Tribhuvan University

Faculty of Humanities and Social Sciences

A PROJECT REPORT ON

AgroBid

Submitted to

Department of Computer Application

Ratna Rajya Laxmi Campus

In partial fulfillment of the requirements for Bachelors in Computer Application

Submitted by

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September 2024

Under the Supervision of

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Ratna Rajya Laxmi Campus

SUPERVISOR'S RECOMMENDATION

I hereby recommend that this project prepared under my supervision by **"Asiya Khatun"** entitled "**AgroBid**" is partial fulfillment of the requirement for the degree of Bachelor of Computer Application is recommended for the final evaluation.

Bhupendra Ram Luhar

SUPERVISOR

Tribhuvan University

Faculty of Humanities and Social Sciences

Ratna Rajya Laxmi Campus

LETTER OF APPROVAL

This is to certify that the project prepared by **"Asiya Khatun "** entitled **"AgroBid"** in partial fulfillment of the requirement for the degree of Bachelor in Computer Application has been evaluated. In our opinion it is satisfactory in the scope and quality as a project for the required degree.

-------------------------------- Bhupendra Ram Luhar Project Supervisior Ratna Rajya Laxmi Campus Pradarsani Marg,Kathmandu	-- Bhupendra Ram Luhar Coordinator,Bachelor in Computer Application Ratna Rajya Laxmi Campus
-------------------------------------- **Internal Examiner**	-------------------------------------- **External Examiner**

ABSTRACT

The "AgroBid" is an online platform that makes buying and selling agricultural products easier through a bidding process. It helps connect farmers (Farmers) with bidders (buyers) in a transparent and efficient way. Farmers can list their products, such as fruits and vegetables, and bidders can view these listings and place bids on the items they are interested in. The system ensures fair competition and clear communication between users. "AgroBid" also includes features like registration, where both farmers and bidders need admin approval before they can use the platform. Farmers can manage their profiles and products, while bidders can submit bid requests and view product details. Admins have control over user approvals and product listings, making sure the platform runs smoothly. The system is designed to be easy to use, secure, and efficient, offering a seamless experience for everyone involved in the agricultural trading process.

Keyword: Biding, Price Prediction, Random Forest, Bider, AgroBidt.

ACKNOWLEDGEMENT

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LIST OF ABBREVIATIONS

CSS: Cascading Style Sheets

HTML: Hyper Text MarkupLanguage

JS: JavaScript

SQL: Structured Query Language

TC: Test Case

UI: User Interface

CHAPTER 1: INTRODUCTION

1.1 Introduction

"AgroBid" is a web-based application where the farmers add their crops in large quantities which are further bidded by the biders. This system's primary goal is to elevate farmers' products to a simpler marketing platform where they can easily verify a specific price for their goods without causing chaos. Here the bider can see the product details and can bid on them based on farmers' criteria i.e. the farmers would fix a minimum price for their products and the bidder has to bid accordingly. The farmers can finalize the suitable bid amount for their products. The bider and the farmers both have to verify themselves by registering to the system first before following up the procedure. The system also allows the bider to view the product information. The bider can have a wide range of selection of the products and compare them within. The final selection or approval of the bidded amount is carried out by the farmer and once a certain bided price is approved the products are marked as sold out and further process are carried out. It also allows the farmer to be familiar with the current value of the products.

The "AgroBid" allows the farmers and biders a convenient and user friendly environment. Furthermore, the admin is able to approve the farmers after they register. The biders make payment of the products they are sold to through the notifications provided. The "AgroBid" is a great initiative for the farmer to add their products in online marketing platform where they get a satifactory price of their products.And the user/bider doesn't need to travel several distances to find products of their choice and expected quantity.

1.2 Problem Statement

Though there are various platform for Agriculture purpose most system deprive sellling the products in large quantity fulfilling the needs of both large-scale buyers and those looking for bulk purchases and the criteria is fulfilled in this system. This feature ensures that farmers can meet varying demands efficiently

1.3 Objective

The main objective of this project is:

- To provide a platform for the farmers to sell their product in bulk.
- To provide recommendations of similar products as per biders requirements.
- To provide a platform where the farmers can accept a bid as per their interests.

1.4 Scope and Limitation

Scope

The scope of this project names **"AgroBid"**is to create platform where the farmers can add their products in bulk and set a minimun range for their products. The **"AgroBid"** allows the bider to view all the products added by different farmers and choose among to bid in. The bider can view similar products according to their requirements. The **"AgroBid"** allows an authority to farmers to choose a certain bid on their product and decline others.

Limitation

Some limitation of this project are:

- The farmers and biders should be verified by the admin before using the functionalites.
- No communication medium for bider and the farmers.
- Unfamiliarity to the websites.

1.5 Development Methodology
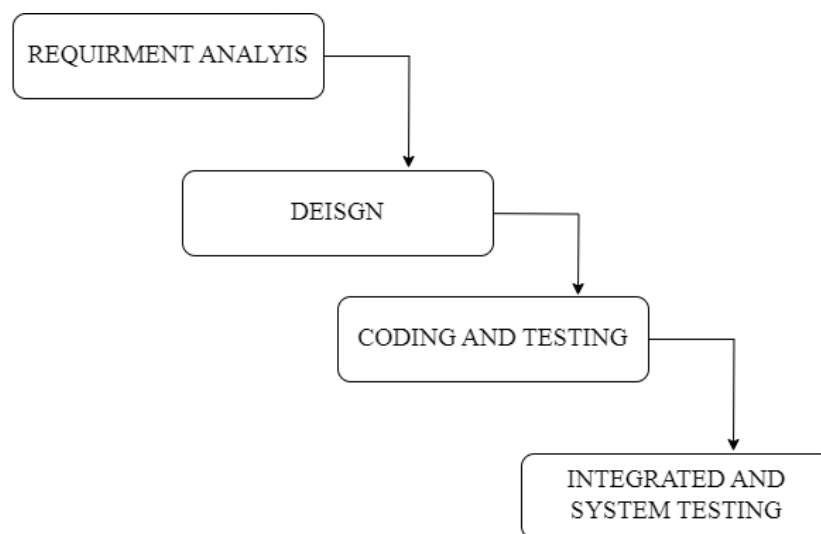
Figure 1-1 Waterfall Methodology Diagram for "AgroBid"

The Waterfall model is better for **AgroBid** because it offers a clear, linear structure that ensures each phase is completed before moving to the next. This is ideal for projects with well-defined and stable requirements, as is often the case in agriculture. Its emphasis on detailed documentation and milestone tracking facilitates effective project management and communication among stakeholders, ensuring that all needs are thoroughly addressed.

1.6 Report Organization

This project is divided into five major chapters.

Chapter 1: Introduces the project, outlining its objectives, scope, and limitations. It provides a basic understanding of what the project aims to achieve and the constraints it may face.

Chapter 2: Offers background information on the topic. It includes existing knowledge and theories relevant to the project, helping to establish a foundation for understanding the subject matter.

Chapter 3: Focuses on analyzing the system by assessing its requirements and feasibility. This chapter also covers the design of the system, including how it is planned and structured.

Chapter 4: Details the implementation of the proposed design. It describes the tools used, and includes information on unit testing and system testing to ensure the system works correctly.

Chapter 5: Concludes the report with a summary, and future recommendations with list references, and includes any additional materials (Appendix) related to the project.

CHAPTER 2: BACKGROUND STUDY AND LITERATURE REVIEW

2.1 Background Study

Nowadays, technological advancements are making everyday life more convenient. E-commerce platforms have seen tremendous growth recently, and the "AgroBid" exemplifies this trend. AgroBid is designed to streamline the biding and selling of agricultural products. AgroBid simplifies the process of agricultural product trading, allowing users to manage their profiles and product listings with real-time updates. It provides an easy way to view and interact with product information.The platform features an intuitive interface, making it accessible to users from various backgrounds. Additionally, AgroBid is designed to handle a large volume of data and supports multiple users accessing the system simultaneously. [1].

Overall, the ("AgroBid") provides a precise solution for agricultural product trading with a user-friendly experience.

2.2 Literature Review

Krishi Market is an online platform that connects farmers with buyers, facilitating the sale and purchase of agricultural products. It aims to bridge the gap between producers and consumers, providing a transparent and efficient marketplace for agricultural commodities. It discards the involvement of middleman. Real-time pricing information is available, helping both buyers and Farmers make informed decisions. The platform typically supports a variety of agricultural products, including grains, vegetables, fruits, dairy products, and more. [1]

BigHaat is an agritech platform designed to empower farmers by providing them with access to high-quality agricultural inputs, expert advice, and market linkages. The platform aims to bridge the gap between farmers and the agricultural supply chain by leveraging technology. It provides support in multiple languages to cater to farmers from different regions. It also connects farmers directly with buyers, enabling them to sell their produce at fair prices. [2]

The Agricultural Market Information System (AMIS) is an international initiative aimed at enhancing food market transparency and improving policy coordination in times of market uncertainty. AMIS was established by the G20 in 2011. [3]

E-agriculture, or electronic agriculture, refers to the use of information and communication technologies (ICTs) in the agricultural sector. It encompasses a broad range of activities

and technologies designed to improve agricultural production, marketing, and the livelihoods of farmers. [4]

Farmbrite is a comprehensive farm management software platform designed to help farmers and agricultural businesses manage their operations more efficiently. It offers a wide range of tools and features to streamline farm activities, improve productivity, and enhance decision-making. [5]

FarmDrive is a Kenyan based social enterprise that is unlocking access to financial services for over 50 million smallholder farmers in Africa. Using simple mobile phone technology, alternative data sets, and sophisticated data analytics, FarmDrive is closing the critical information gap that keeps smallholder farmers from getting loans that would allow them to grow and diversify their businesses [6]

Digital Green is a global development organization that is building an AI-powered assistant to help small-scale farmers around the world improve their productivity and incomes. Since 2008, it has worked with front line extension agents to boost the cost-effectiveness of public extension systems by offering innovative development models, technologies, and services to farmers. The result has been a 10-fold cut in costs and a 24% rise in income levels. But our work is far from done. [7]

CHAPTER 3: SYSTEM ANALYSIS AND DESIGN

3.1 System Analysis

System analysis is a methodical and organized process that entails the collection and understanding of data, the identification of concerns or challenges, and the deconstruction of a system into its individual components. The primary objective of system analysis is to thoroughly investigate a system or its elements with the aim of pinpointing its objectives. It is a problem-solving approach that seeks to improve the system by ensuring the optimal performance and smooth operation of all its constituent parts, thereby enabling the system to successfully accomplish its intended goals.

