

Project Report on

## **“E-Farming”**

Submitted in partial fulfillment of the requirements of  
PG Diploma in Advanced Computing



**Submitted By**

**PG-DAC**

**March 2023**

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## **CERTIFICATE**

This is to certify that the Report work entitled

### **“E-Farming”**

Has been duly completed by the following students under my guidance, in a satisfactory manner as a partial fulfillment of the requirement for the award of the PG - Diploma in Advanced



Computing, Delhi

**SUBMITTED BY**

**MARCH 2023**

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**Senior Project Engineer**

## Declaration

I declare that this written submission represents our ideas in our own words and where others' ideas or words have been included, we have adequately cited and referenced the original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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Our special thanks to our parents and all of friends for help us exchanging any ideas and give the enjoyable study environment. At last we special gratify to almighty God for blessing us with the hidden power to complete this study work.

## PROJECT TEAM

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Mr. Chaitanya Nandkishor Patil	(230310120007)

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## **ABSTRACT**

E-Farming is a web application developed for farmers. This application gives suppose to the village farmers who want to use this facility and who want to learn how is it possible and how they can use e-farming to sell their products.

If the farmers have knowledge of computer, then they can directly register in the site and sell their product otherwise they can contact company's computer professional who will schedule classes to teach the basics of computers and internet. They can know how they can open this site and register with it and sell their products online etc.

In the existing system buying and selling a product is done manually. Price of the product is fixed by the seller. All the details of the product to be sold or purchased is maintained manually. Sellers or buyers not able to get the complete information about the product. In this project we update the selling and buying prices of a product and update in the website when the farmer checks the product price of a particular product and accordingly he will sell his product by checking the rate of the particular product and the buyers also check the rate of a product accordingly they will buy the products and all the information will be updated in the website.



## CHAPTER-2

### Introduction

The main idea to create this website is for the smooth flow of the crops that are harvested by the farmers and get prices that are covering all the needs of the farmers by fixing the price and the buyer by the products according to their requirement. By this the farmer can sell their by registering into website.

#### 2.1 Description

This project is a web application in which Admin, Farmer, Wholesaler can register on our portal or platform which will help them as well as admin get can number of farmers and wholesaler's registered and if any problem they can raise complaint. In our project supplier can request for grains, vegetables, fruits and other products from the farmer so that it can easily access products according to any particular requirements.

Admin can add farming tips and can go through the complaints and resolve them. Admin is able to see all registered farmers and wholesalers and has over all authority of the portal.

Farmers are able to add products according to their harvested crops.

Customers can easily view and purchase different products which are arranged and displayed after selecting products.

#### 2.2 Problem Formulation

The main idea of this project is to provide the platform to various farmers to sell their crops at reasonable prices. Finding the best and healthy products is all we need while decorating our home or work place, so as to fulfill the requirement we came up with this idea which will connect farmers and wholesaler's from different places across India.

#### 2.3 Motivation

With the increase of demand in crop products for easily availability of products the farmers can sell their crops at reasonable price and some crops are not getting expected income. So, by this they can sell their crops Nationwide so we came up with this idea mainly focused on providing an online platform for those

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farmers.

## **2.4 Proposed System**

E-Farming System not only get popularity just by providing better quality products and also the backend processing which were involved to achieve profitability. This system will provide the platform to various farmers for their crops to be sold.

This E-Farming will not only provide its wholesaler's to get products list with prices but also flexibility to make comparison of prices and quantity offered by other vendors.

## **2.5 Future Scope**

The project has a very vast scope in future. The project can be implemented on internet in future. Project can be updated in near future as and when requirement for the same arises, as it is very flexible in terms of expansion.

With the proposed software of database Space Manager ready and fully functional the client is now able to manage and hence run the entire work in a much better, accurate and error free manner.

The following are the future scope for the project.

- Discontinue of particular farmer or buyer will eliminate total potential of system so can be included in Government system
- Bar code Reader based sale system of food grains.
- Individual Authentication system with photo ID for login of Farmer module and Buyer module login.
- Can be shifted to mobile website.

## **CHAPTER-3**

### **System Analysis**

#### **3.1 Functional Requirements**

##### **3.1.1 Login of Admin**

- The Admin will be able to manage the all Services.
- The Admin will be able to view all farmers and wholesaler's details.
- The Admin will resolve complaints and add farming tips.
- The Admin will be able to delete the farmers and wholesaler's data.

##### **3.1.2 Login of Farmer**

- The Farmer will be able to get registered and login.
- The Farmer will be able to add products.
- The Farmer will be able to register complaints.
- The Farmer will be able to sell the crops according to wholesaler's requirements.

##### **3.1.3 Login of Wholesaler**

- The Wholesaler will be able to get registered and login.
- The Wholesaler will be able to view products.
- The Wholesaler will be able to buy the products.
- The Wholesaler will be able to post the advertisement of the required crops.

## **3.2 Non-functional Requirements**

### **3.2.1 Performance Requirements**

The system should store all the database records of assigned project, assigned task, completed task, task status and requested task and the application should be available for use 24\*7 through the server. Also, the application should be user friendly with a proper user interface which makes it easy for the user to understand. All the options should be present in properly accessible places for user convenience.

### **3.2.2 Safety Requirements**

All login ids and passwords of the admin, vendor and customer should be protected for privacy using whatever constraints required in the database or the application.

### **3.2.3 Security Requirements**

All passwords of the administrators should be protected for privacy using whatever constraints required in the database or the application. Transactions regarding project admin records should be carried out properly. The database should be protected from attacks and unauthorized access. The interface should be protected from attacks. All passwords should be stored as a secure hash of the administrator password.

## **3.3 Software Quality Attribute**

### **3.2.4 Availability**

The system should run on a variety of operating systems that support the Java language. The system should run on a variety of hardware.

### **3.2.5 Accessibility**

The software will be accessible to admin.

### **3.2.6 Compatibility**

The software will be compatible with multiple platforms.

### **3.2.7 Durability**

The software will be tested for working with multiple users.

### **3.2.8 Effectiveness**

The software will be made to handle operations effectively.

