American International University-Bangladesh (AIUB)

Department of Computer Science

Faculty of Science & Technology (FST)

PROJECT TITLE

AgriConnect: Connecting Micro Entrepreneurs With Farmers

By

Semester: Spring_24_25		**Section: H**	**Group Number: 01**	
SN	Student Name	Student ID	Contribution (CO4)	Individual Marks
1.	Ishan, Ibnul Ishtiak	22-49545-3	25%	
2.	Siddique, Md Abu Bakar	22-48322-3	25%	
3.	Md. Ibtihazaman	22-49153-3	25%	
4.	Md. Anisur Rahman	22-49553-3	25%	

The project will be evaluated for the following Course Outcomes

CO3: *Select* appropriate software engineering models, project management roles, and their associated skills for the complex software engineering project and evaluate the sustainability of developed software, taking into consideration the societal and environmental aspects	Total Marks	
Appropriate Process Model Selection and Argumentation with Evidence	[5 Marks]	
Evidence of Argumentation Regarding Process Model Selection	[5Marks]	
Analysis of the impact of societal, health, safety, legal, and cultural issues	[5Marks]	
Submission, Defense, Completeness, Spelling, grammar, and Organization of the Project report	[5Marks]	
CO4: *Develop* a project management plan to manage software engineering projects following the principles of engineering management and economic decision process	Total Marks	
Develop the project plan, its components of the proposed software products	[5Marks]	
Identify all the activities/tasks related to project management and categorize them within the WBS structure. Perform detailed effort estimation correspond with the WBS and schedule the activities with resources	[5Marks]	

Identify all the potential risks in your project and prioritize them to overcome these risk factors.	[5Marks]	

Description of Student's Contribution in the Project work

Student Name: Ishan, Ibnul Ibnul Ishtiak
Student ID: 22-49545-3
Contribution in Percentage (%): 25%
Contribution in the Project:

- Project Proposal
- Requirement Analysis (Authentication)
- OO Diagram (Class Diagram)
- UI/IX design (Admin)
- Test Case (Admin)
- WBS
- Gant Chart (Short + Detailed)
- EVA

_____
Signature of the Student

Student Name: Siddique, Md Abu Bakar
Student ID: 22-48322-3
Contribution in Percentage (%): 25%
Contribution in the Project:

- System Analysis
- Project Proposal
- Requirement Analysis (Admin)
- OO Diagram (Use Case)
- UI/IX design (Authentication)
- Test Case (Authentication)
- COCOMO
- EVA
- RMM

_____
Signature of the Student

Student Name: Md. Ibtihazaman
Student ID: 22-49153-3
Contribution in Percentage (%): 25%
Contribution in the Project:

- Project Proposal
- Requirement Analysis (Consumer)
- Model Selection
- OO Diagram (Activity Diagram)
- UI/IX design (Consumer)
- Test Case (Consumer)

- Gant Chart (Short+Detailed)
- EVA
- RMM

_____
Signature of the Student

Student Name: Md. Anisur Rahman
Student ID: 22-49553-3
Contribution in Percentage (%): 25%

Contribution in the Project:

- Project Concept
- Requirement Analysis(Farmer)
- OO Diagram(Sequence Diagram)
- UI/IX design (Farmer)
- Test Case (Farmer)
- Gant Chart (Short+Detailed)
- COCOMO
- RMM

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Signature of the Student

Rubric for Project Assessment (CO3)

Criteria	Marks distribution (Max 3X5= 15)				Acquired Marks
	Inadequate (1-2)	Satisfactory (3)	Good (4)	Excellent (5)	
Selection of Software Engineering Models	Does not articulate a position or argument of choosing appropriate model. Does not present any evidence to support the arguments for the choice of the model	Articulates a position or argument for choosing models that is unfocused or ambiguous. Presents incomplete/vague evidence to support argument for model choice	Articulates a position or argument of choosing models that is limited in scope. Does not present enough evidence to support the argument for the choice of the model	Clearly articulates a position or argument for the choosing software engineering models. Presents sufficient amount of evidence to support argument for the model selection	
Role identification and Responsibility Allocation	The project has poor project management plans for identifying roles and assigning the responsibilities	Identify few roles in the project management where some of the roles are left alone with any project responsibilities	Identify most of the roles in the project management and assign their responsibilities	Well planned project with proper role identification and responsibility allocation in the project management activities	
Impact identification					
Formatting and Submission	Project report is not complete and Several errors in spelling and grammar. Present a Confusing	Some errors in spelling and grammar. Some problems	Few errors in spelling and grammar. Presents most of the details in	Project report is complete and No errors in spelling and grammar. Consistently	

	organization of concepts, supporting arguments, and real-life example. Sentences rambling, and details are repeated.	of organizing the answer in a logical order of defining, elaborating, and providing real-life examples.	a logical flow of organization in definition, details, and example.	presents a logical and effective organization of definition, details, and real-life example of the topic.	
				Acquired marks:	
				CO Pass / Fail:	

Background & Problem Domain

The agricultural sector in many developing regions encounters significant challenges within its supply chain structure. Farmers frequently face limited market access, exploitation of prices by middlemen, and insufficient financial resources to improve their productivity. At the same time, micro-entrepreneurs, who have the potential to bridge the gaps in the agricultural value chain, often lack the necessary connections, resources, and knowledge to effectively collaborate with farmers.

