Corn Cradle

Interim Report

IS2102 Group Project 1

Presented by: IS Group 02

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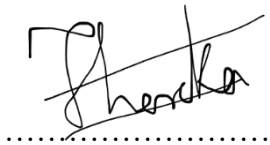

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1. Introduction

1.1 Introduction to the Project

Corn Cradle is a digital platform that will be of great benefit to corn farmers in Sri Lanka. This effort addresses the crucial need for a centralized system to streamline agricultural operations and improve market access for corn farmers, who play an important role in the country's food supply.

1.2 Problem Statement

Corn farmers in Sri Lanka face significant challenges in obtaining fair prices for their produce due to the lack of transparency in the supply chain. Intermediaries often purchase corn from farmers at low prices and sell it to manufacturers at much higher rates, leading to reduced profits for farmers and higher costs for manufacturers and consumers. This price disparity and the inability of farmers to negotiate directly with manufacturers contribute to the inefficiencies in the corn industry. However, the impact of these challenges extends beyond the corn industry, affecting various other sectors as well.

1.3 Our Solution

To address these challenges, we propose the development of a web-based platform called "Corn Cradle" that facilitates transparent price negotiations and transactions between corn farmers, intermediaries, and manufacturers. The platform will not eliminate the role of intermediaries, but it will create a more equitable and transparent system that benefits all stakeholders.

By addressing the challenges faced by corn farmers, we are positively impacting a wide range of related products such as eggs, chicken, cakes, and bakery items that rely on corn. This initiative also benefits essential food items like Thriposha and Samaposha. By supporting corn farmers, we are fostering a more sustainable and equitable agricultural ecosystem, ensuring that prices remain fair and stable across the entire supply chain.

1.5 How Corn Cradle is Different

Corn Cradle is a holistic platform that caters to the diverse needs of stakeholders across Sri Lanka's corn ecosystem, including farmers, buyers, manufacturers, ingredient suppliers, farm workers, and agriculture analysts. This comprehensive approach sets Corn Cradle apart from other agricultural platforms, as it aims to address the unique challenges faced by the corn industry in Sri Lanka.

One of the key differentiators of Corn Cradle is its ability to tackle the pressing issues of animal feed and baby food production shortages in Sri Lanka. By connecting corn farmers directly with manufacturers and ingredient suppliers, the platform facilitates the efficient supply of corn as a crucial raw material. Corn Cradle empowers farmers by providing specialized resources and a tailored labor marketplace to support every aspect of corn cultivation. Farmers can also access collective buying and selling capabilities to improve their profitability. The platform caters to the needs of all stakeholders, from buyers and manufacturers to ingredient suppliers and farm workers. By bringing together this diverse system, Corn Cradle creates a more efficient, transparent, and interconnected corn industry in Sri Lanka, addressing immediate challenges and laying the foundation for a sustainable future.

1.6 Comparison Chart

Comparison Chart

FEATURES	LIVELIFE.LK	SAARAKETHA	GLOMARK.LK	OUR WEB APP
Sell Products	✓	✓	✓	✓
Hire Workers	✗	✗	✗	✓
Buy Ingredients	✗	✗	✗	✓
Bidding System for Fair Pricing	✗	✗	✗	✓
User Base (Corn Farmers in Sri Lanka)	✗	✗	✗	✓
Weather Forecasting	✗	✗	✗	✓
Guide Farmers	✗	✗	✗	✓

2. Project Goals

Our project's ultimate objective is to provide a comprehensive platform that assists Sri Lankan corn farmers by handling every facet of their operations, from market access to resource management. The project also aims to respect traditional methods while modernizing and strengthening local agricultural practices through the use of technology

- Establish a transparent and fair pricing mechanism for the corn industry in Sri Lanka.
- Empower corn farmers by providing them with access to manufacturer-listed prices and negotiation leverage.
- Facilitate efficient and equitable transactions between farmers, intermediaries, and manufacturers.
- Foster collaboration and communication among various stakeholders in the corn ecosystem.
- Provide crop recommendations and agricultural advice based on local conditions and market trends.
- Contribute to the overall development and competitiveness of the agricultural sector in Sri Lanka.

3. Project Objectives

The Corn Cradle initiative aims to establish a complete digital platform that would enable Sri Lankan corn farmers to improve their agricultural operations, expand market access, and boost profitability by giving them access to tools and resources.

- Develop a user-friendly web platform that connects corn farmers, intermediaries, manufacturers, and other stakeholders.
- Implement a transparent price listing system that allows manufacturers to showcase their buying prices.
- Enable farmers to view and negotiate with intermediaries based on the manufacturer-listed prices.
- Facilitate secure and transparent transactions between farmers and intermediaries, with detailed records.
- Incorporate features for farm worker recruitment, ingredient supplier listings, and manufacturer sourcing.
- Provide market insights, price trends, and advisory services through the involvement of agriculture analysts.
- Ensure data security, privacy, and user authentication to maintain trust and confidentiality within the platform.
- Conduct user testing, gather feedback, and continuously improve the platform based on user needs and market dynamics.

4. Scope Of the Project

4.1 Users

- Farmer
- Buyer
- Farm worker
- Ingredients supplier
- Manufacturer
- Agriculture Analyst
- Moderator
- Website Administrator

4.2 In-Scope

- Create a web-based platform called "Corn Cradle" to facilitate transparent price negotiations and transactions between corn farmers, intermediaries, and manufacturers.
- Allow corn farmers, buyers, farm workers, and ingredient suppliers to register and manage their profiles on the platform.
- Enable users to list, search, and manage corn-related resources such as corn produce, farm equipment, and ingredients.
- Implement a bidding system to help farmers sell their corn at reasonable prices.
- Facilitate transactions where farmers can sell their corn harvest, buy necessary ingredients, and hire farm workers.
- Allow farm workers to list and sell their labor services.
- Enable buyers' intermediaries to bid on and purchase corn from farmers.
- Provide an interface for each user type to manage their respective activities on the platform.
- Integrate weather forecast information to help farmers make informed decisions about corn cultivation.

4.3 Out of scope

- Comprehensive accounting or financial planning tools beyond basic financial management.
- Extensive labor management features such as time tracking, payroll, and human resources management.
- Real-time tracking of corn deliveries and ingredient supplies.

5. Project Feasibility

5.1 Social Feasibility

Corn Cradle's success hinges on fostering trust within the local farming community and aligning with the cultural practices of Sri Lankan corn growers. By simplifying processes for farmers and ensuring product quality for buyers, the platform can establish itself as a reliable and trustworthy partner.

Recognizing Sri Lanka's diverse cultural and linguistic landscape, Corn Cradle will be designed to seamlessly integrate with local farming practices. This cultural fit is crucial for gaining acceptance and adoption among the farming community.

Sustainability is a key consideration for Corn Cradle's long-term viability. The platform will be continuously updated based on user feedback, ensuring it remains relevant and responsive to the evolving needs of the corn industry. By prioritizing long-term community benefits, Corn Cradle can position itself as a trusted and enduring partner in Sri Lanka's agricultural transformation.

Accessibility is another critical factor. Corn Cradle will feature a user-friendly interface and intuitive features, catering to users with varying digital literacy levels. This inclusive approach will help bridge the digital divide and empower even the most marginalized farmers to participate in the digital agricultural ecosystem.

By addressing these social considerations – building trust, aligning with cultural practices, ensuring sustainability, and promoting accessibility – Corn Cradle can establish itself as a socially feasible and impactful platform serving the needs of the Sri Lankan corn farming community.

5.2 Economical Feasibility

Our solution's cost considerations include;

Development Cost - Since we're students, no added cost for development.

Tools - We use free tools, no extra cost.

Hosting - Localhost

After implementation, Our revenue will come from a commission fee charged to farmers and buyers for each transaction made through our platform. This will help sustain the system and ensure its continued improvement. Considering these costs, our solution is affordable and economically feasible.

5.3 Legal and Ethical Feasibility

There are no copyright issues since there are no other websites with the same exact business model. All the resources used on the website are either open-source or used with proper permissions.

All the details of the users are stored in encrypted format. User data will be only visible with user's permission. All the transactions would be done over trusted, safe payment providers according to a user agreement.

Details of the users will not be used for any unethical causes; it would only be used for the maintenance of a website.

5.4 Technical Feasibility

The main deliverable of this project is a web app built using HTML, CSS and JS in the frontend and PHP in the backend which utilizes MySQL as the datastore. Apache HTTP Server is used to run the PHP applications. The platform relies on; SMS gateway to send notifications, a payment gateway to accept payments and also uses SMTP to send emails. In addition to that, GitHub is used as the code collaborative and version control tool.

Most of these technologies are either open source or freely available. The team has to gain adequate technical knowledge before and while building the system. It is a tremendous task, but the timeline allows us to gain a considerable amount of technical knowledge before starting the actual development work and the rest while building the system itself.

This comprehensive technical approach will enable the creation of a robust, scalable, and user-friendly platform tailored to the needs of Sri Lankan fruit and vegetable farmers.

5.5 Operational Feasibility

From our platform, we propose to:

- Allow farmers to sell their products directly to buyers.
- Enable farmers to hire workers easily.
- Facilitate the purchase of farming ingredients from relevant shops.
- Introduce a bidding system to ensure fair prices for farmers.

Our solution is a web application accessed through the Internet. To use and operate the system, users must have:

- Internet connection.
- A mobile phone or a computer with a recent version of a web browser installed.
- Basic knowledge of IT and using the internet.
- Intermediate level of knowledge in online and card-based payments for transactions.

Because there is no need to provide special training to use the system or any dedicated HR resources to maintain the system, the project is operationally feasible.

5.6 Schedule Feasibility

The project development time span is roughly allocated to a 10-month period to complete the project with the current resources available and the knowledge level of the four members taken into consideration. The man hours needed to complete the project have been divided equally among four members to complete the project within the due time. The tasks have been divided in a vertical approach and thus the process is made easier.

