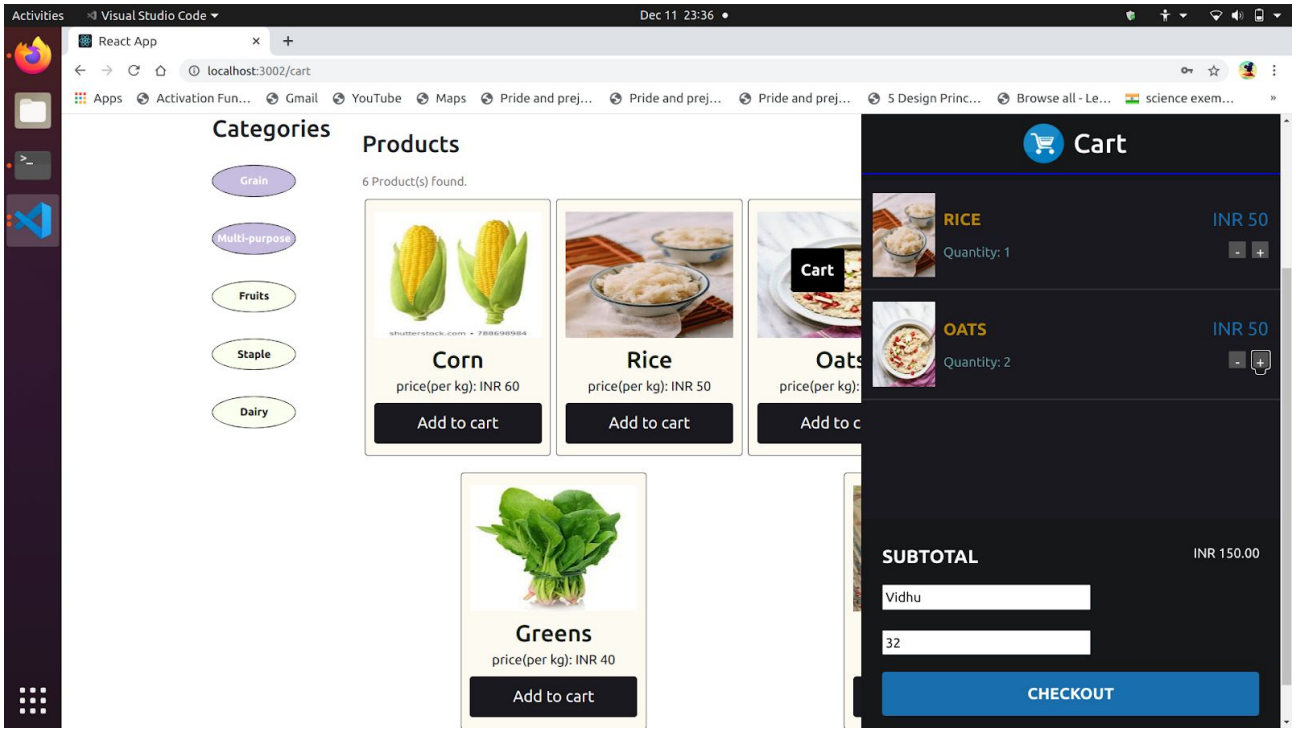
Cart Page-



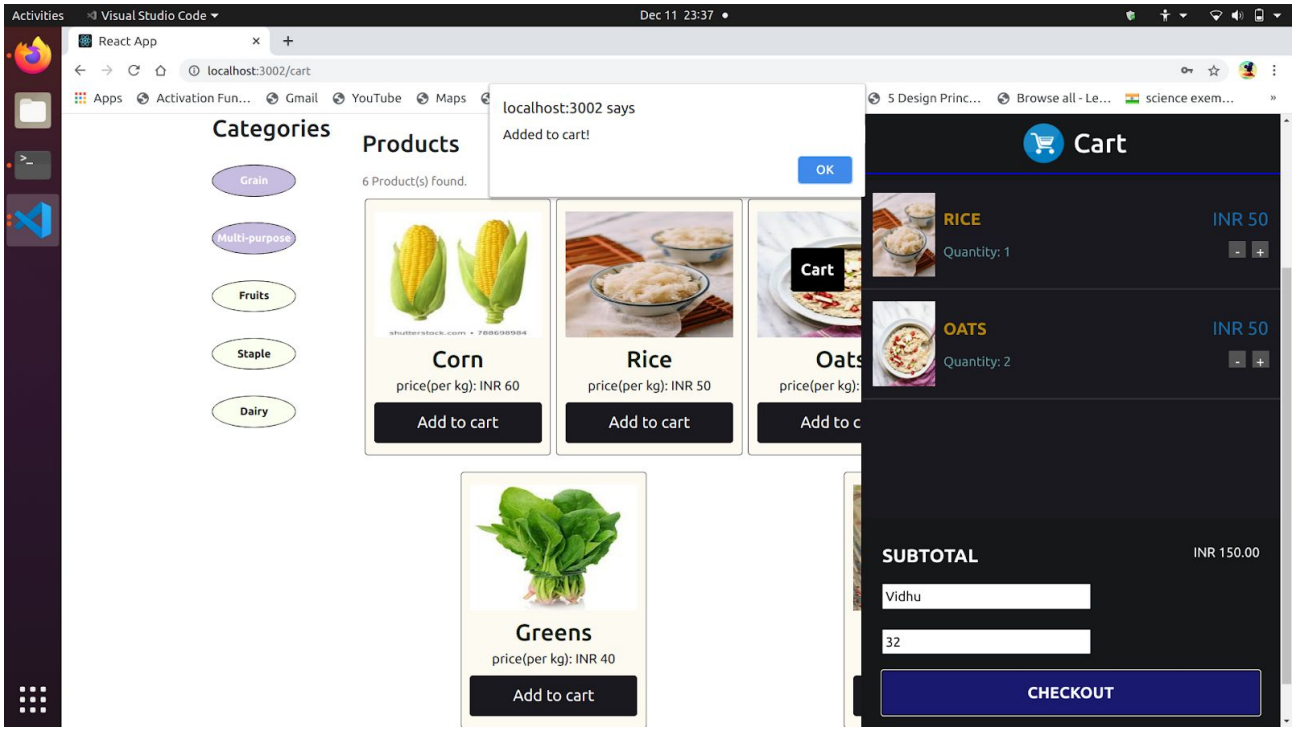
Filter products with categories,display in price range-