3.1.1 Requirement Analysis

The requirement analysis of AgroBid is completed through finding the functional requirements and non-functional requirements for the system.

Functional Requirement:

The functional requirement provides the overview of the system.

Use Case Diagram

The "AgroBid" it consists of three actors as Admin, Bider and Farmer.

Farmer: The farmer shall register and login to the system. They shall add their products and manage them. The farmer shall view the infromation of the bider who bided on the products. The farmer shall accept a bid. The farmer shall also set a minimum range of the product.

Bider: The farmer shall register and login to the system. The bider shall view the products and bid on them. The bider shall wait for the response of the bid and once the bid is approved the bider shall make payment.

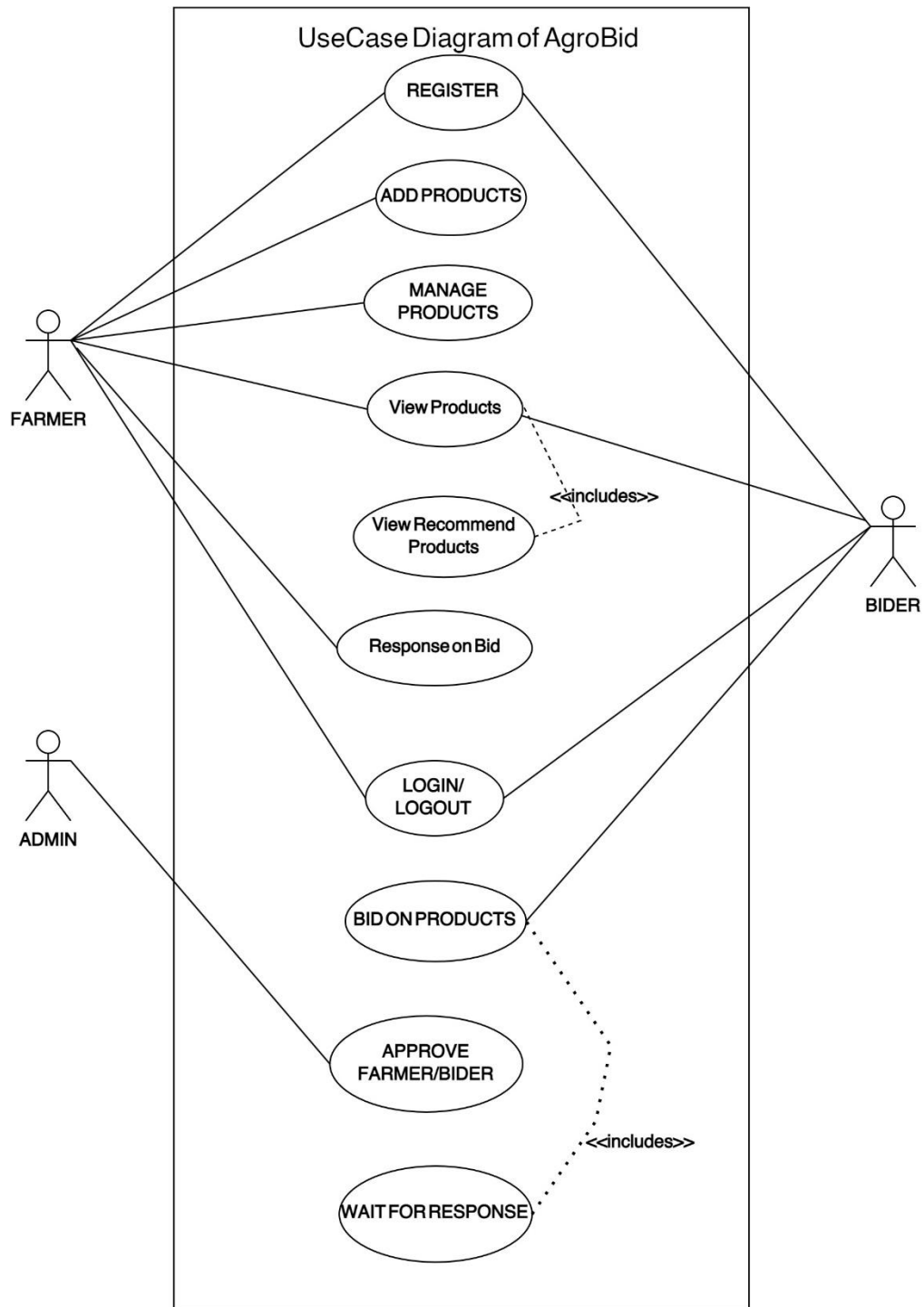**Admin**: The admin shall login to the system. The admin shall aprove the bider and farmer.

Figure 3-1:Use Case Diagram of "AgroBid"

Non-Functional Requirements

Availability: As a web-based application, "AgroBid" is accessible from any device with an internet connection. There's no need to install additional software or worry about storage space on the user's device, as everything operates directly through the web browser.

Security: Security is enhanced by restricting system changes to administrators only.. Each user has a unique session upon logging in, requiring their login details to access the system securely.

Performance: "AgroBid" is designed to efficiently handle tasks related to managing users (both biders and Farmers) and facilitating the bidding process. Admins can oversee all aspects of the system, while users and biders can register, log in, and perform their tasks, such as bidding or managing agricultural products.

Reliability: The system is dependable for managing users and supporting the trading of agricultural products through a bidding process.

3.1.2   Feasibility Analysis
Technical Feasibility

By creating a website that enables farmer to add their products and sell them with a profit and manage the products and for the biders to view different products added by the farmer and bid on them. Easy to use, with a user-friendly layout and effective comparing feature. Additional features can be added like the category of products as fruits and vegetables. The project used PHP and MySQL and Laravel framework as the backend, while HTML, CSS, JS and Bootstarp were used as the front end, making it easily installable on the system whenever needed. Using MySQL as a backend, huge amounts of data can be efficiently processed. Therefore, this project is technically feasible.

Operational Feasibility

With the right preparation and execution, an online system for selling the crops by the farmer is operationally feasible. Users would find it simple to use because it is very user-friendly for all biders and farmers. To use this system no specific training is needed

Economic Feasibility

Cost estimates can be made after examining the total requirements. All the resources required to finish the project may be simply found online as open source.

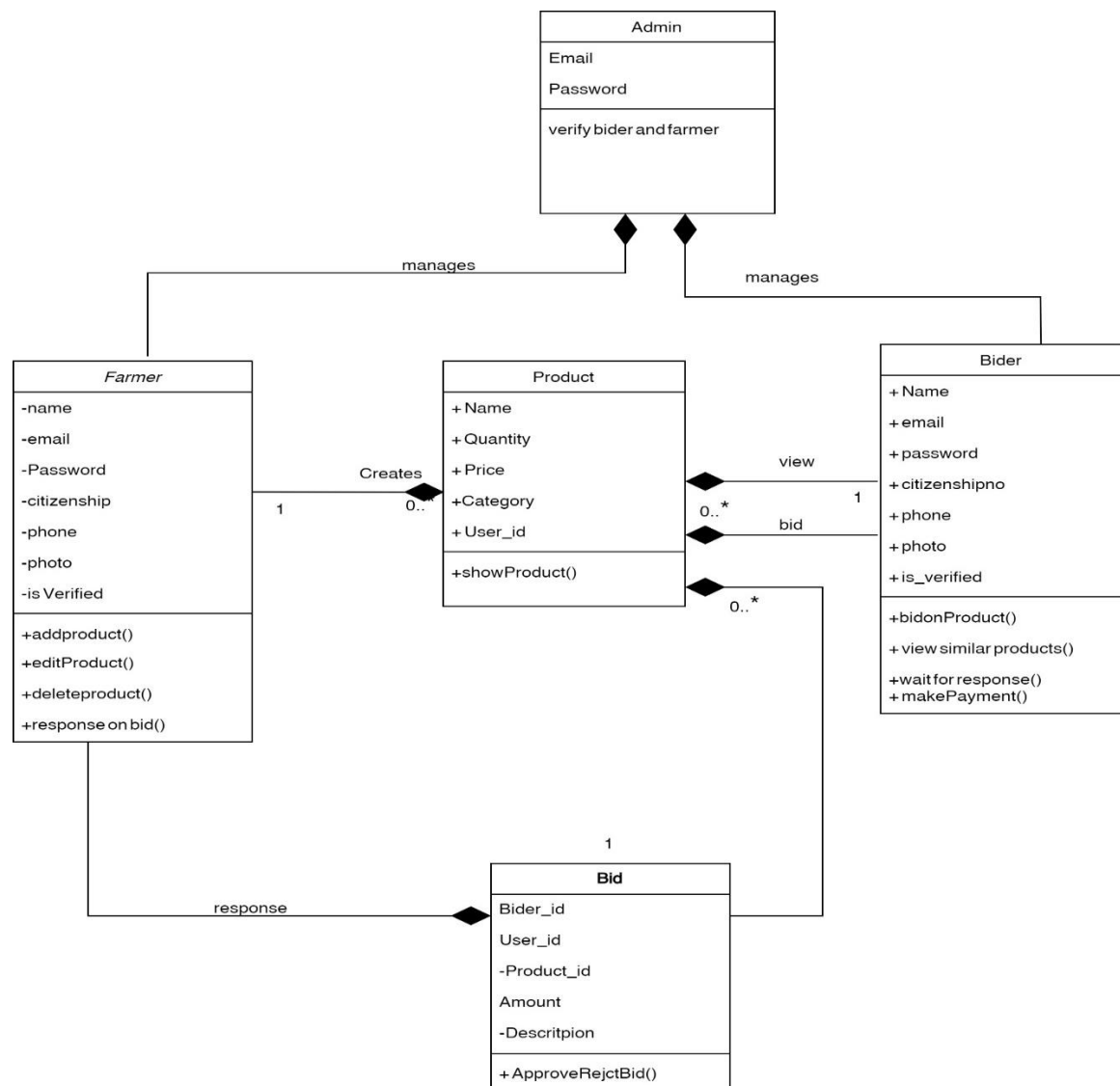### 3.1.3 Object Modeling: Class and Object Diagram