Insights drawn from companies like iFarmer and Agroshift reveal a considerable opportunity to establish a platform that links farmers with micro-entrepreneurs. Such a platform could offer vital services, resources, and market access, thereby promoting a more efficient and equitable agricultural ecosystem.

Category – A

Root Cause of the Problem

Several interconnected issues plague the current agricultural ecosystem:

1. **Fragmented Market Access**: Farmers have limited visibility into market demand and prices, forcing them to sell at whatever price intermediaries offer.
2. **Multiple Layers of Intermediaries**: The presence of numerous middlemen in the supply chain results in farmers receiving only a small fraction of the final selling price while consumers pay inflated costs.
3. **Post-Harvest Losses**: Inadequate storage facilities and inefficient transportation lead to 30-40% post-harvest losses.
4. **Limited Access to Finance**: Small-scale farmers struggle to access capital for investing in better farming techniques and technologies.
5. **Information Asymmetry**: Farmers lack knowledge about modern farming practices, market trends, and optimal timing for planting and harvesting.

6. **Untapped Potential of Micro-Entrepreneurs**: Many small-scale entrepreneurs who could provide valuable services to farmers lack the platforms and resources to connect with them.

Process Model

The **Agile Model** is the software process model for the "AgriConnect" project because it allows the flexibility, fast changes, and consistent teamwork, which is important for this project that has different type of users and needs that evolve over time. Agile operates in short cycles or sprints, meaning updates can be quickly made based on real-time feedback from farmers and consumers. As the needs of the users are likely to evolve, it's important to be able to make quick adjustments. With Agile, key features like product listings and order management can be released early, and improvements can be made as development continues. Additionally, Agile encourages continuous communication with users to gather feedback, ensuring that the platform is always evolving to meet their needs.

Other models, like the **Waterfall Model**, follow a rigid, step-by-step approach where each stage must be completed before moving on to the next. This makes it difficult to adjust once the process is in motion, which isn't ideal for this project, where user needs are likely to change over time.
The **V-Model** is an extension of the waterfall model, where each phase of development has a corresponding testing phase. But it still lacks the flexibility that Agile provides, the rigidity of no backtracking or changes once a phase is completed makes it difficult to select this model for this project.
The **Prototyping Model** allows for early versions of the system, but it can lead to delays as prototypes are repeatedly changed. Agile, on the other hand, handles changes in a more organized way, using well-defined sprints to keep the project on track.
The Incremental Model develops the system in smaller sections, but it needs careful planning upfront and does not handle changes as easily. On the other hand, Agile allows for continuous feedback and quick updates through its sprints, making it more responsive to evolving user needs.

Functional Requirements

Authentication System Requirements

1. Login Page

Functional Requirements

- Users (admin, farmers, consumers) can log in using email/phone and password.
- The system verifies credentials against the database before granting access.
- Error messages appear for incorrect login details.
- "Remember Me" option allows users to stay logged in.
- "Forgot Password" link directs users to the password reset page.

- Successful login redirects users to their respective dashboards (admin, farmers, consumers).

Non-Functional Requirements

- The login page must load within 5 seconds for a smooth experience.
- Data transmission must be secure using encryption.
- The page must be responsive (work on desktops, tablets, and mobiles).
- Error messages should be clear and user-friendly to guide users.

Project Development Constraints

- Must use firebase Authentication
- The system must differentiate between Admin, Farmer and Consumer logins
- Save previous login information

2. Sign-up Page

Functional Requirements

- Users create an account by providing their name, email, phone number, address and password, currently cultivating which crops (for farmers), Land quantity (for farmers), NID(for farmers).
- Option to select Farmer or Consumer role during registration.
- Email/phone verification via OTP.
- Password must follow security rules: At least 8 characters, one uppercase letter, one number, and one special character.
- Users must agree to terms and conditions before signing up.
- Upon successful signup, users are redirected to their dashboard.

Non-Functional Requirements

- Signup must be completed within short time for an efficient user experience.
- OTP verification should be delivered within 10 seconds.
- Secure data storage using encryption techniques.
- Intuitive user interface for easy navigation.
- Fully responsive design for desktop, tablet, and mobile.