Cart view on adding products-



Successful order placement-

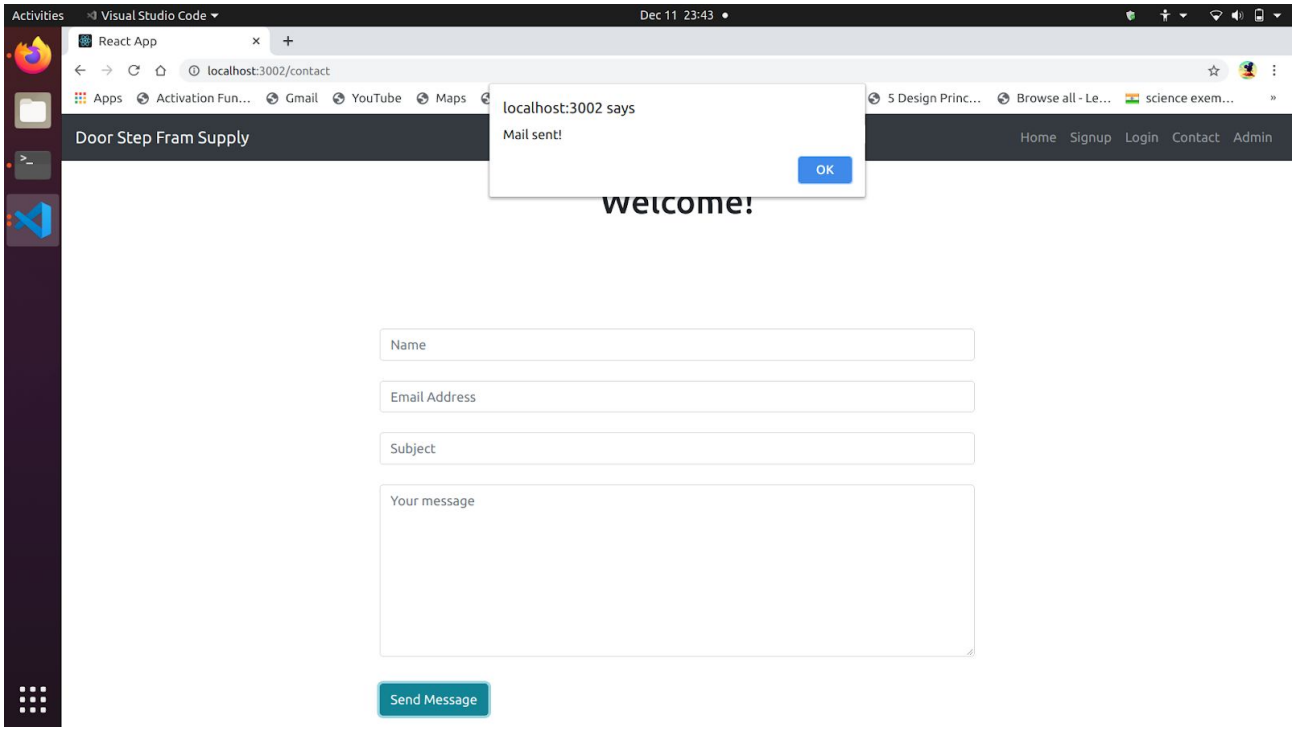


added cart to orders in database-

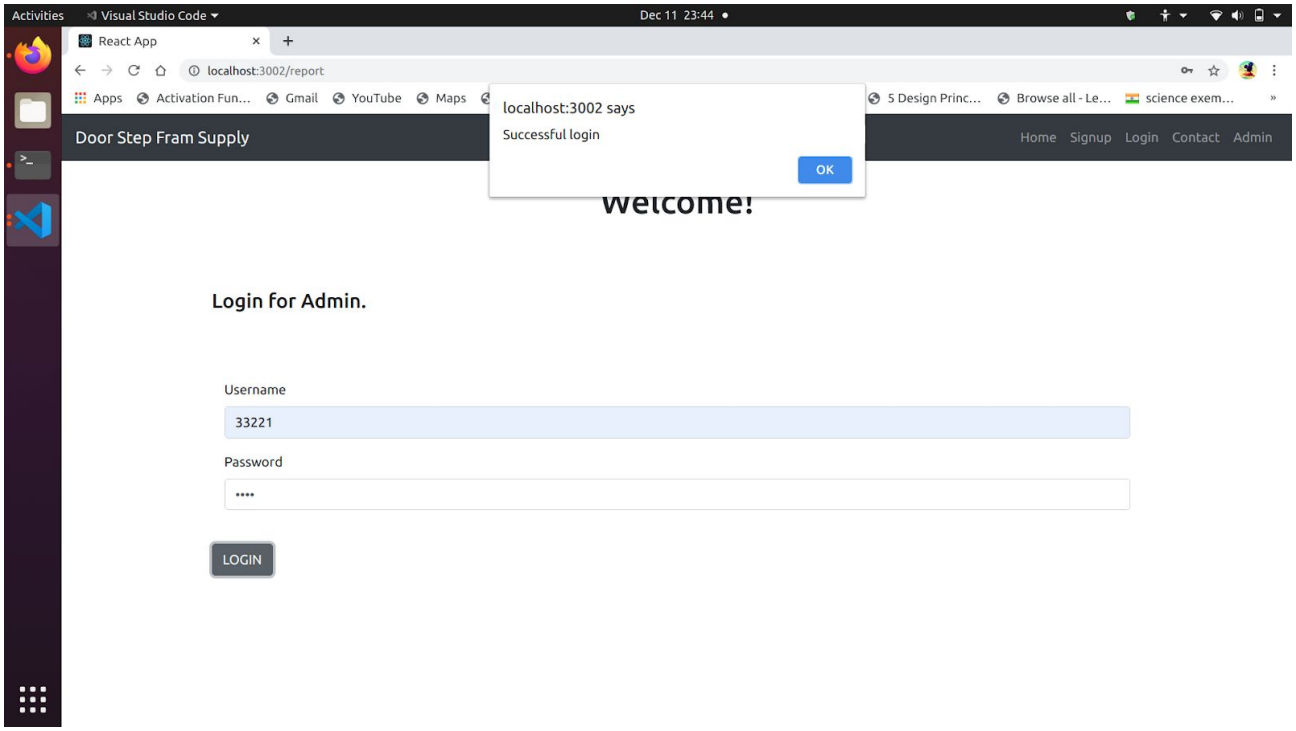
```
mysql> select* from orders;
+----------+---------+-------------+----------+-----------+---------+---------+
| order_id | cust_id | no_of_items | cost_due | cust_name | farm_id | crop_id |
+----------+---------+-------------+----------+-----------+---------+---------+
|       18 |      23 |           3 |      100 | Ellika    |    NULL |    NULL |
|       19 |      26 |           3 |      100 | Neha      |    NULL |    NULL |
|       20 |      27 |           2 |       80 | Shekhar   |    NULL |    NULL |
|       34 |      30 |           3 |      150 | Shekhar   |       1 |       1 |
|       35 |      27 |           7 |      270 | Shekhar   |       1 |       1 |
|       36 |      27 |           7 |      270 | Shekhar   |       1 |       1 |
|       37 |      30 |           2 |      100 | Shekhar   |       1 |       1 |
|       38 |      27 |           2 |      100 | Shekhar   |       1 |       1 |
|       39 |      27 |           2 |       40 | Shekhar   |       2 |       2 |
|       40 |      29 |           2 |      100 | Raji      |       1 |       1 |
|       41 |      30 |           2 |      100 | Rakesh    |       1 |       1 |
|       43 |      31 |           2 |      100 | Jeet      |       1 |       1 |
|       44 |      31 |           2 |       60 | Jeet      |       3 |       3 |
|       45 |      30 |           1 |     10.9 | Shekhar   |       1 |       1 |
|       46 |      32 |           3 |      150 | Vidhu     |       1 |       1 |
+----------+---------+-------------+----------+-----------+---------+---------+
15 rows in set (0.00 sec)
```