Figure 3-2:Class Diagram of AgroBid

Figure 3.2 shows the structure of an AgroBid by illustrating its classes, their attributes, methods, and relationships. Each class is represented by a rectangle, which includes the class name at the top, attributes (properties) in the middle, and methods (functions) at the bottom. The diagram also shows two types of relationships: aggregation, indicated by a line with a hollow diamond, where the part can exist independently, and composition, shown by a filled diamond, where the part cannot exist without the whole. This helps to visualize how different parts of the system connect and interact
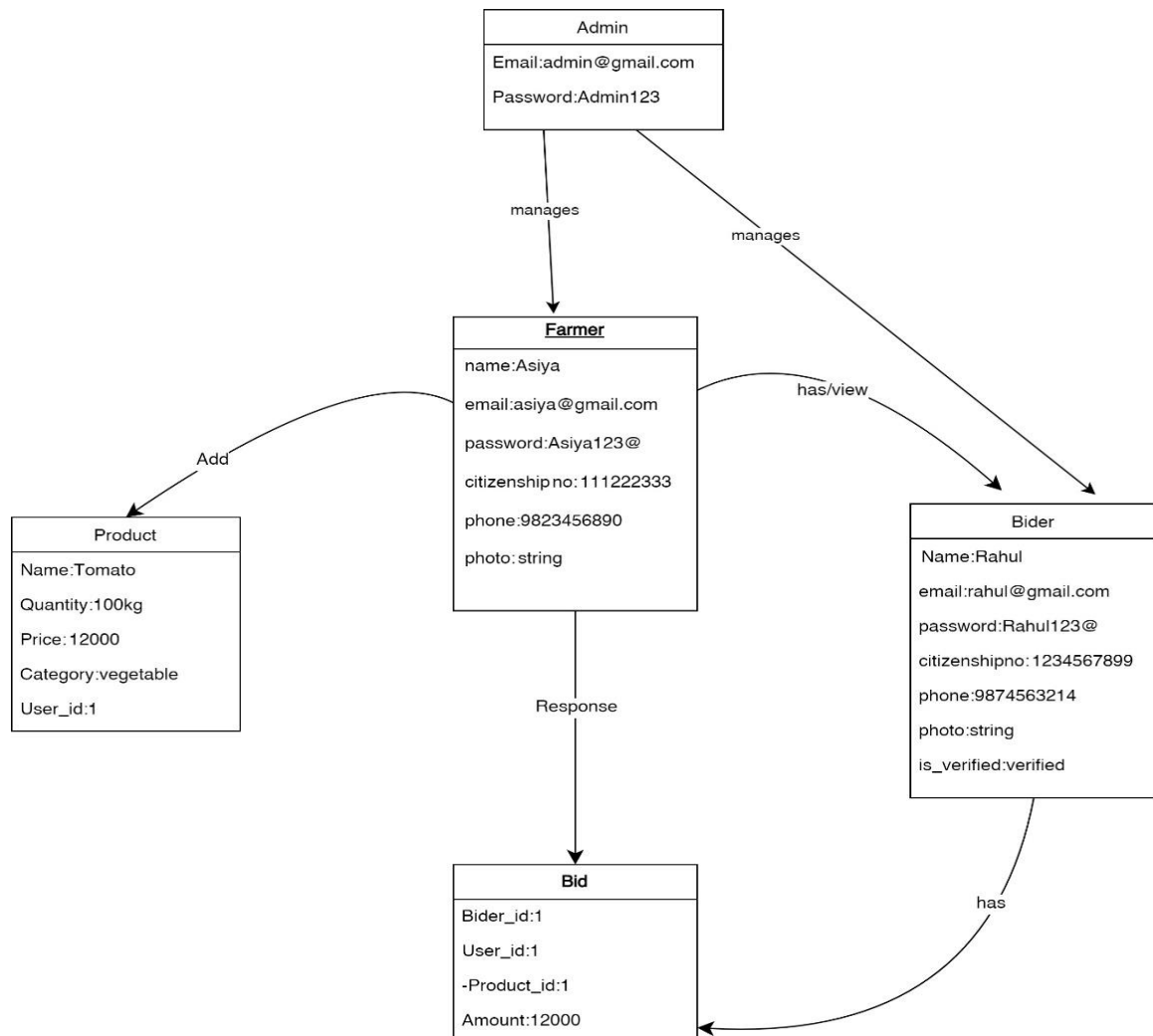
Figure 3-3:Object Diagram of AgroBid

The object diagram provides a snapshot of the system, depicting specific instances of classes at a particular moment in time. Each object is represented as a rectangle, with the object's name and class displayed at the top, followed by its current attribute values in the middle. This diagram captures the actual relationships between these objects, reflecting real data and connections during runtime. Unlike class diagrams that outline possible structures, object diagrams illustrate how the system's components are organized and interact in a specific scenario, offering a concrete, real-world perspective of the system's operation at a given moment.

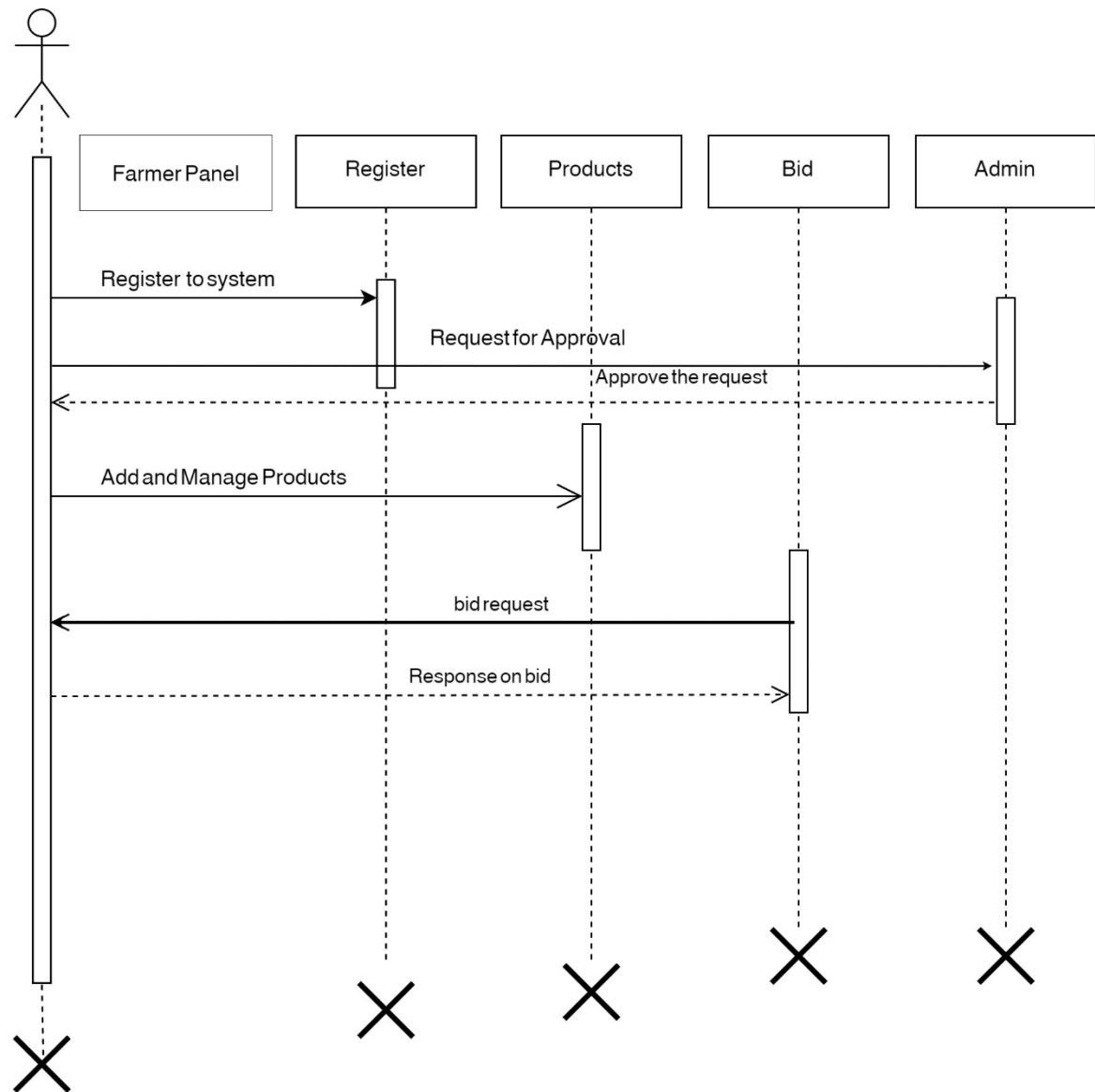### 3.1.4 Dynamic Modelling:State and Sequence Digarm