### **3.2.9 Maintainability**

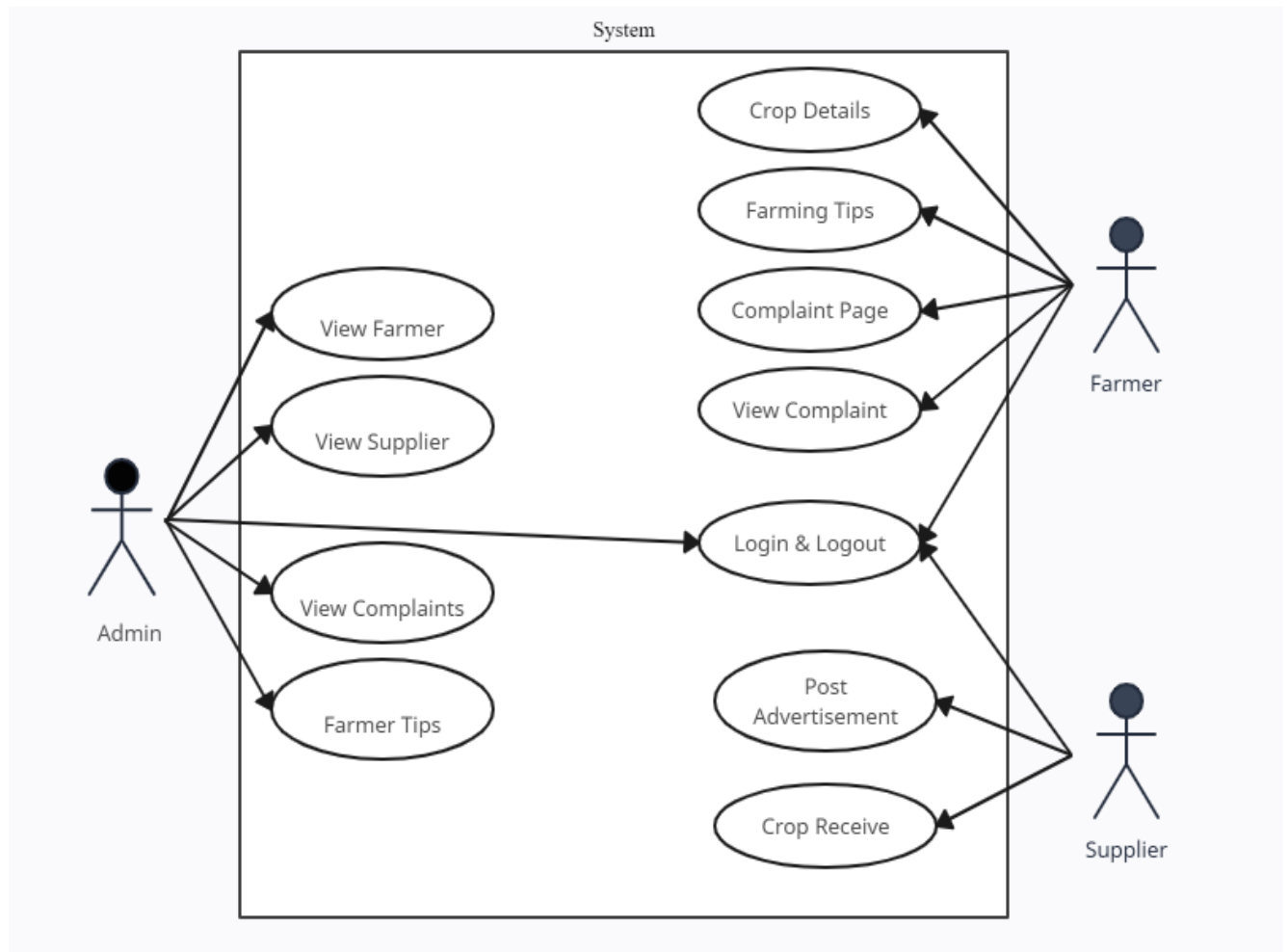
The system should be easy to maintain. There should be a clear separation between the interface and the business logic code. There should be a clear separation between the data.