Contact Page-

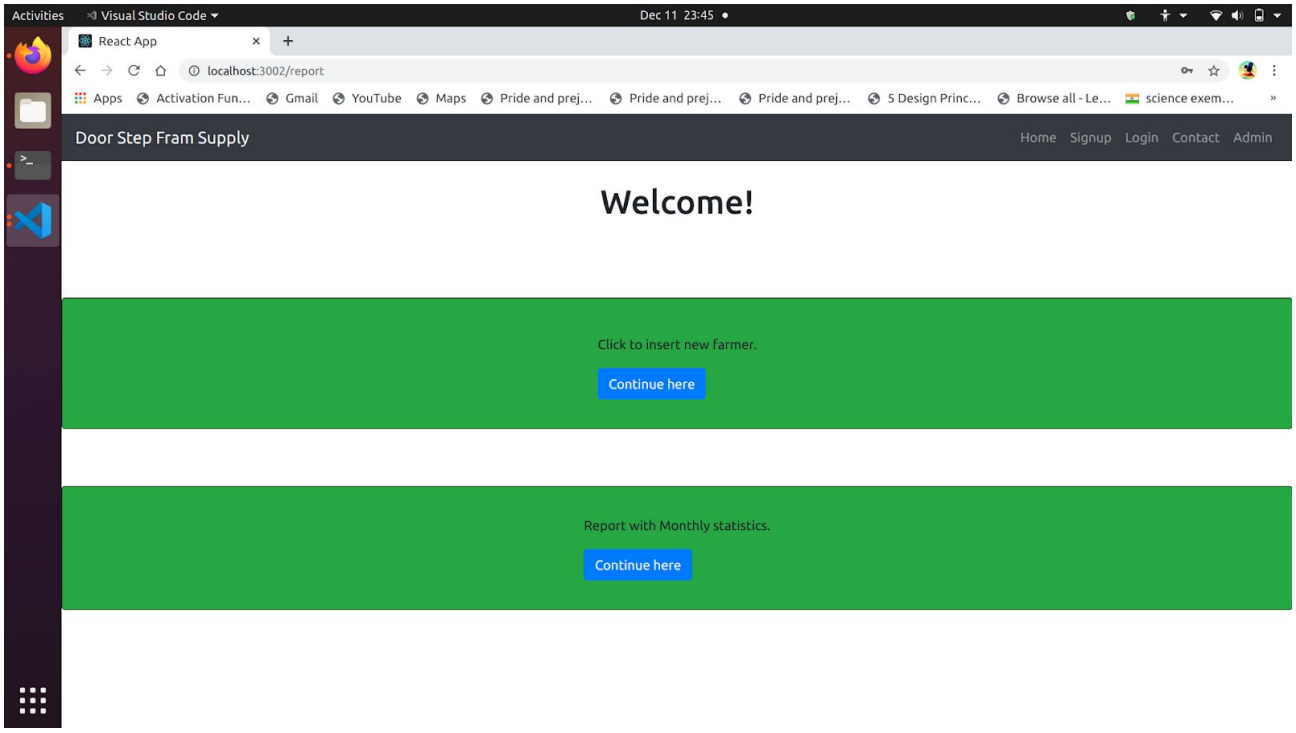
contact alert on sending mail-



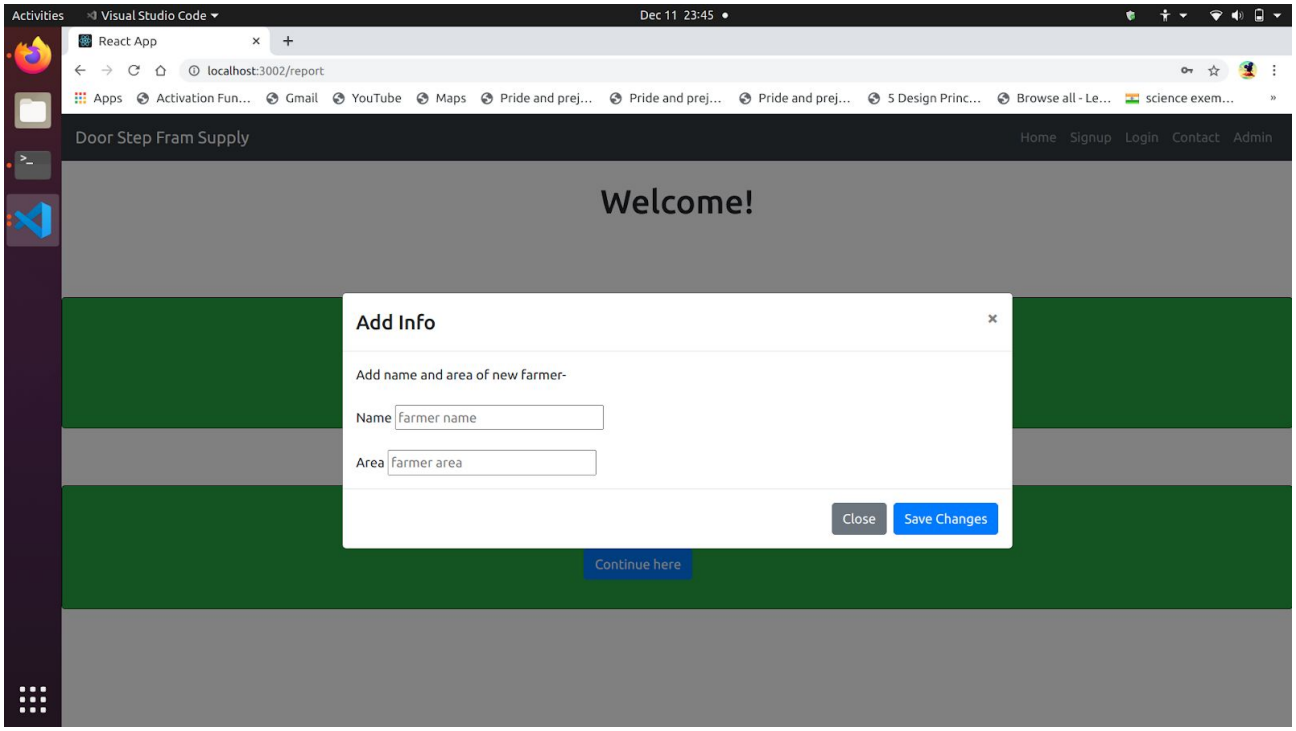
Admin Page-



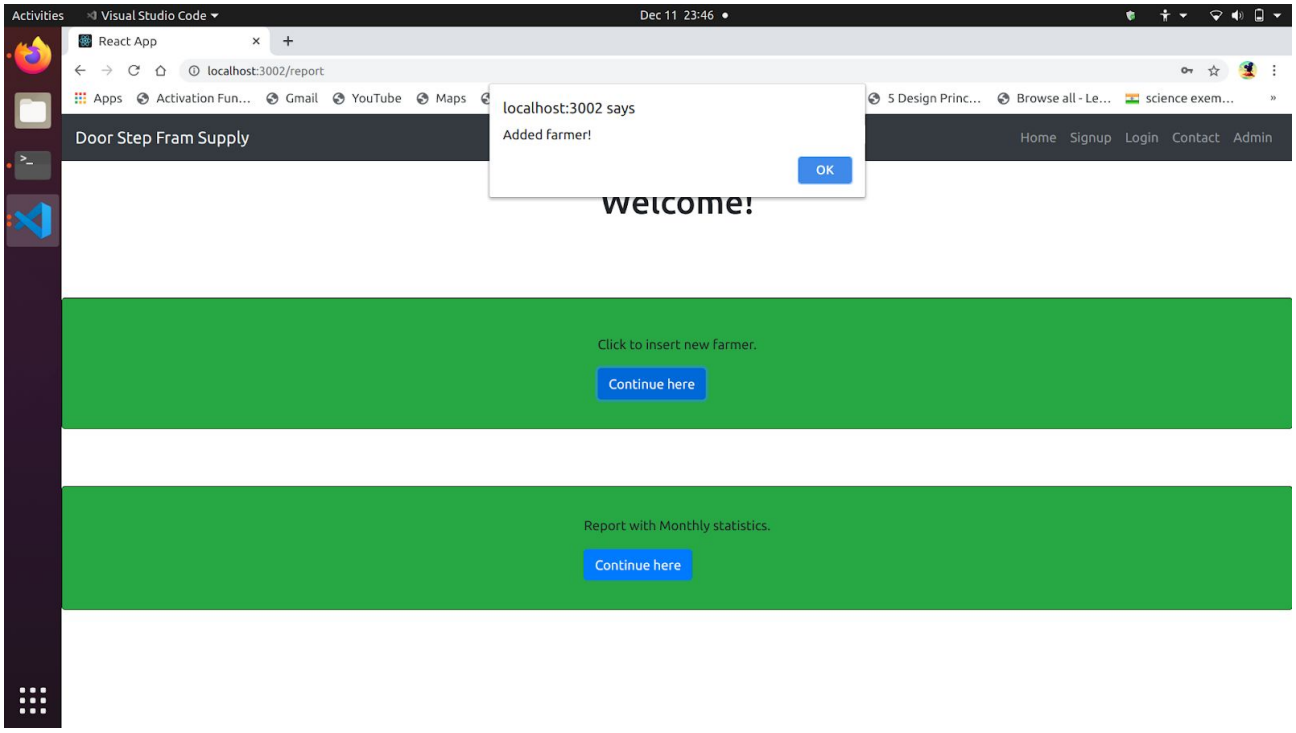
Admin options-



Insert farmer-



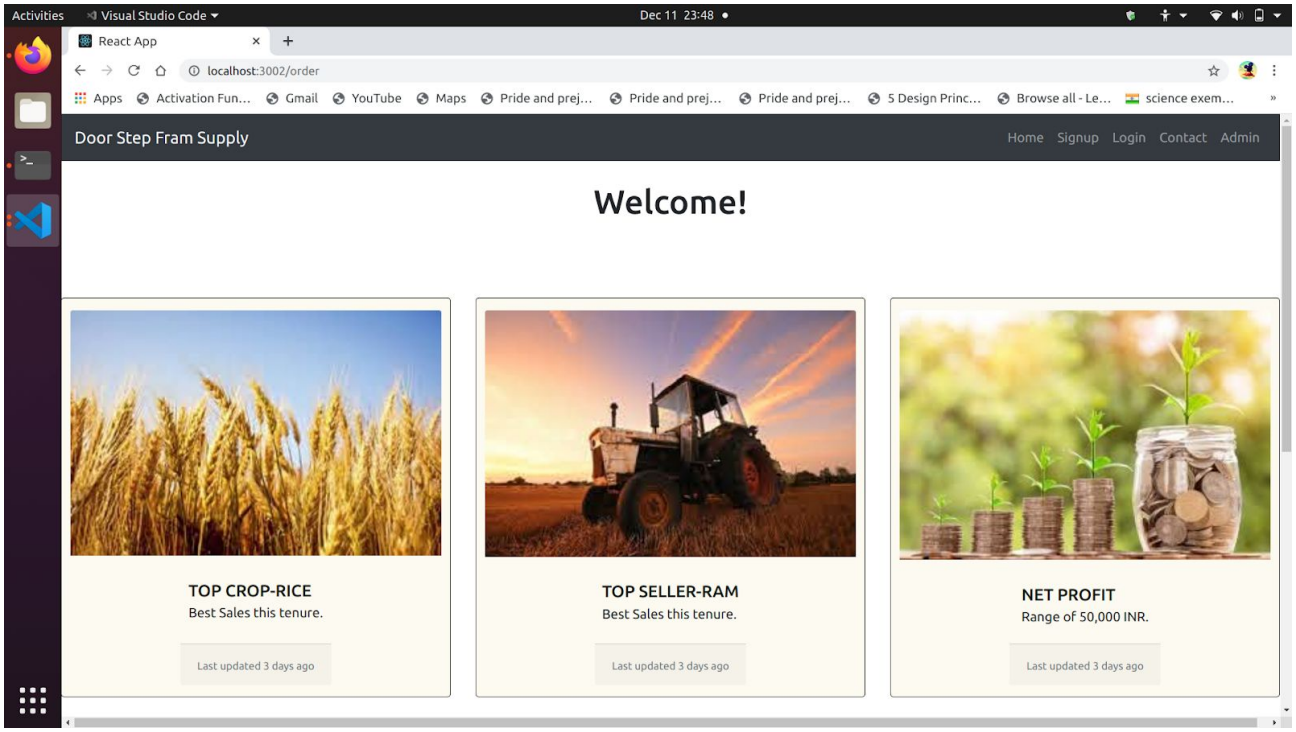
Successful insertion-

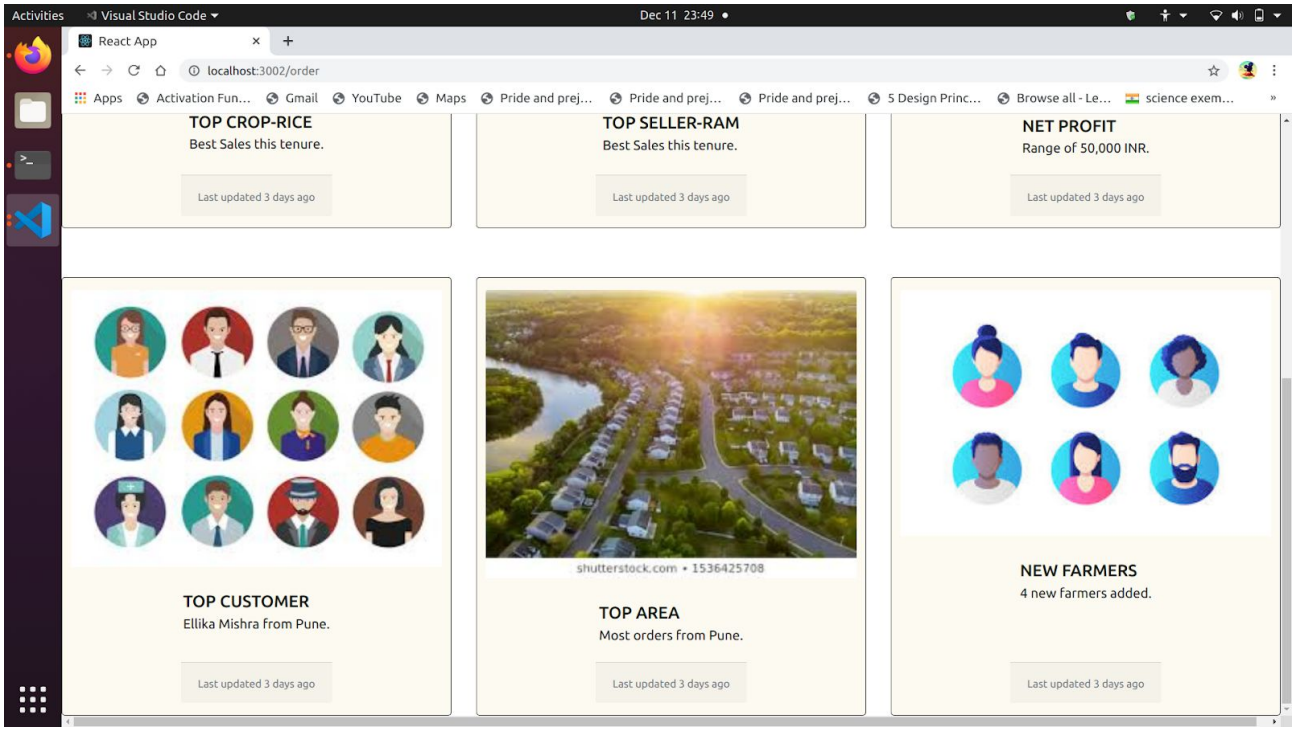


Farmer details in database-

```
mysql> select* from farmer;
+-----+--------+-----------+
| fid | name   | area      |
+-----+--------+-----------+
|   1 | Ram    | Pune      |
|   2 | Vinay  | Mumbai    |
|   3 | Abdul  | Chinchwad |
|   4 | Sam    | Pune      |
|   5 | Sham   | Mumbai    |
|   6 | Rajesh | Pune      |