Figure 3-4: Sequence Diagram for Farmer in AgroBid

From Figure 3.4 shows the activity diagram of Farmer where the farmer would register to the system from Farmer Panel and Admin would response to the request of the farmer. After being approved the farmer adds the product and manage accordingly.The farmer response on the bid requested by the bider.
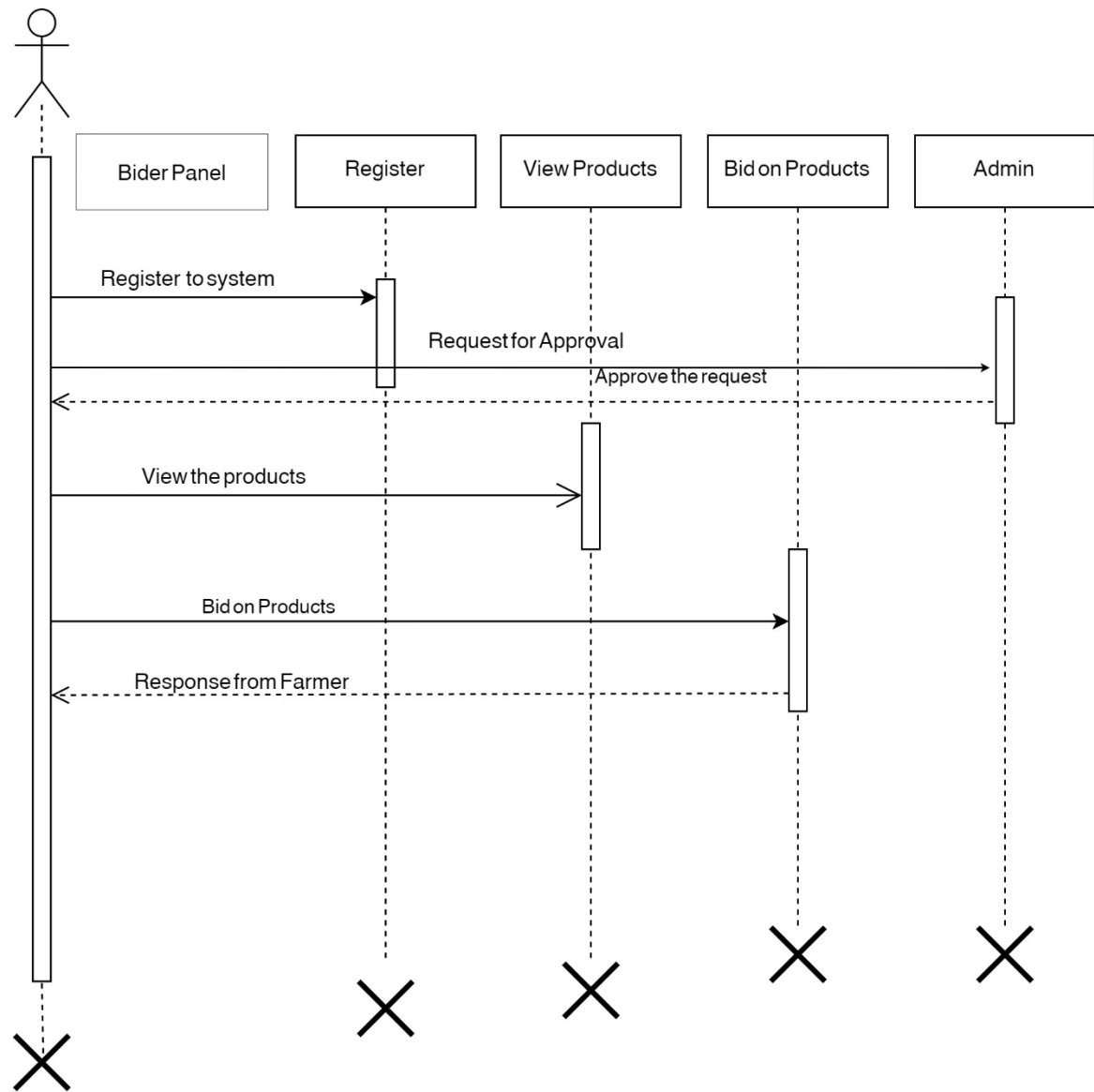
Figure 3-5: Sequence Diagram for Bider in AgroBid

From Figure 3.5 shows the activity diagram of Bider where the bider would register to the system from Bider Panel and Admin would response to the request of the bider. After being approved the farmer views the product and bid accordingly.The bidder bid on the products and responded by the farmer.
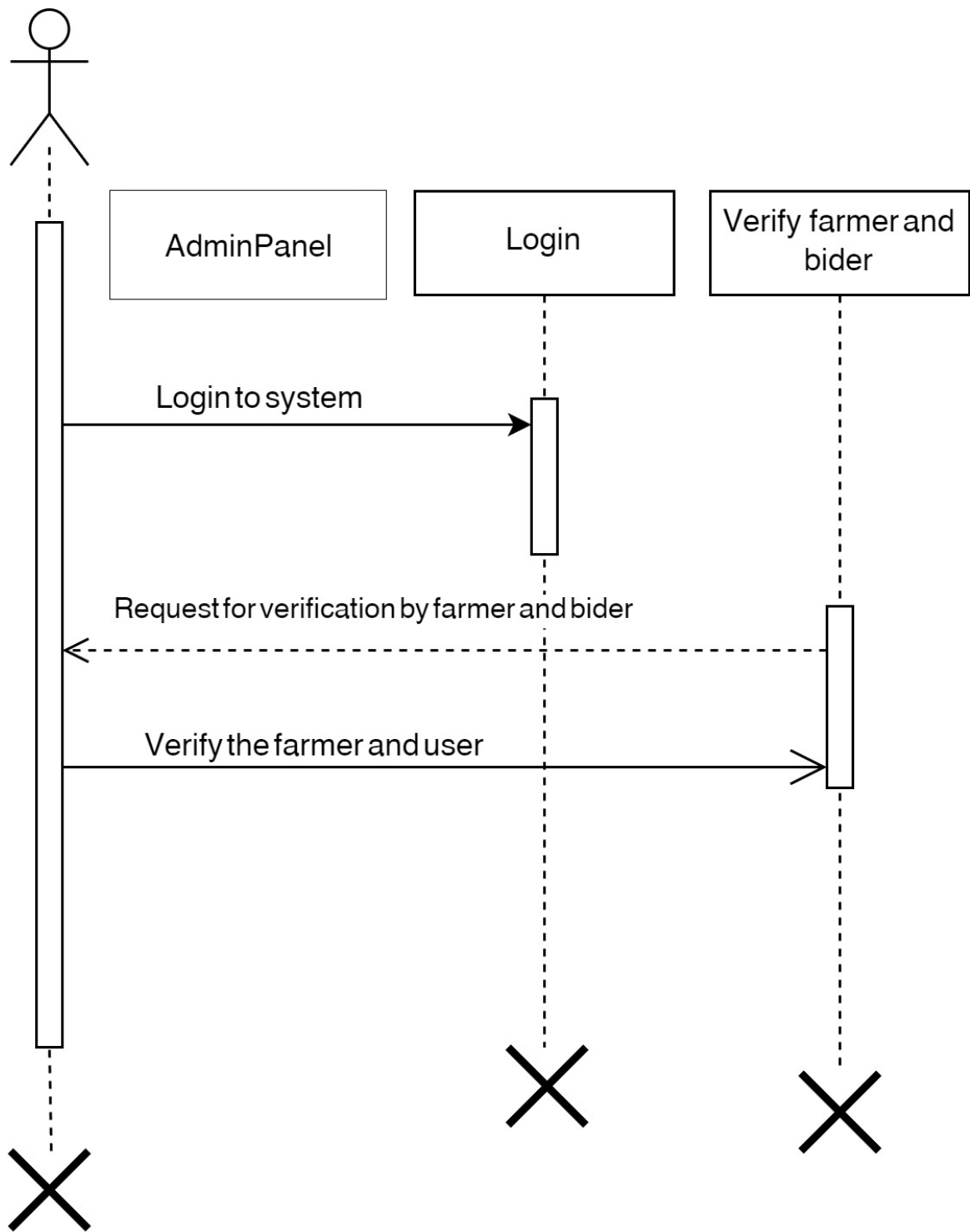
Figure 3-6: Sequence Diagrm for Admin in AgroBid

From Figure 3.6 shows the activity diagram of Admin where the admin would login to the system from Admin Panel. After being logged in the farmer and bider are verified by the admin.

