

# AgroRent Hub

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INMCA2020-25



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01

# Overview

Introduction to AgroRent Hub and its objectives.



# Introduction

## AgroRent Hub Platform

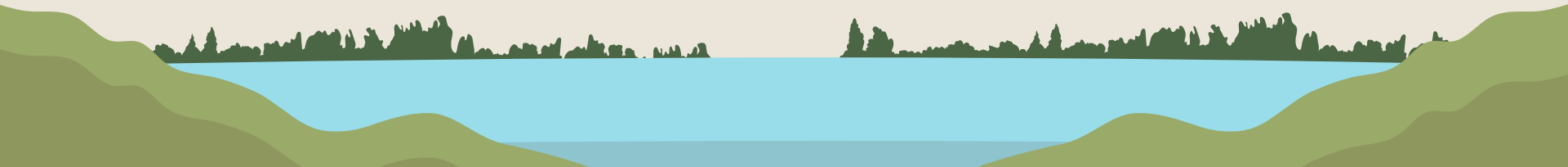
An innovative, Django-based online rental system for agricultural tools, equipment, and services.

Designed to streamline the rental process in agriculture by connecting **farmers, suppliers, delivery personnel, and administrators.**

**Objectives:** Provide a secure, efficient, and user-friendly platform for all roles.

Increase accessibility to essential tools and improve inventory and demand management.

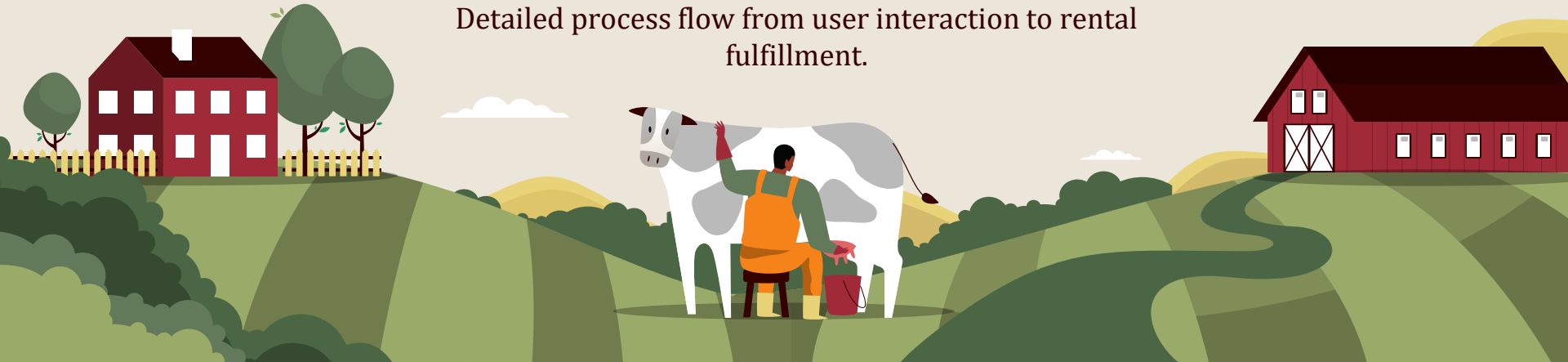
**Key Technologies:** Django, HTML/CSS, JavaScript, MySQL.



02

# USER

Detailed process flow from user interaction to rental fulfillment.





