

FORTUNE FARM

By

NISHI PATEL (19BSIT001)

ISHITA KOYANI (19BSIT016)

DEEP SHETA (19BSIT086)

Under Guidance

of

Internal Guide

Assistant Professor

DIP PATEL

Submitted to



Smt. Chandaben Mohanbhai Patel Institute of Computer Applications

CHARUSAT

Changa

Submission of April-May 2022

Acknowledgement

Knowledge in itself is a continuous process. At this moment of our substantial enhancement, We rarely find words to express our gratitude towards those who were constantly involved with us.

The completion of any inter disciplinary project depends upon coordination, cooperation and combined efforts of several resources of knowledge, creativity, skill, energy and time. The work being accomplished now, we feel our most sincere urge to recall and knowledge through these lines, trying our best to give full credit wherever it deserves.

We would like to thank our project guide **Mr. Dip Patel and Mr. Nilay Ganatra** and Dean & Principal **Dr. Atul Patel** who advised and gave us moral support through the duration of our project. Without their constant encouragement we could not have been able to achieve what we have.

It's our good fortune that we had support and well wishes of many. We are thankful to all and those names which have been forgotten to acknowledge here but contributions have not gone unnoticed.

With Sincere Regards,

Deep Sheta (19BSIT086)

Ishita Koyani (19BSit016)

Nishi Patel (19BSIT001)

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➤ **Project Profile**

Project Name: Fortune Farm

Type of Application: An E-commerce and Assistance Application

Project Description:

This software primarily focuses on farmers selling directly to consumers without the use of a middleman, as well as allowing farmers to purchase pesticides. as well as enlisting the help of the consultant Customers will be able to purchase products that farmers have put up for sale .

Team Size: 3 people

Front End: Android Software Development Kit (Kotlin)

Back End: Firebase

Tools used: Android Studio (2021.1.1)

❖ Introduction to Tools

➤ **Front End Tool: Android Studio (2021.1.1)**

“Android SDK” is the tool where all the front-end work is done and all the structured query language codes are written in order to implement the system.

The Android SDK is a software development kit that includes a comprehensive set of development tools. These include a debugger, libraries, a handset emulator based on QEMU, documentation, sample code, and tutorials.

➤ **Back End Tool:**

❖ **Firestore:**

- Google Firestore is a Google-backed application development software that enables developers to develop iOS, Android.
- Firestore's first product was the Firestore Real-time Database, an API that synchronizes application data across iOS, Android, and Web devices, and stores it on Firestore's cloud. The product assists software developers in building real-time, collaborative applications.
- In this application, we have used Firestore to store real time data. i.e. when farmer add data to sell, it will show directly on customers side data to buy.

System Study

a. Existing System: -

There is currently no system on the market that allows for direct transactions between farmers and clients.

b. Proposed System

: - Dynamic Application:

- Farmers will be able to register and login to sell their products directly to consumers without having to go through a middleman, as well as purchase pesticides through the application. Furthermore, farmers can seek professional help for pest management by contacting professionals.

c. Scope of the Proposed System:-

- There are these modules in this system.
- **Register:** first name, last name, Phone number, email, username, password, confirm_password.
- **Login:** username, password.
- **Edit items(groceries):** Farmer name, groceries, Fruit and vegetables.
- **Selling :** Product title, Details, Price, Quantity, Category
- **Buying :** Product title, Details, Price
- **Adviser :** Name, Contact details

d. Aim and Objective of the Proposed System: -

Aim: - We connect farmers with customers to sell fresh fruits, vegetables, and groceries for a subsequent profit rather than selling them to a middleman and earn less for their goods.

Objectives: - Following are the objectives of the system: -

1. Farmers can sell their products and seek help when they need it.
2. Customers can purchase fresh produce, fruits, and goods directly from farmers.

e. Feasibility Study

❖ **Operational Feasibility: -**

- The basic activity is to sell the items that farmers have produced and to purchase the pesticides that are required, and the system will achieve its goal.
- The farmer's and customer's jobs will be made much easier with this approach. Buying groceries, fruits, and veggies on a regular basis will be much easier for users.
- The system is operationally practicable, according to the aforesaid analysis.

