



*Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)*

---

## FLORAMART - ONLINE REAL PLANT SELLING

---

### The domain of the Project

E-Commerce & Online Retail , Agriculture & Gardening , Horticulture & Plant Care, online marketplace for plants

Under the guidance of

Mr. Shrihari Poturaju (Guide & Mentor)

### Team Members:

Ms. Shyara Vaidehi (B.Tech, 6<sup>th</sup> semester)

### Period of the project

August 2024 to February 2025



SURE TRUST

PUTTAPARTHI, ANDHRA PRADESH



*Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)*

## DECLARATION

The project titled “**Floramart**” has been mentored by **Mr.shrihari poturaju** , organised by SURE Trust, from August 2024 to February 2025, for the benefit of the educated unemployed rural youth for gaining hands-on experience in working on industry relevant projects that would take them closer to the prospective employer. I, hereby declare that I have solely worked on this project under the guidance of my mentor. This project has significantly enhanced my practical knowledge and skills in the domain.

### Name

Ms. Shyara Vaidehi

### Signature

A handwritten signature in black ink, appearing to read "Shyara Vaidehi".

### Mentor

Mr. Shrihari Poturaju  
Full Stack Developer at IBM

### Signature

### Seal & Signature

Prof. Radhakumari  
Executive Director & Founder  
SURE Trust



## Table of Contents

---

1. DECLARATION.....	2
2. TABLE OF CONTENTS .....	3
3. EXECUTIVE SUMMARY .....	4
4. INTRODUCTION.....	5
4.1. Background and Context.....	5
4.2. Problem Statement.....	5
4.3. Scope .....	5
4.4. Limitations .....	5
4.5. Innovation.....	6
5. PROJECT OBJECTIVES .....	7
5.1. Project Objectives for floramart .....	7
5.2. Expected outcomes and Deliverables.....	7
6. METHODOLOGY AND RESULTS.....	9
6.1. Methods/Technology Used.....	9
6.2. Tools/Software Used.....	9
6.3. Data Collection Approach.....	9
6.4. Project Architecture .....	10
6.5. Results.....	10
6.6. Final Project Working Screenshots .....	10
6.7. GitHub Link .....	21
7. LEARNING AND REFLECTION .....	22
7.1. Learning and Reflection .....	22
7.2. Experience .....	22
8. CONCLUSION AND FUTURE SCOPE .....	22
8.1. Objectives .....	23
8.2. Achievements .....	23
8.3. Conclusion.....	24
8.4. Future Scope.....	25



## Executive Summary

---

**FloraMart** is an online store for buying plants, making it easy for customers to shop while also learning how to care for them. It connects plant nurseries (sellers) and buyers through a simple and user-friendly platform. Key features include filter options, add to cart, and an admin dashboard for managing sales and orders. A special feature is the seasonal care guide, which provides monthly plant care tips to help users keep their plants healthy. The platform facilitates smooth interaction between stakeholders users (buyers), sellers (nurseries), and admins ensuring a seamless shopping experience. By making plant shopping more convenient and informative, FloraMart benefits both plant lovers and businesses.



## ***Introduction***

---

### **Background and Context**

FloraMart is an innovative e-commerce platform designed for plant enthusiasts, gardeners, and eco-conscious consumers. With the increasing popularity of home gardening and indoor plants, there is a growing demand for an online marketplace that provides a seamless shopping experience for plants and gardening essentials. FloraMart aims to bridge the gap between plant nurseries and customers by offering a user-friendly online store that ensures quality plants, reliable delivery, and expert care guidance.

### **Problem Statement**

Many plant buyers face challenges such as limited local availability, lack of expert guidance, and inconvenience in transportation. Additionally, traditional plant nurseries often lack an online presence, making it difficult for consumers to explore and purchase plants effortlessly. FloraMart addresses these issues by:

- Providing a digital platform for purchasing plants with doorstep delivery.
- Offering expert plant care tips, including watering, sunlight requirements, and seasonal care.
- Integrating search and filter features for easy plant selection based on customer preferences.

### **Scope**

- Online plant shopping with a wide variety of indoor, outdoor, medicinal(herbs), and flowering plants. And fertilizer and seeds
- User-friendly search, filtering, and cart functionalities for efficient browsing.
- Admin dashboard for managing products, orders, and user accounts.

### **Limitations**



*Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)*

- Currently limited to plant-related products; expansion to gardening tools and accessories is planned for future updates.
- Delivery services may initially be restricted to specific regions.
- Plant availability depends on seasonal stock and supplier partnerships.

## **Innovation**

FloraMart's Plant Care Tips feature provides real-time seasonal care advice, updating automatically based on the current month. Users receive personalized reminders for watering, sunlight, and fertilizing, ensuring healthier plants with minimal effort. Integrated with the FloraMart ecosystem, it helps users choose seasonal plants while offering engaging and educational content.



---

## *Project objectives*

---

### **Project Objectives for FloraMart**

FloraMart aims to create a seamless and user-friendly online platform for buying plants while providing expert care guidance. The key objectives of the project are:

1. Simplify Online Plant Shopping: Develop an easy-to-use e-commerce platform that connects buyers with plant nurseries (sellers).
2. Enhance User Experience: Implement filter options, add-to-cart features, and order tracking for a smooth purchasing process.
3. Provide Expert Plant Care Tips: Offer a seasonal care guide with monthly plant maintenance tips to help users keep their plants healthy.
4. Efficient Order & Inventory Management: Enable sellers and admins to manage sales, inventory, and customer interactions through an admin dashboard.
5. Encourage Sustainability & Green Living: Promote easy access to plants and educate users on their benefits, contributing to a greener environment.