Accordingly, the estimated man-hours allocated for the project are as follows,

The number of hours a member spends on the project per day ≈ 2 hour

Number of group members = 4

Number of Hours per members (10 months) ≈ 2x10x30 ≈ 600 hours

Total man hours ≈ 600x4 ≈ 2400 hoursWe use an iterative waterfall model for development and once requirements gathering is almost complete, we can predict that other tasks with identified features and scope can be completed. At this point the requirements are mostly stable so there won't be any major changes to the requirements that could affect the project's schedule.

6. Project Constraints and Assumptions

Constraints are restrictions that define a project's limitations and assumptions are something that you accept as true without question or proof.
The constraints and assumptions of our proposed system are as follows.

6.1 Constraints

- Limited technical knowledge at the start; team needs to gain technical skills during development.
- Usage of open-source technologies and tools which may have limitations in functionality and support.
- Dependency on third-party services for SMS, payments, and emails which can be unreliable or limited in availability
- Limited man-hours: Each member is estimated to spend about 1 hour per day on the project.
- Total development period is 10 months, with tasks divided equally among four members
- Budget constraints limit the ability to use premium or paid services and tools, relying on freely available and open-source resources

6.2 Assumptions

- Adequate technical knowledge can be gained by the team before and during the development process.
- Open-source and freely available tools and technologies will meet the project's requirements without significant issues.
- The project's scope remains stable with no major changes in requirements during development.
- Users (farmers, buyers, farm workers) will be able to use the web platform effectively with minimal training due to its user-friendly design
- There is a significant need for a centralized platform in the agricultural sector, particularly for corn farmers in Sri Lanka.
- The platform will attract enough users (farmers, buyers, farm workers) to be viable and sustainable

7. Project Deliverables

At the end of the project the following deliverables will be available,

- The completed web application with the proper interfaces based on the user roles
- User documentation
- Test case documentation

8. Requirements

8.1 Functional Requirements

Farmer

- Farmers can sign up for a new account, verify their mobile number/email, log in securely, and log out of the system.
- The system allows farmers to log into their account and reset their password if incorrect.
- Farmers can edit their profile information, including updating their mobile number or email.
- The system enables farmers to search for and purchase ingredients for their farming needs.
- Farmers can add, update, and delete products in their inventory.
- The system allows farmers to view their order history for products.
- Farmers can check the availability of workers through the system.
- The system enables farmers to hire available workers.
- Farmers can rate the workers they have hired after job completion.
- The system provides a feature for farmers to request help and support.

Buyer

- Buyers can sign up for a new account, verify their mobile number/email, log in securely, and log out of the system.
- The system allows buyers to log into their account and reset their password if incorrect.
- Buyers can edit their profile information, including updating their mobile number or email.

- Apply filters to find corn harvest
- Buyers can place bids on products they are interested in purchasing.
- If a buyer wins a bid, the system allows them to pay an advance for the product.
- Buyers have the option to cancel their bids, but must provide reasons for cancellation.
- The system maintains a purchase history that buyers can view.
- Buyers can request help and support through the system.

Manufacturer

- Manufacturers can sign up for a new account, verify their mobile number/email, log in securely, and log out of the system.
- The system allows manufacturers to log into their account and reset their password if incorrect.
- Manufacturers can edit their profile information, including updating their mobile number or email.
- Manufacturers can search for available corn harvests.
- Add, update, delete product prices.
- Request help and support through the system.

Farm Worker

- Farm Workers can sign up for a new account, verify their mobile number/email during the process.
- The system allows Farm Workers to log into their account securely and log out when finished.
- If the password is incorrect during login, Farm Workers can reset their password.
- Farm Workers can edit their profile information, including updating their mobile number or email.
- The system enables Farm Workers to add and manage their job descriptions.
- Farm Workers can view and accept job requests through the system.
- The system provides options for Farm Workers to select and participate in training programs.
- Farm Workers can request help and support through the system when needed.

Ingredient Supplier

- Ingredient Suppliers can sign up for a new account, which includes verifying their mobile number/email.
- The system allows Ingredient Suppliers to log into their account securely and log out when finished.
- If the password is incorrect during login, Ingredient Suppliers can reset their password.
- Ingredient Suppliers can edit their profile information, including updating their mobile number or email.
- The system enables Ingredient Suppliers to add new products to their inventory.
- Ingredient Suppliers can update existing product information in the system.
- The system allows Ingredient Suppliers to delete products from their inventory when necessary.
- Ingredient Suppliers can view their order history through the system.
- The system provides functionality for Ingredient Suppliers to accept incoming orders.
- Ingredient Suppliers can send delivery codes for confirmed orders through the system.
- The system offers a help and support feature for Ingredient Suppliers to request assistance when needed.

Moderator

- Moderators can log into their account and reset their password if incorrect.
- The system allows moderators to log out securely.
- Moderators can edit their profile information, including updating their mobile number or email.
- The system enables moderators to confirm bidding winners.
- Moderators have the ability to delete products and labor requests.
- The system allows moderators to provide help and support to users.
- Moderators can review and confirm content on the platform.

System Administrator

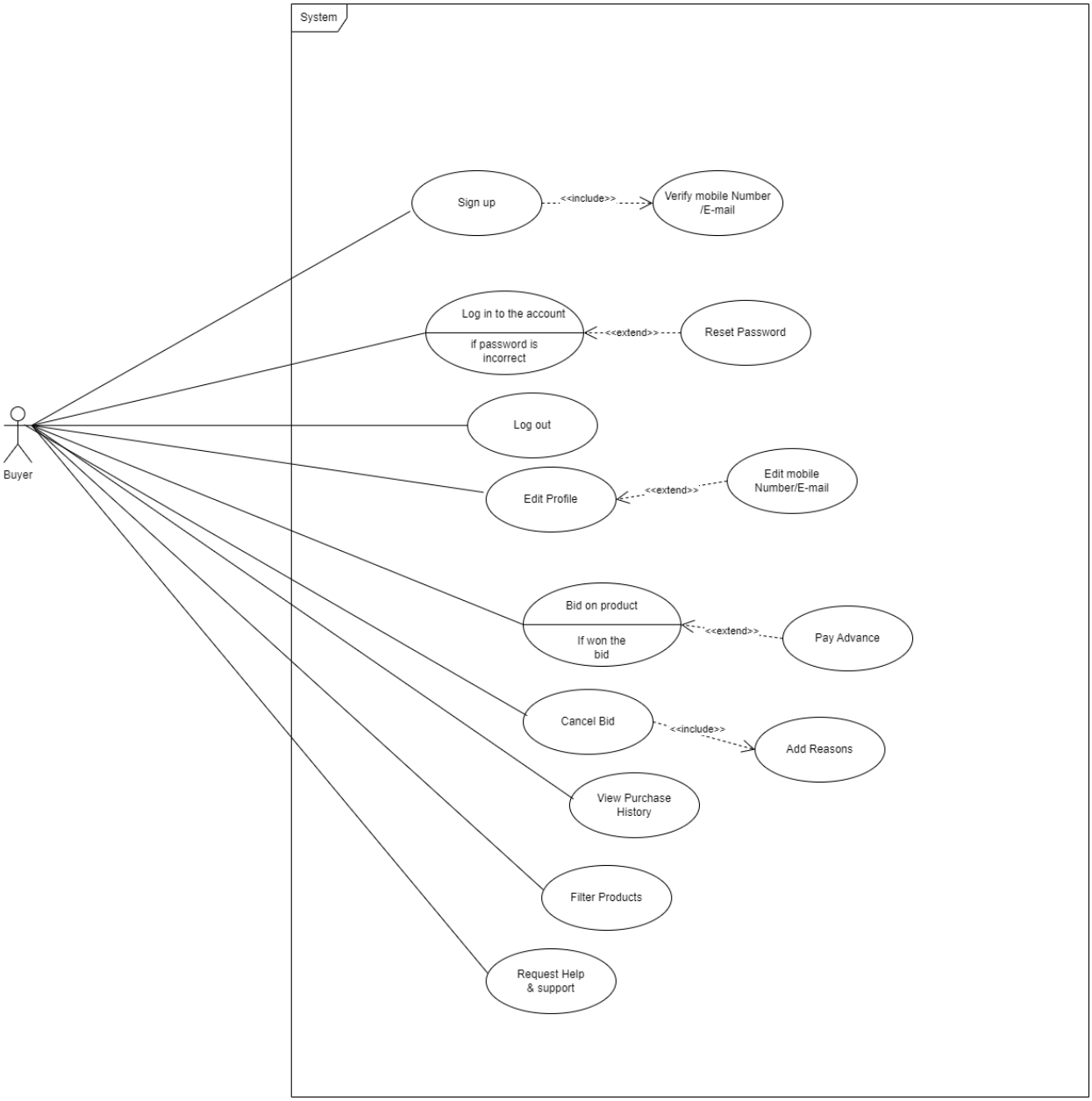
- The system shall allow the System Administrator to log into their account securely.
- If the password is incorrect during login, the system shall provide an option for the System Administrator to reset their password.
- The system shall enable the System Administrator to log out of their account when finished.
- The system shall allow the System Administrator to edit their profile information, including updating their mobile number or email.
- The system shall provide functionality for the System Administrator to remove users from the system as needed.

- The system shall allow the System Administrator to update user details, such as modifying user information or permissions.
- The system shall enable the System Administrator to add new moderators to the system and assign appropriate roles and permissions.
- The system shall provide the ability for the System Administrator to add new Agriculture Analysts to the system and set up their accounts.
- The system shall allow the System Administrator to generate various reports related to system usage, user activity, or other relevant metrics.
- The system shall ensure data privacy, security, and access control for all actions performed by the System Administrator.
- The system shall maintain an audit trail or log of all activities and changes made by the System Administrator for accountability and troubleshooting purposes.