❖ **Technical Feasibility: -**

Fortune Farm is complete android mobile application. The main technology and tools that are associated with this system are: -

Technologies: -

- Android Software Development Kit

Tools: -

- Android Studio
- Firebase for real-time database

Each technology is free to use, and the technical abilities necessary are manageable. Product development time constraints and the ease with which these technologies can be implemented are aligned. The technology is theoretically possible, according to the research.

❖ **Economic Feasibility: -**

- Android Studio is free to download from Google is open source. Fruit and vegetables, as well as groceries, are free of charge.
- There are no costs because the system is not currently hosted on any platform. As a result, there is no charge.
- The system is shown to be economically viable in the aforementioned analysis.

System Analysis

- **Requirements Specification (along with System Modules): -**

There are mainly 2 Modules: - Farmer module, Customer Module

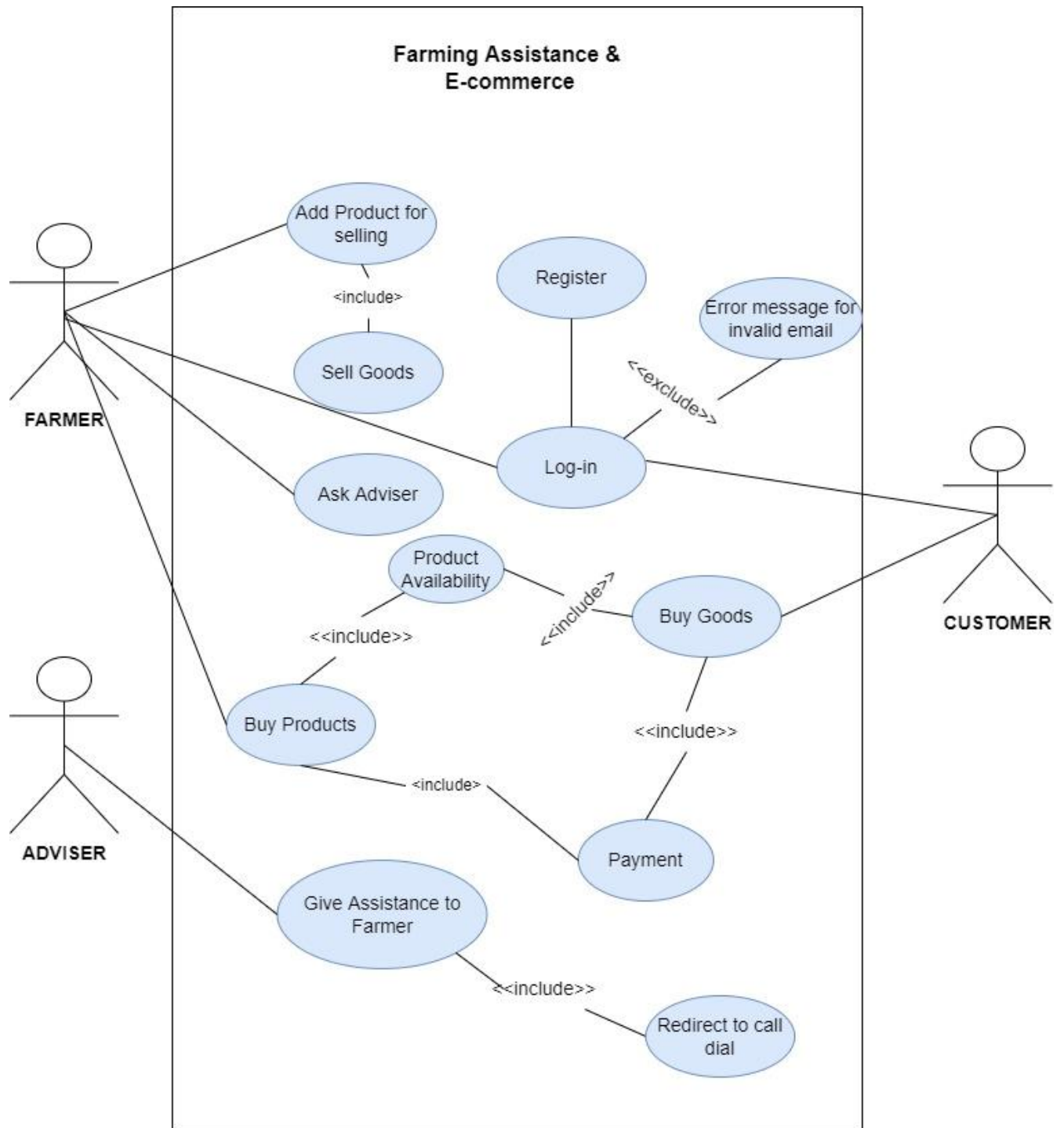
Purpose -

The system's goal is for farmers to sell their produce, such as vegetables, fruits, and groceries, and for pesticides to be purchased.