## CHAPTER-4

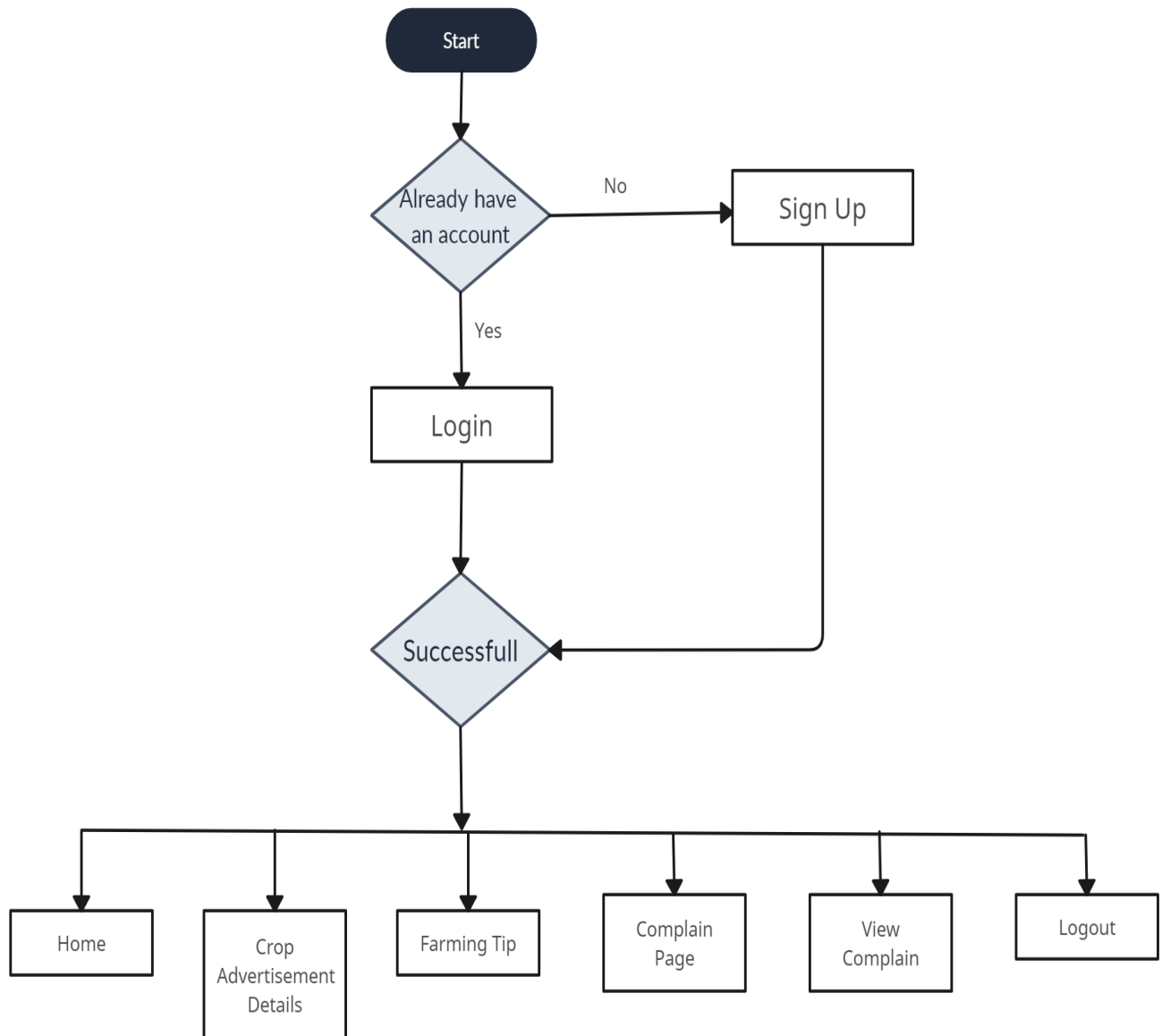
### Analysis Modeling

#### 4.1 Use Case Diagram

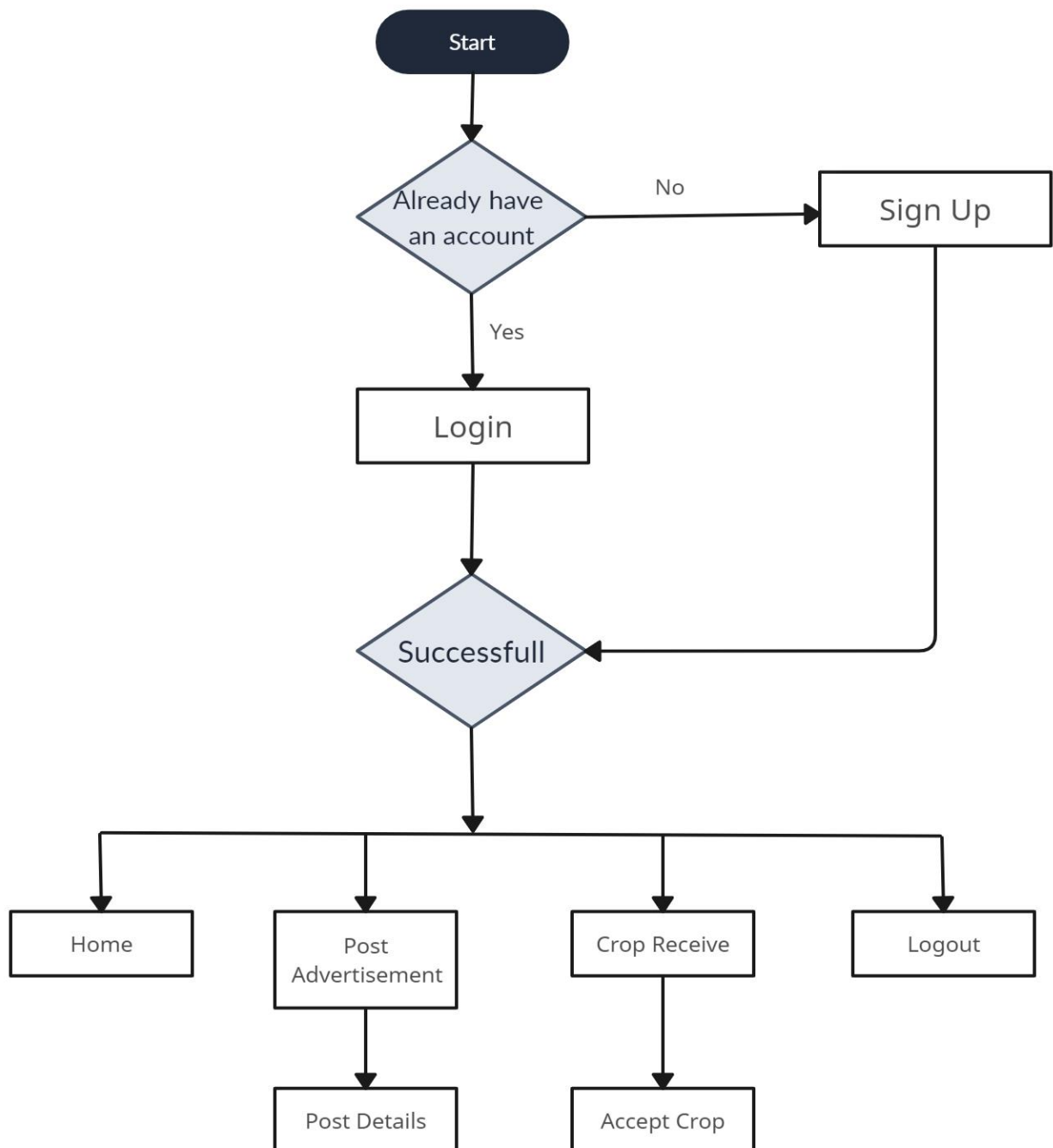
- Use case diagrams are used to gather the requirements of a system including internal and external influences. These requirements are mostly design requirements. Hence, when a system is analyzed to gather its functionalities, use cases are prepared and actors are identified.
- When the initial task is complete, use case diagrams are modelled to present the outside view.