### **Expected Outcomes & Deliverables**

- Fully Functional E-Commerce Website – A user-friendly platform for buying and selling plants.
- Filter Options – Advanced filtering for easy plant selection
- Add to Cart – Seamless shopping experience with order management.
- Admin Dashboard – A system for sellers and admins to manage inventory, orders, and customers.



*Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)*

- Seasonal Care Guide – Monthly plant care tips to help users maintain healthy plants.
- User & Seller Interaction System – Communication between buyers and nurseries.



## Methodology and Results

---

### Methods & Technologies Used

FloraMart is built using modern web technologies to ensure a fast, secure, and scalable e-commerce platform. The key methods and technologies used include:

- **Backend:** Python (**Flask**) for handling requests, **FastAPI** to connect backend to frontend and database interactions.
- **Frontend:** HTML, CSS, **JavaScript** for a user-friendly interface.
- **Database:** PostgreSQL for efficient storage and management of plant, order, and user data.

### Tools & Software Used

- Development: Visual Studio Code
- Database Management: PostgreSQL, pgAdmin
- API Integration: FastAPI

### Project Architecture

The FloraMart architecture follows a modular and scalable design:

1. Frontend (Client-Side)
  - HTML, CSS, JavaScript for UI/UX
  - Responsive design for mobile and desktop users
  - Dynamic seasonal care tips using JavaScript
2. Backend (Server-Side)
  - Flask (Python) for request handling and business logic
  - User authentication and session management



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

- Order processing

### 3. Database Layer

- PostgreSQL for managing product listings, user data, orders, and payments
- Secure and optimized queries for fast data retrieval

### 4. Admin Panel

- Admin dashboard for managing orders, inventory, and users
- Analytics for tracking sales and performance

### 5. Add to Cart

- Users can add to cart and checkout the total
- And quantity increase and decrease

## Final Project Working Screenshots with Explanation

### ➤ Home Page :

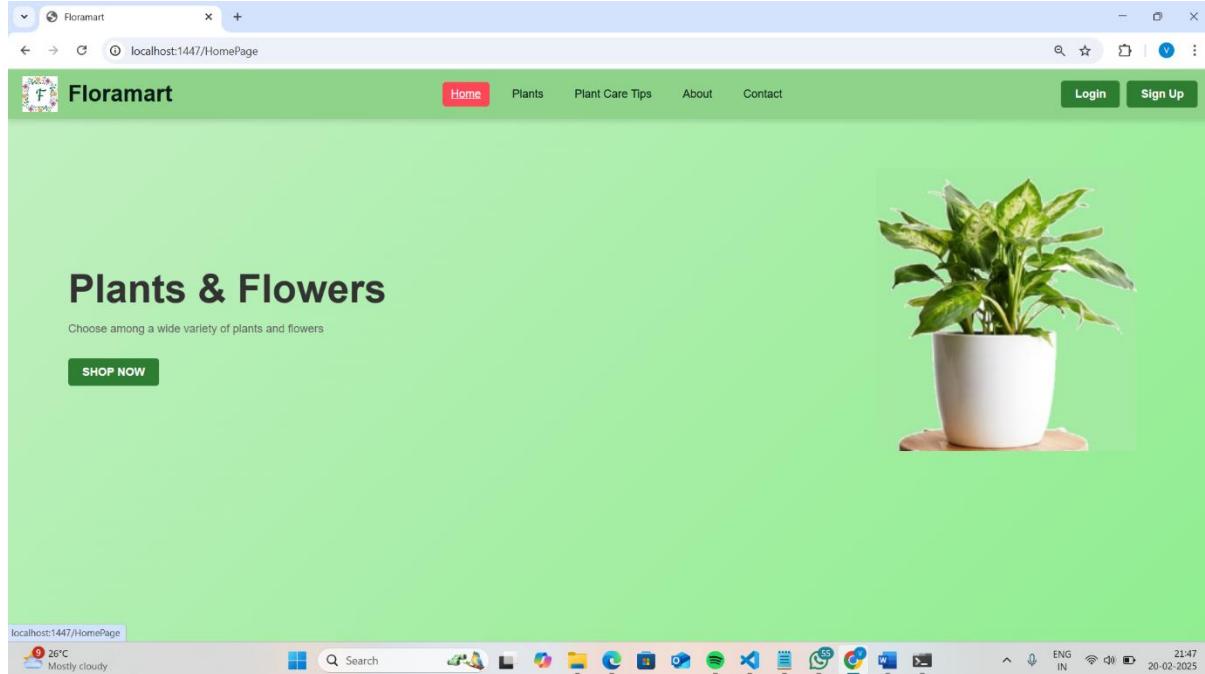


Figure 1: Home Page of the Project



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

- Signup page : Users and seller are sign up for the web-application.