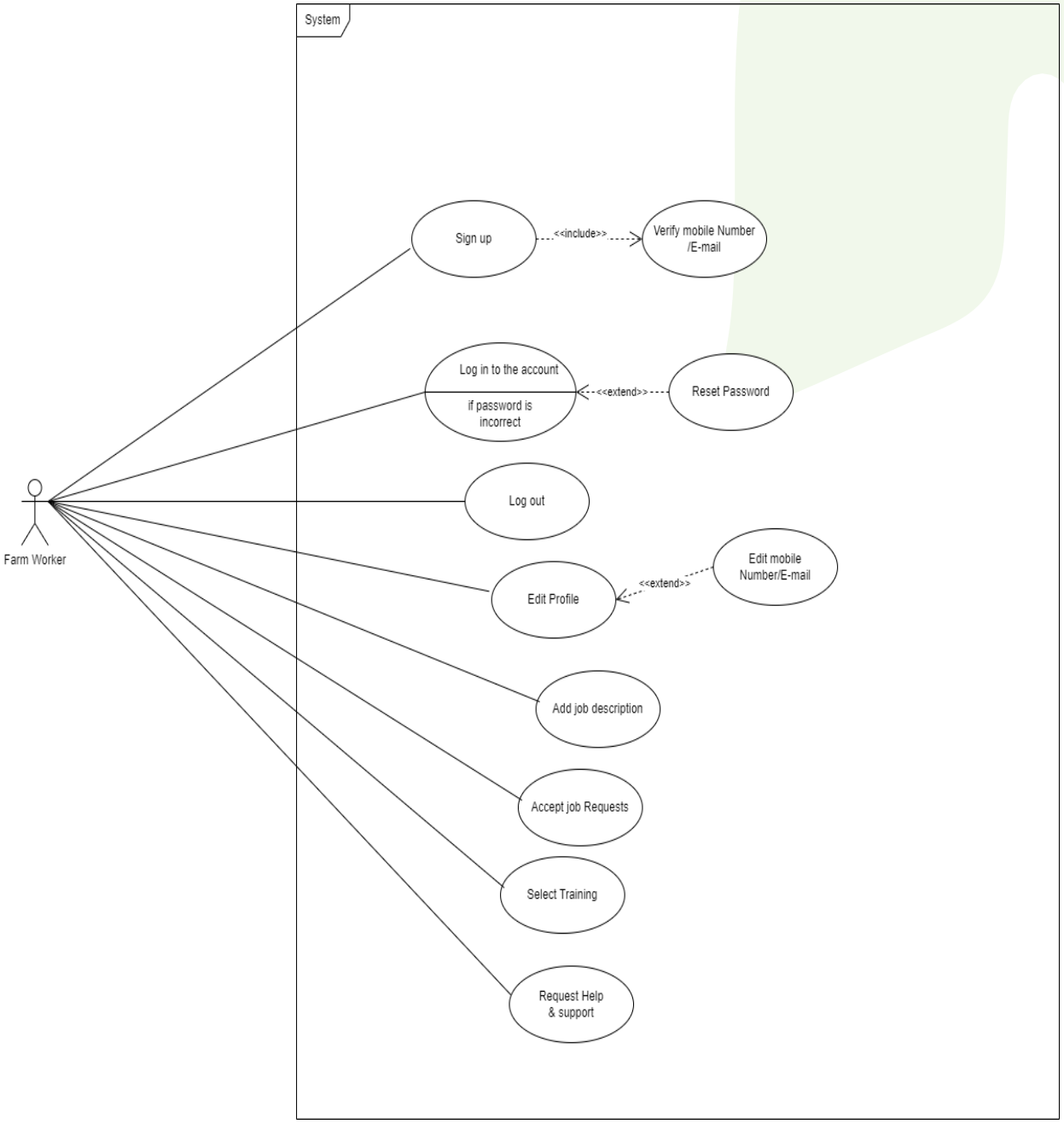
9. Use Case Diagrams

9.1 Farmer

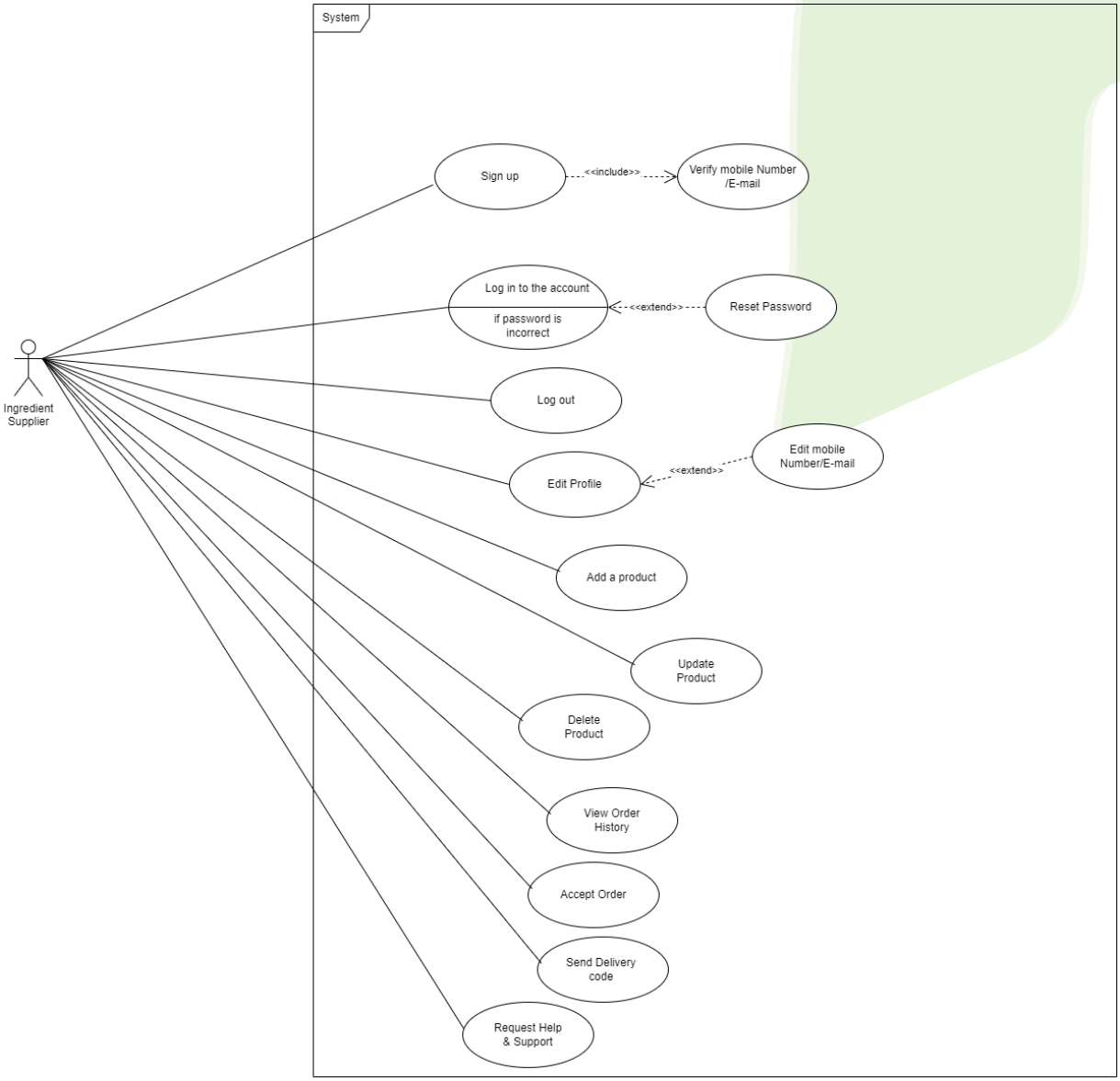
9.2 Buyer



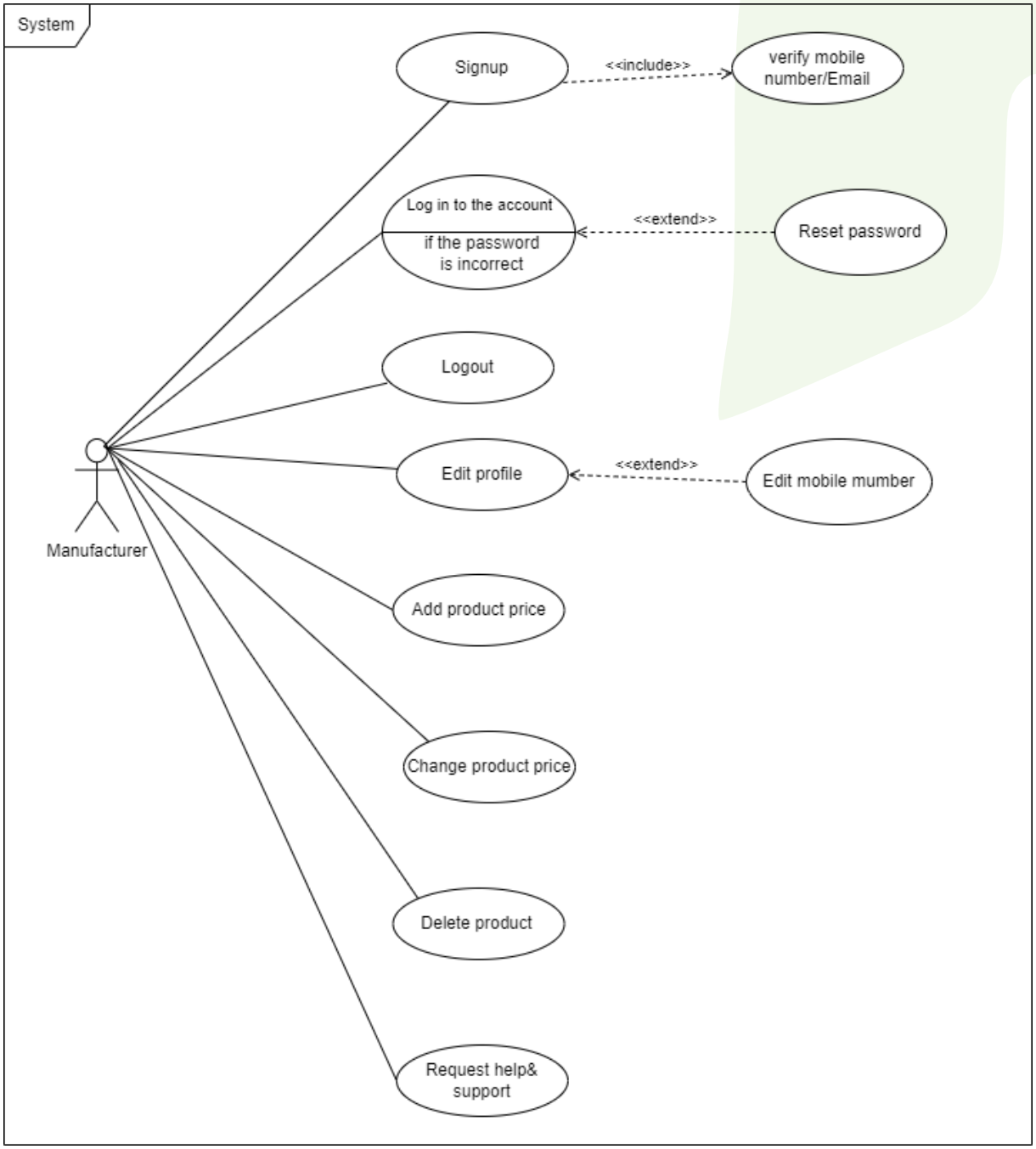
9.3 Farm Worker



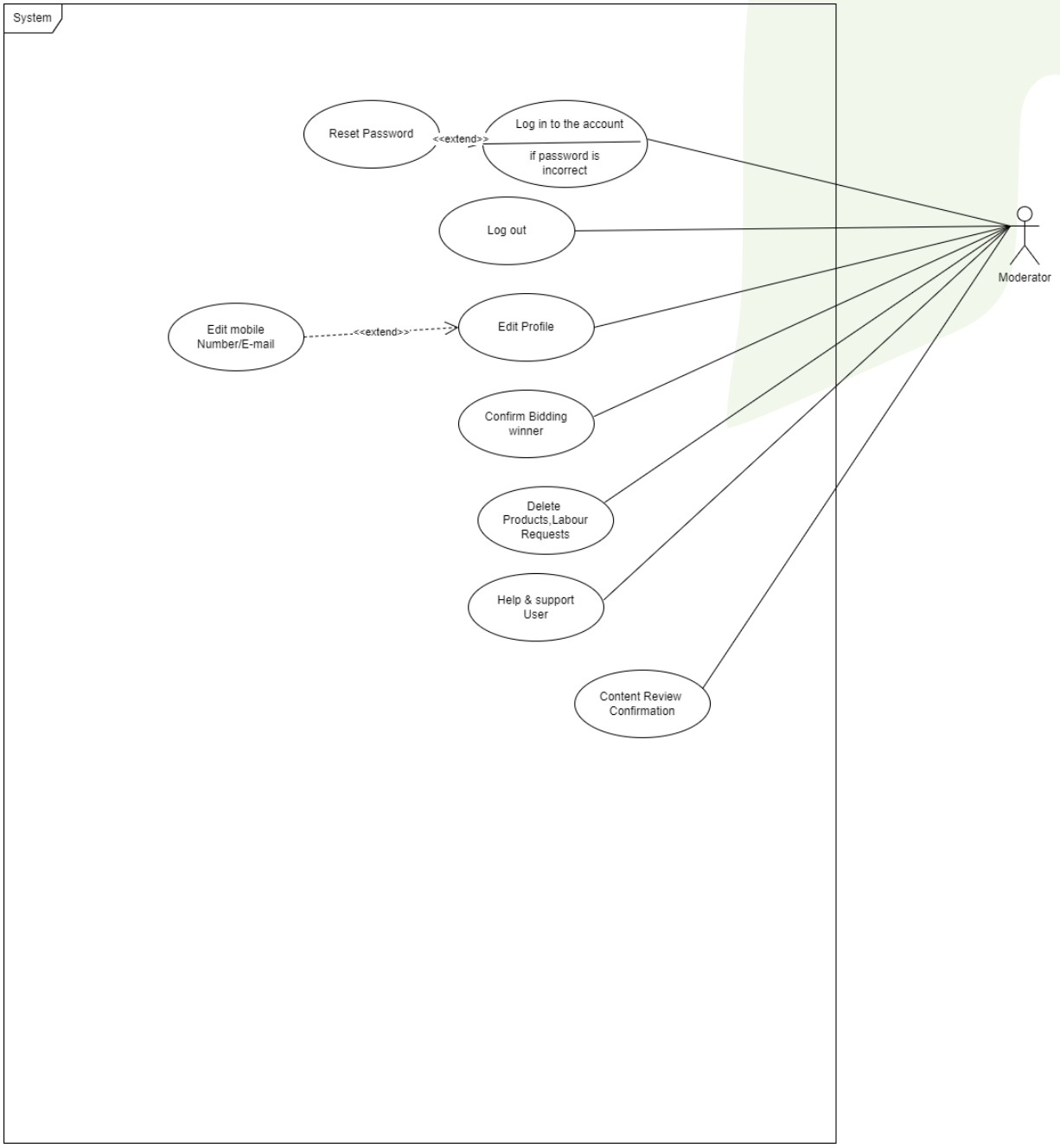
9.4 Ingredient Supplier



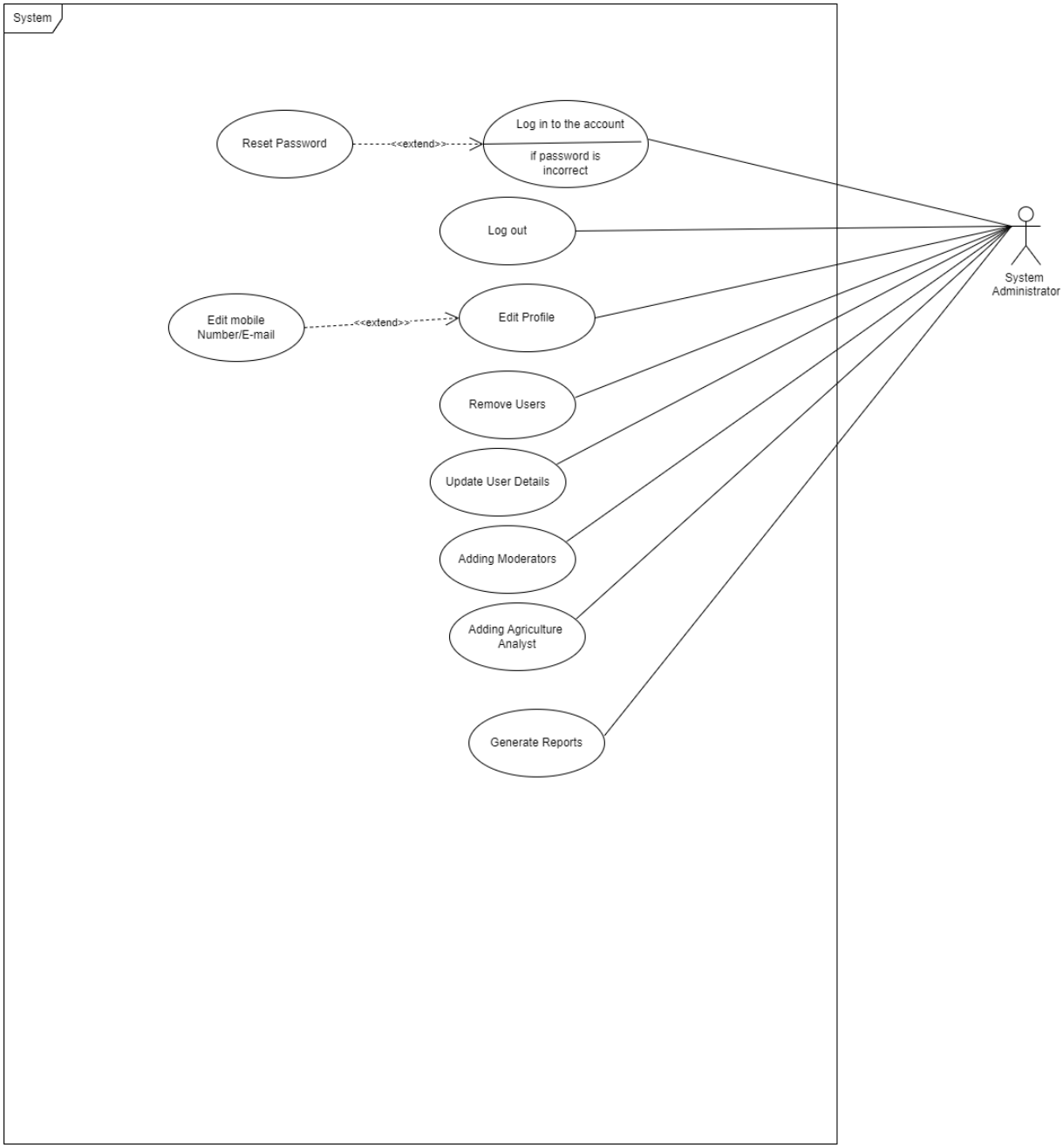
9.6 Manufacturer



9.7 Moderator



9.8 System Administrator



10. Use Case Narratives

Farmer

Register as Farmer

Use Case ID	01
Use Case Name	Register as Farmer
Actor	Farmer
Description	A user registers as a farmer to take advantage of the farming services.
Pre-Conditions	Visit the website as a guest user
Main Scenario	1. Go to the signup page. 2. Select the user type as 'Farmer'. 3. Fill up the registration form with the correct details. 4. Verify email and phone number. 5. Show registration success notification.
Exceptions	1. If the user fails to enter any required details, show an error message with the error. 2. Prevent the user from registering in the system if email and phone number verification fails. 3. If a user is trying to use an email or a phone number that is already used, show an error message.
Post-Conditions	Redirect to the login page

Use Case ID	02
Use Case Name	Verify Mobile Number / E-mail during Sign Up
Actor	Farmer

Description	A farmer verifies their mobile number and email address as part of the sign-up process to ensure they receive important communications and account security.
Pre-Conditions	The farmer must be on the sign-up page and have filled out the registration form with their details.
Main Scenario	1. The farmer submits the registration form. 2. The system sends a verification code to the provided mobile number or provided email address. 3. The farmer enters the verification code received via SMS or E-mail into the provided field on the sign-up page. 4. The system verifies the mobile number or email address. 5. Show a verification success notification. 6. Complete the registration process.
Exceptions	1. If the farmer enters an incorrect verification code, show an error message and prompt the farmer to re-enter the code. 2. If the farmer fails to verify the email within a certain attempt, prompt the farmer to request a new verification code. 3. If the verification process fails due to system issues, show an error message and prompt the farmer to try again.
Post-Conditions	The farmer's mobile number and email are verified, and the registration process is successfully completed.