Project Development Constraints

- User roles (Farmer, Consumer) must be properly defined.
- Integration with custom email service.

- Follow data protection laws.

3. Forgot Password Page

Functional Requirements

- Users enter their registered email or phone number to reset their password.
- The system sends an OTP or password reset link via email/phone.
- Users enter the OTP and create a new password (following security rules).
- A success message confirms the password has been changed.
- Users can now log in with the new password.

Non-Functional Requirements

- The page must be secure to prevent unauthorized access.
- OTP should be delivered within 10 seconds for quick password recovery.
- The entire process should be **completed within 1 minute**.
- The page must work smoothly on all devices (desktop and mobile).

Project Development Constraints

- Limit password reset attempts per user to prevent spam.
- Requires email/SMS API integration (e.g., Firebase, Twilio).
- Provide clear success/error messages to guide the user.

Admin Requirements

Dashboard

Functional Requirements

- System shall display total number of active farmers and consumer with trend graphs
- System shall show transaction history
- System shall display top products by transaction volume
- System shall show user acquisition metrics with conversion rates from registration to active usage
- System shall display alerts for critical issues (payment failures, system errors, unusual activity)
- System shall provide quick access buttons for common administrative tasks
- System shall provide access to create a new admin account
- System shall provide access to fixed each product price, minimum quantity

Non-Functional Requirements

- Dashboard shall fully load within 5 seconds on standard admin workstations
- Dashboard shall automatically refresh data every 5 minutes without user intervention
- Dashboard shall be available 99.9% of the time
- Dashboard shall support customization of displayed widgets and metrics
- Dashboard shall be optimized for minimum 1366x768 screen resolution

Project Development Constraints

- Dashboard development must be completed within 2 weeks
- Dashboard must support offline functionality for critical metrics
- Dashboard must implement caching mechanisms to reduce database load
- Dashboard must not consume more than 50MB of client memory

User Management (Admin)

Functional Requirements

- The system displays a searchable and filterable list of all registered users.
- The system allows searching users by name, email, phone, ID, location, and user type.
- The system displays detailed user profile information, including verification status.
- Admins can edit user profile information and update verification status.
- Admins can activate, deactivate, or suspend user accounts.
- The system provides user activity logs, including login history, transactions, and listings.
- Admins can reset user passwords and send verification emails.
- Admins can manually verify user identities and documents.
- Collectors take products from farmers and deliver them to customers who placed the order.

Non-Functional Requirements

- User search shall return results within 2 seconds for any search criteria
- User management interface shall log all admin actions for audit purposes
- System shall mask sensitive user data by default with explicit action to reveal
- User management functions shall be accessible only to admins with appropriate permissions

Project Development Constraints

- User management module must be developed within 3 weeks
- Module must implement role-based access control with at least 3 privilege levels(Director, GM, Collector)
- Module must maintain immutable audit logs for all user management actions
- Implementation must comply with relevant data protection regulations

Product Research (Product Management)

Functional Requirements

- System shall display a searchable and filterable list of all product/service listings
- System shall allow searching products by name, category, price range
- System shall display detailed product information including images and descriptions
- System shall allow admins to approve, reject, or flag products for review
- System shall allow admins to edit product information and categories
- System shall provide analytics on product performance (views, sales, ratings)
- System shall allow admins to create and manage product categories
- System shall allow admins to feature specific products on the marketplace

Non-Functional Requirements

1. Product search shall return results within 2 seconds for any search criteria
2. Product management interface shall log all admin actions for audit purposes
3. System shall support batch operations for up to 5,000 products at once
4. Product analytics shall be updated at least hourly for accurate reporting

Project Development Constraints

1. Product management module must be developed within 3 weeks
2. Module must implement content moderation tools for product listings
3. Module must support image processing and optimization for product photos
4. Implementation must include spam detection algorithms for product listings

Reports

Functional Requirements

- System shall generate user acquisition reports by date range and user type
- System shall generate transaction reports showing volume, value, and fees collected
- System shall generate product performance reports by category and region

- System shall generate user engagement reports showing active users and session data
- System shall generate financial reports including revenue and payment processing
- System shall allow admins to create custom reports with selectable metrics and filters
- System shall allow exporting reports in multiple formats (PDF, CSV, Excel)

Non-Functional Requirements

- Standard reports shall generate within 5 seconds for any date range
- Custom reports shall generate within 30 seconds of request
- System shall support concurrent report generation for up to 10 admins
- Report data shall be clearly labelled with timestamp and data freshness
- Reports shall be accessible and printable from all modern browsers

Project Development Constraints

- Reporting module must be developed within 4 weeks
- Module must implement server-side processing for report generation
- Implementation must include data caching mechanisms for frequent reports
- Module must support data anonymization for sensitive information
- Module must limit resource usage to prevent report generation from impacting system performance

Farmer Requirements

Order Management

Functionality:

- Farmers can place orders for seeds, fertilizers, pesticides, and equipment directly through the platform.
- Real-time updates on the status of farm supply orders.
- Farmers can review their previous orders to assist with future planning.
- Farmers have the ability to cancel or modify orders before they are processed.
- Generate detailed invoices for all purchased farm supplies.
- Farmers can monitor their payment history

Non-Functionality:

- Orders should be confirmed instantly, with notifications sent via email or SMS.