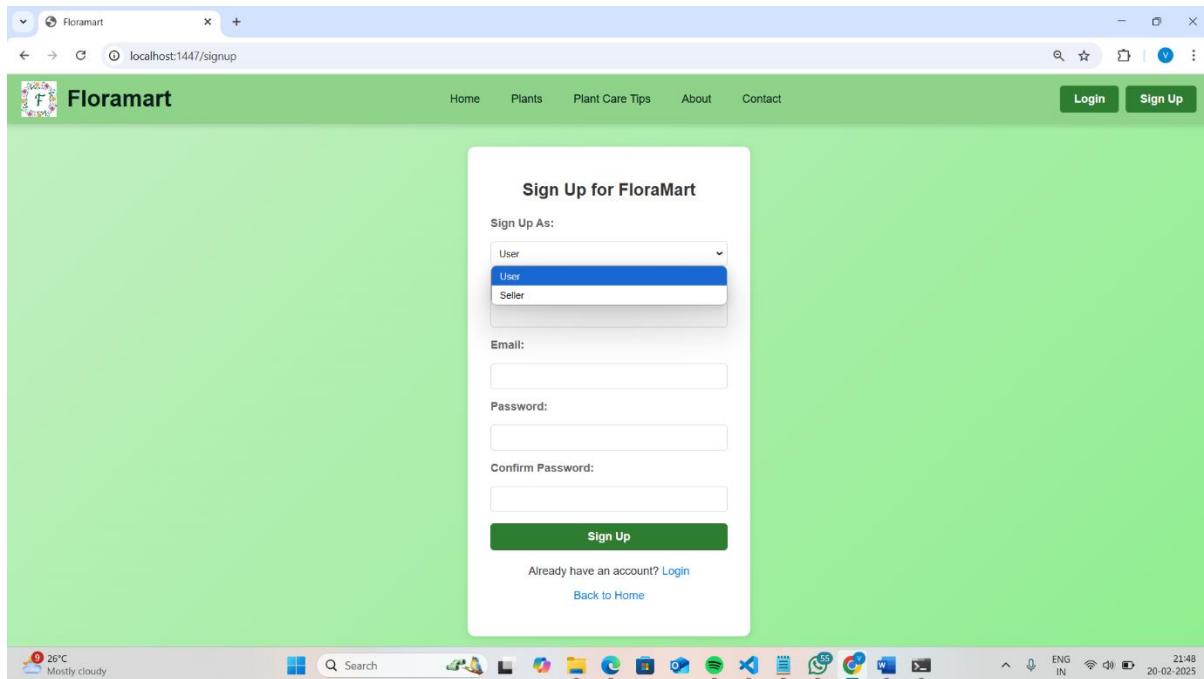


Figure 2: Sign Up Page of the Project

- Log in : Users and seller are log in for the web-application.

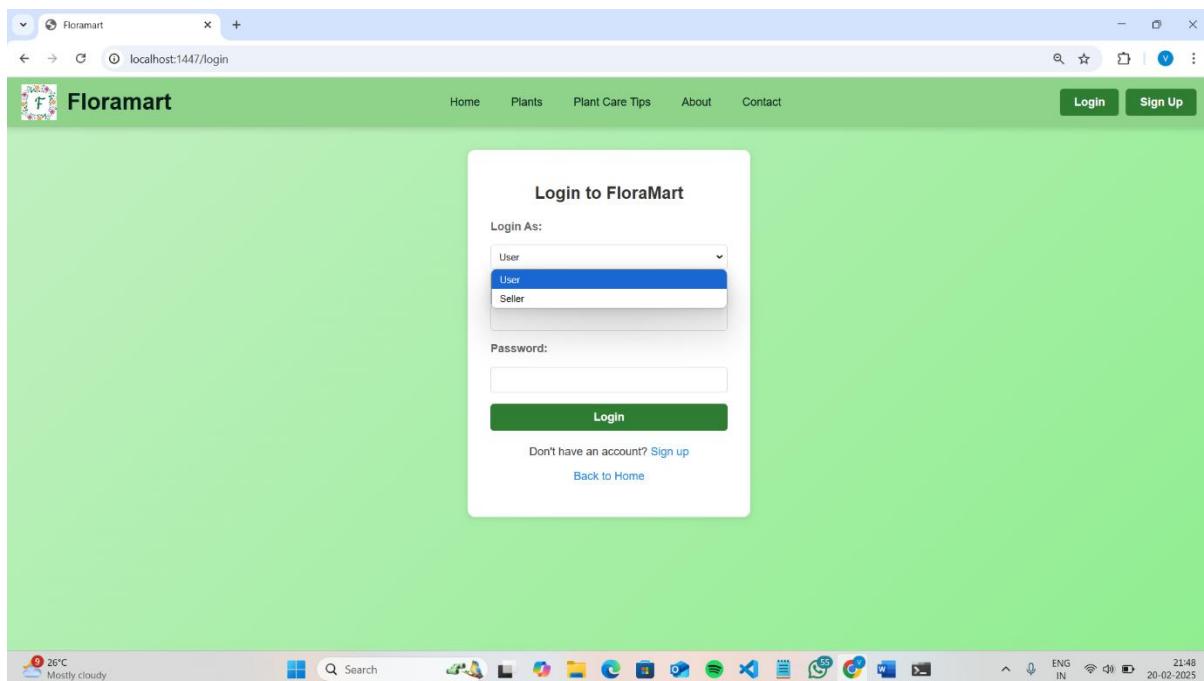


Figure 3: Log In Page of the Project



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

- Plant Page : At this page, we make it easy for you to find the right plants, fertilizers, and seeds for your gardening needs. Use our **Plant Type** and **Fertilizer & Seeds** filters to browse through a wide range of options, from organic fertilizers to high-quality seeds. Whether you're looking for indoor plants, outdoor plants flowering plants, or essential plant nutrients, our filtering system helps you narrow down your choices quickly.