Use Case ID	03
Use Case Name	Farmer Login to Web Page
Actor	Farmer
Description	A farmer logs into the web page to access farming services.

Pre-Conditions	The farmer must have a registered account.
Main Scenario	1. Go to the login page. 2. Enter the registered email or mobile number. 3. Enter the password. 4. Click on the 'Login' button. 5. Show login success notification and redirect to the farmer's dashboard.
Exceptions	1. If the email or mobile number is not registered, show an error message. 2. If the password is incorrect, show an error message and provide an option to reset the password.
Post-Conditions	The farmer is logged in and has access to their dashboard.

Use Case ID	04
Use Case Name	Edit Farmer Details
Actor	Farmer
Description	A farmer edits their personal and account details.
Pre-Conditions	The farmer must be logged into their account.
Main Scenario	1. Go to the profile page. 2. Click on the 'Edit Profile' button. 3. Modify the desired details (e.g., name, address, contact information). 4. Click on the 'Save' button to update the details. 5. Show a success notification indicating that the profile has been update
Exceptions	1. If the user fails to enter any required details, show an error message indicating the missing information. 2. If there is a problem saving the details, show an error message and prompt the user to try again.
Post-Conditions	The farmer's profile is updated with the new details.

Use Case ID	05
Use Case Name	Edit Mobile Number / E-mail during Profile Edit
Actor	Farmer
Description	A farmer updates their mobile number or email address through the profile edit feature to ensure their contact information is current.
Pre-Conditions	The farmer must be logged into their account.
Main Scenario	1. Navigate to the 'Edit Profile' section. 2. Select the option to edit the mobile number or email address. 3. Enter the new mobile number or email address. 4. The system sends a verification code to the new mobile number or email address. 5. The farmer enters the verification code received via SMS into the provided field. 6. The system verifies the new mobile number and email address. 7. Show a verification success notification. 8. Update the profile with the new mobile number or email address.
Exceptions	3. If the farmer enters an incorrect verification code, show an error message and prompt the farmer to re-enter the code. 4. If the farmer fails to verify the email within a certain attempt, prompt the farmer to request a new verification code. 5. If the verification process fails due to system issues, show an error message and prompt the farmer to try again.
Post-Conditions	The farmer's profile is updated with the new mobile number or email, and the updated contact information is verified.

Use Case ID	06
Use Case Name	Add a Product
Actor	Farmer

Description	The farmer adds a new product to their list.
Pre-Conditions	The farmer must be logged into their account.
Main Scenario	1. Go to the 'Add Product' page. 2. Enter the product details (e.g., name, category, price, quantity, description). 3. Upload an image of the product (optional). 4. Click on the 'Save' button to add the product. 5. Show a success notification indicating that the product has been added.
Exceptions	1. If the farmer fails to enter any required details, show an error message indicating the missing information. 2. If there is a problem saving the product, show an error message and prompt the farmer to try again.
Post-Conditions	The new product is added to the farmer's product list.

Use Case ID	07
Use Case Name	Update Product
Actor	Farmer
Description	The farmer updates the details of an existing product.
Pre-Conditions	The farmer must be logged into their account and have at least one existing product.
Main Scenario	1. Go to the 'My Products' page. 2. Select the product to be updated. 3. Click on the 'Edit' button for the selected product. 4. Modify the desired product details (e.g., name, category, price, quantity, description). 5. Click on the 'Save' button to update the product. 6. Show a success notification indicating that the product has been updated.
Exceptions	1. If the farmer fails to enter any required details, show an error message indicating the missing information.

	2. If there is a problem saving the updated product details, show an error message and prompt the farmer to try again.
Post-Conditions	The product details are updated in the farmer's product list.

Use Case ID	08
Use Case Name	Delete Product
Actor	Farmer
Description	The farmer deletes a product from their list.
Pre-Conditions	The farmer must be logged into their account and have at least one existing product.
Main Scenario	1. Go to the 'My Products' page. 2. Select the product to be deleted. 3. Click on the 'Delete' button for the selected product. 4. Confirm the deletion in the confirmation prompt. 5. Show a success notification indicating that the product has been deleted.
Exceptions	1. If the farmer cancels the deletion in the confirmation prompt, the product is not deleted. 2. If there is a problem deleting the product, show an error message and prompt the farmer to try again.
Post-Conditions	The selected product is removed from the farmer's product list.

Use Case ID	09
Use Case Name	View Order History
Actor	Farmer
Description	The farmer views their past order history.
Pre-Conditions	The farmer must be logged into their account.
Main Scenario	1. Go to the 'Order History' page. 2. The system retrieves and displays a list of past orders. 3. The farmer can view details of each order (e.g., order date, items purchased, total cost).

	4. The farmer can filter the order history by date range or order status.
Exceptions	1. If there are no past orders, show a message indicating that no orders have been placed.
Post-Conditions	The farmer can review the details of their past orders.

Use Case ID	10
Use Case Name	Rate Workers
Actor	Farmer
Description	The farmer rates the workers they have hired based on their performance.
Pre-Conditions	The farmer must be logged into their account and have hired workers in the past.
Main Scenario	1. Select the worker to be rated from the list of hired workers. 2. Click rate worker button. 3. Provide a rating (e.g., star rating) and optionally write a review. 4. Click on the 'Submit' button to save the rating and review. 5. Show a success notification indicating that the rating and review have been submitted.
Exceptions	1. If there are no workers to rate, show a message indicating that no workers have been hired.
Post-Conditions	The worker's rating and review are saved and can be viewed by others.

Use Case ID	11
Use Case Name	Search ingredients
Actor	Farmer
Description	A farmer searches for ingredients available in the system to purchase for farming needs.
Pre-Conditions	
Main Scenario	1. Navigate to the 'Purchase Ingredients' section. 2. Enter the name or category of the ingredient in the search bar. 3. Click on the search button. 4. The system displays a list of ingredients matching the search criteria. 5. The farmer can filter the search results based on price. 6. The farmer selects an ingredient from the search results. 7. The system shows detailed information about the selected ingredient.
Exceptions	1. If no ingredients match the search criteria, show a message indicating no results found
Post-Conditions	The farmer can view detailed information about the selected ingredient and proceed with the purchase if desired.

Use Case ID	12
Use Case Name	Purchase Ingredients
Actor	Farmer
Description	A farmer purchases ingredients necessary for farming through the system.
Pre-Conditions	The farmer must be logged into their account and have searched for the desired ingredients.
Main Scenario	1. View the detailed information about the selected ingredient. 2. Enter the payment and shipping information. 3. Confirm the purchase.

	4. The system processes the payment and generates an order confirmation. 5. Show a purchase success notification with order details.
Exceptions	1. If the ingredient is out of stock, show an out-of-stock message. 2. If the payment information is invalid or incomplete, show an error message and prompt the farmer to correct the details. 3. If the payment processing fails, show an error message and prompt the farmer to try again.
Post-Conditions	The farmer receives an order confirmation, and the ingredients are prepared for shipping.

Use Case ID	13
Use Case Name	Hire Workers
Actor	Farmer
Description	A farmer hires workers through the system to assist with farm activities.
Pre-Conditions	The farmer must be logged into their account.
Main Scenario	1. Navigate to the 'Hire Workers' section. 2. Enter the details of the job, including the number of workers needed and the job duration. 3. Check the availability of workers. 4. Select the available workers from the list. 5. Confirm the hire. 6. Show a hiring success notification.
Exceptions	1. If no workers are available, show an error message.
Post-Conditions	Update the farmer's account with the hiring details and notify the selected workers.

Use Case ID	14
Use Case Name	Check Availability Workers
Actor	Farmer
Description	A farmer checks the availability of workers or equipment before hiring or renting.
Pre-Conditions	1. Farmer is authenticated and logged into the system. 2. Farmer has navigated to the section for hiring workers.
Main Scenario	1. Navigate to the hiring section. 2. Filter available workers. 3. Show the list of available workers.
Exceptions	1. If no workers or equipment are available, show an appropriate message
Post-Conditions	Allow the farmer to proceed with hiring workers or renting equipment based on the availability information.

Use Case ID	15
Use Case Name	Request Help & Support
Actor	Farmer
Description	A farmer requests assistance or support from the system for any issues or queries they may have.
Pre-Conditions	The farmer must be logged into their account. Farmer has navigated to the section of Help & Support.
Main Scenario	1. Navigate to the 'Help & Support' section. 2. Fill out the help request form with the necessary details. 3. Submit the help request. 4. The moderators review the request and provides assistance or solutions. 5. The farmer receives a response from the support team via email or within the system

Exceptions	1. If the support team is unable to resolve the issue, notify the farmer with an explanation and possible next steps.
Post-Conditions	The farmer's issue or query is addressed, and any necessary follow-up actions are taken.

Reset Password

Use Case ID	16
Use Case Name	Reset Password
Actor	Farmer
Description	Allow farm workers to reset forgotten passwords.
Pre-Conditions	Farm worker has a registered account.
Main Scenario	1. Go to the login page. 2. Click on the 'Forgot Password' link. 3. Enter the registered email address or phone number and click 'Submit'. 4. The system sends an OTP to the provided email address or an OTP to the phone number. 5. Enter and confirm a new password. 6. Click on the 'Save' button to update the password.
Exceptions	invalid email wrong OTP
Post-Conditions	Farm’ password is updated

Buyer

Register as buyer

Use Case ID	17
Use Case Name	Register (Buyer)
Primary Actor	Buyer
Secondary Actor	Admin
Pre-Conditions	Buyer visits the Corn Cradle website.
Main Scenario	1. Buyer clicks the 'Register' button. 2. Buyer selects the user type (buyer/farmer/farm worker) 3. System prompts the buyer to enter personal details (name, email, phone number). 4. Buyer enters the required details. 5. System prompts the buyer to enter additional details (address, preferences). 6. System verifies the email and phone number by sending a verification code. 7. Buyer enters the verification code to confirm their identity. 8. System displays a 'Registration request sent' notification. 9. Admin reviews and approves the registration request. 10. System sends a registration success email to the buyer.
Exceptions	1. system notifies that the email or phone number is invalid. The buyer is prompted to re-enter valid details. 2. Admin identifies invalid or incomplete details. The registration is rejected. The system sends an email notifying the buyer of the unsuccessful registration and provides instructions for resubmission.
Post-Conditions	The buyer successfully registers and can log into the Corn Cradle system to start browsing and purchasing products.