- Ensure that there are no unnecessary delays during the order placement and checkout process.
- Allow farmers to quickly reorder frequently used supplies.

Project Development Constraints (PDC):

- Orders must be stored securely with encryption.
- Connect with delivery tracking systems for farm supply orders.
- Capable of handling large orders from multiple farmers simultaneously without delays.

Selling Products to Consumers

Functionality:

- Farmers list crops, livestock, and other products with details like price, quantity, and availability.
- Collectors can add farmers' products to the system based on availability but do not act as buyers.
- Highlights high-demand items based on market trends.
- Provides harvest dates, quality ratings, and pickup/delivery locations.

Non-Functional Requirements:

- Instant product availability and quick loading times.
- Clear pricing, stock, and product details for easy browsing.

Project Development Constraints (PDC):

- Real-time updates for listings and availability.
- Secure system for flexible yet fair pricing.
- Supports growing product listings and transactions.

Order and Payment Management

Functionality:

- Farmers receive orders directly from consumers.
- Real-time updates from placement to delivery.
- Secure transactions via payment gateways.
- Farmers can track sales, revenue, and pending payments.
- Farmers can modify or cancel unconfirmed orders.

- Farmers hand over products to collectors for delivery.

Non-Functional Requirements:

- Orders are confirmed immediately with notifications.
- No delays in order processing or payments.
- Clear details on payments and pending amounts.

Project Constraints:

- Encrypted order and payment data.
- Real-time status tracking.
- Fast, accurate payment handling.

Transaction History

Functionality:

- **Sales Overview:** View total revenue, sold products, and buyer details.
- **Downloadable Reports:** Export sales data in CSV or PDF format.
- **Transaction Filtering:** Sort by date, product, buyer, or payment status.
- **Detailed Insights:** Access product, quantity, price, buyer, and payment details.
- **Revenue Analytics:** Visual reports on sales trends and top-selling items.

Non-Functional Requirements:

- **Fast Data Retrieval:** Quick access to transaction history.
- **Accurate Records:** Ensure precise financial tracking.
- **User-Friendly Layout:** Clear, organized display for easy navigation.

Project Constraints:

- **Secure Storage:** Encrypted financial data protection.
- **Scalable Management:** Handles large transaction volumes efficiently.
- **Efficient Report Downloads:** Quick exports, even for extensive records.

Agricultural Expert Support

Functionality:

- Advice Requests: Farmers can seek expert guidance on crops, soil, and pest control.
- Real-Time Chat: Instant expert support for urgent farming issues.
- Scheduled Consultations: Book expert appointments for detailed advice.

- Knowledge Base: Access expert-written articles, guides, and tutorials.

Non-Functional Requirements:

- Fast Responses: Experts should reply promptly to inquiries.
- Availability Display: Show open consultation slots to avoid conflicts.
- Practical Advice: Ensure responses are clear, actionable, and relevant.

Project Constraints:

- Role-Based Access: Limit expert consultation features to authorized users.
- Reliable Chat System: Ensure smooth real-time communication.
- Updated Resources: Regularly refresh knowledge base content.

Consumer Requirements

Dashboard Requirements

Functionality:

1. Users will have a personal dashboard displaying recent orders, product recommendations, and saved items.
2. Users can track order status (e.g., payment confirmation, delivery updates).
3. Quick access to the cart, orders, ratings, and support will be available.
4. Users will receive notifications for discounts, promotions, and restocked items.
5. The dashboard will have a simple, user-friendly design for efficient navigation.

Non-Functionality:

1. The dashboard must load within 5 seconds for smooth user experience.
2. The system must support real-time updates for new orders and notifications.
3. The dashboard must be responsive to different screen sizes.
4. The interface should be user-friendly, with easy access to all features.

Project Development Constraints (PDC):

1. The dashboard will dynamically retrieve user-specific data from the database.
2. Firebase Authentication will be used for personalized access.
3. Data caching should be implemented to minimize load times.
4. The dashboard should distinguish between different user roles.