**FARMERS**



**SUPPLIERS**



**ADMIN**



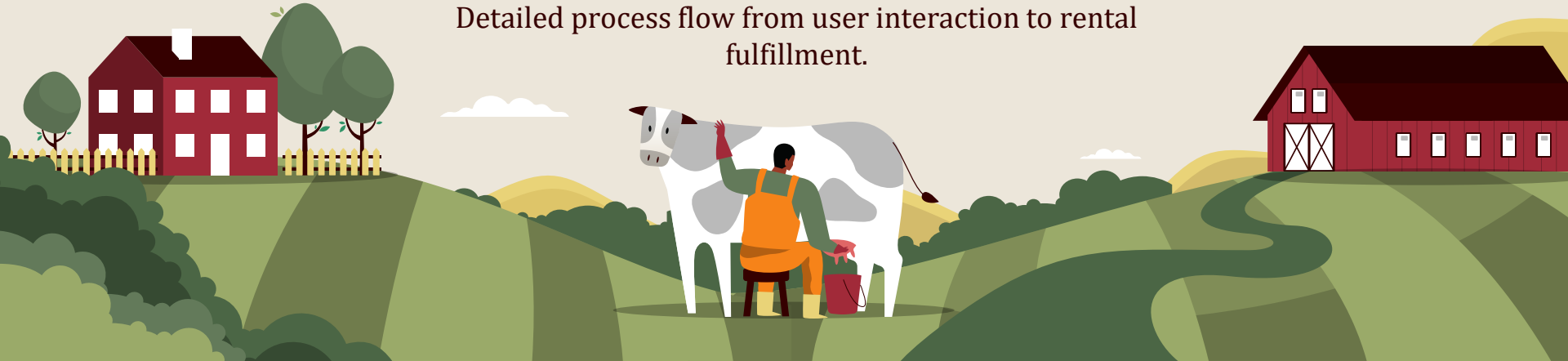
**DELIVERY BOY**



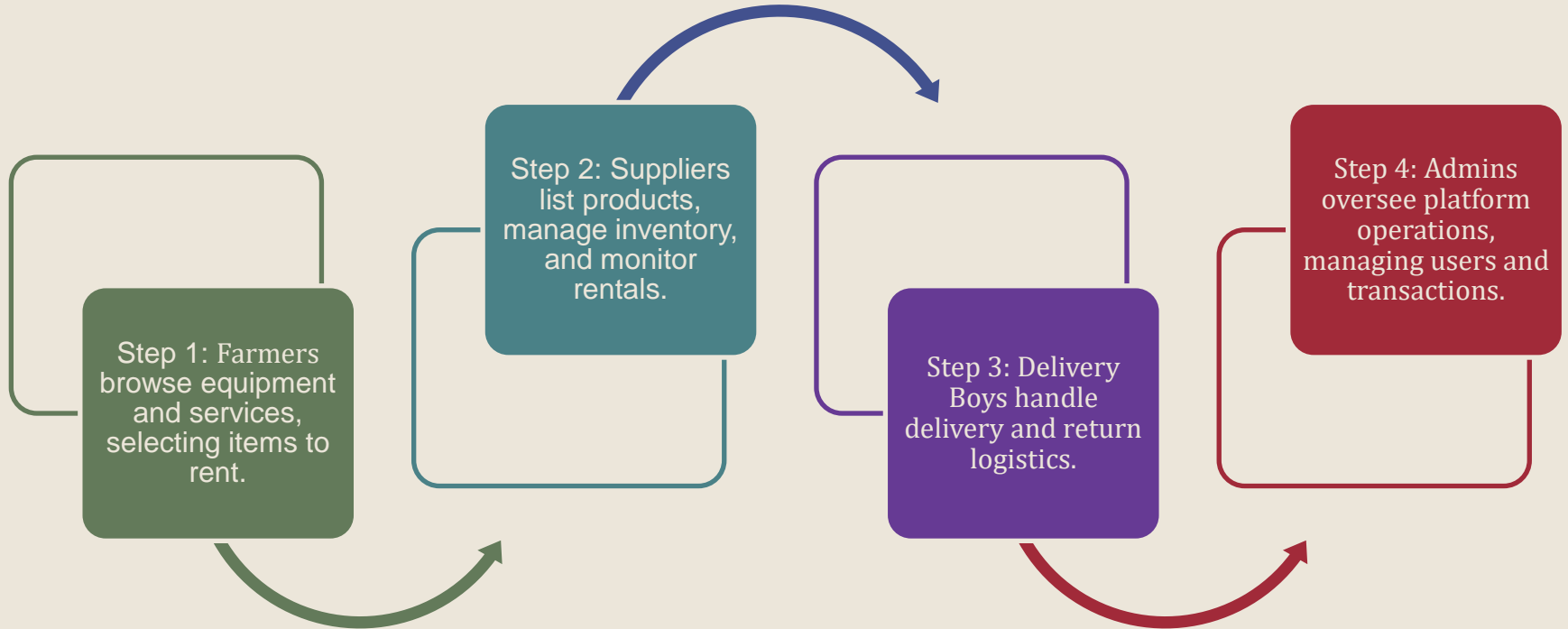
03

# Project Flow

Detailed process flow from user interaction to rental fulfillment.



# Platform Process Flow





# Order Flow



## Login

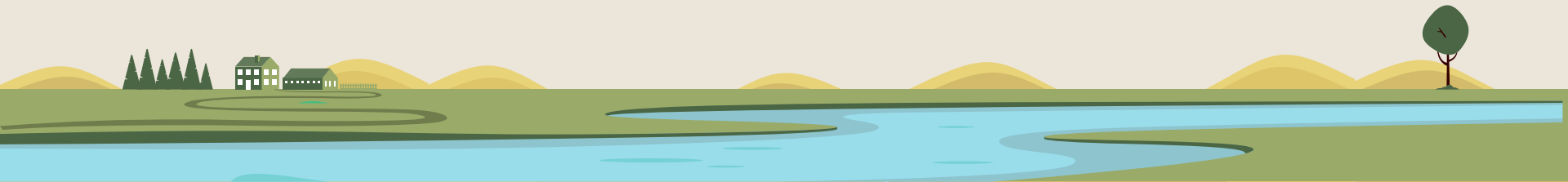
Email

Password

[Forgot Password?](#)