Sign in option -Buyer

Use Case ID	18
Use Case Name	Sign In (Buyer)
Actor	Buyer
Description	Buyer logs into the Corn Cradle platform using their registered email and password. Includes an option to reset the password if forgotten.
Pre-Conditions	Buyer is registered on the Corn Cradle platform and has valid login credentials.
Main Scenario	1. Buyer navigates to the Corn Cradle website and clicks the 'Sign In' button. 2. System displays the login form for the buyer to enter their email and password. 3. Buyer enters their email and password. 4. System verifies the entered credentials. 5. If credentials are correct, the buyer is successfully logged in and redirected to their dashboard
Exceptions	1. If the credentials are incorrect, the system notifies the buyer and prompts them to re-enter their email and password. 2. System asks the buyer to enter their registered email for password recovery. 3. System sends a password reset link to the buyer's registered email. 4. Buyer clicks the password reset link and it sends an OTP. 5. Buyer enters and confirms the new password. 6. System updates the password and notifies the buyer of the successful password reset. 7. Buyer returns to the login page to sign in with the new password.
Post-Conditions	The buyer successfully logs into the Corn Cradle system and gains access to their dashboard and other platform features.

Bid on products-Buyer

Use Case ID	19
Use Case Name	Bid on Products
Actor	Buyer
Description	The buyer places a bid on available products listed by farmers. If the farmer accepts the bid, the buyer pays an advance for the harvest.
Pre-Conditions	Buyer is logged into the Corn Cradle platform and the products listed by farmers are available for bidding.
Main Scenario	1. Buyer browses available products listed by farmers. 2. Buyer selects a product and clicks the 'Place Bid' button. 3. System prompts the buyer to enter the bid amount and any additional details or conditions. 4. Buyer enters the bid amount and submits the bid. 5. System records the bid and notifies the farmer of the new bid. 6. Farmer reviews the bid and decides whether to accept or reject it. 7. If the farmer accepts the bid, the system prompts the buyer to pay an advance for the harvest. 8. Buyer makes the advance payment through the platform. 9. System confirms the payment and notifies both the buyer and the farmer of the successful bid and payment.
Exceptions	1. If the entered bid amount is below the minimum required bid, the system notifies the buyer and prompts them to enter a valid amount. 2. If the farmer does not respond to the bid within a specified timeframe, the bid expires, and the system notifies the buyer. 3. If the advance payment fails, the system notifies the buyer and prompts them to retry or use a different payment method.
Post-Conditions	The buyer successfully places a bid, and if accepted by the farmer, pays an advance for the product. Both the buyer and the farmer are notified of the successful transaction.

Cancel Bid- Buyer

Use Case ID	20
Use Case Name	Cancel Bid
Actor	Buyer
Description	The buyer cancels a previously placed bid on a product and provides a reason for the cancellation.
Pre-Conditions	Buyer is logged into the Corn Cradle platform and has an active bid on a product.
Main Scenario	1. Buyer navigates to their active bids page on the Corn Cradle platform. 2. Buyer selects the bid they wish to cancel. 3. Buyer clicks the 'Cancel Bid' button next to the selected bid. 4. System prompts the buyer to enter a reason for the cancellation. 5. Buyer enters the cancellation reason and confirms the cancellation. 6. System records the cancellation and removes the bid from the active bids list. 7. System notifies the farmer of the bid cancellation and provides the reason entered by the buyer.
Exceptions	1. If the buyer does not provide a valid reason for cancellation, the system prompts them to enter a reason before proceeding. 2. If there is a system error while recording the cancellation, the system notifies the buyer and asks them to retry or contact support.
Post-Conditions	The bid is successfully cancelled, the buyer's bid is removed from their active bids list, and the farmer is notified of the cancellation along with the reason provided.

View purchase history-Buyer

Use Case ID	21
Use Case Name	View Purchase History
Actor	Buyer
Description	The buyer views their purchase history, including details of past transactions and bids.
Pre-Conditions	Buyer is logged into the Corn Cradle platform and has completed transactions or placed bids in the past.
Main Scenario	1. Buyer navigates to their account dashboard on the Corn Cradle platform. 2. Buyer clicks on the 'Purchase History' link or tab. 3. System retrieves the buyer's past transactions and bid history. 4. System displays a list of past purchases and bids, including details such as product name, date of transaction, bid amounts, and status. 5. Buyer can click on each entry to view more detailed information about the specific transaction or bid.
Exceptions	1. If the buyer has no past transactions or bids, the system displays a message indicating that there is no purchase history to show. 2. If there is a system error while retrieving the purchase history, the system notifies the buyer and asks them to retry or contact support.
Post-Conditions	The buyer successfully views their purchase history, gaining access to detailed information about their past transactions and bids.

Filter products-Buyer

Use Case ID	22
Use Case Name	Filter Products
Actor	Buyer
Description	The buyer filters the product listings to narrow down their search based on specific criteria such as price, category, and availability.
Pre-Conditions	Buyer is logged into the Corn Cradle platform. The product listings have filterable attributes available

Main Scenario	1. Buyer navigates to the products page on the Corn Cradle platform. 2. System displays the list of products along with available filter options (e.g., price range, category, availability) 3. Buyer selects the desired filter options to refine their search (e.g., sets a price range, selects a category, or chooses a specific filter) 4. Buyer clicks the 'Apply Filters' button to filter the product list based on the selected criteria. 5. System processes the selected filters and updates the displayed product list to include only the items that match the filter criteria. 6. Buyer reviews the filtered product list. 7. Buyer can click on any product to view more details or modify the filter settings to further refine or broaden their search.
Exceptions	1. If no products match the selected filters, the system displays a message indicating that no products were found and suggests adjusting the filter criteria. 2. If there is a system error while applying the filters, the system notifies the buyer and asks them to retry or contact support.
Post-Conditions	The buyer successfully applies filters to the product list, allowing them to view only the products that meet their specific criteria and preferences.

Help & Support-Buyer

Use Case ID	23
Use Case Name	Request Help and Support
Actor	Buyer
Description	The buyer requests assistance or support regarding issues or questions they encounter while using the Corn Cradle platform.
Pre-Conditions	Buyer is logged into the Corn Cradle platform and is on a page where they can access help and support options.

Main Scenario	1. Buyer navigates to the help and support section of the Corn Cradle platform. 2. System displays various help and support options (e.g. Live chat, FAQs) 3. Buyer selects their preferred method of support (Live chat or view FAQs) 4. If using live chat, the buyer initiates a chat session with a support agent(moderator). 5. If submitting a support ticket, the system prompts the buyer to describe their issue and provide relevant details. 6. Buyer enters the required information and submits the support request. 7. System notifies the buyer of the resolution or provides further instructions.
Exceptions	1. If live chat is unavailable, the system offers alternative support methods such as submitting a support ticket or contact form.
Post-Conditions	The buyer successfully requests help and receives support, resolving their issue or query regarding the use of the Corn Cradle platform.

Logout-Buyer

Use Case ID	24
Use Case Name	Log out
Actor	Buyer
Description	Enable secure logout from the system
Pre-Conditions	Buyer is logged in
Main Scenario	1. Buyer selects logout option 2. System ends the session
Exceptions	Network interruption during logout
Post-Conditions	Buyer is logged out and session is terminated

Edit Profile-Buyer

Use Case ID	25
Use Case Name	Edit Profile
Actor	Buyer
Description	Allow users to update their profile information
Pre-Conditions	Buyer is logged in
Main Scenario	1. Buyer navigates to the profile page. 2. The system displays current profile information. 3. Buyer edits the information. 4. The system saves the updated profile information.
Exceptions	Invalid input or verification failure
Post-Conditions	Buyer's profile is updated

Farm Worker

Sign Up

Use Case ID	26
Use Case Name	Sign Up
Actor	Farm Worker
Description	Allow farm workers to sign up for an account with verification
Pre-Conditions	Farm worker does not already have an account
Main Scenario	1. Farm worker enters signup details. 2. System verifies mobile number or email. 3. System creates a new account.
Exceptions	Invalid input or unverified contact information
Post-Conditions	Farm worker account is created and verified

Log in to the account

Use Case ID	27
Use Case Name	Log in to account
Actor	Farm Worker
Description	Enable Farm Workers to access their accounts
Pre-Conditions	Farm worker has valid credentials
Main Scenario	1. Farm worker enters login credentials. 2. System validates the credentials. 3. System grants access to the account.
Exceptions	Incorrect password triggers reset option
Post-Conditions	Farm Worker gains access to their account.