Products

Functionality

- Consumers can browse a categorized selection of agricultural products which are available for purchase.
- Each product list shows clear images, descriptions, prices, and availability status.
- Users can search for products using a keyword-based search and apply filters to refine results.
- Clicking on a product will open a detailed page with product specifications and seller information.
- New arrivals and trending products will be highlighted to attract buyers.

Non-Functionality

- The product list must be optimized to load quickly to prevent unnecessary delays.
- The system should allow smooth navigation between different product categories.
- Images should be high resolution but compressed for fast loading.
- The UI should ensure a clear and structured product display for better usability.
- The product database should be scalable to accommodate increasing items without slowing down performance.

Project Development Constraints (PDC)

- Product details must be retrieved dynamically from the database to ensure up-to-date information.
- The search and filter system should be linked with real-time queries for accuracy.
- A caching mechanism should be in place to speed up frequently accessed product pages.
- The browsing system must be efficient in handling large product inventories and high user traffic.

Cart

Functionality

- Consumers can add products to their shopping cart and modify quantities before confirm the order.
- The cart will automatically update total costs, including applicable taxes and discounts.
- Users can save their cart items for later purchases, even after logging out.
- The cart will have a direct checkout option to proceed with payment instantly.
- Items in the cart should reflect real-time stock availability to prevent order failures.

Non-Functionality

- The cart should be updated instantly when users add or remove items, without requiring a page reload.
- It must retain selected products even if users exit the website and return later.
- The UI should be simple and visually organized, making it easy to manage purchases.
- The system should ensure fast processing of cart updates, even under high user load.

Project Development Constraints (PDC)

- The cart should use session-based storage for temporary data and database storage for long-term data.
- Security measures must be implemented to prevent price manipulation and fraudulent activity.
- The system should be capable of handling large numbers of simultaneous shopping sessions.
- The checkout process should be seamlessly integrated with payment processing and order management.

Orders

Functionality

- Consumers can place orders directly from their cart after selecting payment options.
- Users can track order status updates in real-time from processing to delivery.
- The order history section will allow users to view past purchases for reference.
- Customers can cancel or modify orders before they are shipped.
- A detailed invoice will be generated automatically for each completed order.

Non-Functionality

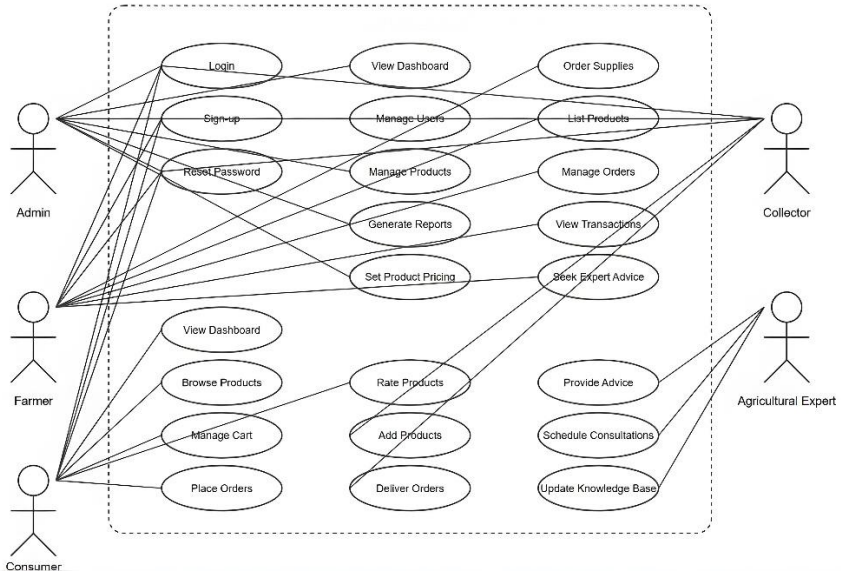
- Order confirmation must be instant, with an email or phone message sent to the user.
- The system should support real-time tracking of delivery status.
- The order process must be smooth and free of unnecessary delays.
- Users should be able to reorder previous purchases with a single click.

Project Development Constraints (PDC)