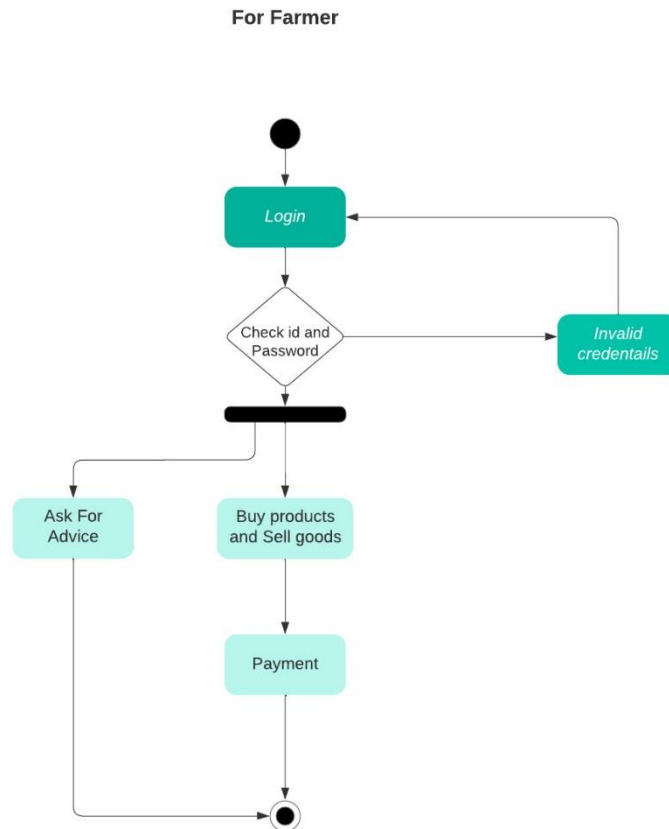
Intended Audience: - This system can be used by all the farmers, customer, reviewer (future enhancement).