|   7 | Raj    | Pune      |
|   8 | Jai    | Mumbai    |
|   9 | Mohan  | Chinchwad |
|  10 | Sunil  | Mumbai    |
+-----+--------+-----------+
10 rows in set (0.00 sec)
```

Report page for admin view-





5.4 Future work / Extension

The site can be developed into android/ios applications with functionalities for both Customers and Farmers to login and use according to roles i.e purchase and sell.The farmer and customer can get in direct contact without Admin intervention,this needs a large database and efficient management of roles. Also next steps involve developing an android for easier use of this product.

5.5 Conclusion

In this mini project we have successfully designed and implemented the Door-Step Farm Supply system using Node.js as a front-end and MySQL as a backend.Major steps for building were choosing appropriate frontend frameworks for development,next was choice of connectors with Mysql depending on chosen frontend.Designing of the project to be user friendly with real world implementation for stake-holders and users was a crucial point Through this we learned to apply the concepts of Mysql database and connection with frontend framework React.We also made use of HCI principles to make the project user friendly.

REFERENCES

List all the material used from various sources for making this project

[1] Journal article – A. A. Author of article. "Title of article," Title of Journal, vol. #, no. #, pp. page number/s, Month year.

[2] Books- Author's last name, first initial. (Publication date). Book title. Additional information. City of publication: Publishing company.

[3] Magazine- Author's last name, first initial. (Publication date). Article title. Periodical title, volume number(issue number if available), inclusive pages

[4] Website or Web page Author's name. (Date of publication). Title of article. Title of Periodical, volume number, Retrieved month day, year, from full URL