Login

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



## Register

Name

Email

Address

Phone No

Password

Confirm Password

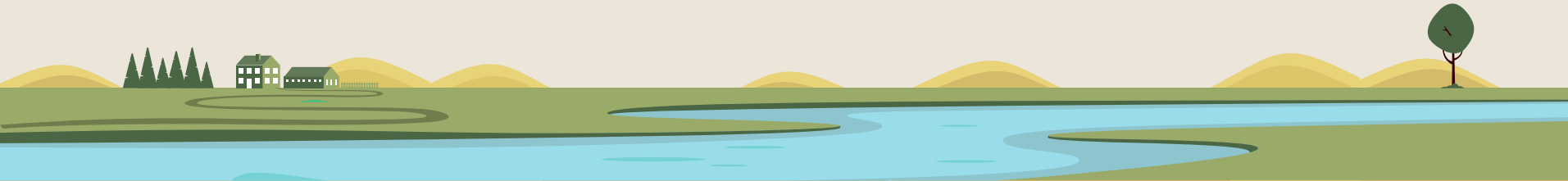
☐ Farmer ☐ Supplier ☐ Delivery Boy

Register



Sign in with Google

Already have an account? [Login](#)





[Show all](#)[Machinery and Equipments](#)[Irrigation Equipment](#)[Harvesting Equipment](#)[Tools](#)[Livestock Equipment](#)[Sort by Name](#) [Sort by Price](#)

### Seed Drills

₹2500.00

From:  To:

Qnt:  [Add to Cart](#)



### Cultivators

₹4500.00

From:  To:

Qnt:  [Add to Cart](#)



### Rotary Tillers

₹5600.00

From:  To:

Qnt:  [Add to Cart](#)

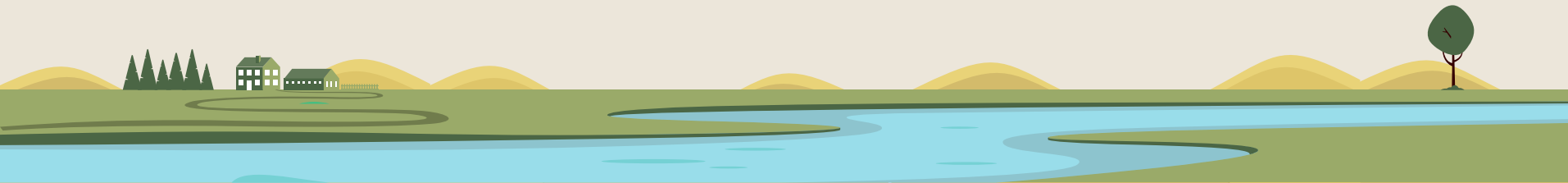


### Mowers


₹800.00

From:  To:

Qnt:  [Add to Cart](#)



# Rental Product Cart

Si.No	Product Image	Price Per Day	Quantity	Start Date	End Date	Days	Price	Actions
1	 Seed Drills	₹2500.00	1	Nov. 6, 2024	Nov. 12, 2024	6	₹15000.00	<a href="#">Delete</a>

Seed Drills (1 x ₹2500.00 x 6days) ₹15000.00

**Total:** ₹15000.00

[Place Order](#)

- Dashboard
- View Farmers
- View Suppliers
- View Delivery Boys
- View Rental Product
- View Category
- View Orders
- View Damaged Products

Farmers

Show 

10

 entries

Search:

Si.No	Name	Email	Address	Phone	Last Login	Status	Action
1	Wilgimol Thomas	wilgimolthomas@gmail.com	Nayipurayidathil House,Arangu p.o Chappath,Naduvil via Kannur,kerala	7025169137	Nov. 5, 2024, 6:31 p.m.	active	<div>Block</div>
2	SreeLakshmi P.S	sree@gmail.com	Kinder Garden House,Kottayam,Kerala	8590762162	June 23, 2024, 4:22 p.m.	active	<div>Block</div>
3	Thomas Thomas	thomas@gmail.com	Nayipurayidathil House,Arangu p.o Chappath,Naduvil via Kannur,kerala	9744169137	June 19, 2024, 6:15 p.m.	active	<div>Block</div>
4	Varsha Shaji	varsha@gmail.com	123 Main Street, 101, CA ,United States	7034516382	Aug. 13, 2024, 2:38 p.m.	active	<div>Block</div>
5	Sreelakshmi P S	sreelakshmips2025@mca.ajce.in	8122 Wooded Brook Way, Boise,673425	8590762167	Sept. 23, 2024, 10:44 a.m.	active	<div>Block</div>