State Diagram

The following state diagram demonstrates different lifecycle states that the different entities go through.
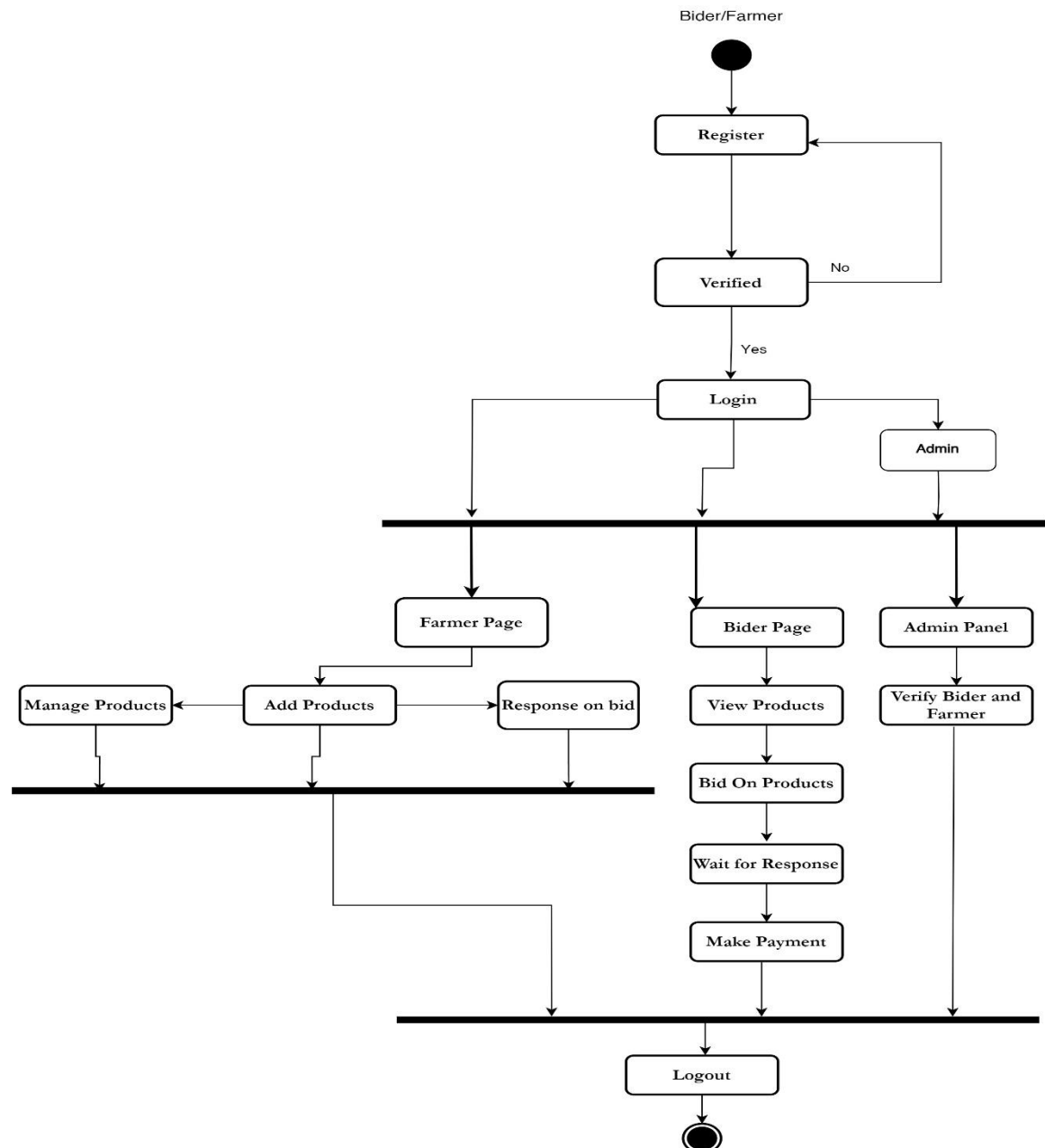

Figure 3-7: State Diagram of AgroBid

The state diagram outlines a system that includes functionalities for farmer registration, allowing farmers to create and manage their accounts, and bidders to view available products. It features a dedicated Farmer Page for product listing, where farmers can add new items. Bidders can access a Bidder Page to filter products,bid on them and wait for response and make payment when the bid is approved. An Admin Panel approves the farmer and the bider.
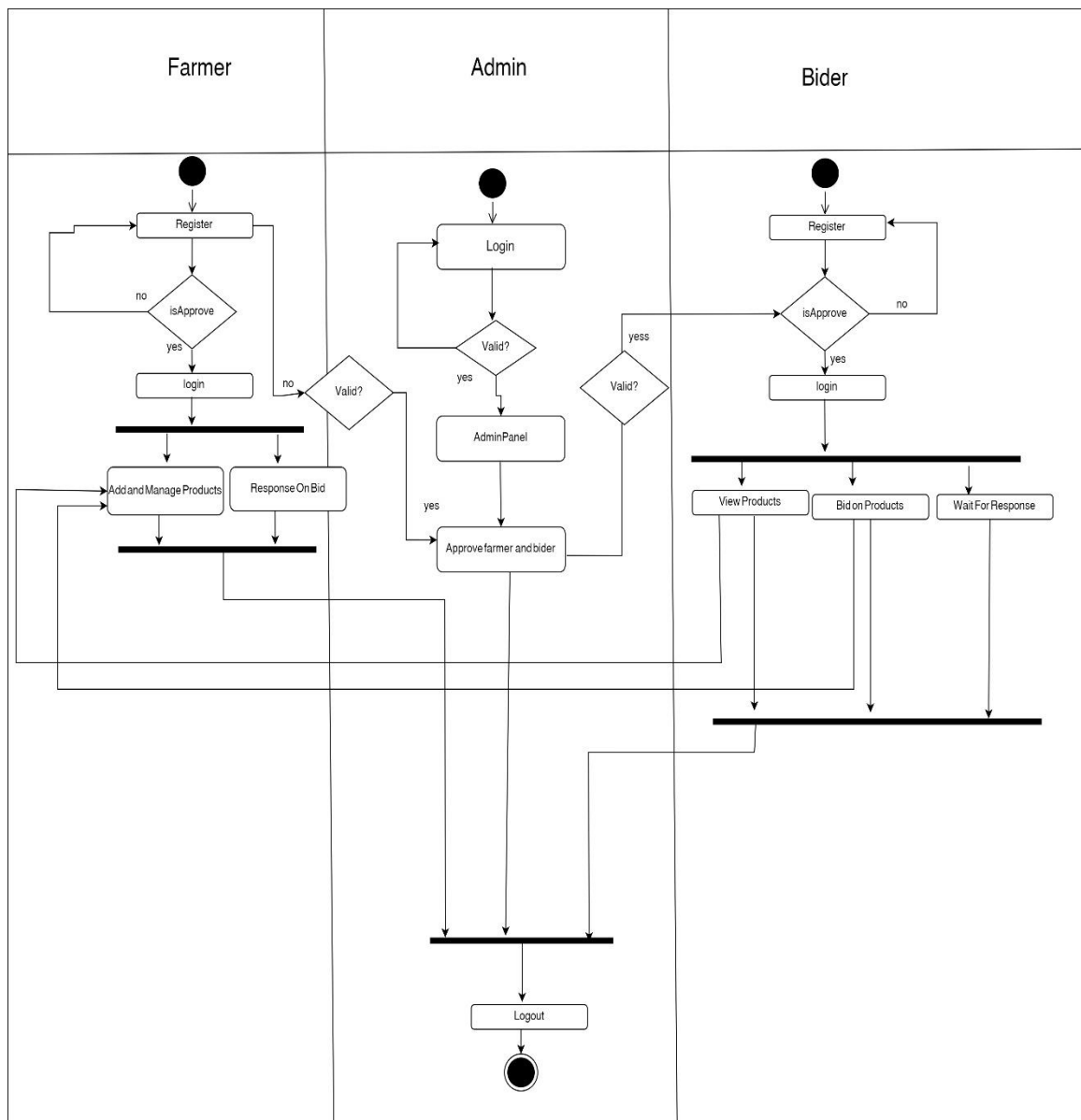
3.1.5 Process Modelling: Activity Diagram

Figure 3-8: Activity Diagrm of AgroBid

The activity diagram above visually represents the workflow of processes within the "AgriBid". It begins with an initial node (a filled circles) and progresses through various activities, depicted as rounded rectangles. Arrows between these activities indicate the flow of control, showing how one step leads to the next. Decision points, represented by diamonds, illustrate where the process can branch based on conditions, such as whether a bid meets the minimum price. The diagram may also include parallel activities, shown through fork and join nodes, where multiple tasks—like validating user input and updating the bid status—can be performed simultaneously. This diagram offers a clear overview of

the process, making it easier to understand the sequence of actions and decisions involved in tasks like bidding, user authentication, and product management within the "AgroBid".

3.2 System Design

During the system design phase, the analysis is taken to another step where existing classes and object diagrams are refined and component and deployment diagram are constructed.

3.2.1 Refinment of Classes and Object

In the following refined diagram, the existing class diagram has been refined by adding more detail. The diagram consists of method signatures, return types and parameter types. While the class diagram showed the overview of the system, the refined class diagram adds more detail for actual implementation.
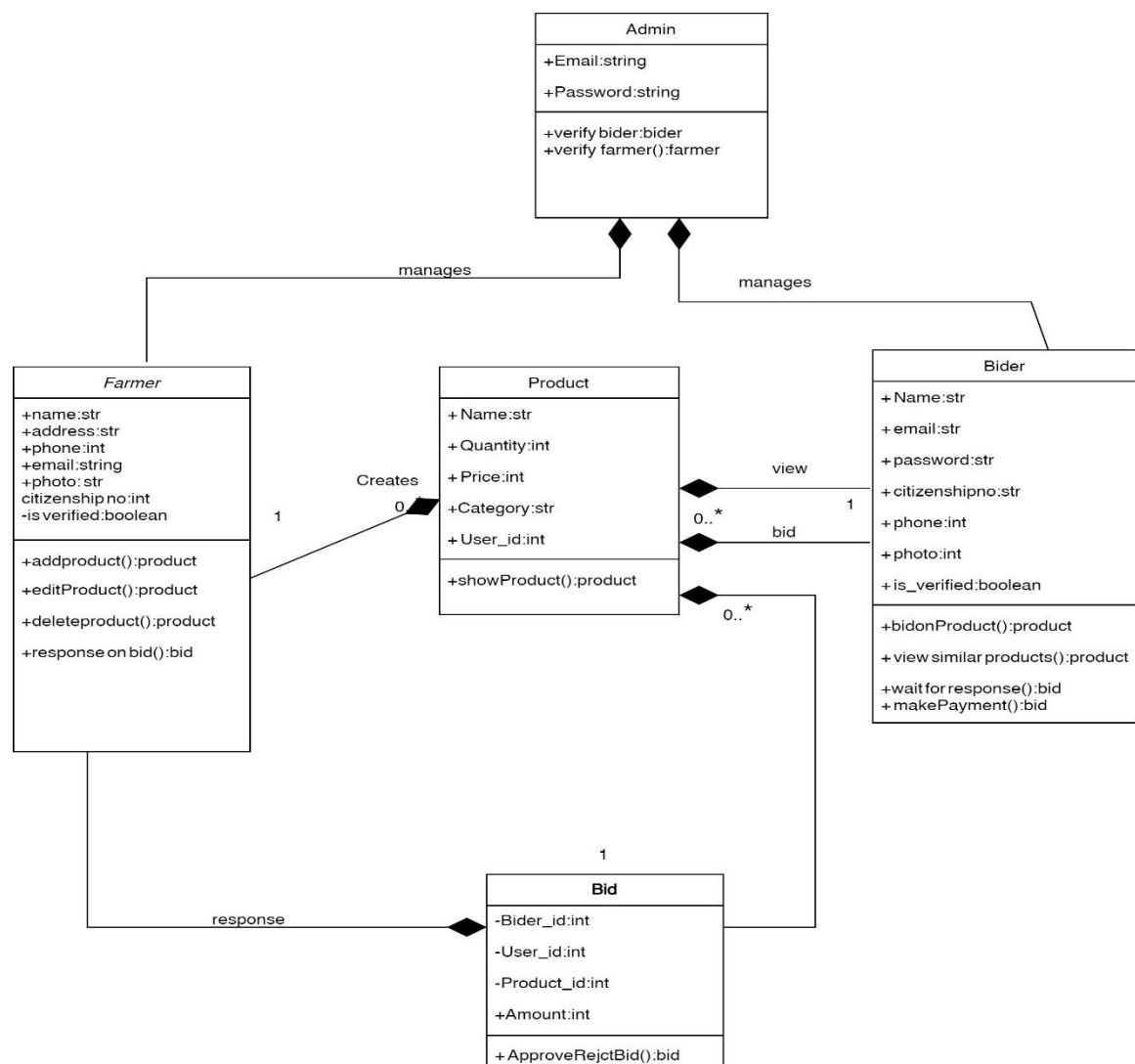