Reset Password

Use Case ID	28
Use Case Name	Reset Password
Actor	Farm Worker
Description	Allow farm workers to reset forgotten passwords
Pre-Conditions	Farm worker has a registered account

Main Scenario	1. Farm worker requests password reset. 2. System sends reset instructions. 3. Farm worker sets new password.
Exceptions	Invalid email or invalid OTP
Post-Conditions	Farm worker's password is updated

Log out

Use Case ID	29
Use Case Name	Log out
Actor	Farm Worker
Description	Enable secure logout from the system
Pre-Conditions	Farm worker is logged in
Main Scenario	1. Farm Worker selects logout option 2. System ends the session
Exceptions	Network interruption during logout
Post-Conditions	Farm worker is logged out and session is terminated

Edit Profile

Use Case ID	30
Use Case Name	Edit Profile
Actor	Farm Worker
Description	Allow users to update their profile information
Pre-Conditions	Farm worker is logged in

Main Scenario	1. Farm Worker navigates to the profile page. 2. The system displays current profile information. 3. Farm Worker edits the information. 4. The system saves the updated profile information.
Exceptions	Invalid input or verification failure
Post-Conditions	Farm worker's profile is updated

Edit Mobile Number/Email

Use Case ID	31
Use Case Name	Edit Mobile Number/Email
Actor	Farm Worker
Description	Allow farm workers to update their mobile number or email
Pre-Conditions	Farm worker is logged in and accessing profile editing
Main Scenario	1. Farm worker selects to edit mobile number or email. 2. Farm worker enters new mobile number or email. 3. System verifies the new mobile number or email. 4. System updates the information.
Exceptions	Invalid input or verification failure
Post-Conditions	Farm worker's mobile number or email is updated

Add job description

Use Case ID	32
Use Case Name	Add job description
Actor	Farm Worker
Description	Allow farm workers to add job descriptions to their profile.

Pre-Conditions	Farm worker is logged in
Main Scenario	1. Farm Worker navigates to the job description section. 2. The system prompts for job details. 3. Farm Worker enters the job details. 4. The system saves the job description.
Exceptions	Invalid input
Post-Conditions	Job description is visible in the system

Accept job Requests

Use Case ID	33
Use Case Name	Accept job Requests
Actor	Farm Worker
Description	Enable acceptance of job requests from employers
Pre-Conditions	Farm worker is logged in and has received job requests
Main Scenario	1. Farm Worker navigates to the job requests section. 2. The system displays pending job requests. 3. Farm Worker reviews and accepts a job request. 4. The system updates the job status to accepted
Exceptions	If there are no pending job requests, the system displays a message
Post-Conditions	Job request is confirmed and processed

Select Training

Use Case ID	34
Use Case Name	Select Training
Actor	Farm Worker

Description	Allow selection of training programs or courses
Pre-Conditions	Farm worker is logged in and training options are available
Main Scenario	1. Farm Worker navigates to the training section. 2. The system displays available training programs. 3. Farm Worker selects a training program. 4. The system confirms the selection.
Exceptions	If there are no available training programs, the system displays a message
Post-Conditions	User is enrolled in selected training

Request Help & support

Use Case ID	35
Use Case Name	Request Help & support
Actor	Farm Worker
Description	Provide access to help and support services
Pre-Conditions	Farm worker is logged in
Main Scenario	1. Farm Worker navigates to the help & support section. 2. The system displays support options. 3. Farm Worker selects an option and submits a request. 4. The system logs the request and provides confirmation.
Exceptions	If the support request fails, the system displays an error message
Post-Conditions	Support request is logged and awaiting response

Ingredient Supplier

Sign Up

Use Case ID	36
Use Case Name	Sign Up
Actor	Ingredient Supplier
Description	Allow ingredient suppliers to sign up for an account with verification
Pre-Conditions	Supplier does not already have an account
Main Scenario	1. Supplier enters signup details. 2. System verifies mobile number or email. 3. System creates a new account.
Exceptions	Invalid input or unverified contact information
Post-Conditions	Supplier account is created and verified

Log in to the account

Use Case ID	37
Use Case Name	Log in to the account
Actor	Ingredient Supplier
Description	Enable Ingredient Suppliers to access their accounts
Pre-Conditions	Supplier has valid credentials
Main Scenario	1. Supplier enters login credentials. 2. System validates the credentials. 3. System grants access to the account.
Exceptions	Incorrect password triggers reset option
Post-Conditions	Supplier gains access to their account

Reset Password

Use Case ID	38

Use Case Name	Reset Password
Actor	Ingredient Supplier
Description	Allow suppliers to reset forgotten passwords
Pre-Conditions	Supplier has a registered account
Main Scenario	1. Supplier requests password reset. 2. System sends reset instructions. 3. Supplier sets new password.
Exceptions	invalid email or invalid OTP
Post-Conditions	Supplier's password is updated

Log out

Use Case ID	39
Use Case Name	Log out
Actor	Ingredient Supplier
Description	Enable secure logout from the system
Pre-Conditions	Supplier is logged in
Main Scenario	1. Supplier selects logout option. 2. System ends the session.
Exceptions	Network interruption during logout
Post-Conditions	Supplier's password is updated

Edit Profile

Use Case ID	40
Use Case Name	Edit Profile

Actor	Ingredient Supplier
Description	Allow suppliers to update their profile information
Pre-Conditions	Supplier is logged in
Main Scenario	1. Supplier accesses profile editing section. 2. Supplier modifies information including mobile/email. 3. System saves changes.
Exceptions	Invalid input or verification failure
Post-Conditions	Supplier's profile is updated

Edit Mobile Number/Email

Use Case ID	41
Use Case Name	Edit Mobile Number/Email
Actor	Ingredient Supplier
Description	Allow suppliers to update their mobile number or email
Pre-Conditions	Supplier is logged in and accessing profile editing
Main Scenario	1. Supplier selects to edit mobile number or email. 2. Supplier enters new mobile number or email. 3. System verifies the new mobile number or email. 4. System updates the information.
Exceptions	Invalid input or verification failure
Post-Conditions	Supplier's mobile number or email is updated

Add a product

Use Case ID	42
Use Case Name	Add a product
Actor	Ingredient Supplier
Description	Enable adding new products to the supplier's inventory

Pre-Conditions	Supplier is logged in
Main Scenario	1. Supplier selects option to add a new product. 2. Supplier enters product details. 3. System saves the new product information.
Exceptions	Duplicate product or invalid input
Post-Conditions	New product is added to the supplier's inventory

Update Product

Use Case ID	43
Use Case Name	Update Product
Actor	Ingredient Supplier
Description	Allow suppliers to modify existing product information
Pre-Conditions	Supplier is logged in and product exists
Main Scenario	1. Supplier selects a product to update. 2. Supplier modifies product details. 3. System saves the updated information.
Exceptions	Invalid input or product not found
Post-Conditions	Product information is updated in the system

Delete Product

Use Case ID	44
Use Case Name	Delete Product
Actor	Ingredient Supplier
Description	Enable suppliers to remove products from their inventory
Pre-Conditions	Supplier is logged in and product exists
Main Scenario	1. Supplier selects a product to delete.

	2. System prompts for confirmation. 3. Supplier confirms deletion. 4. System removes the product.
Exceptions	Product associated with active orders
Post-Conditions	Product is removed from the supplier's inventory

View Order History

Use Case ID	45
Use Case Name	View Order History
Actor	Ingredient Supplier
Description	Allow suppliers to access their past order records
Pre-Conditions	Supplier is logged in
Main Scenario	1. Supplier selects option to view order history. 2. System displays list of past orders. 3. Supplier can view details of specific orders.
Exceptions	No order history available
Post-Conditions	Supplier can review their order history

Accept Order

Use Case ID	46
Use Case Name	Accept Order
Actor	Ingredient Supplier
Description	Allow suppliers to accept new orders from customers
Pre-Conditions	Supplier is logged in
Main Scenario	1. Supplier receives notification of a new order.

	2. Supplier reviews order details. 3. Supplier accepts the order. 4. System updates the order status
Exceptions	Invalid order details or system errors
Post-Conditions	Order is accepted and processing begins

Send Delivery Code

Use Case ID	47
Use Case Name	Send Delivery Code
Actor	Ingredient Supplier
Description	Enable suppliers to send delivery codes to customers for order tracking
Pre-Conditions	Supplier has accepted an order
Main Scenario	1. Supplier prepares the order for delivery. 2. Supplier generates a delivery code. 3. Supplier sends the delivery code to the customer.
Exceptions	Invalid order status or delivery code generation failure
Post-Conditions	Delivery code is sent to the customer

Request Help & Support

Use Case ID	48
Use Case Name	Send Delivery Code
Actor	Ingredient Supplier
Description	Allow suppliers to request help and support from the system administrators
Pre-Conditions	Supplier is logged in
Main Scenario	1. Supplier selects the option to request help & support.

	2. Supplier enters details of the support request. 3. System sends the request to the support team.
Exceptions	Invalid input or network issues
Post-Conditions	Support request is logged and acknowledged

Manufacturer

Sign Up

Use Case ID	49
Use Case Name	Sign Up
Actor	Manufacturer
Description	Enable manufacturers to create an account on the platform
Pre-Conditions	Manufacturer has valid credentials
Main Scenario	1. Manufacturer provides their contact information. 2. System verifies the mobile number/email. 3. System creates a new account for the manufacturer.
Exceptions	Duplicate account or invalid input
Post-Conditions	Manufacturer's account is created and ready for use.

Log in to the account

Use Case ID	50
Use Case Name	Log in to the account
Actor	Manufacturer
Description	Allow manufacturers to access their accounts
Pre-Conditions	Manufacturer has valid credentials
Main Scenario	1. Manufacturer enters login credentials. 2. System validates the credentials. 3. System grants access to the account.