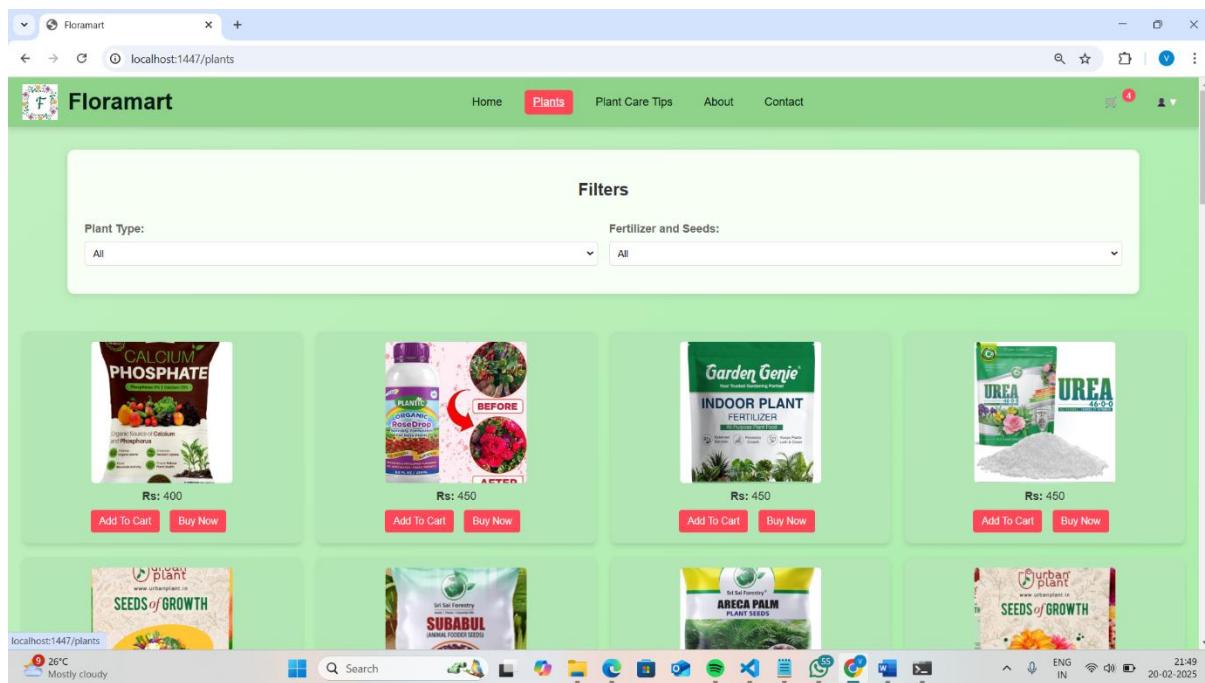


Figure 4: Plants Page of the Project



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

The screenshot shows a web browser window for 'Floramart' on the URL 'localhost:1447/plants'. At the top, there's a navigation bar with links for Home, Plants, Plant Care Tips, About, and Contact. Below the navigation is a 'Filters' section with dropdown menus for 'Plant Type' (set to 'Indoor') and 'Fertilizer and Seeds' (set to 'All'). The main content area displays a grid of six potted plants, each with a small image, price (Rs: 350 or Rs: 250), and two buttons: 'Add To Cart' and 'Buy Now'. Below the grid, there's a weather widget showing '26°C Mostly cloudy' and a system tray with various icons.

This screenshot shows the same 'Floramart' website interface, but the filters are now set to 'Outdoor' under 'Plant Type' and 'Seeds' under 'Fertilizer and Seeds'. The main content area displays a grid of four seed products, each with a small image, price (Rs: 350), and two buttons: 'Add To Cart' and 'Buy Now'. The bottom of the screen shows a weather widget and a system tray.

Figure 5: Filter of the Plants Page

- Plants Care Tips Pgae : At the page, in provide plants care tips and Monthly plant care tips to help users maintain healthy plants.



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

The screenshot shows a web browser window for 'Floramart' at 'localhost:1447/plantcaretipsPage'. The page has a green header with the 'Floramart' logo and navigation links for Home, Plants, Plant Care Tips (which is highlighted in red), About, and Contact. The main content area is titled 'Plant Care Tips' and includes a welcome message: 'Welcome to FloraMart's plant care guide! Here are some essential tips for keeping your plants healthy and thriving.' Below this are four cards: 'Watering' (image of a plant being watered), 'Sunlight' (image of a seedling), 'Fertilizing' (image of a hand applying fertilizer), and 'Seasonal Care' (image of multiple small plants). A sidebar titled 'Seasonal Care Tips' for February provides specific care instructions for each category. The bottom of the screen shows a Windows taskbar with various icons and system status.

Figure 6: Plants Care Tips Page of the Project

➤ About Page : This page of the about for floramart web application .