## 4.2 Farmer

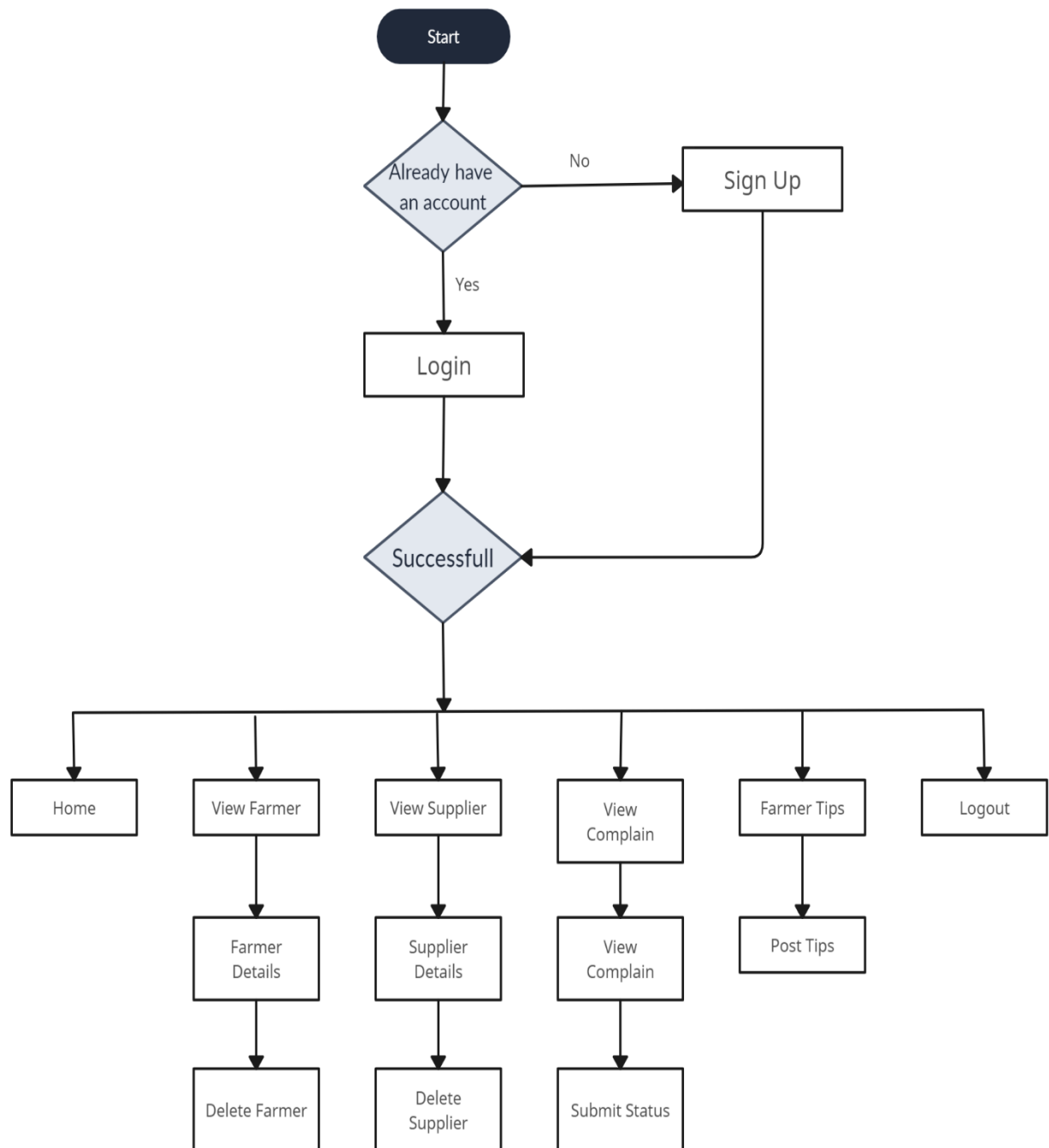


## 4.3 Wholesaler



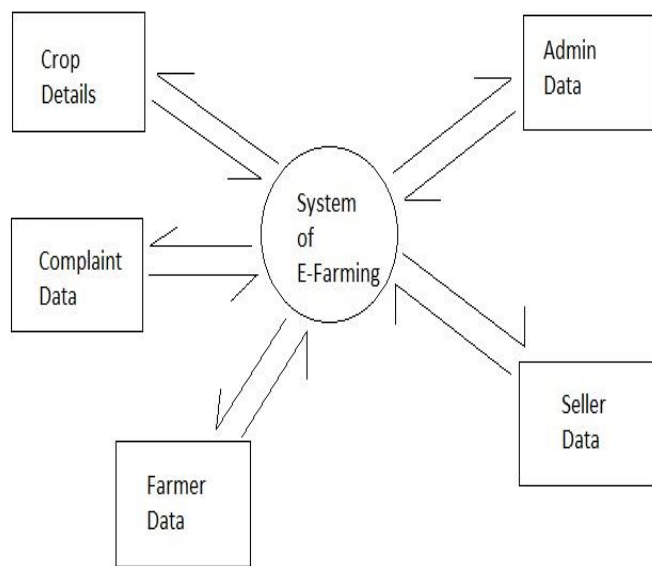


## 4.4 Admin



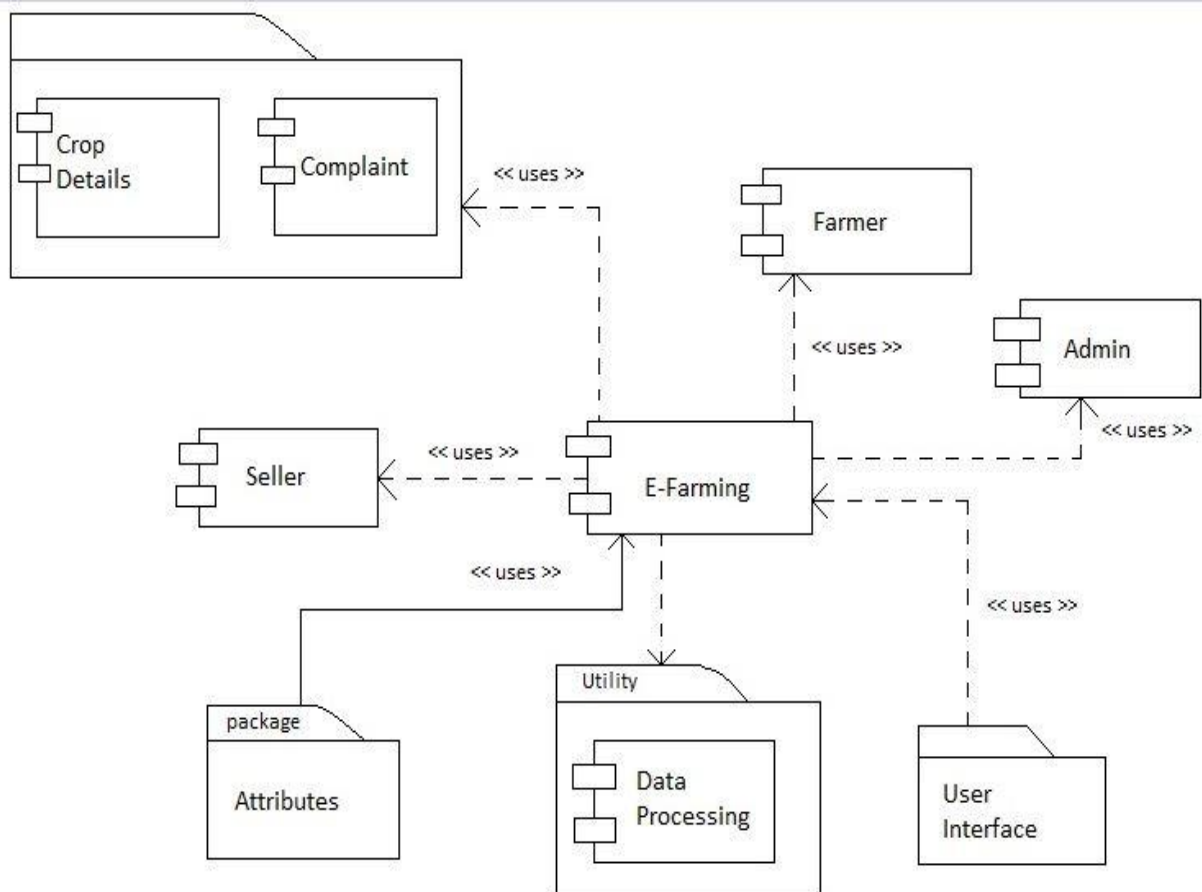
## 4.5 Data Flow Diagram

A data flow diagram (DFD) illustrates how data is processed by a system in terms of inputs and outputs. As its name indicates its focus is on the flow of information, where data comes from, where it goes and how it gets stored.



## 4.6 Component Diagram

A component diagram, also known as a UML component diagram, describes the organization and wiring of the physical components in a system. Component diagrams are often drawn to help model implementation details and double-check that every aspect of the system's required functions is covered by planned development.