- Use Case Diagram

Actor:- Farmer, Customer, Adviser

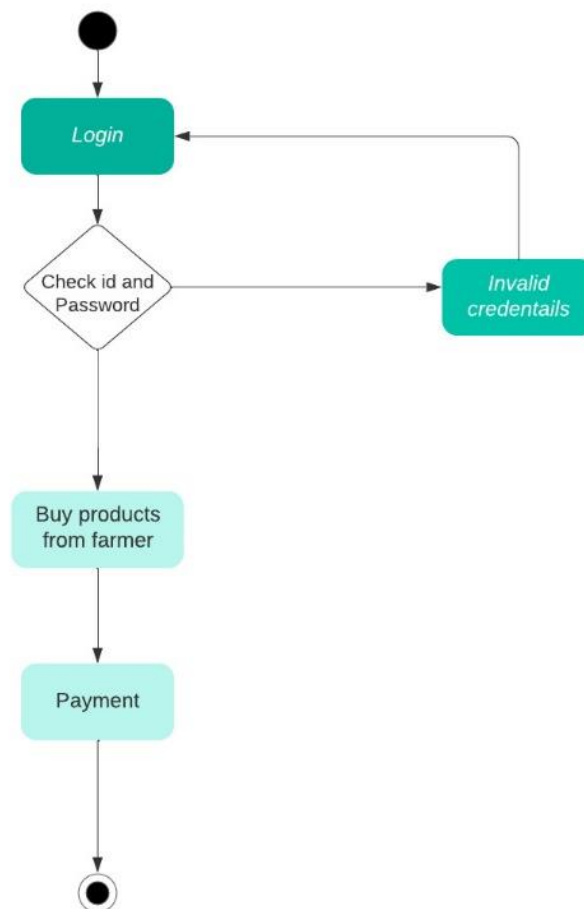


- **Activity Diagram of Farmer**

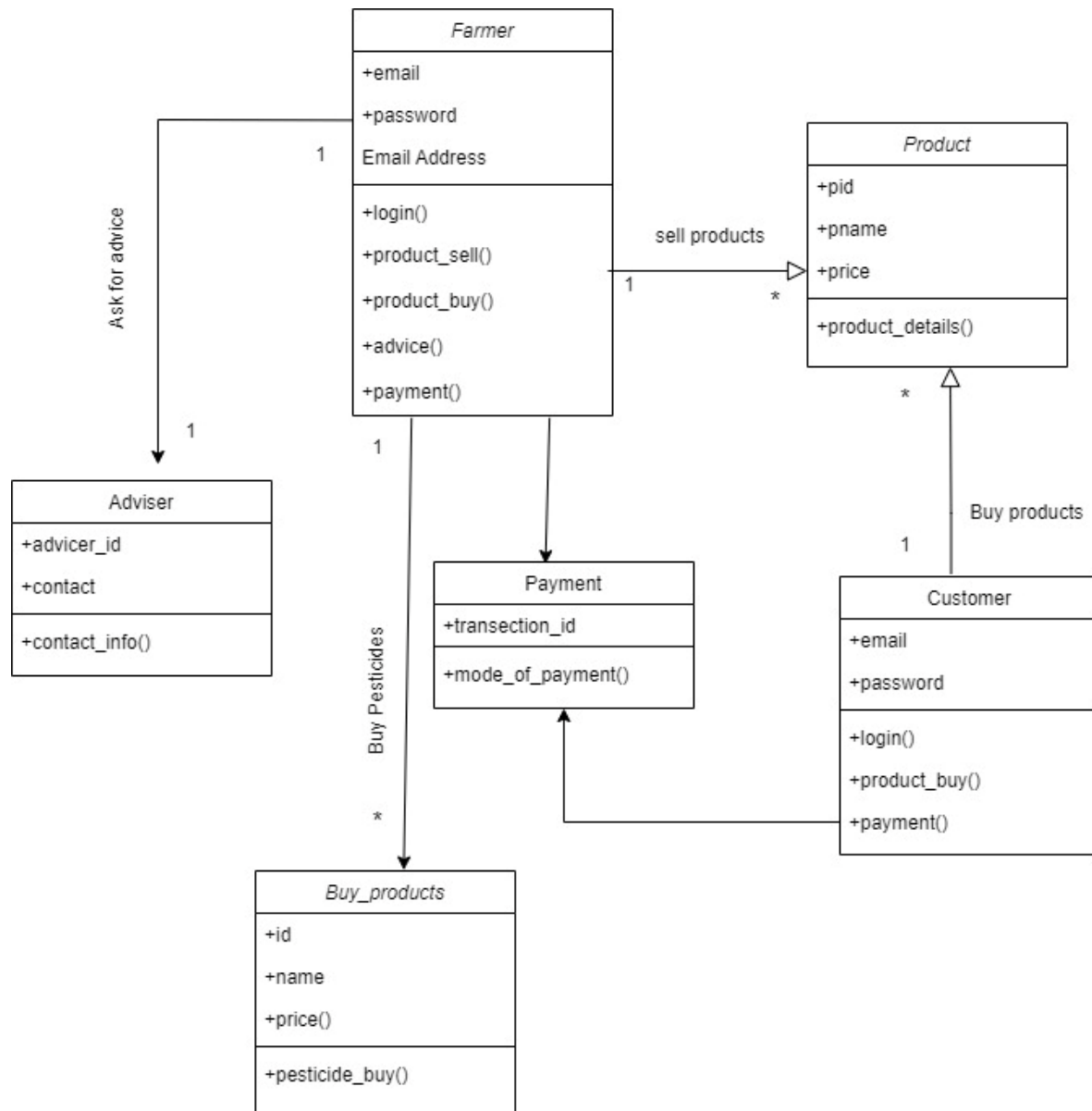


- **Activity Diagram of Customer**

For Customer



- Class Diagram



System Design

Data Dictionary: -

1. User_info:-

No.	Name	Type	Size	Constraint	Description	Example
1	Id	Int	11	Auto increment, Primary key		
2	Category	Text	15			Farmer OR customer
3	F_tname	Text	300		User's name	Bradly
4	L_name	Text	300		User's last name	Cooper
5	P_no	Double	10		User's phone number	9033227083
6	Username	Text	50	Unique	User's email id	bradlycooper@gmail.com
7	Password	Text	50		User's authentication	BradlyCooper