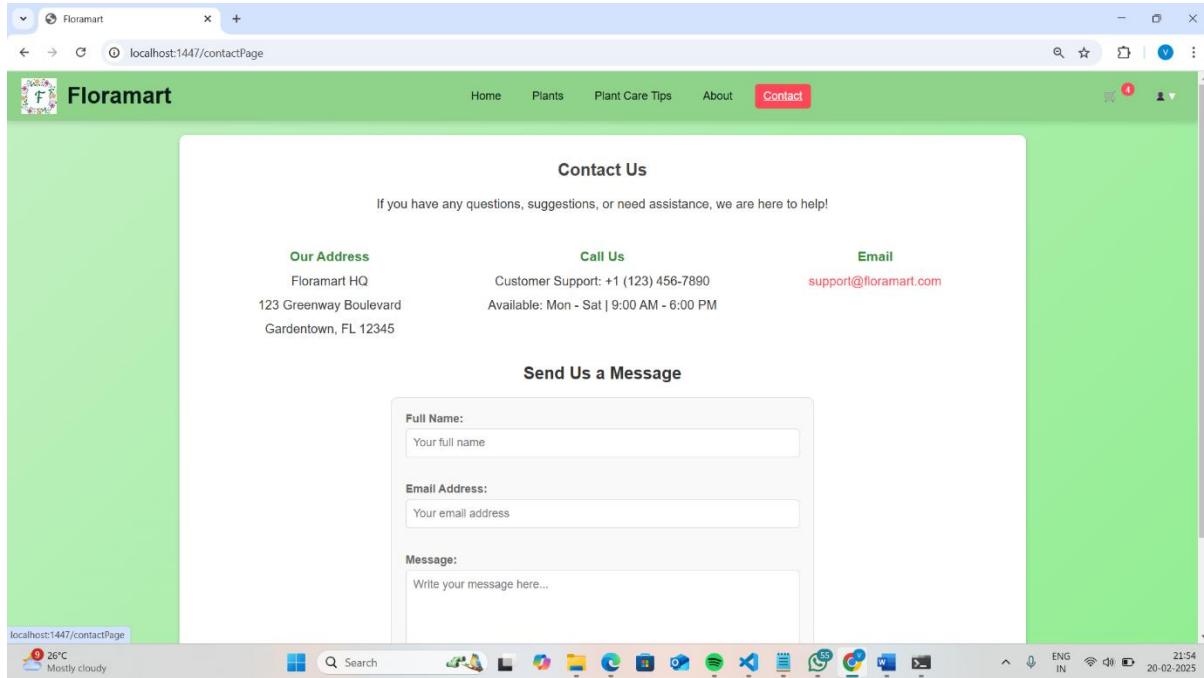
The screenshot shows a web browser window for 'Floramart' at 'localhost:1447/aboutPage'. The page has a green header with the 'Floramart' logo and navigation links for Home, Plants, Plant Care Tips, About (which is highlighted in red), and Contact. The main content area is titled 'About Floramart' and features the tagline 'Your Trusted Partner for Plant Shopping'. It includes sections for 'Our Mission' (text: 'At Floramart, our mission is to reconnect people with nature. We provide a wide variety of high-quality plants, along with expert advice to help you grow and care for your greenery. Whether you're a seasoned gardener or just starting, Floramart is here to make plant shopping convenient and joyful.'), 'Our Story' (text: 'Floramart was founded by plant enthusiasts who wanted to bring the joy of greenery to every home. With a passion for sustainability and a love for all things green, we created an easy-to-use platform that allows you to discover, buy, and care for plants from the comfort of your home. What started as a small initiative has now grown into a trusted brand loved by plant lovers across the country.'), and 'Why Choose Floramart?' (list: 'Wide Selection: From indoor plants to garden essentials, we have it all.', 'Expert Care Tips: Access free care guides and seasonal planting advice.', 'Fast Delivery: Get your plants delivered fresh and securely to your doorstep.', 'Eco-Friendly Practices: Supporting sustainable and green living.', 'Customer Support: We are here to answer your queries every step of the way.'). The bottom of the screen shows a Windows taskbar with various icons and system status.

Figure 7: About Page of the Project



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

- Contact Page : This page of the for contact floramart and send message.



The screenshot shows a web browser window for 'Floramart' on 'localhost:1447/contactPage'. The page has a green header with the 'Floramart' logo and navigation links for Home, Plants, Plant Care Tips, About, and Contact. The 'Contact' link is highlighted in red. The main content area is titled 'Contact Us' and contains a message: 'If you have any questions, suggestions, or need assistance, we are here to help!'. It is divided into three sections: 'Our Address', 'Call Us', and 'Email'. 'Our Address' lists 'Floramart HQ' at '123 Greenway Boulevard, Gardentown, FL 12345'. 'Call Us' provides 'Customer Support: +1 (123) 456-7890' and operating hours 'Available: Mon - Sat | 9:00 AM - 6:00 PM'. 'Email' provides the address 'support@floramart.com'. Below this is a form titled 'Send Us a Message' with fields for 'Full Name', 'Email Address', and 'Message'. The browser status bar shows the URL 'localhost:1447/contactPage', the weather '26°C Mostly cloudy', and the date/time '20-02-2025 21:54'.

Figure 8: Contact of the Project

- User dashboard: With a simple and user-friendly interface, you can easily access the following features ,Profile Management: View and update your personal details to keep your account information up to date.Order History: Track your past and current orders, check delivery status, and manage your purchases effortlessly.Logout Option: Securely log out of your account with a single click to ensure your data remains safe.



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

The screenshot shows the homepage of the Floramart website. At the top, there is a navigation bar with links for Home, Plants, Plant Care Tips, About, and Contact. On the right side of the header, there is a user profile dropdown menu with options for Profile, Orders, and Logout. Below the header, the main content area features a large image of a potted plant on a wooden stand. To the left of the plant, there is a section titled "Plants & Flowers" with a sub-section "Choose among a wide variety of plants and flowers" and a "SHOP NOW" button. The background of the main content area is light green.

The screenshot shows the user profile page of the Floramart website. The top navigation bar includes links for Home, Plants, Plant Care Tips, About, Contact, and two buttons for Login and Sign Up. The main content area features a large white rounded rectangle containing a placeholder profile picture icon. Below the icon, the text "Welcome, vaideeahir@gmail.com" is displayed, followed by "Role: user" and a "Logout" button. The background of the main content area is light green. The bottom of the screen shows a Windows taskbar with various application icons and system status indicators.