Showing 1 to 5 of 5 entries

Previous

1

Next



Dashboard

View Farmers

View Suppliers

View Delivery  
BoysView Rental  
Product

View Category

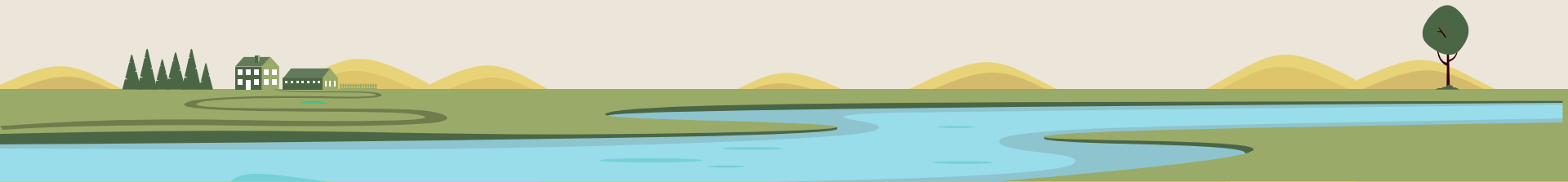
View Orders

View Damaged  
Products

## Orders




Show 10 entriesSearch: 

Si. No	Customer Name	Order ID	Product	Supplier	Quantity	Total Price	Payment Status	Order Date	Start Date	End Date	Action
1	Wilgimol Thomas	66	Sprayers	Jiji Mol Thomas	1	₹1800.00	completed	Oct. 7, 2024, 9:04 a.m.	Oct. 8, 2024	Oct. 17, 2024	<a href="#">View Assigned Delivery Boy</a>
2	Wilgimol Thomas	65	Sprinklers	Tilji Thomas	1	₹720.00	completed	Sept. 23, 2024, 10:14 a.m.	Sept. 30, 2024	Oct. 4, 2024	<a href="#">View Assigned Delivery Boy</a>
3	Wilgimol Thomas	59	Spreaders	Jiji Mol Thomas	1	₹9600.00	completed	Aug. 22, 2024, 2:50 p.m.	Aug. 27, 2024	Aug. 31, 2024	<a href="#">View Assigned Delivery Boy</a>
4	Wilgimol Thomas	58	Balers	Jiji Mol Thomas	2	₹12000.00	completed	Aug. 22, 2024, 2:50 p.m.	Aug. 24, 2024	Aug. 27, 2024	<a href="#">View Assigned Delivery Boy</a>



- Dashboard
- Add Rental Products
- View Rental Products
- Add Categories
- View Categories
- Add Cost For Damaged Product
- View Cost For Damaged Product
- View Orders
- Classify Product

View Rental Products

Si. No	Image	Name	Price Per Day	Stock Quantity	Description	Status	Actions
1		Tractor	Rs.2000.00	28	Versatile vehicles used for pulling or pushing agricultural machinery and trailers, as well as for plowing, tilling, and planting fields.	available	<div>Update</div> <div>Delete</div>
2		Plows	Rs.200.00	5	Implements used to cut, lift, and turn over soil, preparing it for planting by burying weeds and crop residues.	available	<div>Update</div> <div>Delete</div>
3		Seed Drills	Rs.2500.00	6	Machines that precisely plant seeds at the correct depth and spacing, improving crop yields and reducing the need for thinning.	available	<div>Update</div> <div>Delete</div>





AgroRent DeliveryBoy Panel

Dashboard

View Orders

Return Management

Repair Cost Details

Hai, Jilti Thomas!

