

Farmer Overwhelmed

way for farmers



E-Farming

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TEAM MEMBER:>

Aniket Keshav Yerne (PL)

Pratiksha Pradip Gargate

Pradip Abasaheb Gangarde

Abhishekh Kumar

Shashank Dattatray Deshpande

Gaurav Chandulal Chaudhari

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INTRODUCTION

E-farming is an online fruit, vegetable that is dedicated to providing services to consumers in making online marketing accessible to them. It is an online store which will allow the suppliers buying fruits, vegetable easily and also maintain transparency between the Farmer and Consumer.

This application helps customers to buy fruits, vegetable & grain at best value. People can easily browse through the various items using the well-defined interfaces that will be provided by the system.

The main goal of this project is to build a website that is more helpful for the use of Farmers and Consumer and even to keep the clarity in the whole market system from Farmers to direct Supplier and even farmers to get the best value from his inputs. This will help out only two pillars of this market rather than focusing on whole chain of market we made this market chain very easy means Farmers directly access to Consumer. A farmer will be able to know the best value/amount of his product and not fooled by marketers. Help in keeping the clarity between the Consumer and Farmer, removing the black market trade and inflation in the market.

SYSTEM ANALYSIS

The Proposed E-farming has the following features:

- ☐ Only Registered Farmers and Customers will be able to access the services of website.
- ☐ Farmers will have right to decline to offer given by customers.
- ☐ Admin can activate/deactivate any farmers and customers with valid email explanation.
- ☐ Customer can post advertisement about his requirement. Along with it he can view all of the offered product by framers
- ☐ Admin will be able to view all of transactions between farmers and customers to offer full control over website.

PURPOSE OF DOCUMENTS

The purpose of this document is to enlist the software requirements and specifications for E-farming. The proposed system helps in building a website to buy, sell organic fruits and vegetables online using internet connection. Enable farmers to see latest prices of his product provided by government.

The document will cover the system's requirements, design, development, testing and deployment phases. This document is intended for developers' users, testers and project managers for the purpose of understanding the design of systems in terms of different perspectives. Additionally, the document will also describe the business case, target user, and performance metrics of the system, as well as the technical architecture, data flow and the security measures.

SYSTEM REQUIREMENT SPECIFICATION

Overview

We have designed this website with the purpose of allowing farmers to share their product online and helps customers to buy fruits, vegetable & grain at best value.

The main goal of this project is to build a website that is more helpful for the use of Farmers and Consumer and even to keep the clarity in the whole market system from Farmers to direct Supplier and even farmers to get the best value from his inputs.

Study of the system:

Our system's interface has been designed with user-friendly graphics, and can be accessed via a web browser. The top-level interface has been organized into several categories for easy navigation.

1. Administrator Interface Design.
2. User Interface.
3. Service Provider Interface
4. Security Authentication.
5. General end-users.

The administrative interface allows for the management of user access and provides tools for monitoring system usage and statistics. It also includes a feature for approving products posted by farmers.

User of the system:

1. Administrator
2. Farmer

3. Consumer

Admin:

1. View list of Farmers and Consumers registered on website.
2. Approve the Product posted by Farmers.
3. List of transactions between Farmers and Consumers.

Farmers:

1. Farmers can post their crops details online like image, quantity and price etc.
2. Farmers can also view the list of products posted by themselves.
3. Farmers can also view the request by consumers for their crop.

Consumer:

1. Consumer can post their demand online with details like required crop, quantity etc .
2. Consumers can view list of approved products posted by farmers with required details.
3. Farmer can send the request for desired crop posted by farmer.

Security and Authentication:

1. Users Login and Logout.
2. View personal Profiles, Update profiles.
3. Forgot Password.

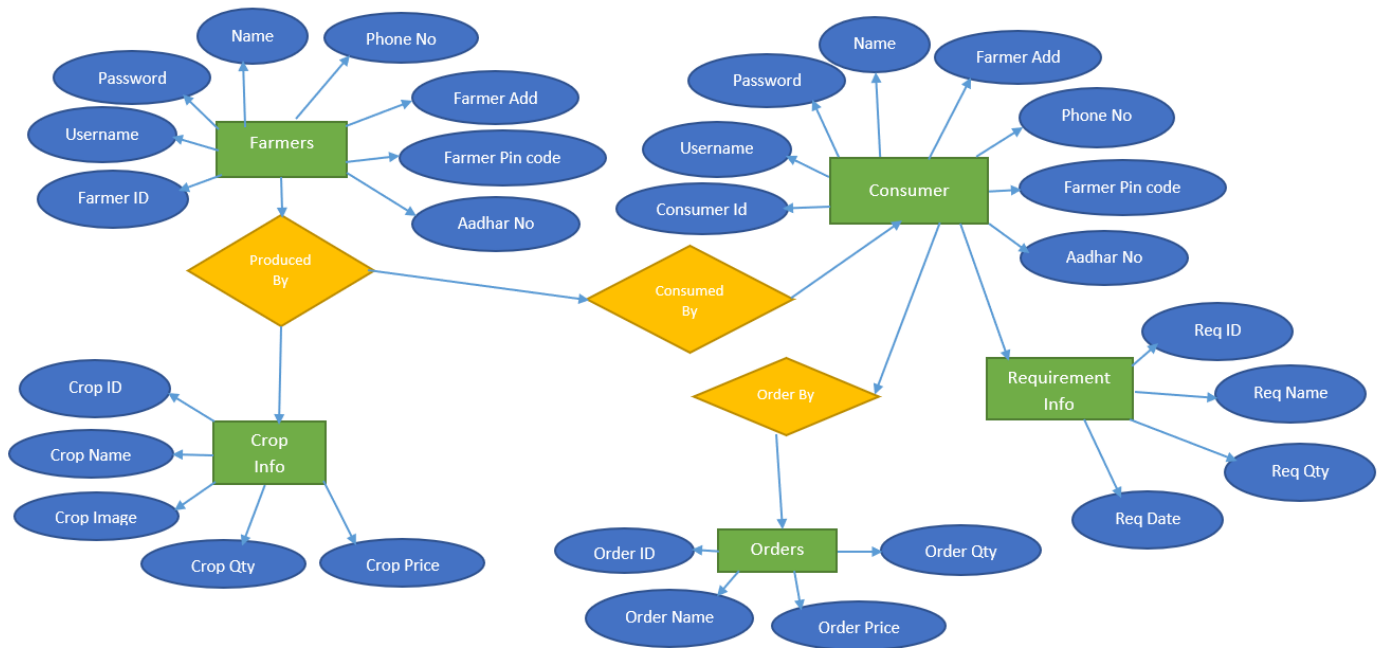
Software Requirement and Hardware Requirement:

Software Requirements:

- Technology : J2SE and J2EE, Hibernate and Spring Boot
- Web-Technologies : React, CSS, JavaScript
- Web Server : Tomcat 9.0
- Java Version : JAVA Version 11
- Backend Database : MySQL 8.0
- IDE : Eclipse

SYSTEM DESIGN

1.E-R DIAGRAM



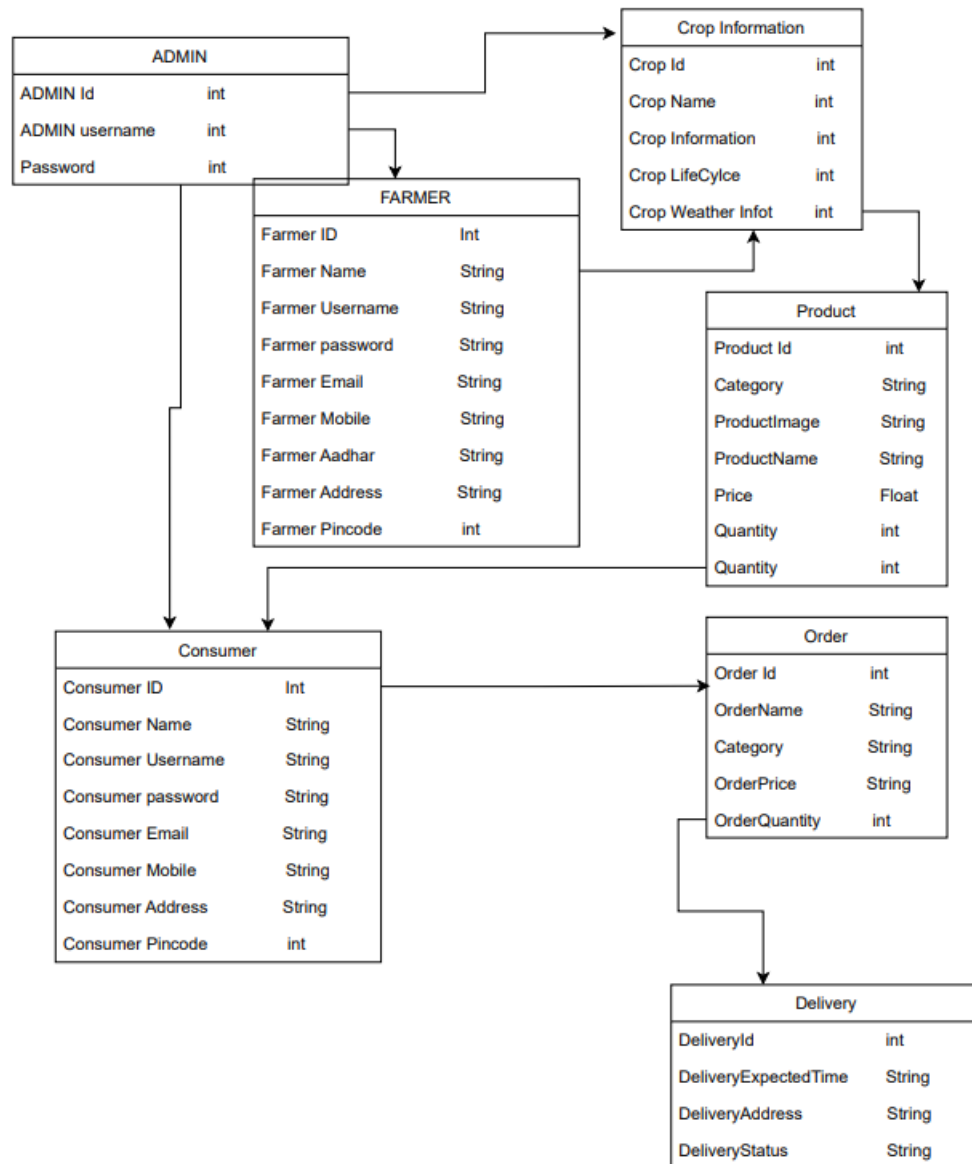
2.UML DIAGRAMS

UNIFIED MODELING LANGUAGE DIAGRAMS

The unified modeling language allows the software engineer to express an analysis model using the modeling notation that is governed by a set of syntactic semantic and pragmatic rules.

A UML system is represented using five different views that describe the system from distinctly different perspective. Each view is defined by a set of diagram, which is as follows.