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

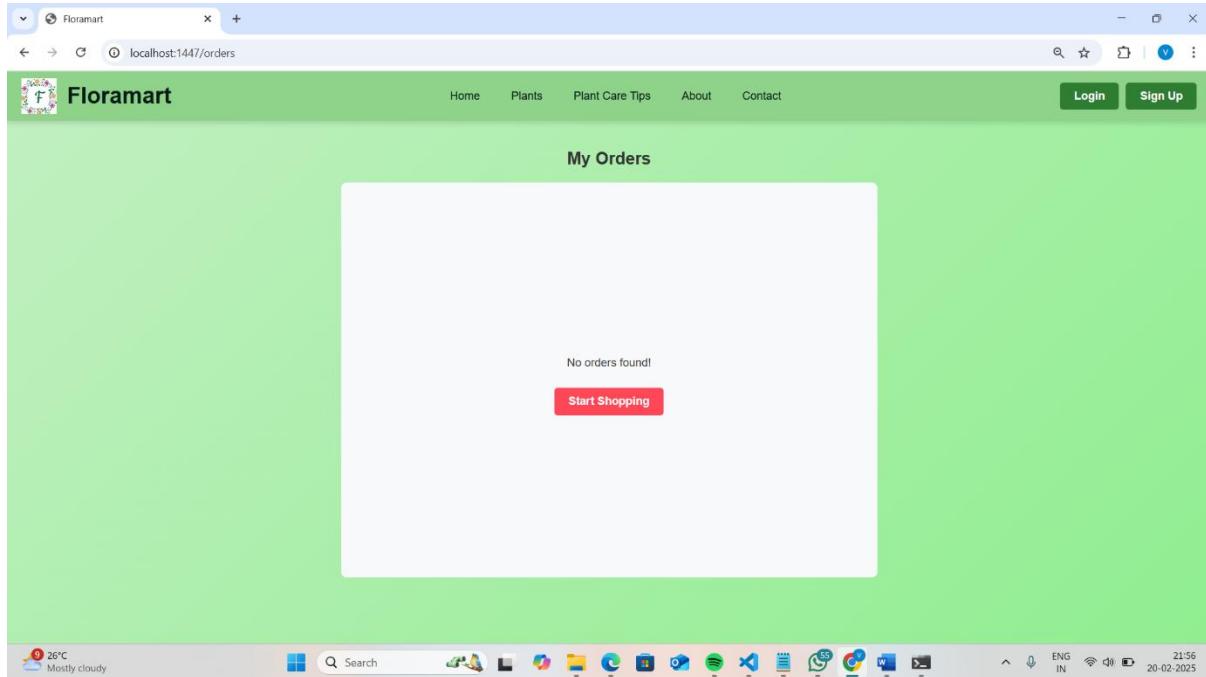


Figure 9: User-Dashboard and Profile, orders ,of the Project

- Admin Dashboard: This interface provides essential functionalities, including, Profile Management: View and update your admin details for a personalized experience. Order Management: Track and manage customer orders efficiently to ensure smooth processing and timely deliveries. Upload Plants: Add new plant listings, update existing ones, and manage inventory with ease. Logout: Securely exit your admin session to maintain data privacy and security.
- **Upload Plants:** This functionality is used only seller . when any new plant available in thay nursery stock , Add new plant listings, update existing ones, and manage inventory with ease.



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

The screenshot shows the Floramart admin interface. At the top, there's a navigation bar with links for Home, Plants, Plant Care Tips, About, Contact, and a user profile icon. A sidebar on the right contains links for Profile, Orders, Upload Plants, and Logout. The main content area features a 'Filters' section with dropdown menus for 'Plant Type' (set to Indoor) and 'Fertilizer and Seeds' (set to All). Below this, there are four cards, each displaying a different potted plant with its price (Rs. 350, Rs. 250, Rs. 250, Rs. 250) and two buttons: 'Add To Cart' and 'Buy Now'. The plants shown are various types of cacti and succulents. The bottom of the screen shows a Windows taskbar with weather information (25°C, Mostly cloudy), search, and other system icons.

The screenshot shows the 'Upload Plant Image' form. The title 'Upload Plant Image' is at the top, followed by a note: 'Use this form to upload plant images along with their name, type, description, and price details.' The form itself has several input fields: 'Plant Name' (with placeholder 'Enter plant name'), 'Product Type' (with placeholder 'Select product type'), 'Plant Type' (with placeholder 'Select plant type'), 'Plant Description' (with placeholder 'Enter a short description'), 'Plant Price (₹)' (with placeholder 'Enter price'), and a file upload section for 'Plant Image' with a 'Choose File' button and a message 'No file chosen'. A large blue 'Upload Plant' button is at the bottom. The rest of the page includes a header with links for Home, Plants, Plant Care Tips, About, Contact, and a user profile icon, and a Windows taskbar at the bottom.

Figure 10: Admin-Dashboard and Profile, orders , upload plants of the Project

- Cart-Page: where you can easily manage your selected items before completing your purchase. This page offers a user-friendly interface with



the following features, Quantity Update: Adjust the quantity of each item using the plus (+) and minus (-)

buttons to match your needs. Remove Items: If you no longer want an item, simply click the "Remove" button to delete it from your cart. Total Price Calculation: The cart automatically updates and displays the total cost based on the selected quantities. Secure Checkout: Once you're ready, click the "Checkout" button to proceed with your order and complete your purchase smoothly.