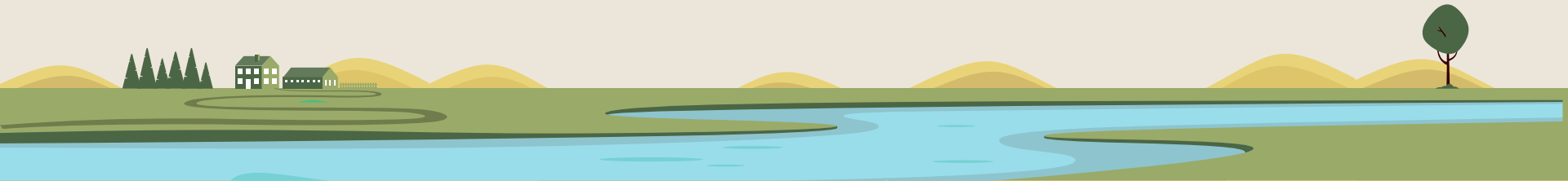
Profile

Sign Out

Assigned Orders

Si.No	Customer	Product	Supplier	Quantity	Start Date	End Date	Price	Action
1	Wilgimol Thomas	Cultivators	Jiji Mol Thomas	1	Aug. 22, 2024	Aug. 25, 2024	₹13500.00	Delivered
2	Wilgimol Thomas	Rotary Tillers	Jiji Mol Thomas	1	Aug. 29, 2024	Aug. 31, 2024	₹11200.00	Delivered
3	Wilgimol Thomas	Balers	Jiji Mol Thomas	2	Aug. 24, 2024	Aug. 27, 2024	₹12000.00	Delivered
4	Wilgimol Thomas	Spreaders	Jiji Mol Thomas	1	Aug. 27, 2024	Aug. 31, 2024	₹9600.00	Delivered
5	Wilgimol Thomas	Sprinklers	Tilji Thomas	1	Sept. 30, 2024	Oct. 4, 2024	₹720.00	Delivered
6	Wilgimol Thomas	Sprayers	Jiji Mol Thomas	1	Oct. 8, 2024	Oct. 17, 2024	₹1800.00	Delivered

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- Dashboard
- View Orders
- Return Management
- Repair Cost Details

Damaged Products Estimated Cost Based On Damage Level & Type

Product:

All

▼

Damage Level:

All

▼

Damage Type:

All

▼

Filter

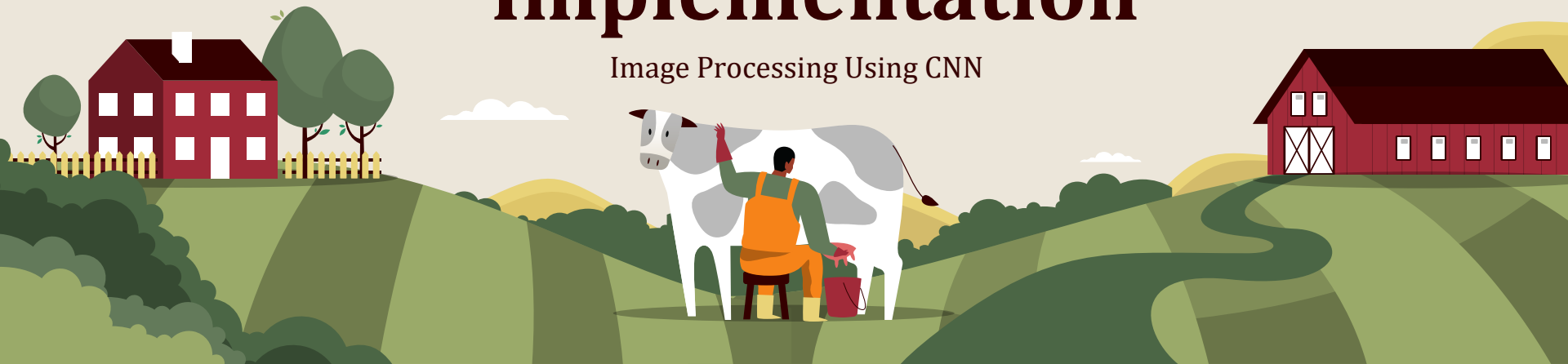
Si. No	Product Name	Damage Level	Damage Type	Estimated Repair Cost (Rs.)
1	Balers	Minor	Physical	₹300.00
2	Balers	Minor	Operational	₹300.00
3	Balers	Minor	Wear and Tear	₹300.00
4	Balers	Moderate	Physical	₹600.00
5	Balers	Moderate	Operational	₹600.00
6	Balers	Moderate	Wear and Tear	₹600.00
7	Balers	Severe	Physical	₹1200.00
8	Balers	Severe	Operational	₹1200.00



04

# Technology Implementation

Image Processing Using CNN



Dashboard

Add Rental  
Products

View Rental  
Products

Add Categories

View Categories

Add Cost For  
Damaged Product

View Cost For  
Damaged Product

View Orders

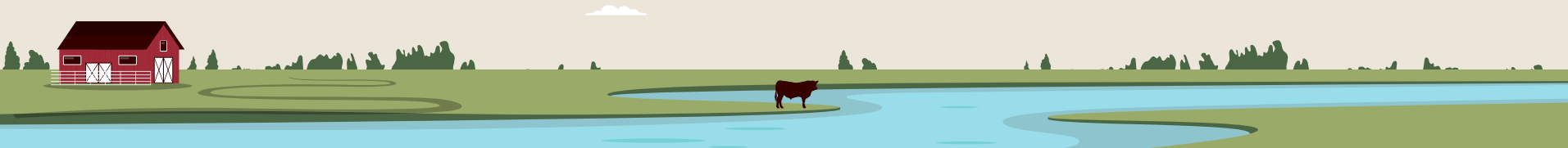
Classify Product

## Classify Product

Upload Product Image:

Choose File No file chosen

Submit



Dashboard

Add Rental  
Products

View Rental  
Products

Add Categories

View Categories

Add Cost For  
Damaged Product

View Cost For  
Damaged Product

View Orders

Classify Product



## Product Category

The product belongs to: Machinery and Equipments

OK



Dashboard

Add Rental  
Products

View Rental  
Products

Add Categories

View Categories

Add Cost For  
Damaged Product

View Cost For  
Damaged Product

View Orders

Classify Product



## Product Category

The product belongs to: Irrigation Equipment

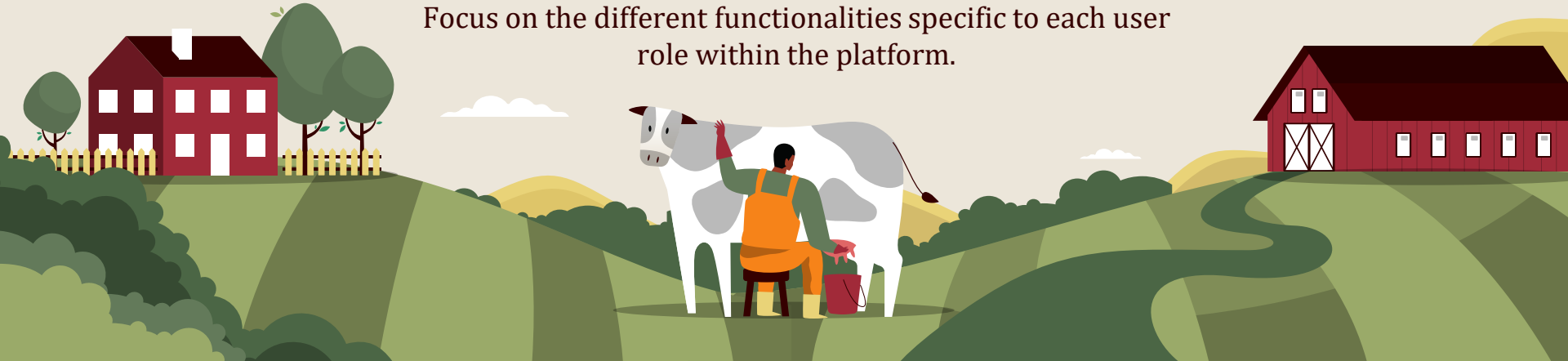
OK



05

# Modules

Focus on the different functionalities specific to each user role within the platform.



# Farmer Module

## Browse and Rent Equipment

- Farmers Can View Available Products
- Filter By Category
- Add Items To Their Cart.

## Order Management

- Track Rental Orders
- Including Start And End Dates
- View Total Rental Costs.

## Payment Processing

- Complete Secure Payments With OTP Verification.

## Return Scheduling

- Schedule Returns At The End Of The Rental Period.

## Notifications

- Receive Updates On Order Status, Delivery
- Return Reminders.





# Supplier Module

**Product Listing and Inventory Management:** Suppliers can add, update, and disable products, monitor stock levels, and manage categories

**Rental Management:** Accept or reject rental requests, monitor product demand, and manage rental periods.

**Demand Forecasting:** Use data insights to predict future demand and manage stock levels accordingly.

**Transaction Management:** Track payments received from rentals, ensuring financial transparency.

**Alerts:** Get low-inventory alerts to ensure popular items are restocked.



# Admin Module

## User Management

- View and manage all users (Farmers, Suppliers, Delivery Boys), including account status and permissions.

## Order and Payment Oversight

- Oversee rental transactions, ensuring smooth payment processing and tracking.

## Platform Maintenance

- Maintain system health, update configurations, and handle any data inconsistencies.

## Reporting and Analytics

- Generate reports on platform usage, order statistics, and user activity.

## Dispute Resolution

- Manage issues between Farmers and Suppliers, ensuring fair outcomes for returns or damaged items.



# Delivery Boy Module



Receive and manage delivery assignments based on location and availability.

Status Updates

Update the delivery status in real-time (e.g., "Out for Delivery," "Delivered," "Return Collected").



Defect Reporting

Report any damages or issues identified at return to keep track of product condition.