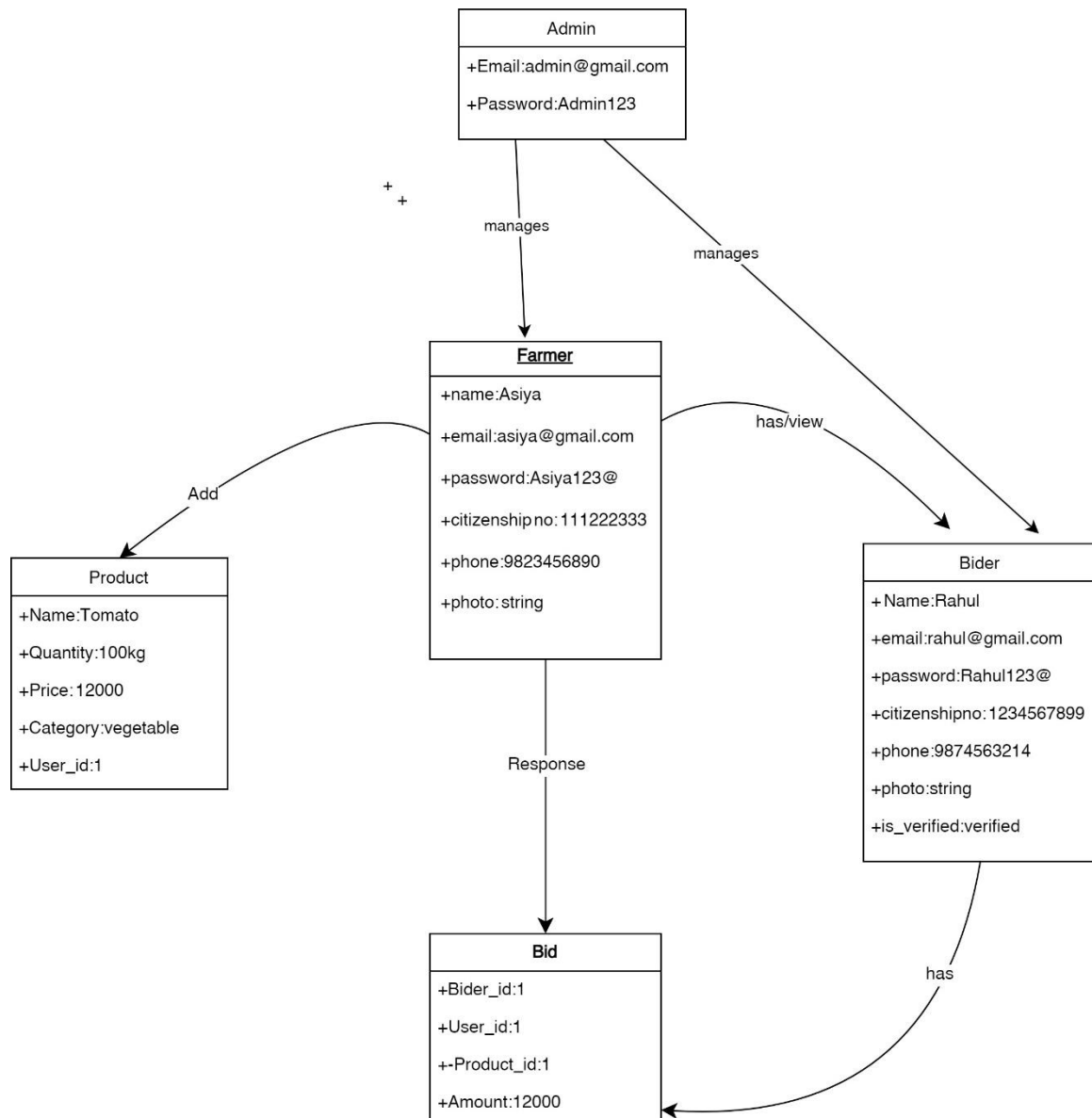**Figure 3-9:Refinement class of AgroBid**

Figure 3-10:Refinment Object of AgroBid

Figure 3.10 shows the attributes of the object in order to make it more effective,precise. This figure shows the attributes of Admin,Bider,Product,Bid and Farmer. Where the farmer manages the bider and farmer by approving the request and the products are adde by the farmer and the bider bid on the products.