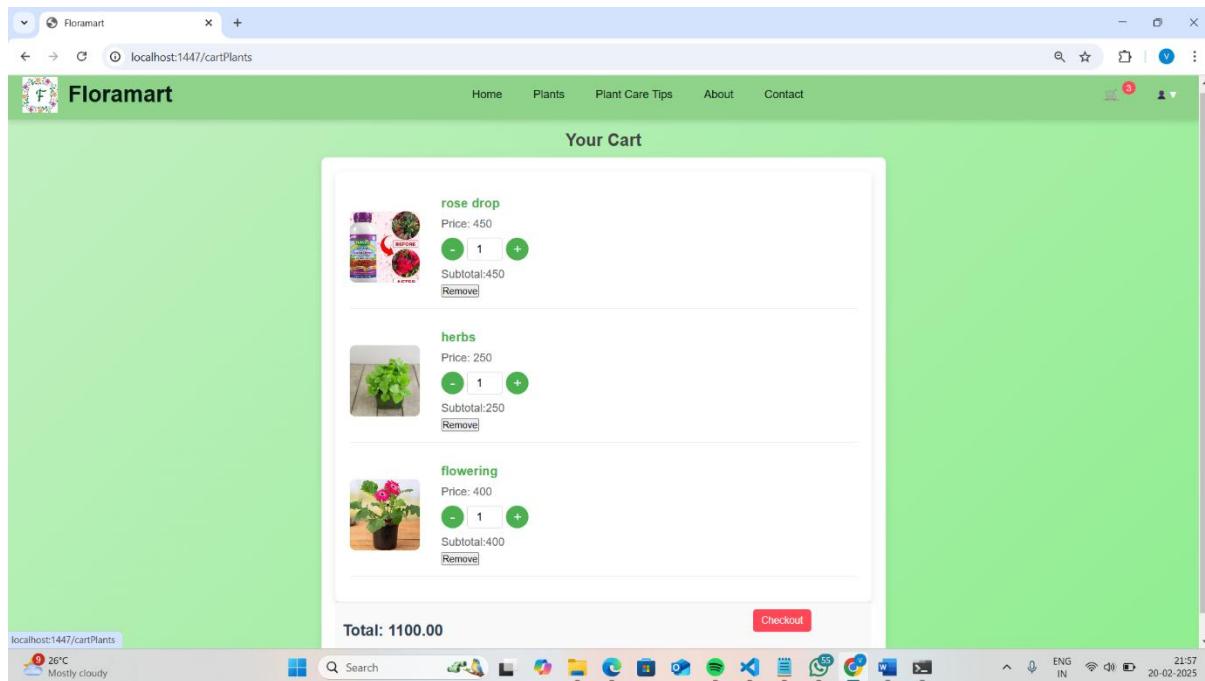


Figure 11: Cart -Page of the Project

- Order Page : This page is ,when user buy-now and checkout than show this page .this page when user order any plants This Payment & Order Confirmation page ensures a smooth and secure checkout process for customers. It includes ,Contact Information: Users provide their email or phone number for updates on their order. Delivery Details: Customers enter their address, city, state, PIN code, and phone number to ensure accurate shipping. Shipping Methods: Options include Standard Shipping



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

Payment Options: Users can choose Cash on Delivery (COD) or Bank Transfer for a hassle-free transaction. Order Summary: Displays total

cost, itemized price breakdown, and shipping charges Billing Address: Option to use the same shipping address or enter a different one. By clicking "Pay Now", the order is placed, and customers receive a confirmation for their purchase. FloraMart ensures secure transactions and reliable delivery services