Order Tracking

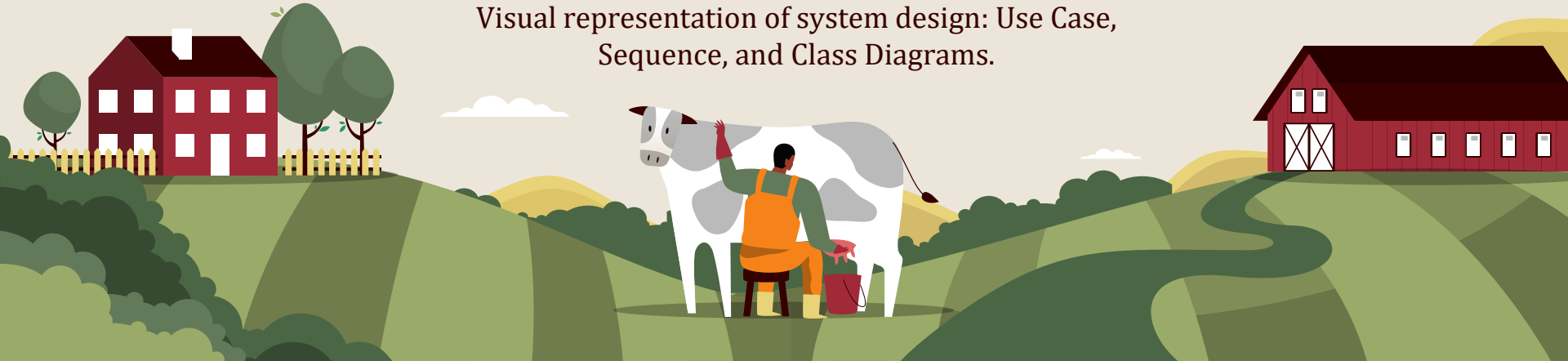
Access a list of assigned orders, with details on delivery address, product, and customer information.



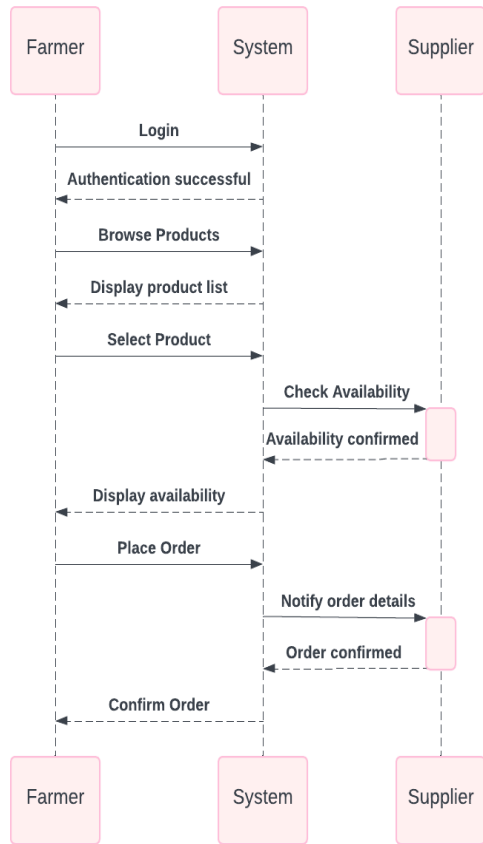
06

# UML Diagrams

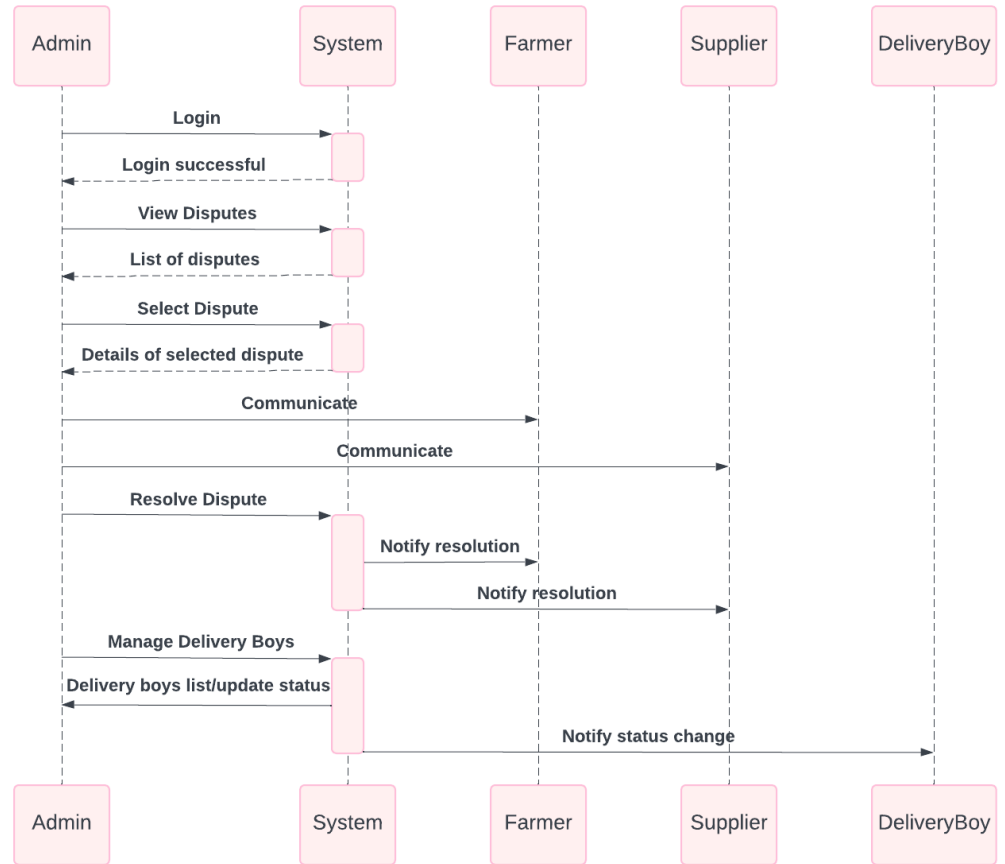
Visual representation of system design: Use Case,  
Sequence, and Class Diagrams.