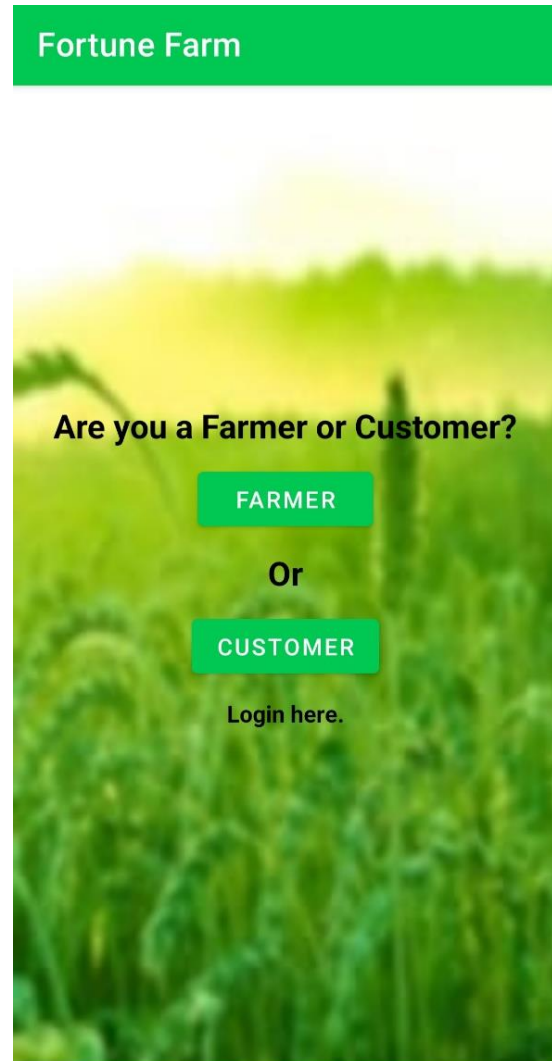
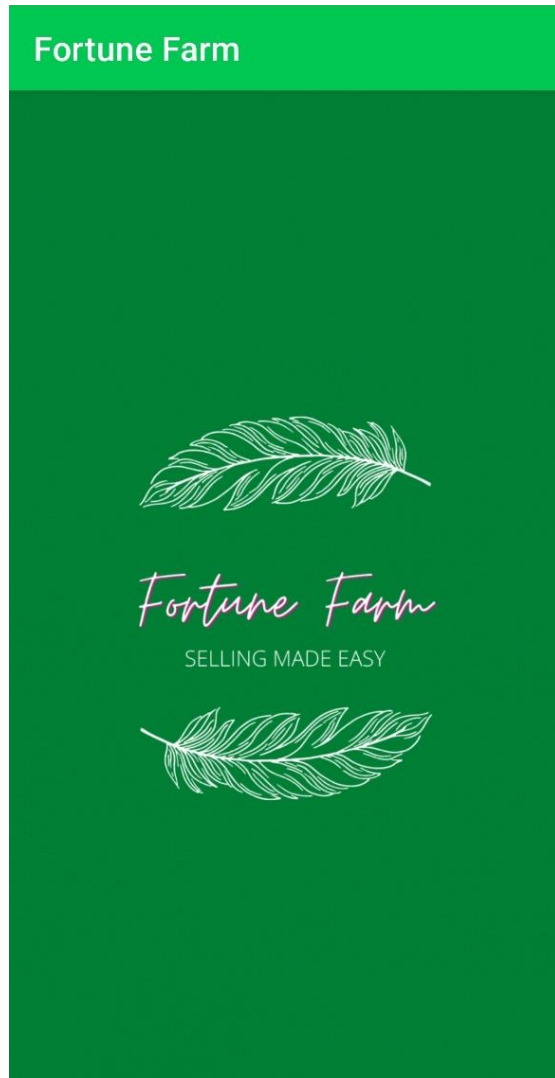
2. Product:-