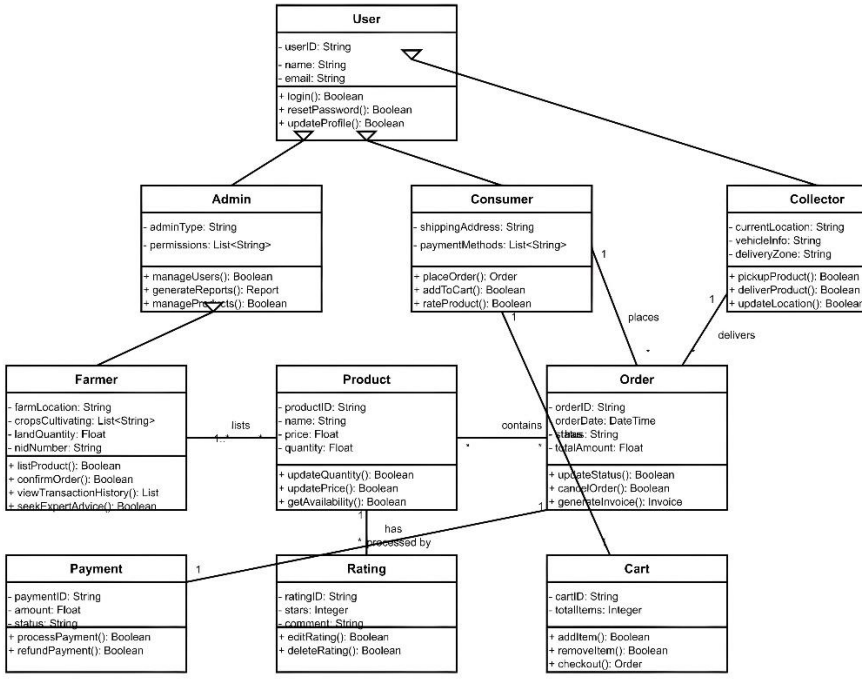
- Orders should be stored securely in the database with proper encryption.
- Payment verification must be completed before finalizing an order.
- The system should be integrated with external logistics services for delivery tracking.
- Order data must be structured to allow easy retrieval for reporting and analytics.
- The order management system should support refunds and returns efficiently.