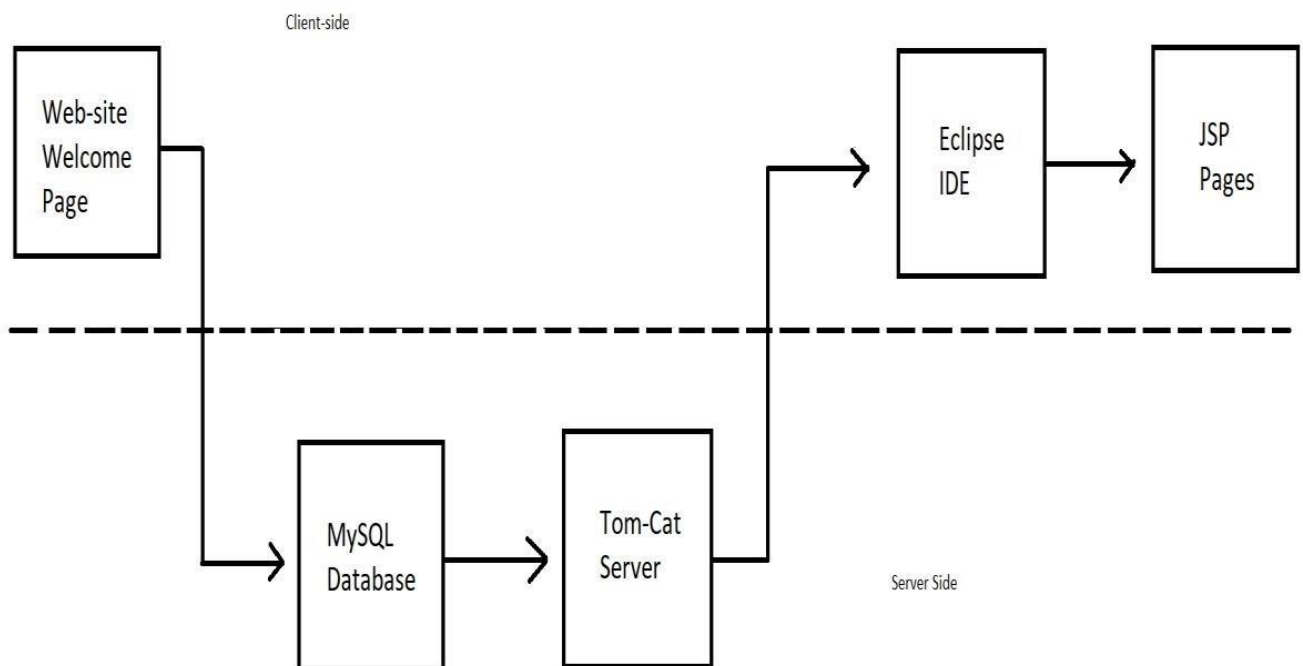
## CHAPTER-5

### Design

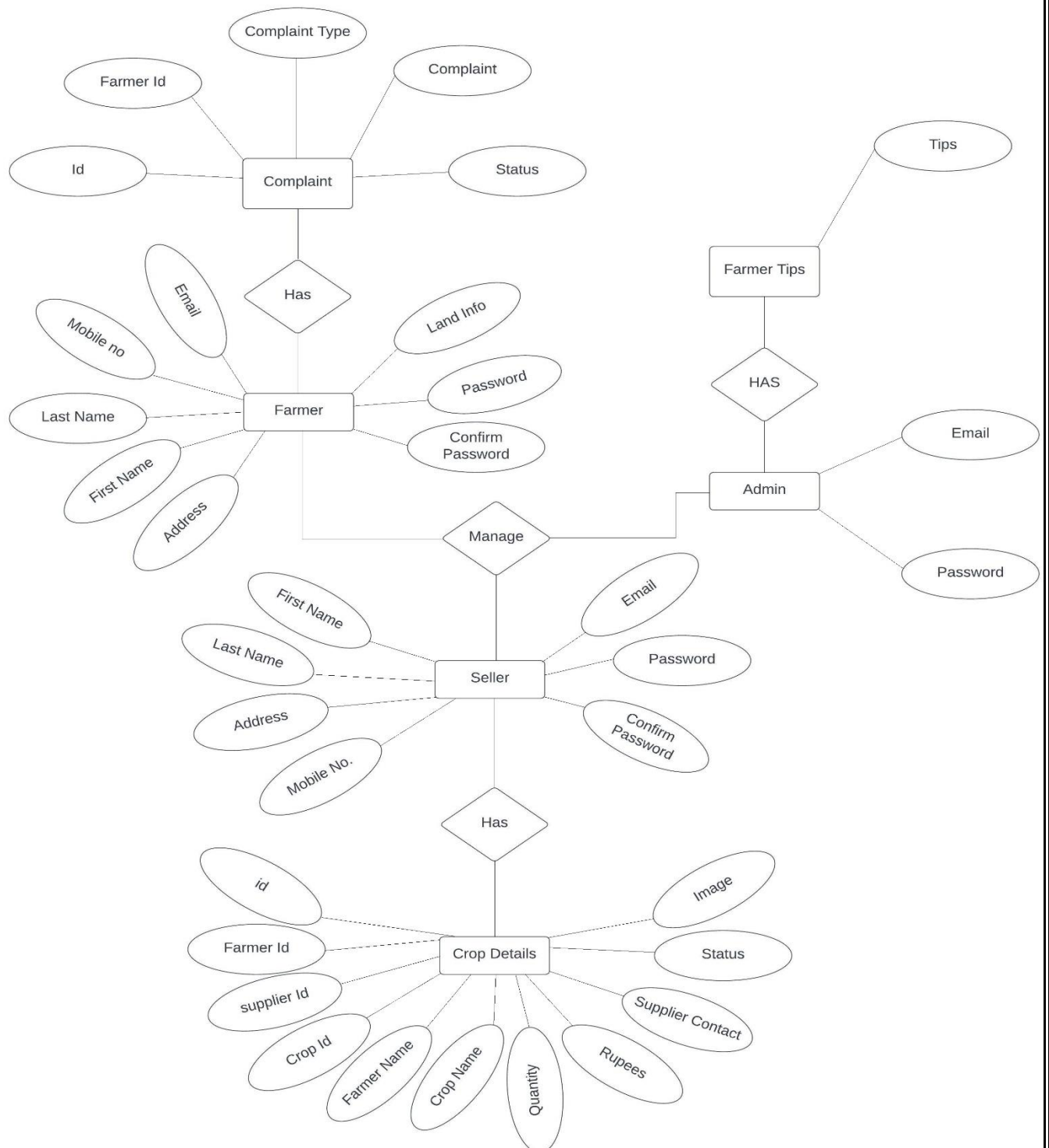
#### 5.1 Data Modeling

##### Deployment Diagram

- The deployment diagram maps the software architecture created in design to the physical system architecture that...
- It maps software pieces of a system to the hardware that are going to execute it.
- Deployment diagram visualizes the topological view of an entire system.