No.	Name	Type	Size	Constraint	Description	Example
1	title	String	50			Kiwi
2	Detail	String	300			Directly imported from Ratnagiri city
3	Price	String	10			100 Rupees
4	Quantity	Int	10			1000 KG
5	Category	String	20			Fruit

3. Pesticides:-

No.	Name	Type	Size	Constraint	Description	Example
1	title	String	50			Celltaf Plus
2	Detail	String	300			Celltaf Plus Pesticide, Bottle
3	Price	String	10			500 rupees

Screen layout: -



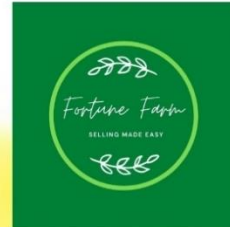
Fortune Farm

Sign Up

SIGNUP

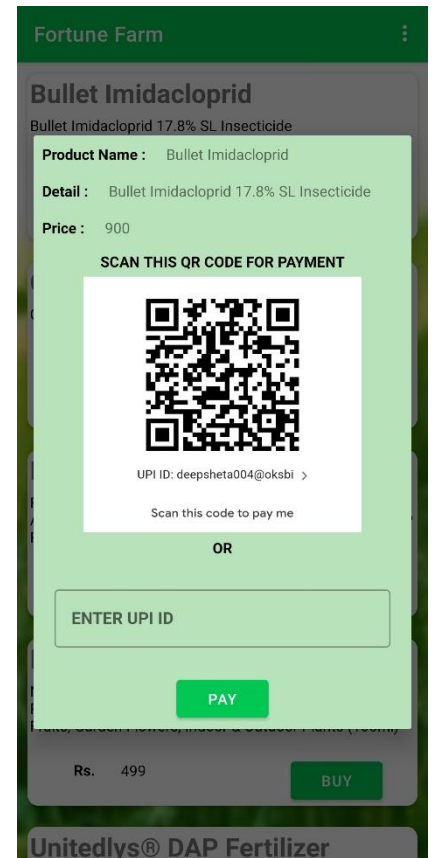
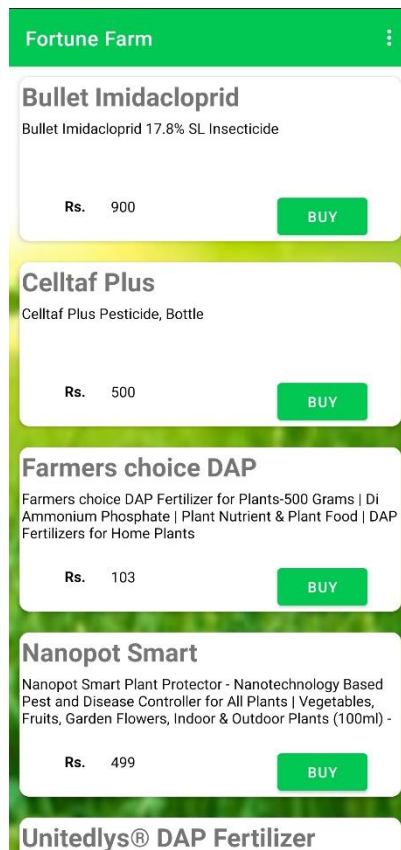
Already have account? [Login here.](#)

Fortune Farm



LOGIN

[Don't have an account?](#) [Register here.](#)