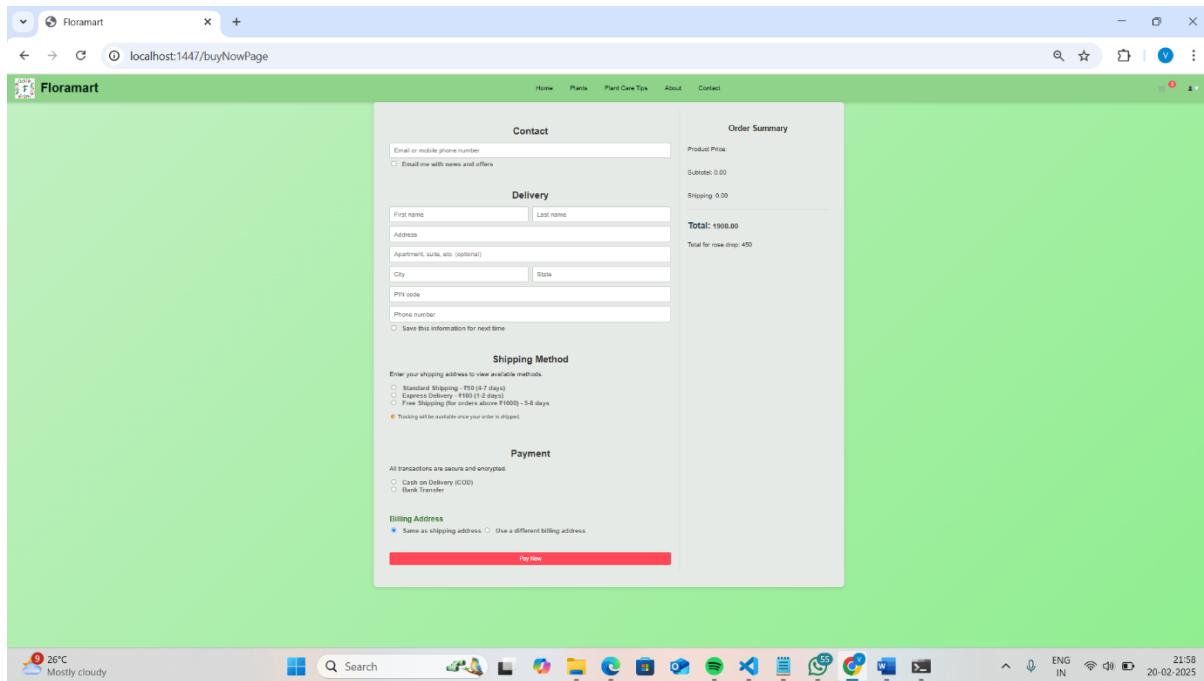


Figure 12: order from of the Project



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

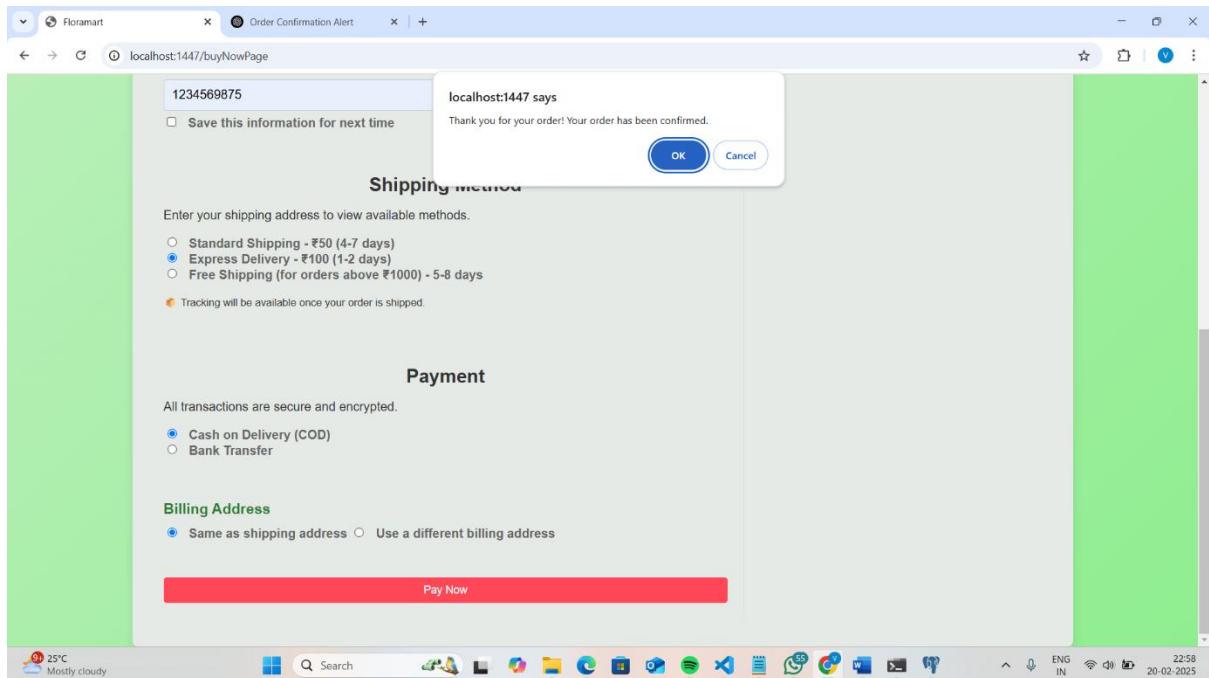


Figure 13: Conform order of the Project

➤ GitHub link:

<https://github.com/VaidehiShyara14/Floramart>



## Learning and Reflection

---

### **Learning and Reflection for FloraMart**

#### **1. Technology Advancements:**

- Flask & PostgreSQL Integration: Improved backend development skills, ensuring a smooth and scalable system.
- E-Commerce Functionalities: Gained expertise in cart management, order processing.
- Frontend Development: Enhanced UI/UX skills using HTML, CSS, JavaScript, for an engaging design.
- Database Management: Optimized PostgreSQL database queries for better performance and efficiency.

#### **2. Management & Operations:**

- Project Planning: Learned to structure the development process effectively, from ideation to execution.
- Time Management: Balanced multiple tasks efficiently to meet project deadlines.
- Problem-Solving Approach: Tackled challenges like debugging, performance optimization, and user experience improvements.

### **Experience Gained from FloraMart**

- Technical Growth: Strengthened skills in web development, database management, and payment gateway integration.
- Business Understanding: Gained insights into e-commerce operations, order tracking, and customer preferences.
- Self-Development: Improved problem-solving abilities, adaptability, and overall efficiency in handling an independent project.
- This experience has enhanced both technical and managerial skills, providing a strong foundation for future projects and career growth.



## Conclusion and Future Scope

---

### **Objectives :**

- Expand Plant Variety: Continuously update the product catalog with rare, exotic, and medicinal plants to cater to a wider audience.
- Enhance Online Payment & Order Tracking: Improve the payment system with multiple gateways, QR code payments, and real-time delivery tracking.
- Implement AI-Powered Recommendations: Introduce AI-based plant recommendations based on user preferences and environmental factors.
- Eco-Friendly Packaging & Sustainability: Focus on sustainable practices by using biodegradable packaging and promoting eco-conscious gardening.
- Mobile App Development: Launch a FloraMart mobile application for better accessibility and on-the-go shopping experience.
- Collaboration with Local Nurseries: Partner with nurseries and plant suppliers to expand product availability and ensure fresh plant deliveries.

### **Achievements:**

- Successful E-Commerce Platform for Plants: Established as a trusted online marketplace for a wide range of plants, fertilizers, and gardening essentials.
- User-Friendly Interface: Developed an intuitive and responsive website for seamless navigation, plant search, and purchase experience.
- Efficient Order Management: Designed a smooth checkout process with cart management, and automated notifications.



*Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)*

- Plant Care Guidance: Introduced plant care tips, seasonal calendars, and watering/fertilizing guidelines for customer education.
- Admin Dashboard for Business Management: Created an admin panel for managing inventory, tracking sales, and analyzing customer preferences.

## **Conclusion:**

FloraMart is a simple and easy-to-use online platform for buying plants. It includes useful features like searching for plants, filtering options, and plant care tips. Customers can place orders smoothly and pay using the Cash on Delivery (COD) method, making it convenient for those who prefer paying in cash.

The admin dashboard helps manage products, orders, and customer details efficiently, ensuring smooth business operations. Although real-time order tracking is not available yet, customers receive updates about their orders, keeping them informed about the delivery status.

Overall, this project makes plant shopping easier, provides helpful plant care information, and ensures a simple and reliable purchase experience. In the future, adding more payment options and advanced order tracking can further improve the platform for customers.

## **Future Scope :**

- Multiple Payment Gateways: Integration of additional payment options like UPI, Credit/Debit Cards, Wallets (Paytm, Google Pay), and international payments for wider accessibility.
- AI-Powered Fraud Detection: Enhancing security by integrating AI-based fraud prevention to detect and block unauthorized transactions.
- Live Order Tracking: Implementing real-time order tracking with GPS integration to provide customers with accurate delivery updates.



*Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)*

- Automated SMS & Email Alerts: Sending instant notifications for payment confirmation, dispatch status, and estimated delivery time. QR Code Payments: Enabling QR code scanning for quick payments at offline pickup points or Flora Mart retail stores.