Exceptions	Incorrect password triggers reset option
Post-Conditions	Manufacturer gains access to their account

Reset Password

Use Case ID	51
Use Case Name	Reset Password
Actor	Manufacturer
Description	Enable manufacturers to reset forgotten passwords.
Pre-Conditions	Manufacturer has a registered account
Main Scenario	1. Manufacturer requests password reset. 2. System sends reset instructions. 3. Manufacturer sets a new password.
Exceptions	Invalid OTP or invalid email
Post-Conditions	Manufacturer's password is updated

Edit Profile

Use Case ID	52
Use Case Name	Edit Profile
Actor	Manufacturer
Description	Allow manufacturers to update their profile information

Pre-Conditions	Manufacturer is logged in
Main Scenario	1. Manufacturer accesses the profile editing section. 2. Manufacturer modifies their information including mobile/email. 3. System saves the changes.
Exceptions	Invalid input or verification failure
Post-Conditions	Manufacturer's profile is updated

Edit Mobile Number/Email

Use Case ID	53
Use Case Name	Edit Mobile Number/Email
Actor	Manufacturer
Description	Enable manufacturers to update their registered mobile number
Pre-Conditions	Manufacturer is logged in
Main Scenario	1. Manufacturer accesses the mobile number/Email address editing section. 2. Manufacturer updates their mobile number or email address. 3. System verifies the new mobile number or email address. 4. System saves the updated mobile number or email address.
Exceptions	Invalid mobile number/Email address or verification failure
Post-Conditions	Manufacturer's mobile number/Email is updated

Add Product Price

Use Case ID	54
Use Case Name	Add Product Price

Actor	Manufacturer
Description	Allow manufacturers to list the prices of their products
Pre-Conditions	Manufacturer is logged in
Main Scenario	1. Manufacturer selects the "Add Product Price" option. 2. Manufacturer enters the product details and price. 3. System validates the input and saves the product price.
Exceptions	Duplicate product or invalid price
Post-Conditions	The product price is added to the platform

Change Product Price

Use Case ID	55
Use Case Name	Change Product Price
Actor	Manufacturer
Description	Enable manufacturers to update the prices of their listed products
Pre-Conditions	Manufacturer is logged in, and the product is already listed
Main Scenario	1. Manufacturer selects the "Change Product Price" option. 2. Manufacturer updates the product price. 3. System validates the new price and saves the changes.
Exceptions	Invalid price or restricted price range
Post-Conditions	The product price is updated on the platform

Delete Product

Use Case ID	56
Use Case Name	Delete Product

Actor	Manufacturer
Description	Allow manufacturers to remove their products from the platform
Pre-Conditions	Manufacturer is logged in, and the product is already listed
Main Scenario	1. Manufacturer selects the "Delete Product " option. 2. System prompts for confirmation. 3. Manufacturer confirms the deletion. 4. System removes the product from the platform.
Exceptions	
Post-Conditions	The product price is removed from the platform

Request Help/Support

Use Case ID	57
Use Case Name	Request Help/Support
Actor	Manufacturer
Description	Enable manufacturers to seek assistance or report issues
Pre-Conditions	Manufacturer is logged in
Main Scenario	1. Manufacturer accesses the "Request Help/Support" option. 2. Manufacturer describes the issue or request. 3. System records the request and assigns it to the support team.
Exceptions	Incomplete request or system processing error
Post-Conditions	Support request is logged and acknowledged

Moderator

Log in to the account

Use Case ID	65
Use Case Name	Log in to the account
Actor	Moderator
Description	Enable Moderators to access their accounts
Pre-Conditions	Moderator has valid credentials
Main Scenario	1. Moderator enters login credentials. 2. System validates the credentials. 3. System grants access to the account.
Exceptions	Incorrect password triggers reset option
Post-Conditions	Moderator gains access to their account

Reset Password

Use Case ID	66
Use Case Name	Reset Password
Actor	Moderator
Description	Allow moderators to reset forgotten passwords

Pre-Conditions	Moderator has a registered account
Main Scenario	1. Moderator requests password reset 2. System sends reset instructions 3. Moderator sets new password
Exceptions	invalid email or invalid OTP
Post-Conditions	Moderator's password is updated

Log out

Use Case ID	67
Use Case Name	Log out
Actor	Moderator
Description	Enable secure logout from the system
Pre-Conditions	Moderator is logged in
Main Scenario	1. Moderator selects logout option. 2. System ends the session
Exceptions	Network interruption during logout
Post-Conditions	Moderator is logged out and session is terminated

Edit Profile

Use Case ID	68
Use Case Name	Edit Profile
Actor	Moderator
Description	Allow moderators to update their profile information

Pre-Conditions	Moderator is logged in
Main Scenario	1. Moderator accesses profile editing section 2. Moderator modifies information including mobile/email 3. System saves changes
Exceptions	Invalid input or verification failure
Post-Conditions	Moderator's profile is updated

Confirm Bidding Winner

Use Case ID	69
Use Case Name	Confirm Bidding winner
Actor	Moderator
Description	Enable moderators to confirm winners of bidding processes
Pre-Conditions	Moderator is logged in and bidding has concluded
Main Scenario	1. Moderator reviews bidding results. 2. Moderator selects and confirms the winner. 3. System updates bidding status.
Exceptions	Tie in bidding or contested results
Post-Conditions	Bidding winner is confirmed and recorded

Delete Products/Labor Requests

Use Case ID	70
Use Case Name	Delete Products/Labor Requests
Actor	Moderator

Description	Allow moderators to remove inappropriate or outdated listings
Pre-Conditions	Moderator is logged in
Main Scenario	1. Moderator identifies product/labor request for deletion. 2. Moderator initiates deletion process. 3. System removes the listing.
Exceptions	Listing is part of an active transaction
Post-Conditions	Product or labor request is removed from the system

Help & support User

Use Case ID	71
Use Case Name	Help & support User
Actor	Moderator
Description	Enable moderators to assist users with queries or issues
Pre-Conditions	Moderator is logged in and user has requested support
Main Scenario	1. Moderator reviews user support requests. 2. Moderator provides assistance or information. 3. System logs the support interaction.
Exceptions	Issue requires escalation to higher support level
Post-Conditions	User receives help and support query is resolved

Content Review Confirmation

Use Case ID	72
Use Case Name	Content Review Confirmation
Actor	Moderator

Description	Allow moderators to review and confirm content appropriateness
Pre-Conditions	Moderator is logged in and content is flagged for review
Main Scenario	1. Moderator reviews flagged content. 2. Moderator decides on content appropriateness. 3. Moderator confirms decision in the system.
Exceptions	Content requires further investigation
Post-Conditions	Content is either approved or removed based on review

System Administrator

Log in to the account

Use Case ID	73
Use Case Name	Log in to the account
Actor	System Administrator
Description	Enable System Administrators to access their accounts
Pre-Conditions	Administrator has valid credentials
Main Scenario	1. Administrator enters login credentials. 2. System validates the credentials. 3. System grants access to the account.
Exceptions	Incorrect password triggers reset option
Post-Conditions	Administrator gains access to their account

Reset Password

Use Case ID	74
Use Case Name	Reset Password
Actor	System Administrator

Description	Allow administrators to reset forgotten passwords
Pre-Conditions	Administrator has a registered account
Main Scenario	1. Administrator requests password reset. 2. System sends reset instructions. 3. Administrator sets new password.
Exceptions	invalid email or invalid OTP
Post-Conditions	Administrator's password is updated

Log out

Use Case ID	75
Use Case Name	Log out
Actor	System Administrator
Description	Enable secure logout from the system
Pre-Conditions	Administrator is logged in
Main Scenario	1. Administrator selects logout option. 2. System ends the session.
Exceptions	Network interruption during logout
Post-Conditions	Administrator is logged out and session is terminated

Edit Profile

Use Case ID	76
Use Case Name	Edit Profile
Actor	System Administrator

Description	Allow administrators to update their profile information
Pre-Conditions	Administrator is logged in
Main Scenario	1. Administrator accesses profile editing section 2. Administrator modifies information including mobile/email 3. System saves changes.
Exceptions	Invalid input
Post-Conditions	Administrator's profile is updated

Edit Mobile Number/Email

Use Case ID	77
Use Case Name	Edit Mobile Number/Email
Actor	System Administrator
Description	Allow system administrators to update their mobile number or email
Pre-Conditions	System administrator is logged in and accessing profile editing
Main Scenario	1. System administrator selects to edit mobile number or email. 2. System administrator enters new mobile number or email. 3. System verifies the new mobile number or email. 4. System updates the information.
Exceptions	Invalid input or verification failure
Post-Conditions	System administrator's mobile number or email is updated

Remove Users

Use Case ID	78

Use Case Name	Remove Users
Actor	System Administrator
Description	Enable administrators to remove user accounts from the system
Pre-Conditions	Administrator is logged in and target user account exists
Main Scenario	1. Administrator searches for user account. 2. Administrator initiates removal process. 3. System prompts for confirmation. 4. Administrator confirms removal. 5. System removes the user account.
Exceptions	User account has pending transactions or is a critical user
Post-Conditions	User account is removed from the system

Update User Details

Use Case ID	79
Use Case Name	Update User Details
Actor	System Administrator
Description	Allow administrators to modify user account information
Pre-Conditions	Administrator is logged in and target user account exists
Main Scenario	1. Administrator searches for user account. 2. Administrator accesses user details. 3. Administrator modifies user information. 4. System saves updated user details.
Exceptions	Invalid input or restricted fields
Post-Conditions	User account details are updated in the system

Adding Moderators

Use Case ID	80
Use Case Name	Adding Moderators
Actor	System Administrator

Description	Enable administrators to create new moderator accounts
Pre-Conditions	Administrator is logged in
Main Scenario	1. Administrator initiates moderator creation process. 2. Administrator enters new moderator details. 3. System validates input and creates moderator account. 4. System assigns moderator privileges.
Exceptions	Duplicate moderator account or invalid input
Post-Conditions	New moderator account is created and activated

Adding Agriculture Analyst

Use Case ID	81
Use Case Name	Adding Agriculture Analyst
Actor	System Administrator
Description	Allow the system administrator to add new agriculture analyst accounts
Pre-Conditions	System administrator is logged in
Main Scenario	1. System administrator selects the option to add new agriculture analysts. 2. System administrator provides the necessary details for the new agriculture analyst account. 3. System creates the new agriculture analyst account.
Exceptions	Invalid input or system error
Post-Conditions	A new agriculture analyst account is added to the system

Generate Reports

Use Case ID	82
Use Case Name	Generate Reports
Actor	System Administrator
Description	Allow administrators to generate system reports
Pre-Conditions	Administrator is logged in
Main Scenario	1. Administrator selects report type. 2. Administrator specifies report parameters. 3. System generates the requested report. 4. System displays or allows download of the report.
Exceptions	Insufficient data for report generation or system processing error
Post-Conditions	Requested report is generated and available to the administrator

Current Progress

System Development Progress

1. Requirements Gathering: 100% completed.
2. UI/UX Design: 100% completed.
3. Backend Development: 30% completed.

Estimated Completion Percentage

Approximately 40% of the project is complete.

Remaining Tasks

1. Finalize backend and frontend integration.
2. Conduct system testing and debugging.

Member Contribution