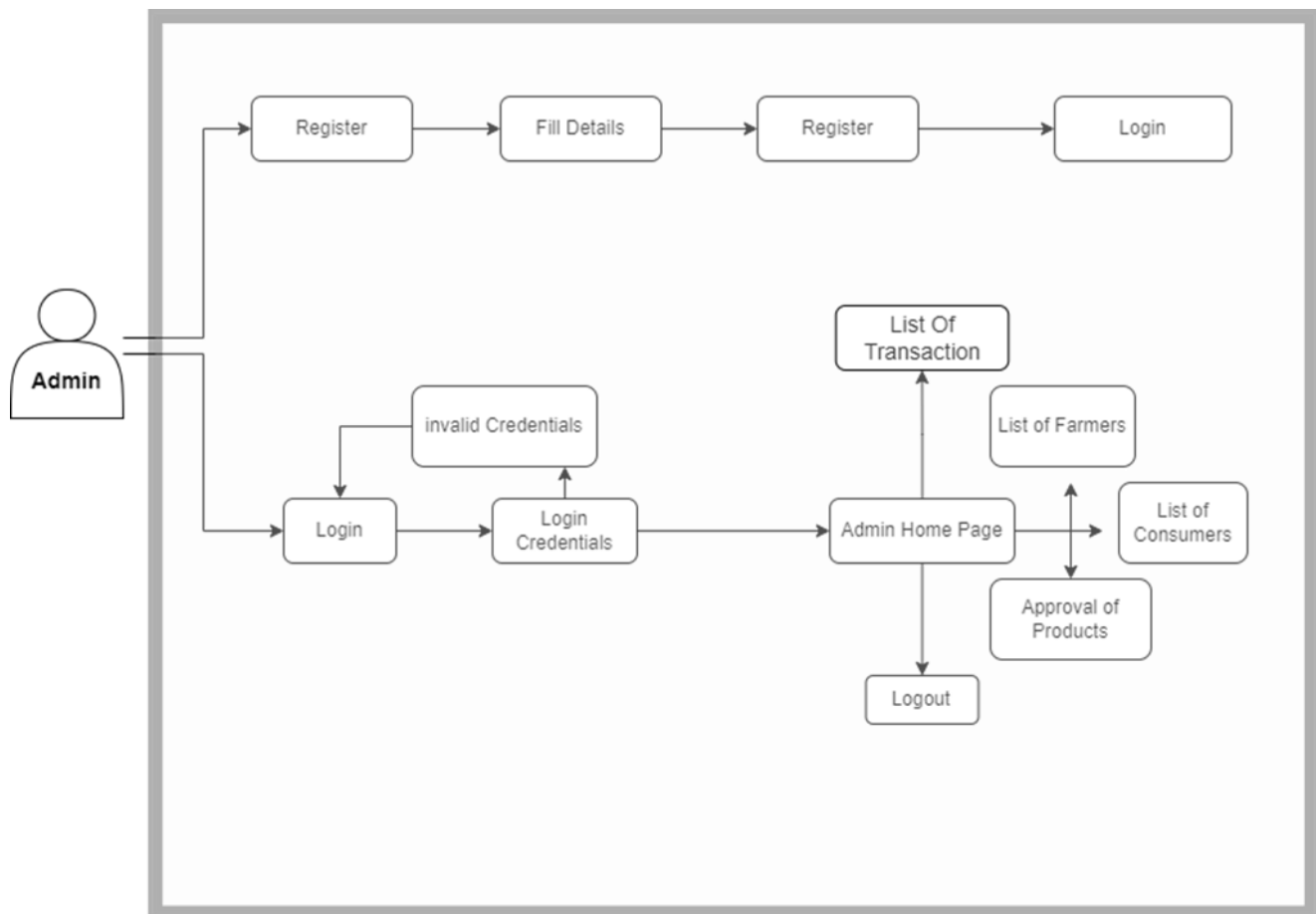
2.1. Class Diagram



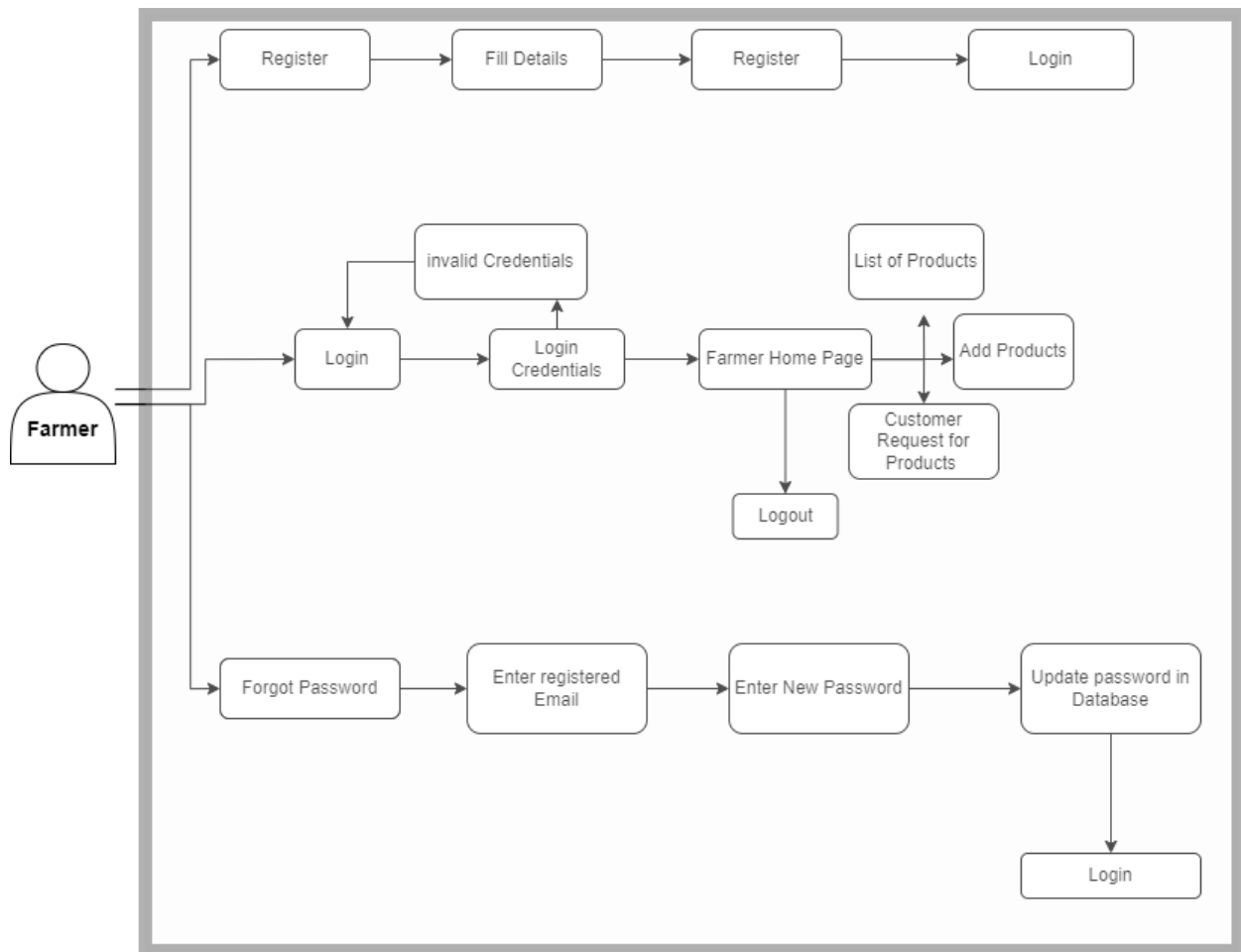
2.2.2.USE CASE DIAGRAMS

System (Base Level) UCD:

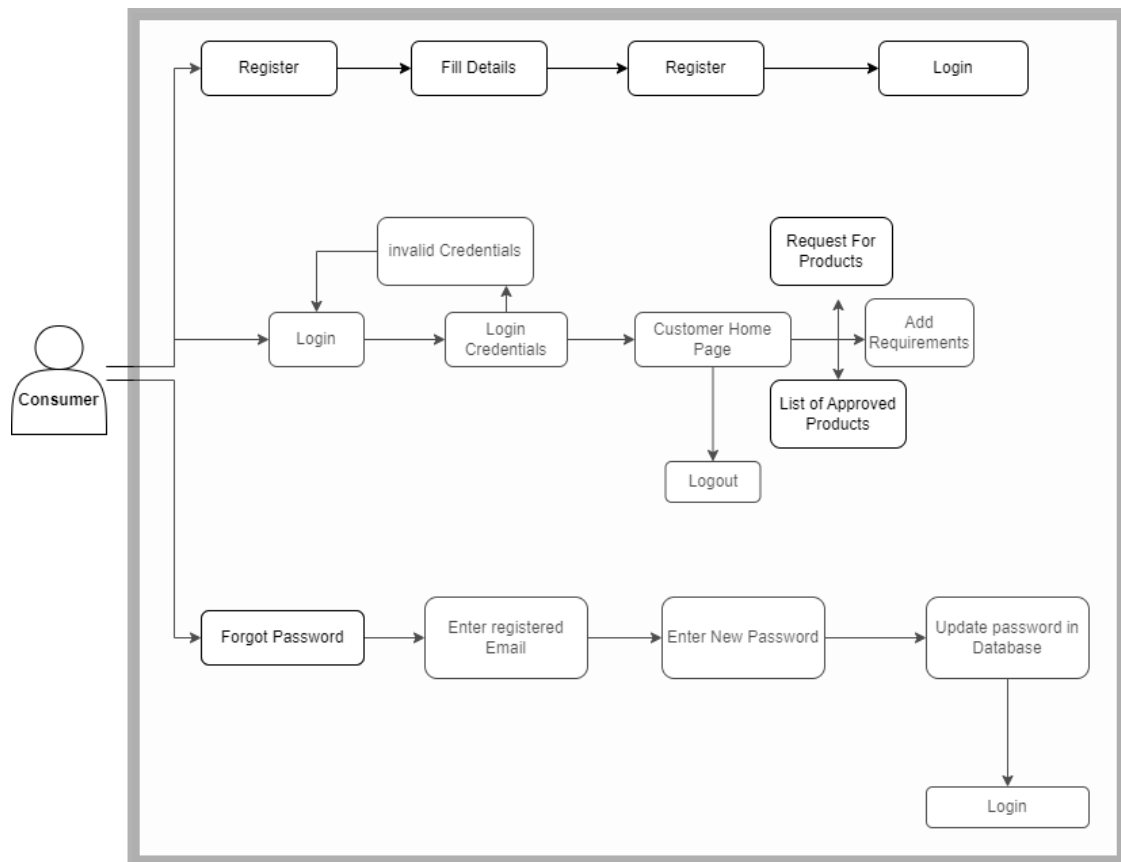
2.2.1. Admin



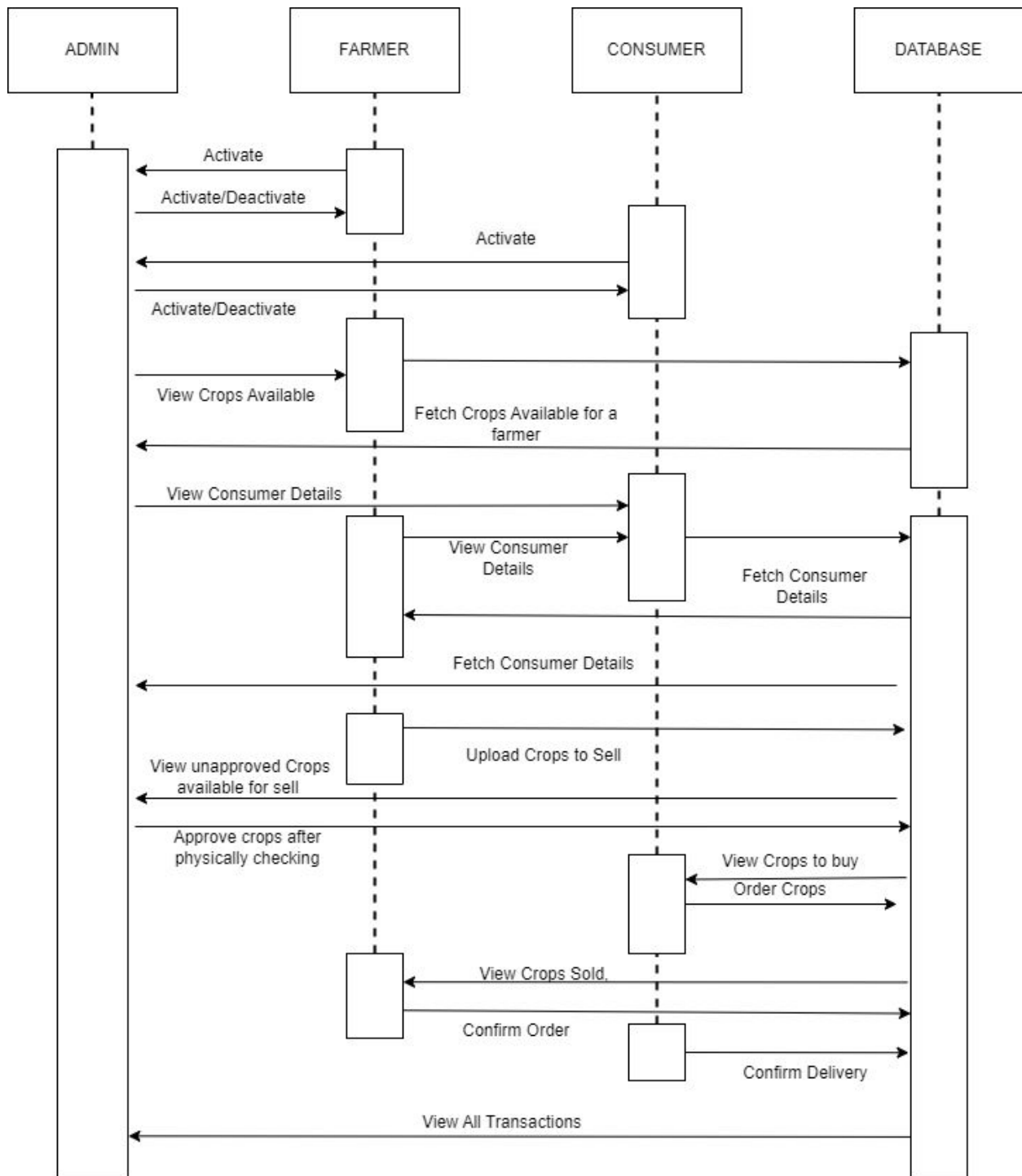
2.2.2. Farmers



2.2.3 Customers

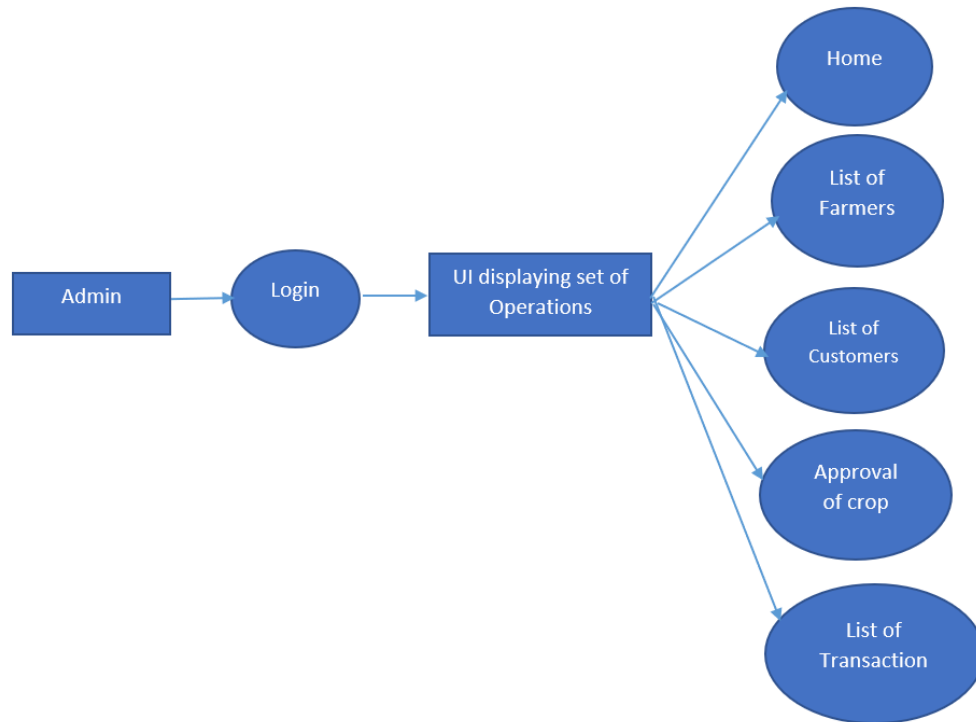


2.3 SEQUENCE DIAGRAM

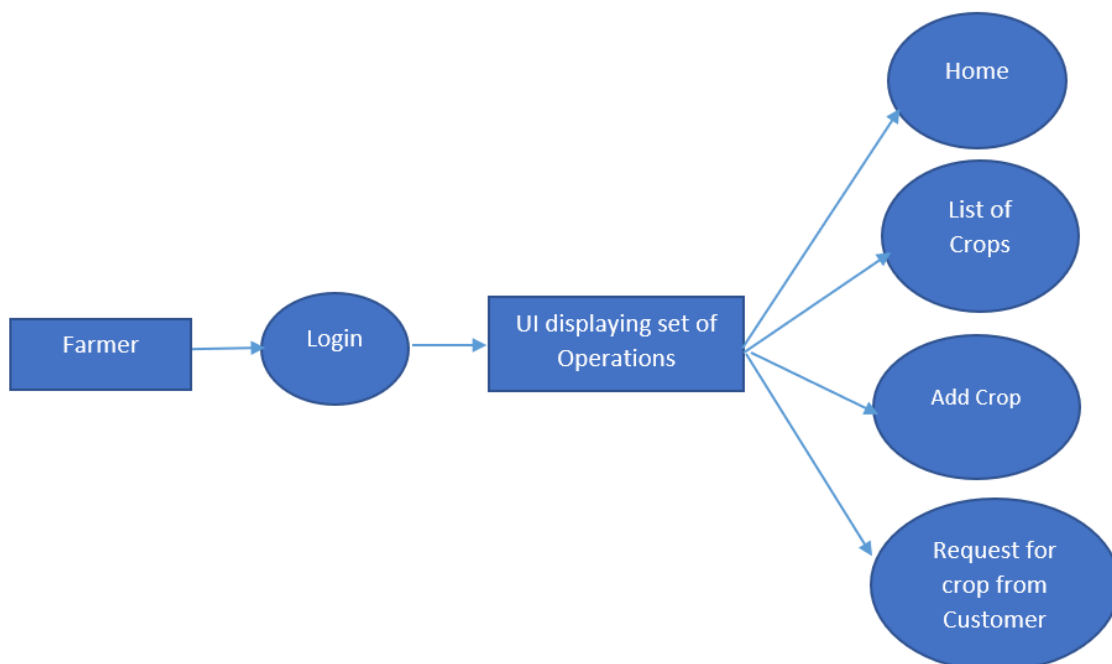


2.4 Data Flow Diagram

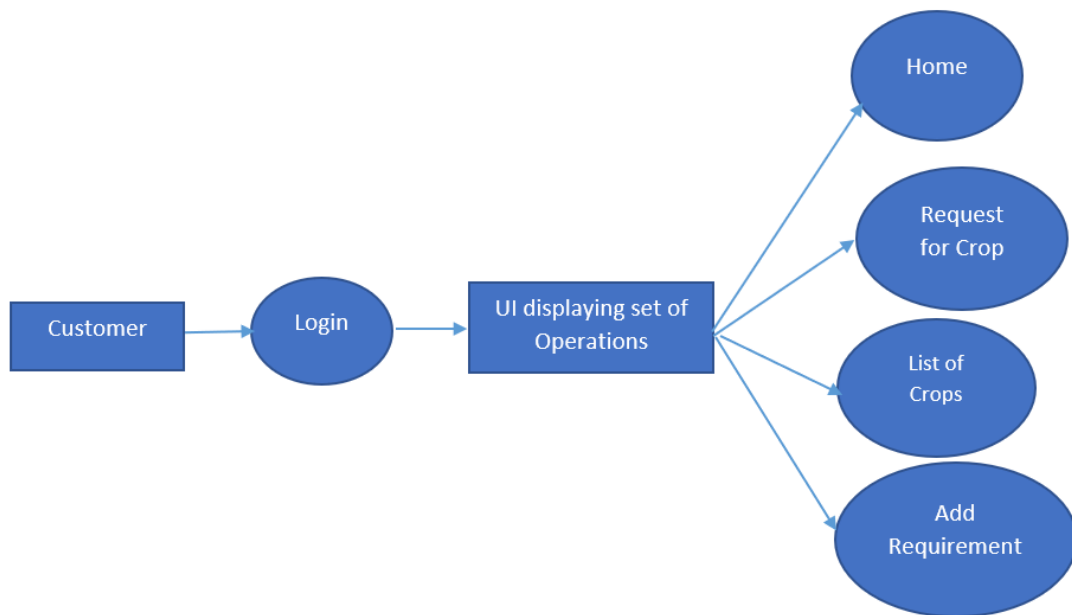
2.4.1 Admin



2.4.2 Farmer

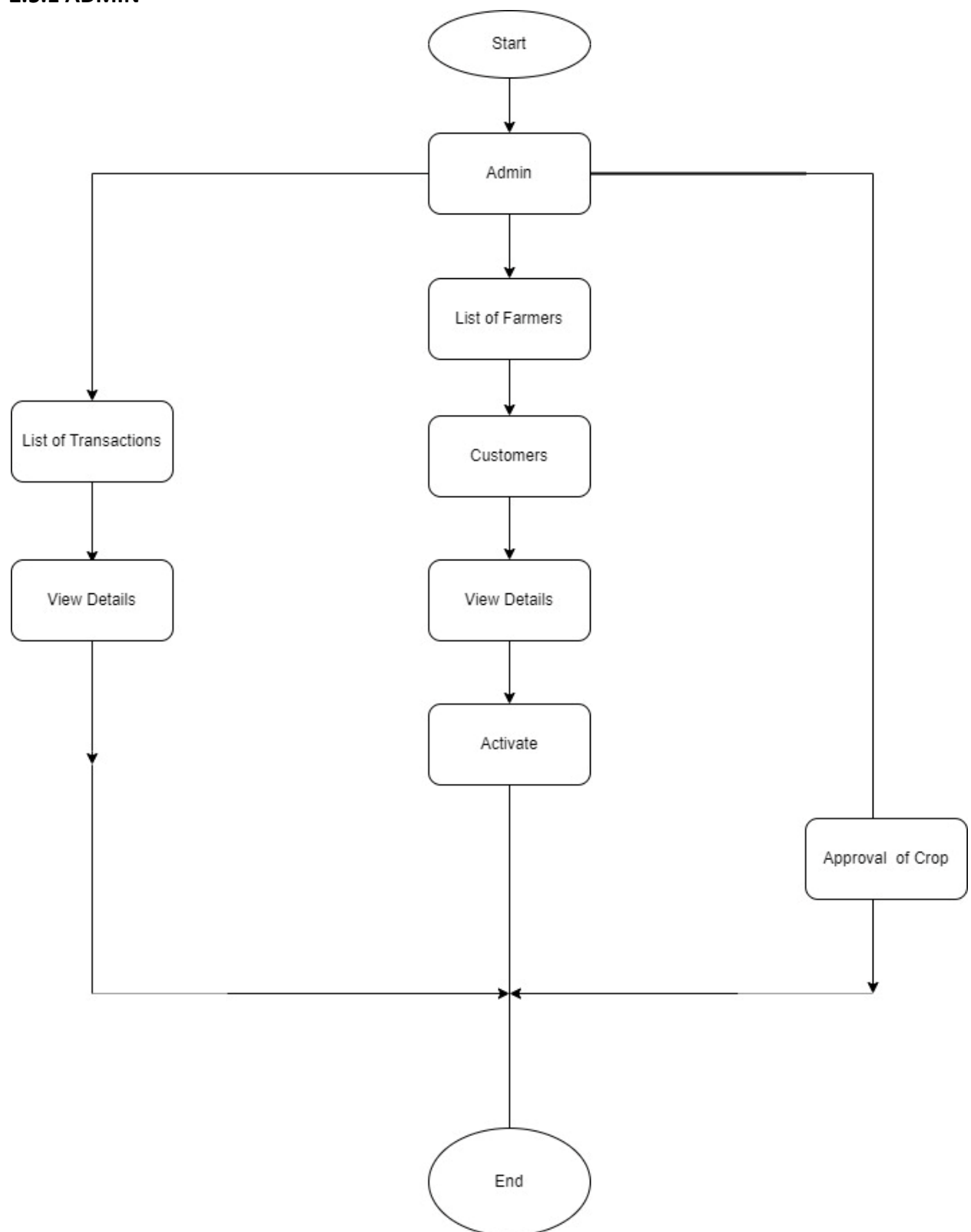


2.4.3 Customer