OOAD Diagrams

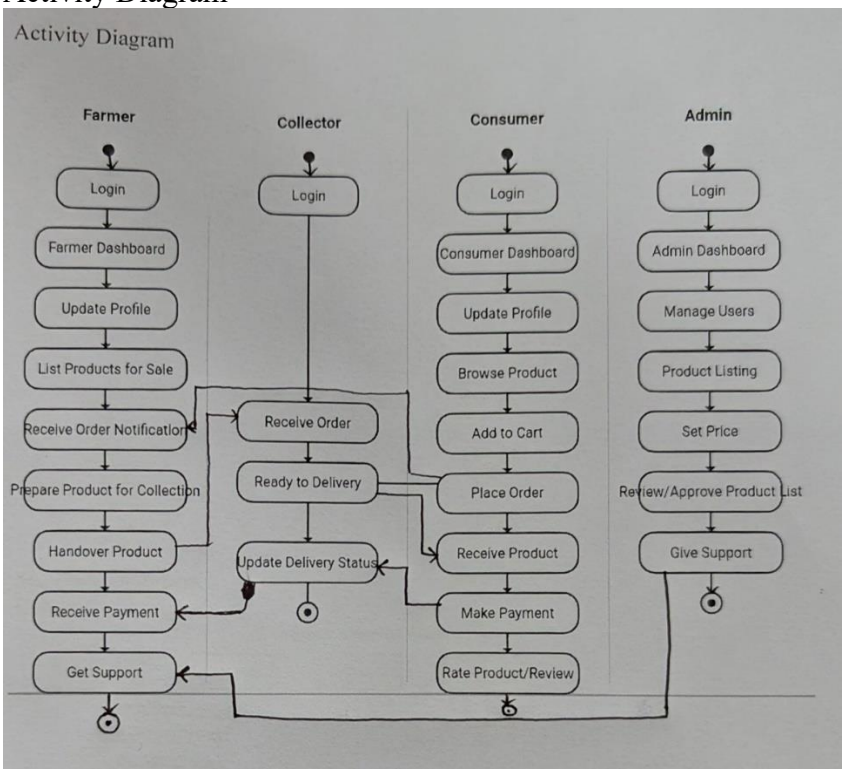
Use Case Diagram



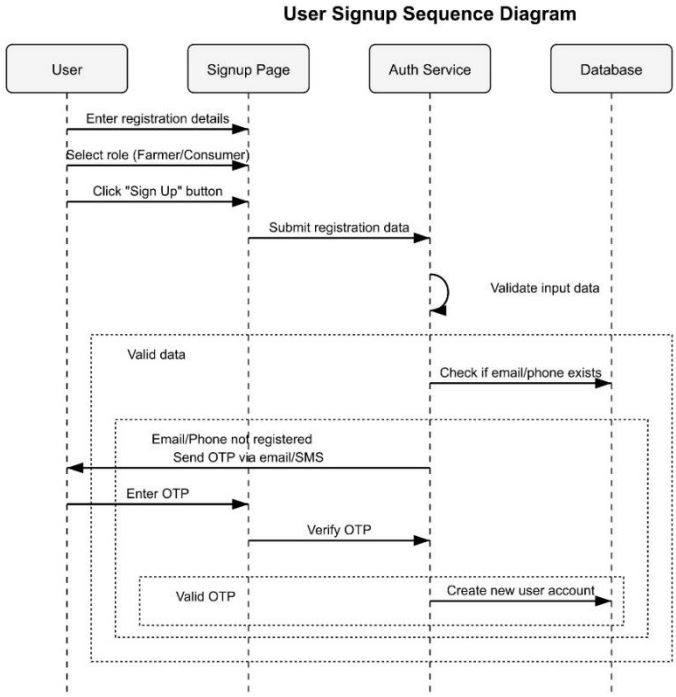
Class Diagram



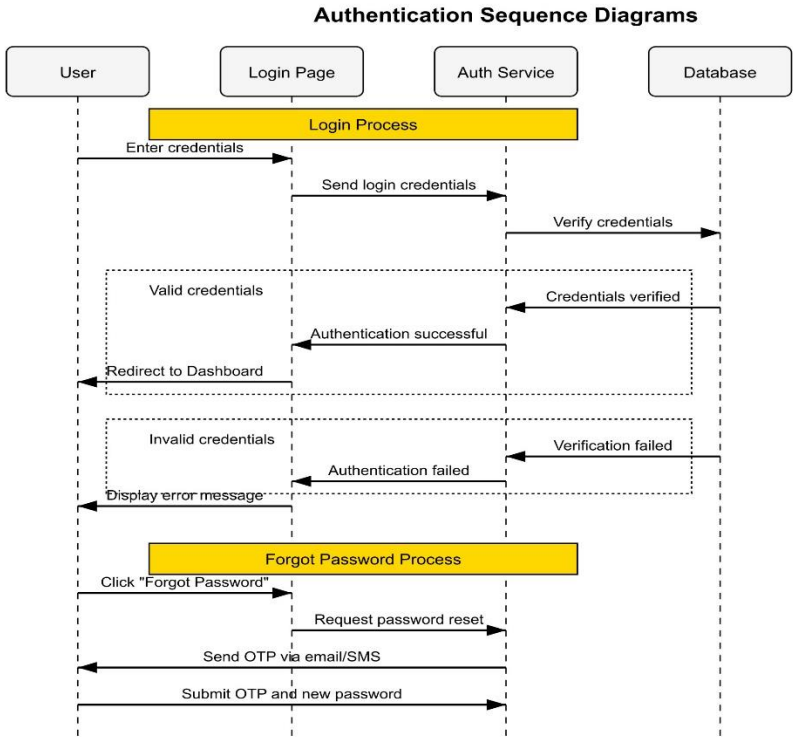
Activity Diagram