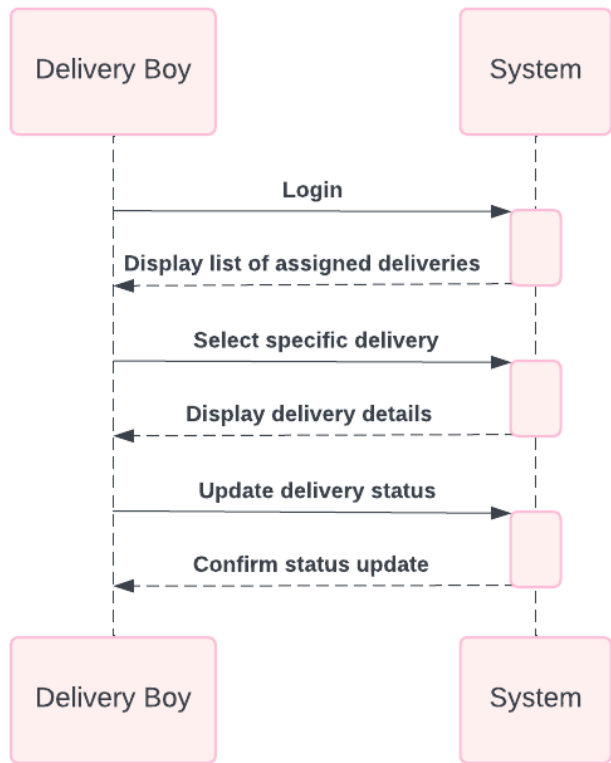
Farmer Sequence Diagram



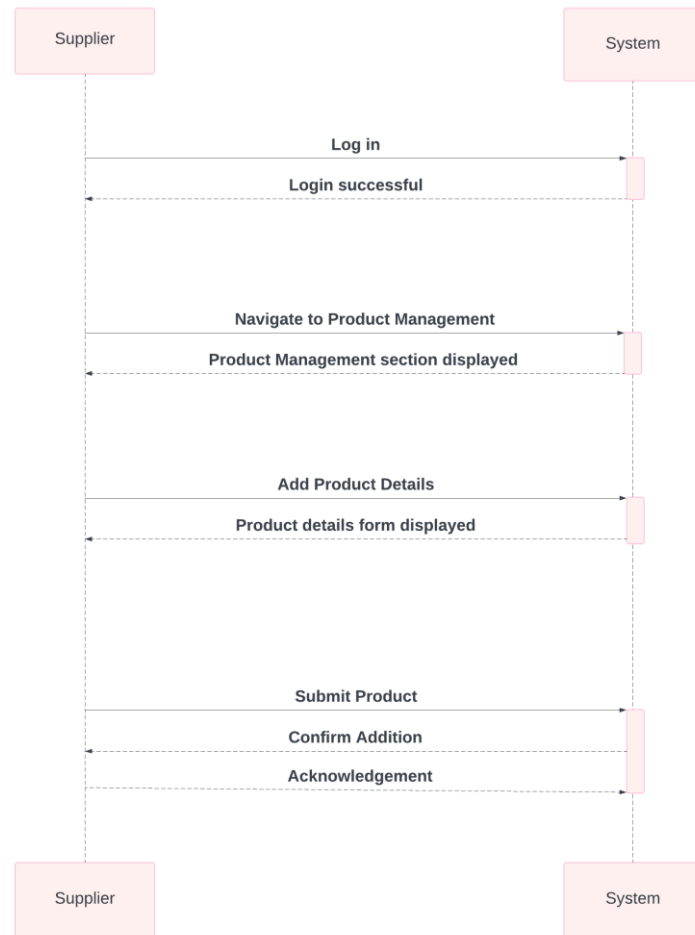
Admin Sequence Diagram



DeliveryBoy Sequence Diagram



Supplier Sequence Diagram



# Thanks!

