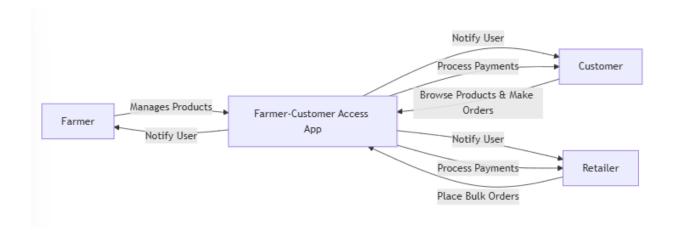
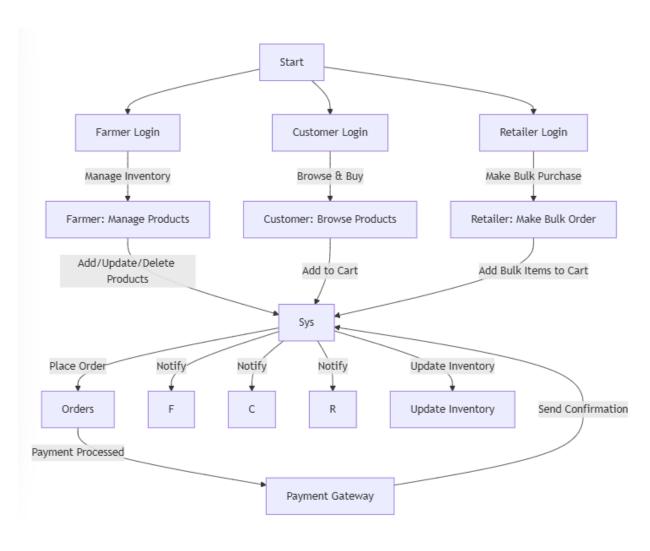
# PROJECT TITLE: FARMER HARVEST CONNECT

#### **Abstract:**

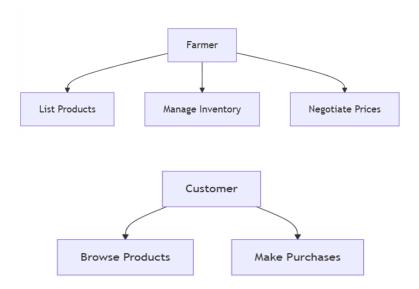
The agricultural supply chain often faces challenges in connecting farmers directly with customers and retailers, leading to inefficiencies and increased costs due to intermediaries. This project aims to address these challenges by developing a mobile application that enables direct access between farmers, customers, and retailers. The platform allows farmers to list their products, negotiate prices with buyers, and manage transactions seamlessly. Customers and retailers can browse a wide range of agricultural products, initiate price negotiations, and complete secure payments, eliminating the need for middlemen. The app also includes features like real-time communication between farmers and buyers, delivery tracking, and a rating system to ensure transparency and build trust. The proposed system ensures ease of use, security, and scalability, benefiting both farmers and consumers. By facilitating direct sales, farmers can reach a larger customer base, while buyers gain access to fresh produce at competitive prices. The application also allows retailers to purchase products in bulk for resale, providing a solution that bridges the gap between producers and consumers in the agricultural market.

# **System Architecture Diagram:**





# **Use Case Diagram:**



# **Module Explanation**

# 1. User Management:

This module focuses on managing users who interact with the system. It typically includes the following functionalities:

- User Registration and Profile Management: Farmers, buyers, suppliers, and admins can create and update their profiles.
- Role-Based Access Control (RBAC): Different users have different permissions, such as farmers being able to list products, buyers placing orders, and admins managing the platform.
- Authentication and Authorization: Ensures secure access, where users log in via credentials or multi-factor authentication (MFA).
- User Support: Offering features like customer support, feedback, and issue resolution.

### 2. Product Management:

This module handles everything related to the listing, display, and organization of agriculture products.

- **Product Listing:** Farmers or sellers can add their agricultural products (like fruits, vegetables, grains, etc.) to the system with relevant details (name, description, price, quantity, etc.).
- **Product Categorization:** Products are organized into categories like cereals, fruits, vegetables, organic, etc., to make browsing easier.
- **Inventory Management:** Sellers can manage stock levels and get notifications about low stock or product expiry.
- **Product Updates:** Sellers can update product details, prices, and availability in real-time.

### 3. Transaction Management:

This module handles all activities related to product purchasing, sales, and payment tracking.

- **Order Processing:** After a buyer places an order, the system tracks the process from order confirmation to delivery.
- Transaction Records: It stores records of every transaction, including order history, payments made, refunds, etc.
- **Payment Gateway Integration:** The system integrates with payment gateways for processing payments securely (e.g., credit cards, mobile payments).
- **Invoicing:** Generates invoices for each transaction, which can be shared with buyers and sellers.

## 4. Delivery Management:

The delivery management module ensures smooth logistics and timely delivery of agricultural products.

- **Shipping Options:** The system provides multiple delivery options (e.g., standard, express, local delivery).
- **Order Dispatch:** Coordination between delivery services and sellers to dispatch goods for delivery.

#### 5. Search and Filter:

This module helps users find products quickly and efficiently.

- **Product Search:** Users can search for products by name, category, price range, or location.
- Advanced Filters: Allows users to filter products based on various parameters such as organic certification, price, quantity, ratings, or region.
- **Search Suggestions:** Auto-complete or suggestions based on commonly searched keywords or popular products.
- **Sorting Options:** Enables sorting results by price, ratings, or newest products.

#### 6. Admin Control Panel:

The admin control panel provides the platform's administrators with tools to manage the overall operations.

- **User Management:** Admins can monitor and manage all users (farmers, buyers, delivery agents, etc.), including deactivating or blocking problematic users.
- **Product Oversight:** Admins can approve or reject products listed by sellers to ensure they meet platform guidelines.

- Analytics and Reporting: Provides detailed reports on sales, product performance, user activity, inventory, etc., to help make informed decisions.
- **Content Management:** Admins can update the website content, banners, and promotional materials.
- **System Settings and Configuration:** Admins can configure system parameters like tax rates, payment settings, and shipping options.

### **Expected Outcome:**

The expected outcomes of implementing the modules in an agriculture product management system include enhanced user experience through secure and efficient user management, streamlined product listing and discovery, and optimized transaction processes for smoother payments and invoicing. The delivery management system ensures timely and trackable deliveries, while advanced search and filter options improve product visibility and user engagement. Admin control panels enable efficient platform management, data-driven decision-making, and quality control. Overall, these modules drive increased sales, customer satisfaction, operational efficiency, market expansion, and scalability, ensuring long-term success for both buyers and sellers.















#### carrot

healthy
In Stock: 12

Rs 10.00 Add to Cart



### cauli fllower

Cripy and healthy

In Stock: 15

Rs 40.00 Add to Cart

#### **Top Indian Agricultural Websites**



#### DA & FW ORGANISATION

The DA & FW is organized into 28 Divisions and has five attached offices and twenty-one subordinate offices which are spread across the country for coordination with state level agencies and implementation of Central Sector Schemes in their respective fields.



#### Department of Agriculture - Farmers Welfare

Agriculture continues to be the most predominant sector of the State economy, around 60 percent of the population is engaged in Agriculture and allied activities for their livelihood. The State has as an area of 130.33 Lakh ha.. with a gross cropped area of around 59.42 lakh ha..



#### TNAU AGRITECH

The Tamil Nadu Agricultural University (TNAU) came into being on June 1, 1971. However, it had its genesis from establishment of an Agricultural School at Saidapet, Chennai, Tamil Nadu, as early as 1868 and it was later relocated at Coimbatore.