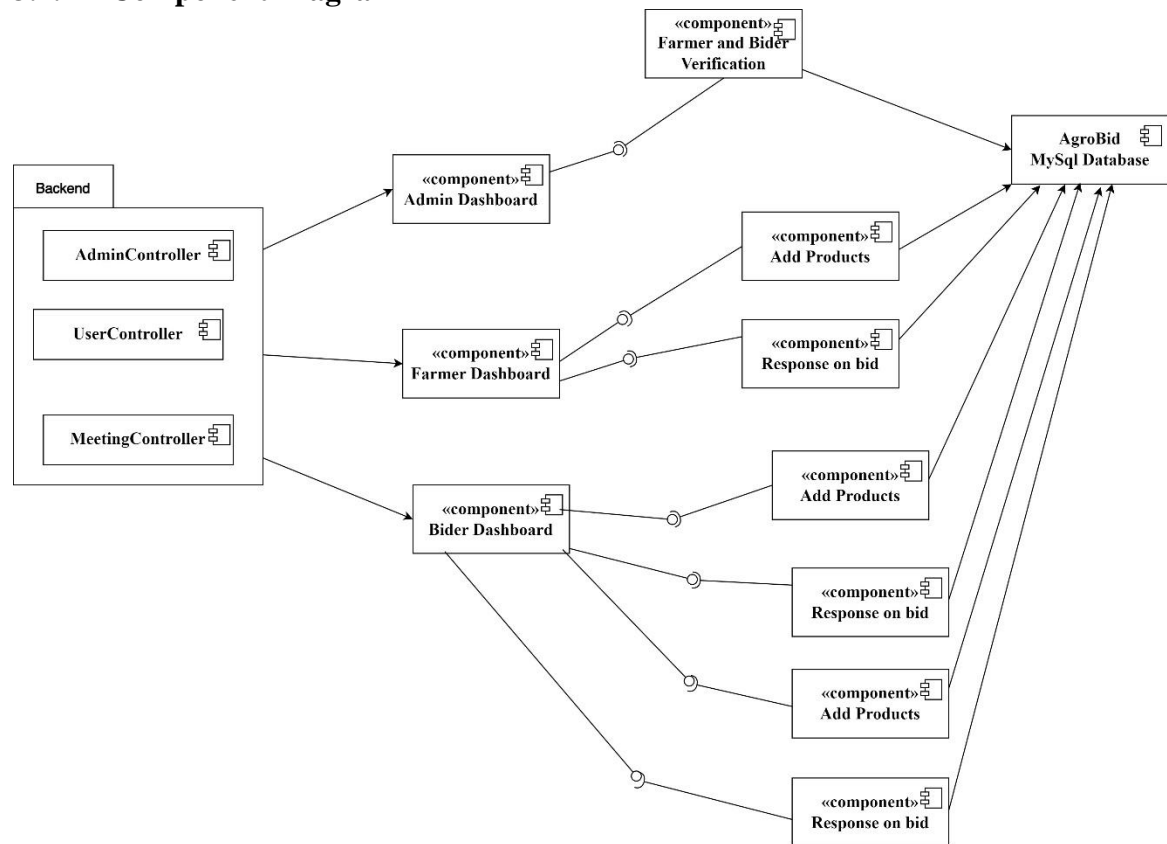### 3.2.2 Component Diagram

Figure 3-11:Component Diagram of AgroBid

The component diagram below illustrates the physical components of "AgroBid" and their interactions. With its help we are able to visualize the overall structure and organization.It consists of Backend, The dashboards their components and connected to Mysql named AgroBid. The datas are all stored in the database of the components.
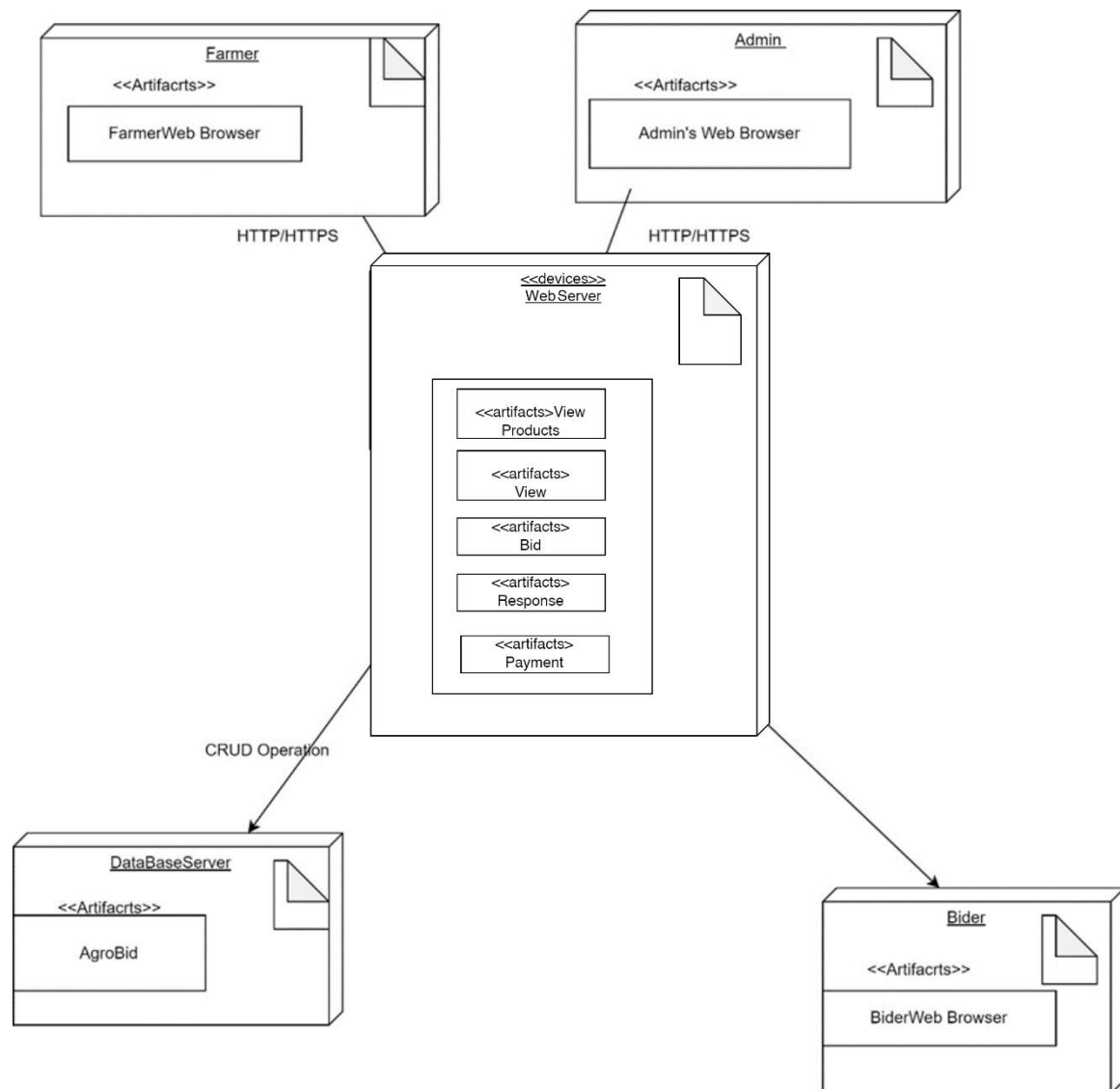
3.2.3 Deployment Diagram

Figure 3-12: Deployment Diagram of AgroBid

The following deployment diagram illustrates how software components are distributed across hardware nodes and how they interact with each other in a runtime environment.

3.3 Algorithm Details

In AgroBid, Random Forest is used for the prediction of similar products to the bider.It allows bider to see more products according to their requirements.

To follow up the Random forest in the system it follows the steps:

1. Data Structure: For a recommendation system, typically needed historical interaction data between ,farmers, biders and products, which could include:

- Farmer IDs
- Bider IDs

- Product IDs

- Features of products (e.g., commodity type, price, unit)

2. Feature Engineering: Prepare features that capture bider behavior and product characteristics:

Product features: price, type, popularity (based on interactions).

3. Training the Model: Use Random Forest to predict user preferences for products based on the features.

$$x^{ij} = \sum_{k=1}^{N} Tx_k(xx_{ij})$$

where:

- y^{ij} = predicted preference score for bider i on product j

- $Tx_k(xx_{ij})$ = prediction of the kkk-th tree for user-product pair (i,j)(i, j)(i,j)

- N = number of trees in the forest

4. Making Recommendations:

After training the model, for a given bider, predicting scores for all products biders haven't interacted with yet.

Sort the scores to recommend the top N products.

Prediction for Recommendations:

Recommended Products=TopN$y^{ij}$for all j not interacted by i

CHAPTER 4: IMPLEMENTATION AND TESTING

4.1 Implementation

Implementation refers to the practical execution of a decision or plan. It involves the process of translating requirements into actual code or actions. In the context implementation entails coding and developing the necessary components based on the specified requirements.

4.1.1 Tools Used

Diagram Tool:

"Draw.io" is used to make all the system diagrams required for this project. It is a proprietary software for making interface, charts and flow diagrams. Overall, Draw.io is a valuable tool for visualizing and communicating ideas, processes, and concepts through visually appealing and informative diagrams.

a) **HTML**:

HTML is used to build all the basis structure of this project. HTML is used for the front end structure.

b) **CSS**:

CSS is used for styling of the web pages, including colors, layout and fonts. It is a simple design language intended to simplify the process of making web pages presentable.

c) **Bootstrap**:

The Bootstrap framework is being used in the home page for the image slider to make the home page stylish and visually appealing for presentation purposes.

d) **Java Script**:

JS is used for the validation of forms and ensuring the responsiveness of web pages. It is used to make web pages interactive, allowing for real-time user interactions and enhancing the overall user experience.

e) **PHP**:

It is a scripting language employed for generating dynamic websites. It allows the creation of dynamic pages and facilitates the establishment of a connection between the front-end and the database.

f) **MySQL**:

MySQ is based on the structure query language, which is used for adding, removing and modifying information in the database. With the help of MySQL, it is very easy to perform different types of commands like add, drop, insert and update.

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g) Visual Studio Code:

The completion of the project is being done using Visual Studio Code. Its features like debugging, syntax highlighting, intelligent code completion, etc., make the coding process faster and hassle-free, contributing to an efficient workflow.

4.1.2   Implementation Details of Modules

The primary modules in AgroBid nclude Product Management**,** User Interaction and Bidding**,** Recommendation Engine**,** Filtering.

- **Product Management Module**

  This module allows farmers to add products and bidders to view them.

  Fields: id, name, quantity, price, picture, product_type, user_id, created_at, updated_at, is_sold.

- **User Interaction and Bidding Module**

  This module enables users to bid on products and handles interaction between users and products.

- **Recommendation Engine Module**

  This module provides personalized product recommendations to users based on their interaction history or product preferences.

- **Product Filtering Module**

  This module allows bidders to filter products based on categories and price.

4.2   Testing

4.2.1   Test Case for Unit Testing
Table 4-1:Test Case for Farmer Login of AgroBId

Project Name: ""AgroBid""	
Test Case 1	
Test Case ID: TC_001	Test Designed by: Asiya Khatun
Test Priority (Low/Medium/High): Medium	Test Designed date: 08-21-2024
Module Name: Login for Farmer	Test Executed by: Asiya Khatun
Test Title: Verify login with valid credentials	Test Execution date: 08-21-2024
Description: Test the login function of ""AgroBid""	
Pre-conditions: User has valid login credentials	

Dependencies:						
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/ Fail)	Notes
1	Navigate to login page		Login page should open	As Expected i.e. User is navigated to system's login page	fail	
2	Navigate to login page		Login page should open	As Expected i.e. User is navigated to system's login page	pass	
3	Enter valid email and password	Email =asiya@gmail.com Password=asiya@12	Email and Password are valid and accurate	As Expected	pass	
4	Click on login button		User should be logged in	As Expected i.e User is logged in.	pass	
Post-conditions: **User's data is validated with database and logged on to "AgroBid"**						

Table 4-2Test Case For Farmer Register

Project Name: "AgroBid"						
Test Case 2						
Test Case ID: TC_002				Test Designed by: Asiya Khatun		
Test Priority (Low/Medium/High): Medium				Test Designed date: 08-21-2024		
Module Name: Register for Farmer				Test Executed by: Asiya Khatun		
Test Title: Register new farmer into the system				Test Execution date: 08-21-2024		
Description: Test the register function of ""AgroBid""						
Pre-conditions: User has all required details						
Dependencies:						
Step s	**Test Steps**	**Test Data**	**Expect ed Result**	**Actual Result**	**Statu s (Pass/ Fail)**	**Not es**
1	Navigate to Register Page		Register page should open	As expected farmer redirected to farmer register page	pass	
2	Enter all the required informations	Name:Asiya Address:kathmandu Phone-no:9823174388 Citizenshipno: 123456789 Phone:9823174988	Name, Email, Address,Phon e Citizenno,Ph oto, Password		fail	

Step	Test Steps	Test Data	Expected Result	Actual Result	Status	Notes
3	Enter all the required informations	Photo: Email:asiya@gmail.com Password:asiya@12 Name:Asiya Address:kathmandu Phone-no:9823174388 Citizenshipno: 123456789 Phone:9823174988	Name, Email, Address,Phone Citizenno,Photo, Password	Didn't went as predcted	fail pass	
4	Click on Signup		Should be registered	As expected	pass	

Post-conditions:

Farmer inputs are validated and stored on database of ""AgroBid""