Add data for selling

Fortune Farm ⋮

Enter name of the product

graps

Enter specification of the product

fresh green

Enter quantity of the product

100

Enter price of the product for one product only

30

Choose Category

Vegetables

Fruits

Dary products

Groceries

Fortune Farm ⋮

Enter name of the product

Enter specification of the product

Enter quantity of the product

Enter price of the product for one product only

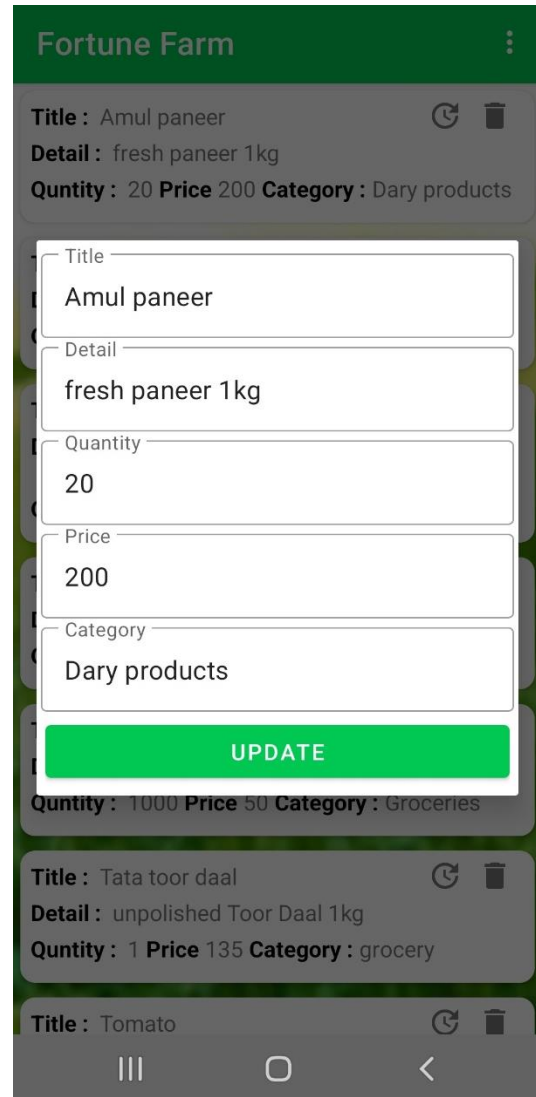
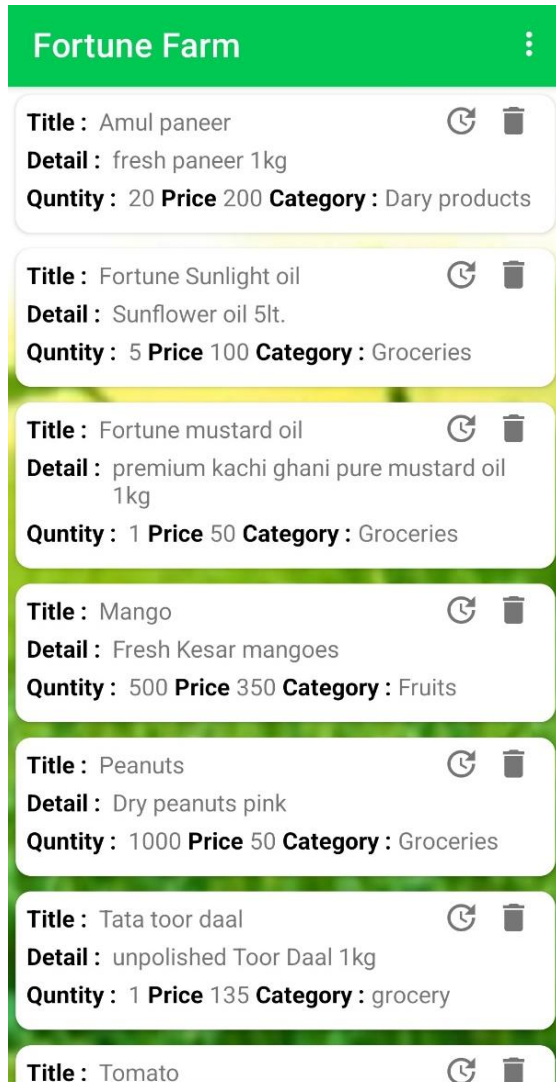
Choose Category

ADD PRODUCT

MANAGE PRODUCT


Product add for Customer

Update and delete data




Adviser details


Fortune Farm




Mittal Skula
[7202035542](tel:7202035542)




Nisha Patel
[8469746155](tel:8469746155)




Rahul Patel
[9870574634](tel:9870574634)




Neel Patel
[9870574634](tel:9870574634)



Jagdish Panchal
[7658976545](tel:7658976545)