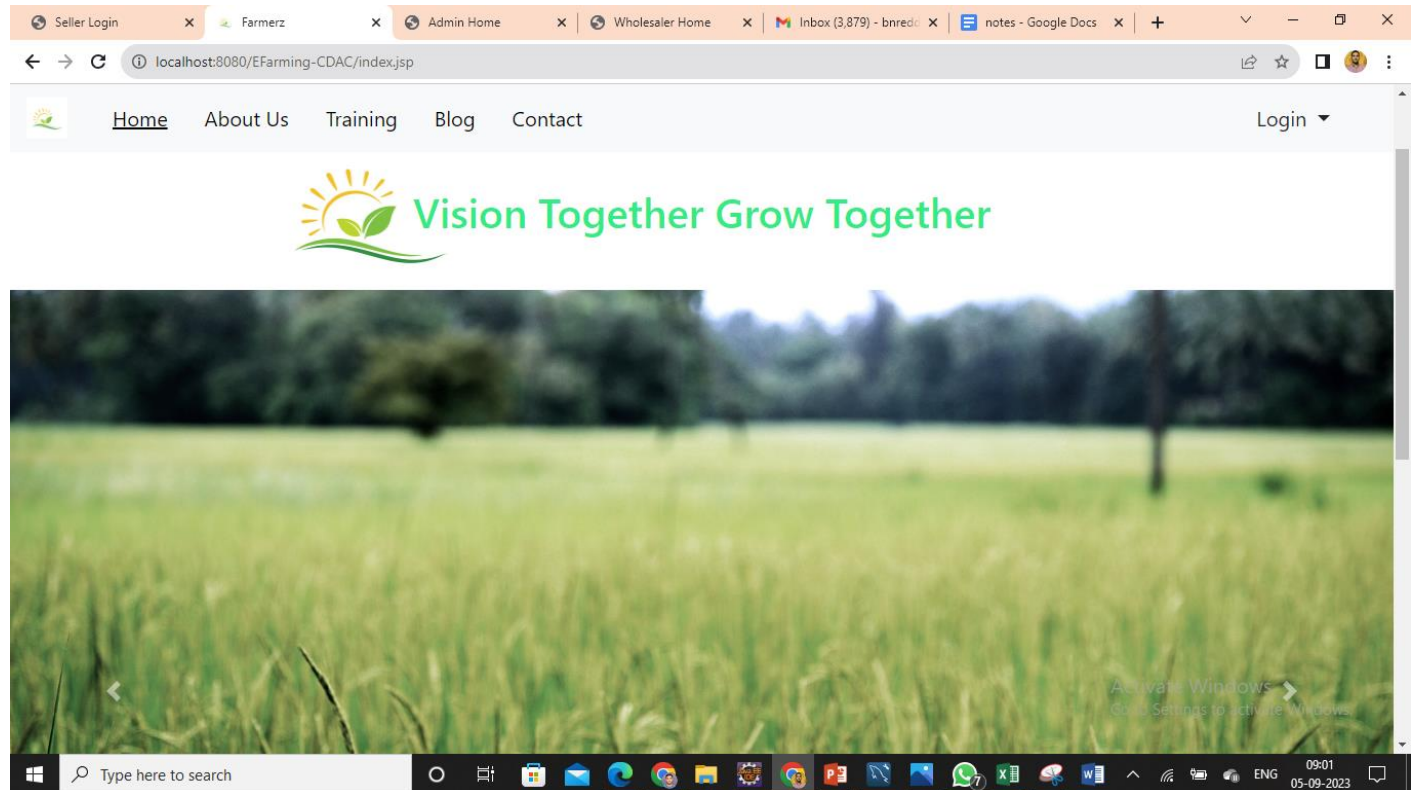


## ER Diagram

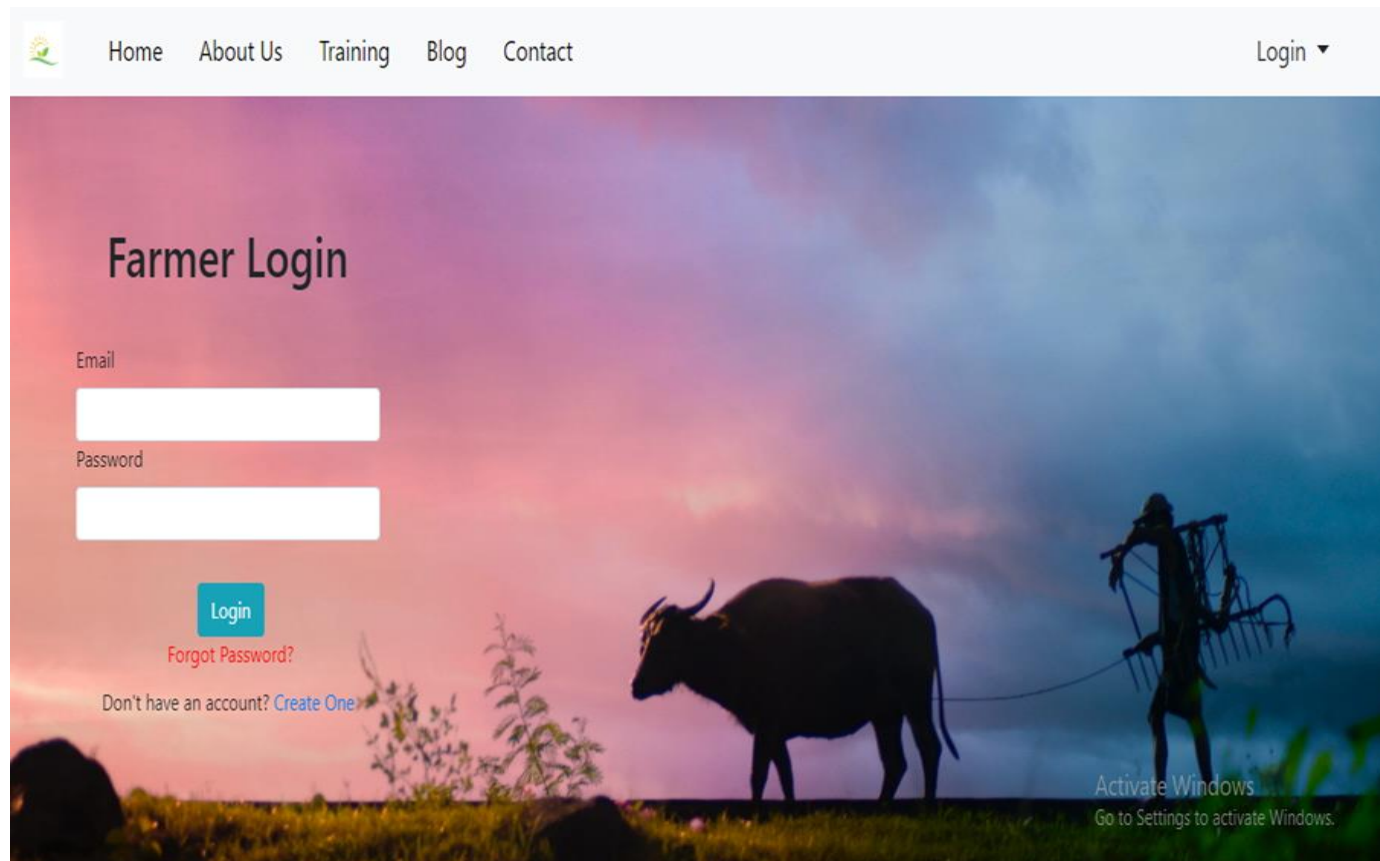


## 5.1 User Interface Design(GUI)

### Home Page



## **Farmer Login Page**

The image shows a web page for farmer login. The background is a scenic photograph of a sunset or sunrise over a field, with a silhouette of a water buffalo and a person plowing the land. The page has a white header with navigation links and a login button. The main content area contains the login form and a 'Forgot Password?' link.

Home About Us Training Blog Contact Login ▼

# Farmer Login

Email

Password

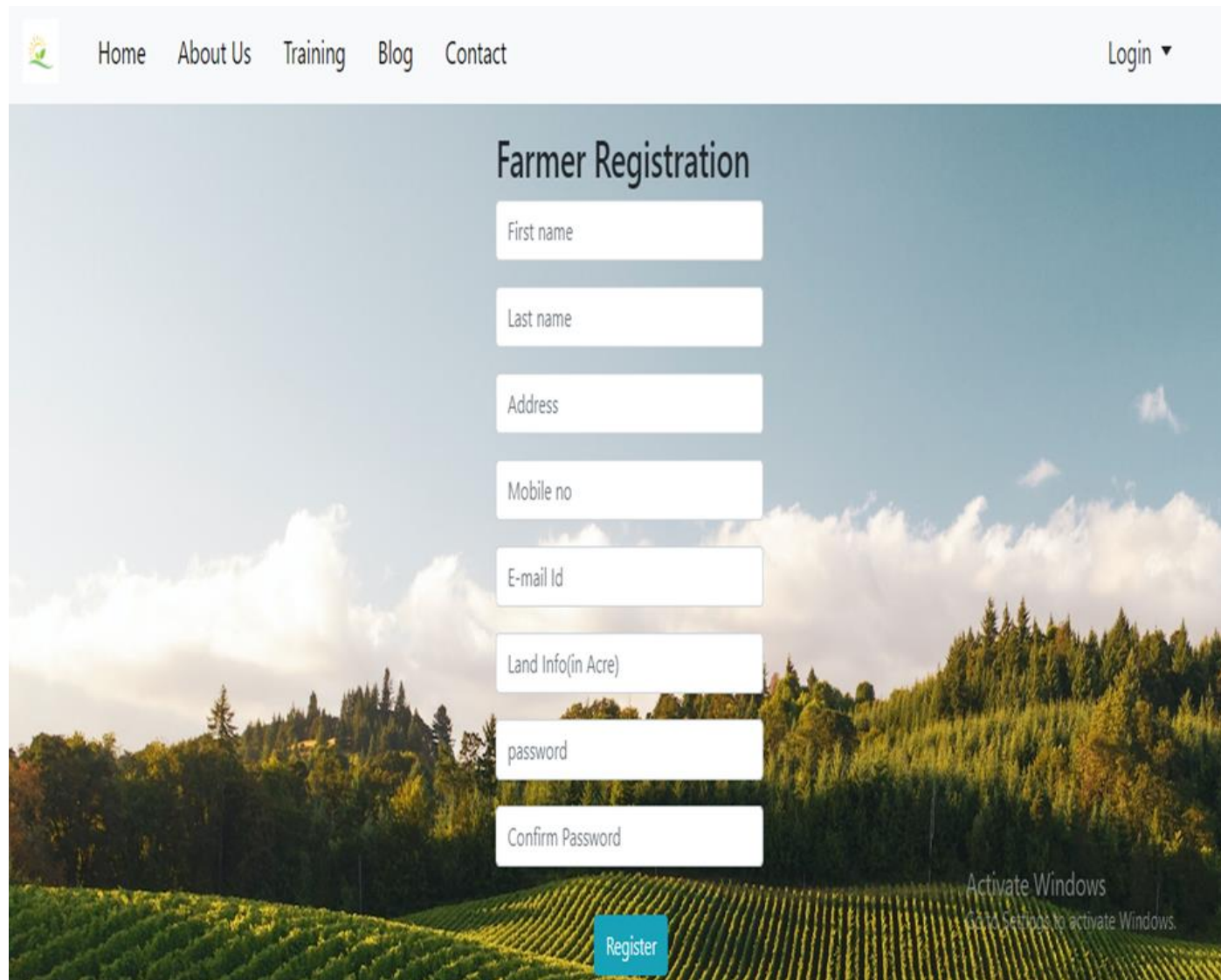
Login

[Forgot Password?](#)

Don't have an account? [Create One](#)

Activate Windows  
Go to Settings to activate Windows.

## **Farmer Registration Page**

The image shows a web page for farmer registration. The background is a scenic landscape with green hills, a dense forest of tall trees, and a blue sky with white clouds. In the foreground, there are rows of green crops in a field. The registration form is centered on the page. It has a title 'Farmer Registration' at the top. Below the title are seven input fields: 'First name', 'Last name', 'Address', 'Mobile no', 'E-mail Id', 'Land Info(in Acre)', 'password', and 'Confirm Password'. A blue 'Register' button is located at the bottom right of the form. In the top right corner of the page, there is a 'Login' link with a dropdown arrow. In the top left corner, there is a small logo of a sun and a plant. The navigation menu includes 'Home', 'About Us', 'Training', 'Blog', and 'Contact'.