Table 4-3Test Case For Bider Login

Project Name: ""AgroBid""	
Test Case 3	
Test Case ID: TC_003	Test Designed by: Asiya Khatun
Test Priority (Low/Medium/High): Medium	Test Designed date: 08-21-2024
Module Name: Login for Biders	Test Executed by: Asiya Khatun
Test Title: Verify login with valid credentials	Test Execution date: 08-21-2024
Description: Test the login function of ""AgroBid""	
Pre-conditions: User has valid login credentials	
Dependencies:	

Step s	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/	Notes

					Fail)	
1	Navigate to login page		Login page should open	As Expected i.e. User is navigated to system's login page	fail	
1	Navigate to login page		Login page should open	As Expected i.e. User is navigated to system's login page	pass	
2	Enter valid email and password	Email =asiya1@gmail.com Password=asiya@12	Email and Password are valid and accurate	As Expected	pass	
3	Click on login button		User should be logged in	As Expected i.e User is logged in.	pass	Screenshot 5
Post-conditions: **User's data is validated with database and logged on to ""AgroBid""**						

Table 4-4:Test Case For Bider Register

Test Case ID: TC_004
Test Priority (Low/Medium/High): Medium
Module Name: Register for Biders
Test Title: Register new bider into the system

Ste p s	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)
1	Navigate to Register page		Register page should open	As Expected i.e. User is navigated to system's register page	pass
2	Enter All the required information	Name:Asiya Address:kathmandu Phone-no:9823174388 Citizenshipno: 123456789 Photo: Email:asiya1@gmail.com Password:asiya@12	Name, Email, Address, Phone and,Citizenship_no, Photo Password are accurate and non-empty	As Expected,	pass
3	Click on Signup button		User should be registered into the System	As Expected, i.e. User is Registered into System and Account has been created	pass

Table 4-5Test Case For Adding Products

Project Name: ""AgroBid""	
Test Case 5	
Test Case ID: TC_005	Test Designed by: Asiya Khatun
Test Priority (Low/Medium/High): Medium	Test Designed date: 08-21-2024
Module Name: Add products	Test Executed by: Asiya Khatun
Test Title: Add food by Farmer	Test Execution date: 08-21-2024
Description: Test the Product adding functionality of ""AgroBid""	
Pre-conditions: Products are added	
Dependencies:	

St eps	Test Steps	Test Data	Expec ted Result	Actual Result	Status (Pass /F ail)	Notes
1	Navigate to add products page		A product add form should be displayed	As expected the form is opened	pass	
2	Enter t he name, quantity, image, price category Andclick submit	Name:To mato Quantity:1 00kg Price:1200 0 Category:v egetable Picture:	Products should be added to the list.	Failed products adding error.	Fail	

3.	Enter the name, quantity, image, price category Andclick submit	Name:Tomato Quantity:100kg Price:12000 Category:vegetable Picture:	Products should be added to the list.	As expected	pass	
4	Click on remove button or edit button to edit or delete the product	Name:Tomato Quantity:120kg Price:13000 Category:vegetable	Shows a form of edit or directly deleted while clicking delete	As expected the product is edited or delete with its actions.	pass	

Post-conditions:

Product is added and appeared in product list

Products are edited and deleted

Table 4-6 Test Case For Biding

Project Name: ""AgroBid""
Test Case 6

Test Case ID: TC_006				Test Designed by: Asiya Khatun		
Test Priority (Low/Medium/High): Medium				Test Designed date: 08-21-2024		
Module Name: Biding on a particular product				Test Executed by: Asiya Khatun		
Test Title: To bid on the products with proper valid amouts				Test Execution date: 08-21-2024		
Description: Test the Place Bid of ""AgroBid""						
Pre-conditions: Bider should be able to bid						
Dependencies:						
Ste p s	Test Steps	Test Data	Expect ed Result	Actual Result	Status (Pas s/ Fail)	Notes
1	Navigate to products page of biderdash		Should display all the products added by the user.	As Expected	pass	
2	Click on aparticula r product and view details or place a bid	Place bid:13000 Comment:	Should allow to bid with the tagged price or above that and also view details of the products and user.	As Expected	pass	

4.2.2 Test Cases for System Testing
Table 4-7:TestCase For Farmer Module

Project Name: AgroBid	
Test Case 7	
Test Case ID: TC_007	Test Designed by: Asiya Khatun
Test Priority (Low/Medium/High): Medium	Test Designed date: 09-25-2024
Module Name: Farmer Module	Test Executed by: Jagrit Timasina
Test Title: Testing all component of AgroBid	Test Execution date: 09-26-2024
Description: Testing complete system by integrate model together	
Pre-conditions: user should navigate to all model by providing required information.	
Dependencies:	

Steps	Test Steps	Test Data	Expeted Result	Actual Result	Status (Pass/ Fail)	Notes
1	Navigate to AgroBid index page		A system index page should be displayed	As expected the page is opened	pass	
2	Navigate to register page for Bider and Farmer		A system should display register page when click on register	As expected register page is shown	pass	
3	Enter valid Data	Name: Asiya Khatun Email=asiya@ @gmail.com Password=Asiya @123 citizenship=102 25688	Datas are valid and found correct	As Expected user registered data send to admin for verification.	pass	

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		phone:98414069 888 photo: img.jpg			
4	Enter email and password	Email=asiya@g mail.com Password=Asiya 123@	Email and Password are valid and accurate	As Expected redirected to admin dashboard	pass
5	Navigate to add products page		A product add form should be displayed	As expected the form is opened	pass
6	Enter the data's and click submit	Name:Apple Qty:120 Price:12000 Picture:img Category:Fruit	Product should be added to the list.	As expected	pass
7	Navigate to products page		A product shows product page and list of products.	As expected the pages is opened	pass
8	Navigate to Bider Request Page		Bid lists should be shown	As expected the pages is opened and shown	pass
9	Responding on the bid page	Approved Declined	Should be approved or declined	As expected	pass

Post-conditions:
All modules is working well for farmer module when we pass correct and validated data.

Table 4-8:Test Case for Bider Module

Project Name: AgroBid						
Test Case 8						
Test Case ID: TC_008				Test Designed by: Asiya Khatun		
Test Priority (Low/Medium/High): Medium				Test Designed date: 09-25-2024		
Module Name:Bider Module				Test Executed by: Jagrit Timasina		
Test Title: Testing all component of AgroBid				Test Execution date: 09-26-2024		
Description: Testing complete system by integrate model together						
Pre-conditions: user should navigate to all model by providing required information.						
Dependencies:						
St e ps	**Test Steps**	**Test Data**	**Expeted Result**	**Actual Result**	**Status (Pass/ Fail)**	**Notes**
1	Navigate to AgroBid index page		A system index page should be displayed	As expected the page is opened	pass	
2	Navigate to register page for Bider		A system should display register page when click on register	As expected register page is shown	pass	
3	Enter valid Data	Name: Rahul Email=Rahul@ @gmail.com Password=Rahu l @123 citizenship=102 25688754 phone:98854406 9888	Datas are valid and found correct	As Expected user registered data send to admin for verification.	pass	

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		photo: img.jpg				
4	Enter email and password	Email=rahul@gmail.com Password=Rahul123@	Email and Password are valid and accurate	As Expected redirected to admin dashboard	pass	
5	Navigate to products page		A product shows product page and list of products.	As expected the pages is opened	pass	
6	Navigate to Bidt Page		Bid should be allowed	As expected the pages is bid succesed	pass	
7	Response page		Approved response should show and payment proceeding	As expected	pass	

Post-conditions:
All modules is working well for bider module when we pass correct and validated data.

Table 4-9:Test Case for Admin Module

Project Name: AgroBid	
Test Case 9	
Test Case ID: TC_009	Test Designed by: Asiya Khatun
Test Priority (Low/Medium/High): Medium	Test Designed date: 09-25-2024
Module Name: Admin Module	Test Executed by: Jagrit Timasina
Test Title: Testing all component of AgroBid	Test Execution date: 09-26-2024
Description: Testing complete system by integrate model together	
Pre-conditions: user should navigate to all model by providing required information.	

St e ps	Test Steps	Test Data	Expeted Result	Actual Result	Status (Pass/ Fail)	Notes
	Dependencies:					
1	Enter email and password	Email=Admin@ gmail.com Password=Admi n123	Email and Password are valid and accurate	As Expected redirected to admin dashboard	pass	
2	Navigate to Request Page		lists should be shown of request	As expected the request are shown	pass	
9	Respondin g on the request page	Approved	Should be approved	As expected	pass	
Post-conditions: **All modules is working well for admin module when we pass correct and validated data.**						

CHAPTER 5: CONCLUSION AND FUTURE RECOMMENDATIONS

5.1   Conclusion

I can conclude that my project, titled Agriculture Product Bidding System ("“AGROBID”"), effectively performs its intended functions and is designed to be user-friendly. The system supports essential operations such as listing agricultural products, submitting bids, and managing product information.

Additionally, "“AGROBID”" includes various features enhancing the system's efficiency and usability. These features make the system refined and easy to navigate. Overall, "“AGROBID”" meets the primary objectives of the project, providing a comprehensive solution for the biding and selling of agricultural products through a seamless bidding process.

5.2   Lesson Learnt/Outcome

The AgroBid has successfully achieved all its objectives. Farmers can now easily add products for sale, update listings, and manage their inventory. Bidders receive personalized product recommendations, facilitating their ability to find relevant agricultural products. A dedicated filtering system allows users to refine their searches based on categories and price ranges, enhancing the user experience. Additionally, a secure payment integration through eSewa ensures seamless transactions. Overall, the system significantly enhances the bidding experience for both farmers and bidders, effectively fulfilling its intended goals.

5.3   Future Recommendations

Looking forward, enhancing AgroBid could involve more relevant algorithms and interactions between biders and farmers. Creating a mobile application version of the platform would allow the users to access it through smartphones and tablets.

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Appendics

Bider Dash

Products List

Response Page

Avialable Products

Product Details

Bidding Form