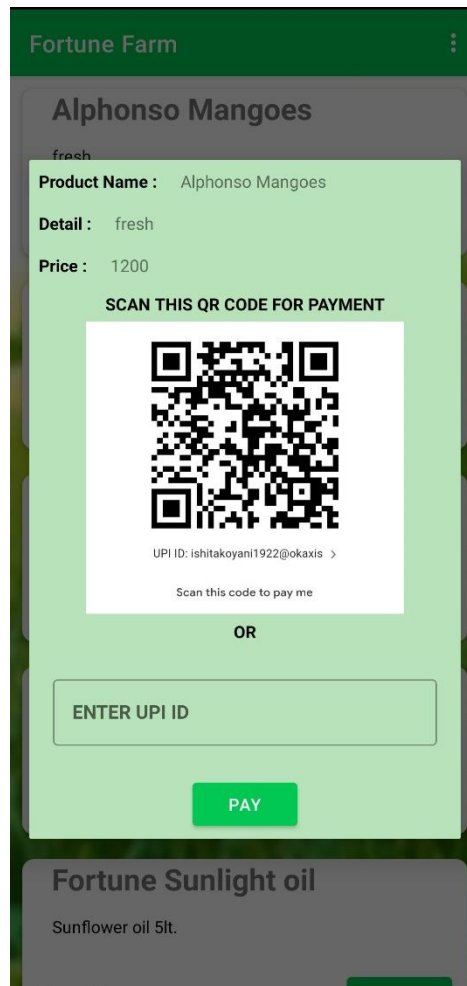
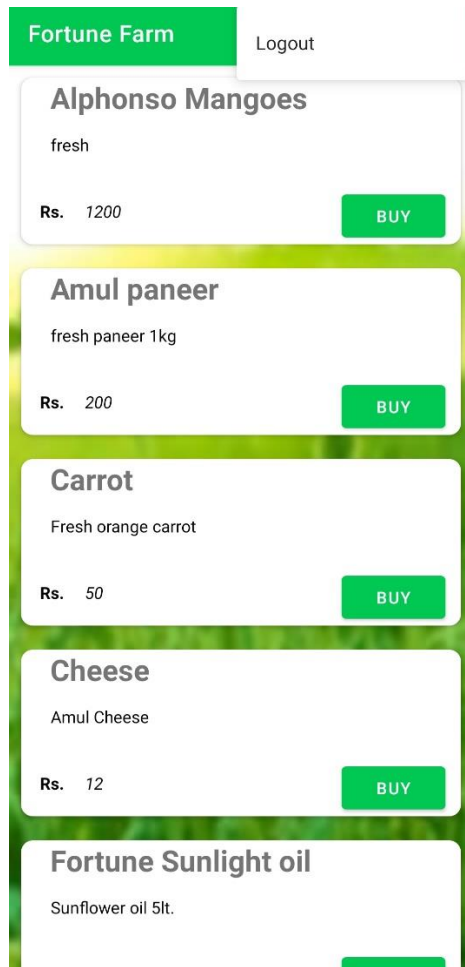


S.J. Solanki
[9426833912](tel:9426833912)



Prakash Shrivastav
[9034567349](tel:9034567349)

Customer Side Activities



System Testing

Testing Strategies: -

Tested the application by registering the farmer/customer and selling goods and buying it successfully.

Test Cases (behavior): -

Case No.	Functions	Input Values	Expected O/p	Actual O/P	Remarks
1	Name		Enter Name	Enter name	Pass
2	Name	Bradly		Bradly	Pass
3	Last name		Enter Last name	Enter Last name	Pass
4	Last name	Cooper		Cooper	Pass
5	Phone No.		Number	Number	Pass
6	Phone No.	9988776655		9988776655	Pass
7	Email ID	Admin	abc@gmail.com	Admin	Pass
8	Email ID	admin@gmail.com		admin@gmail.com	Pass
9	Password		Enter password	Enter Password	Pass
10	Password	Admin		Admin	Pass
11	title		Enter Title	Enter title	Pass
12	title	Kiwi	String	Kiwi	Pass
13	detail		Enter detail	Enter Detail	Pass
14	Detail	Fresh from today's yield	Strings	Fresh from today's yield	Pass
15	Quantity		Enter Number	Enter Number	Pass
16	Quantity	1000	number	1000	Pass
17	Price		Number	Number	Pass
18	Price	100	number	100	pass

Future Enhancement

- It is possible to share Firebase database to data analyst to study as well as for the future prediction of the application.
- For example, location wise selling made by a particular farmer, is farmer profiting enough if not, we could provide personal teaching related to farming if they want.
- We can also predict which kind of products customer are more willing to buy through online basis.

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