Home About Us Training Blog Contact Login ▼

### Farmer Registration

First name

Last name

Address

Mobile no

E-mail Id

Land Info(in Acre)

password

Confirm Password

Register

Activate Windows  
Go to Settings to activate Windows.



## Farmer Home Page



## Crop Advertisement Details Page

Sell Crop	Crop ID	Crop Name	Image	Quantity	Wholesaler ID	Wholesaler Contact	Status
SELL	1	Apple		30	3	7013658964	
SELL	1	mango		100	3	7013658964	Accepted

## Farming Tips Page


	<a href="#">Home</a>	<a href="#">Crop Advertisement Details</a>	<a href="#">Farming Tips</a>	<a href="#">Complain Page</a>	<a href="#">View Complain</a>	<a href="#">Logout</a>
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### Tips for Farmer

Farming Tips
Use seeds that are not expired
Use modern techniques

Activate Windows  
Go to Settings to activate Windows.

## Complain Page

	<a href="#">Home</a>	<a href="#">Crop Advertisement Details</a>	<a href="#">Farming Tips</a>	<a href="#">Complain Page</a>	<a href="#">View Complain</a>	<a href="#">Logout</a>
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### Complain Page

Farmer ID:

Complain:

Complaint Type

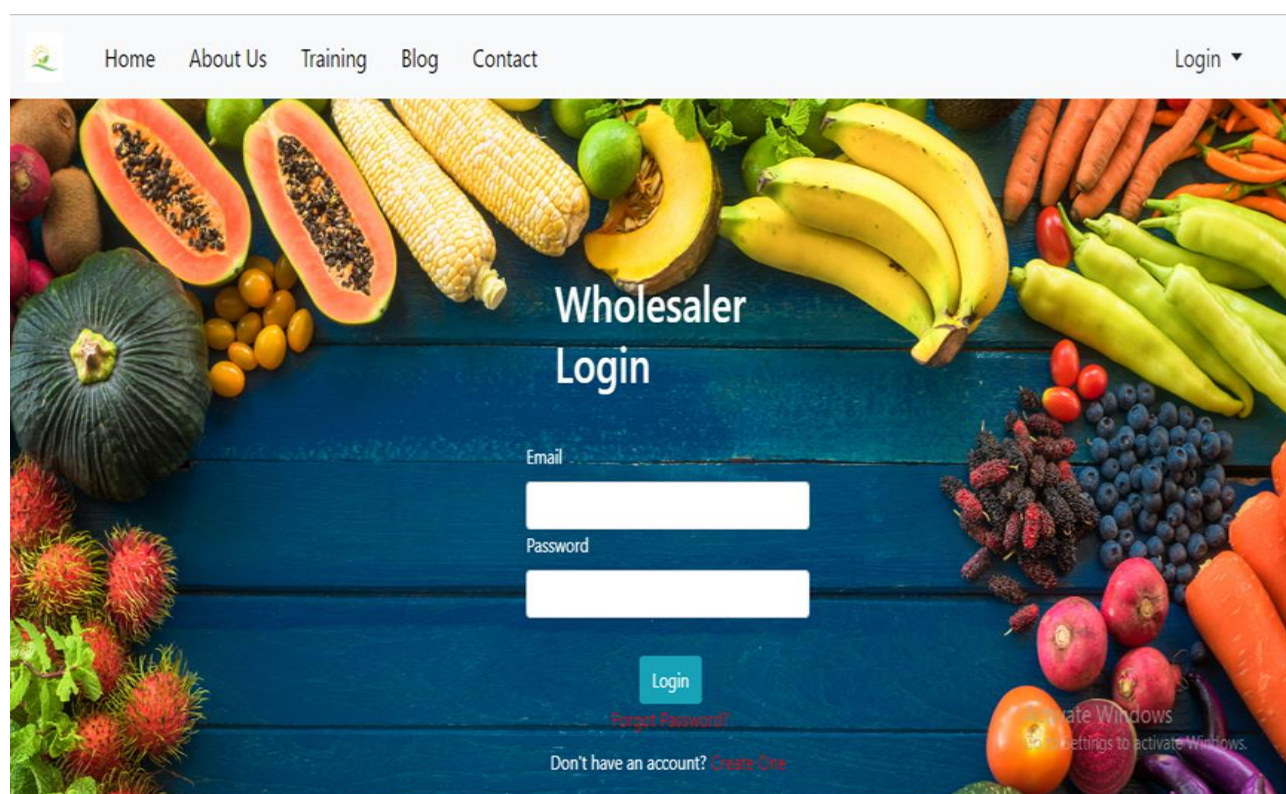
Activate Windows  
Go to Settings to activate Windows.

## View Complain Page



Complain ID	Farmer ID	Complain Type	Complain	Status
2	3	Crop Issue	Rains are not there	SOLVED
3	3	Crop Issue	drought	SOLVED

## Wholesaler Login Page



Wholesaler Login

Email

Password

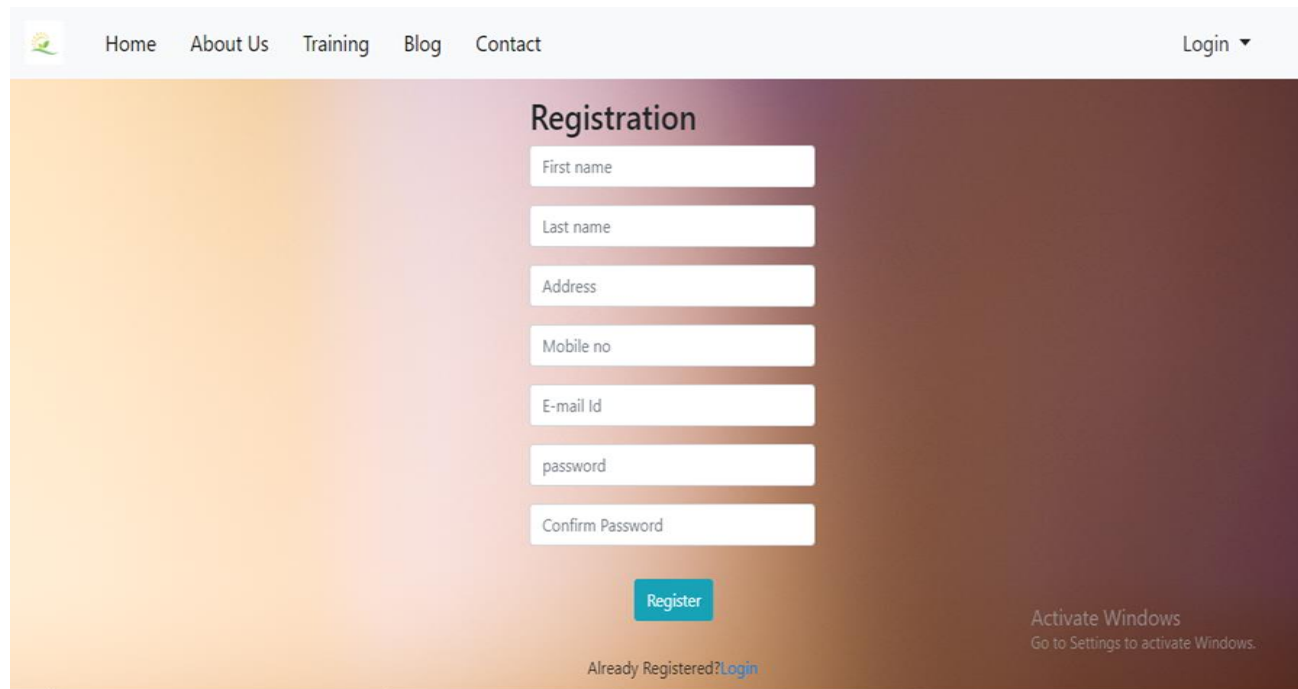
Login

[Forgot Password?](#)

Don't have an account? [Create One](#)



## Wholesaler Registration Page



The registration page features a navigation bar with links: Home, About Us, Training, Blog, and Contact. A 'Login' dropdown menu is located on the right. The main content area is titled 'Registration' and contains a vertical stack of input fields: First name, Last name, Address, Mobile no, E-mail Id, password, and Confirm Password. A blue 'Register' button is positioned below the fields. At the bottom, there is a link 'Already Registered? Login' and a Windows activation watermark.