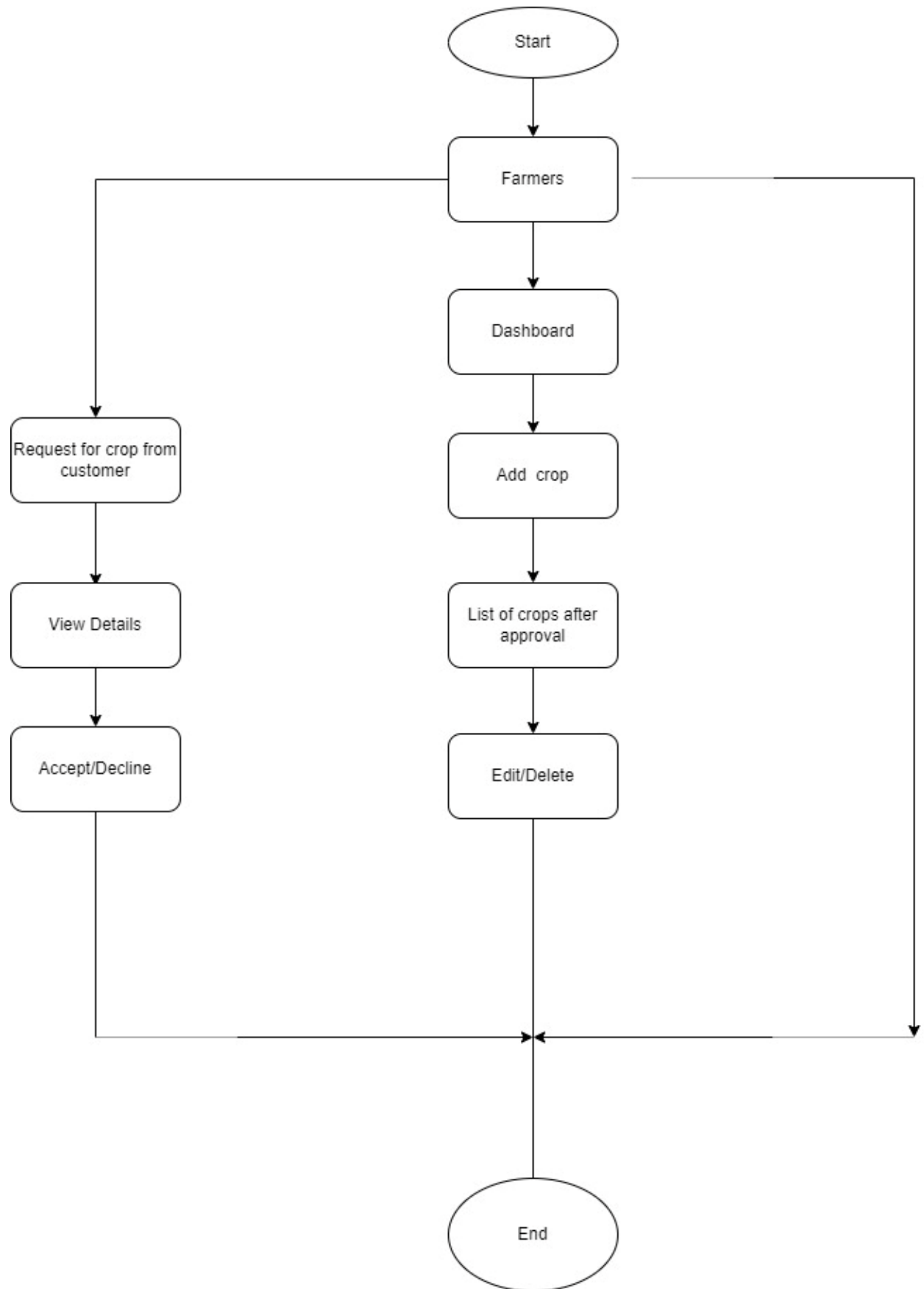


2.5 ACTIVITY FLOW DIAGARM

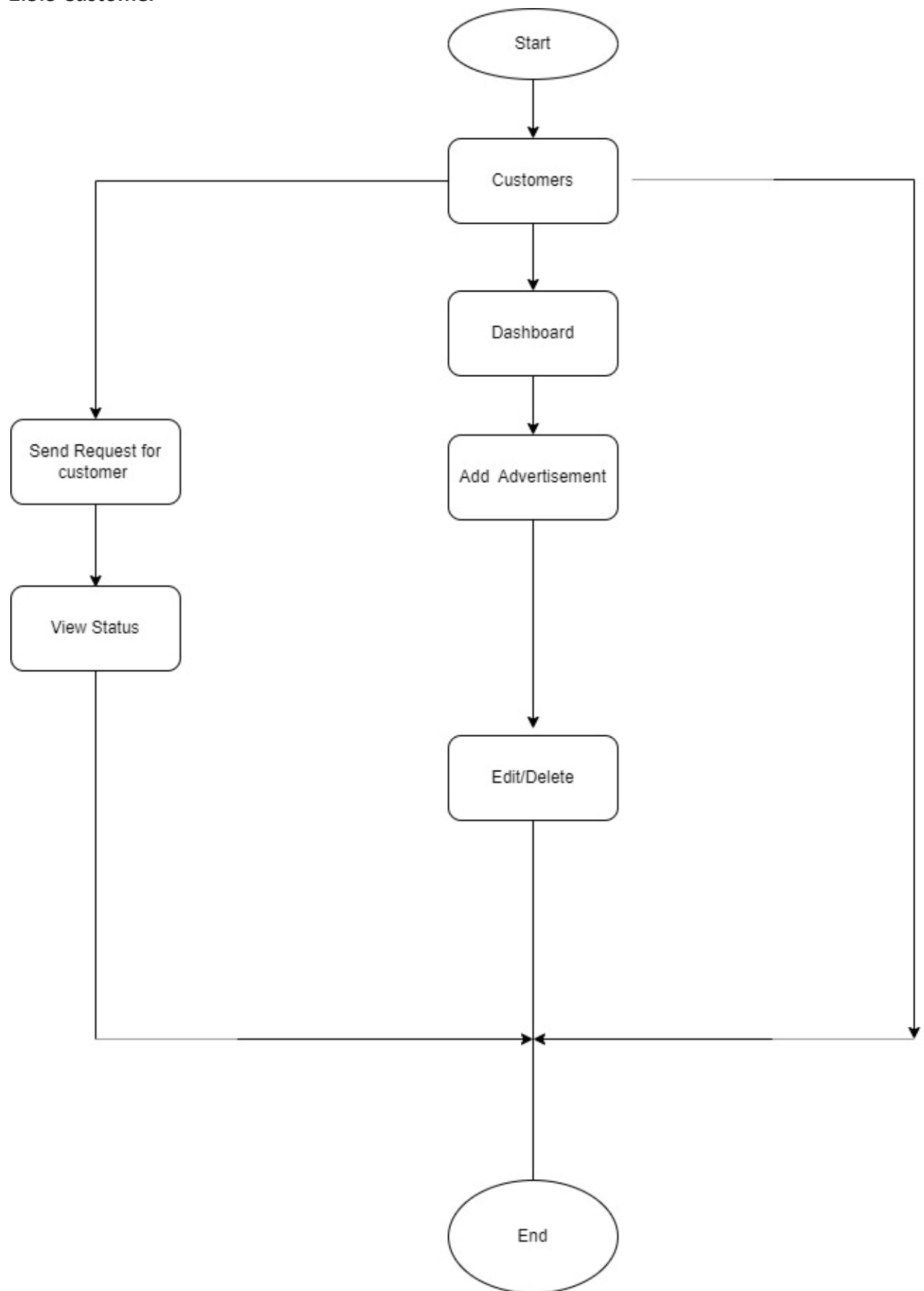
2.5.1 ADMIN



2.5.2 Farmer



2.5.3 Customer



FUTURE SCOPE AND LIMITATIONS

- ☐ The project will be deployed on the Amazon Web Services (AWS) cloud.
- ☐ We can add payment gateway for both the users in future and additional book a vehicle for transportation, both farmer and consumer will pay for transportation, not only farmer.
- ☐ Provide coupons to regular customers to avail discount.
- ☐ We will add google API for customers to order from nearest farmer.

CONCLUSION

With this project, we want to provide a bridge of communication between the farmers and consumers. They can get together and do business that is beneficial for both ends.

Basically, it will be a biggest challenge for most of the farmers since they lack the knowledge about the new technology and trends of this fast-developing world. We propose that the given wholesale market called the E-Farmers Market should be transformed into an electronic marketplace (exchange) for agricultural produce. An important function of the electronic transfer is available to match the supply of the farmers' produce with the requirement from the trader and retailers.

BIBLIOGRAPHY

- (1) Java Complete Reference by Herbert S.
- (2) Database Programming with JDBC and Java by George Reese.
- (3) <https://Draw.io/>
- (4) Wikipedia, URL: <http://www.wikipedia.org>.
- (5) <https://reactrouter.com/>
- (6) Google, URL: <http://www.google.co.in>
- (7) <https://start.spring.io/>
- (8) <https://Javatpoint.com/>
- (9) <https://www.geeksforgeeks.org/>
- (10) <https://mysqltutorial.org/>