Home About Us Training Blog Contact Login

### Registration

First name

Last name

Address

Mobile no

E-mail Id

password

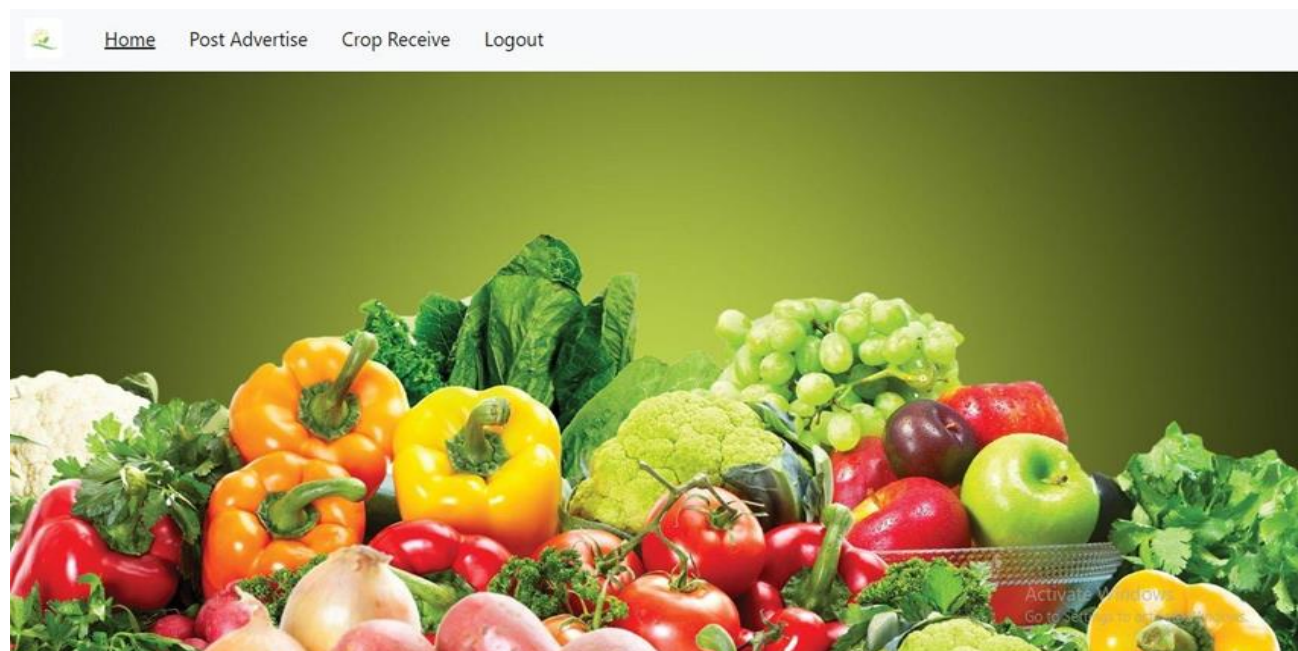
Confirm Password

Register


Already Registered? [Login](#)

Activate Windows  
Go to Settings to activate Windows.

## Wholesaler Home Page



## Post Advertisement

 [Home](#) [Post Advertise](#) [Crop Receive](#) [Logout](#)

### Post Advertise

Wholesaler ID:

Crop ID:

Crop Name:

Image:  
 No file chosen

Required Quantity(in kg):

Activate Windows  
Go to Settings to activate Windows.

## Crop Receive

 [Home](#) [Post Advertise](#) [Crop Receive](#) [Logout](#)

Accept	Crop ID	Farmer ID	Farmer Name	Crop Name	Quantity	Rupees
Accept	1	3	Nagarjuna	mango	100	20000

## Admin Home Page



## View Farmer

Home View Farmer View Wholesaler View Complaint Farming Tips Logout

### Farmer's Information

Farmer ID	Farmer Name	Email ID	Mobile NO	Delete
5	Bhavanam	bnreddymech@gmail.com	1646321459	<a href="#">Delete</a>
6	bhavanam	bnreddymech@gmail.com	9754856666	<a href="#">Delete</a>

Activate Windows  
Go to Settings to activate Windows.

## View Wholesaler

Home View Farmer View Wholesaler View Complaint Farming Tips Logout

### Wholesaler's Information

Seller ID	Wholesaler Name	Email ID	Mobile NO	Delete
2	Nagarjuna Reddy	bn@gmail.com	1235689863	<a href="#">Delete</a>
3	bhavanam	bnreddymech@gmail.com	7013658964	<a href="#">Delete</a>

Activate Windows  
Go to Settings to activate Windows.

## View Complaint


 [Home](#) [View Farmer](#) [View Wholesaler](#) [View Complaint](#) [Farming Tips](#) [Logout](#)

### Complains

Complain ID	Complain
2	<a href="#">View Complain</a>
3	<a href="#">View Complain</a>

Activate Windows  
Go to Settings to activate Windows.

## Farming Tips

 [Home](#) [View Farmer](#) [View Wholesaler](#) [View Complaint](#) [Farming Tips](#) [Logout](#)

Farming Tip:

Post

Activate Windows  
Go to Settings to activate Windows.

localhost:8080/EFarming-CDAC/farmertips.jsp#



## **CHAPTER-6**

### **TESTING**

#### **6.1 Type of Testing used**

##### **Alpha Testing: -**

Alpha testing allows the team to test the software in a real-world environment. One of the reasons to do alpha testing is to ensure the success of the software product. Alpha testing validates the quality, functionality of the software, and effectiveness of the software before it is released in the real world. It is the most common type of testing used in the Software industry. The objective of this testing is to identify all possible issues or defects before releasing it into the market or to the user.

## **CHAPTER-7**

### **Results and Discussions**

The main idea of an e-farming platform is to provide the farmers to add their products according to their harvested crops can access anytime and anywhere using the internet. The platform can be designed to such that the Wholesaler can request products. The purpose of an e-farming platform is to make farmers more accessible and easy to use and they fix their prices, while providing options to add products that can they can increase their income.

## **CHAPTER-4**

### **Conclusions**

The 'Crops Prediction' System thus enables us to provide a wide variety of development to the ongoing chain market system which includes:

- a) A centralize prediction system for cultivating crop as per the demand of the population.
- b) It deals with monitoring the information and predict the future
- c) Track and show the information of plants
- d) Editing, adding and updating the records.
- e) Buyers information can be traced as he is going to buy from the system
- f) Government compensation for damage crop during disaster can be easily achieved from the system
- g) Cultivating and selling the food grains becomes an easy task for the farmers

Probability of higher profit for all has increased

## **FUTURE SCOPE OF THE PROJECT**

The project has a very vast scope in future. The project can be implemented on internet in future. Project can be updated in near future as and when requirement for the same arises, as it is very flexible in terms of expansion.

With the proposed software of database Space Manager ready and fully functional the client is now able to manage and hence run the entire work in a much better, accurate and error free manner.

The following are the future scope for the project.

- Discontinue of particular farmer or buyer will eliminate total potential of system so can be included in Government system
- Bar code Reader based sale system of food grains.
- Individual Authentication system with photo ID for login of Farmer module and Buyer module login.
- Can be shifted to mobile website.