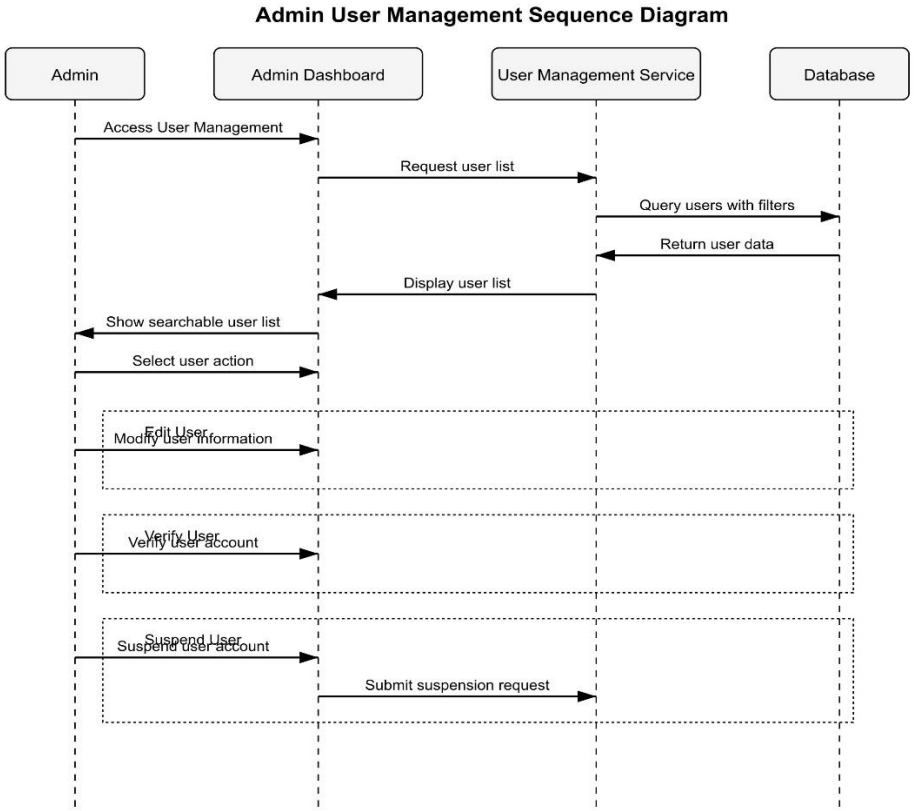
Sequence Diagrams
User



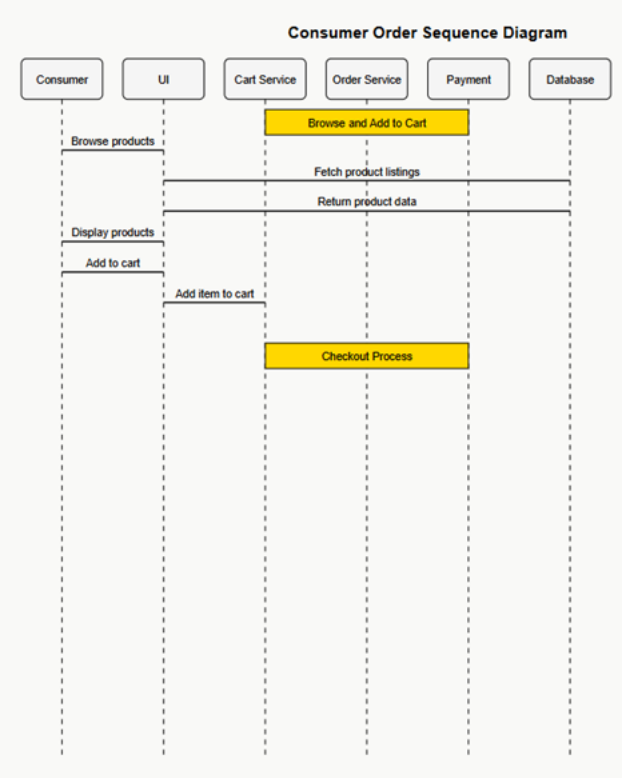
Authentication



Admin



Consumer

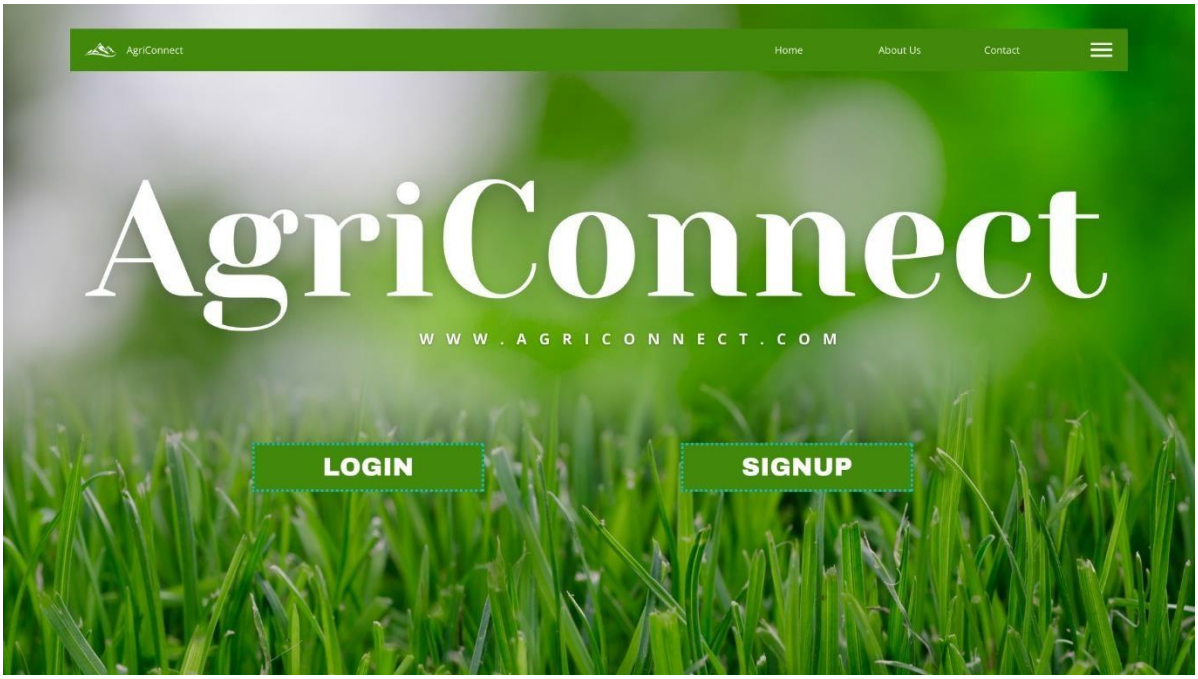


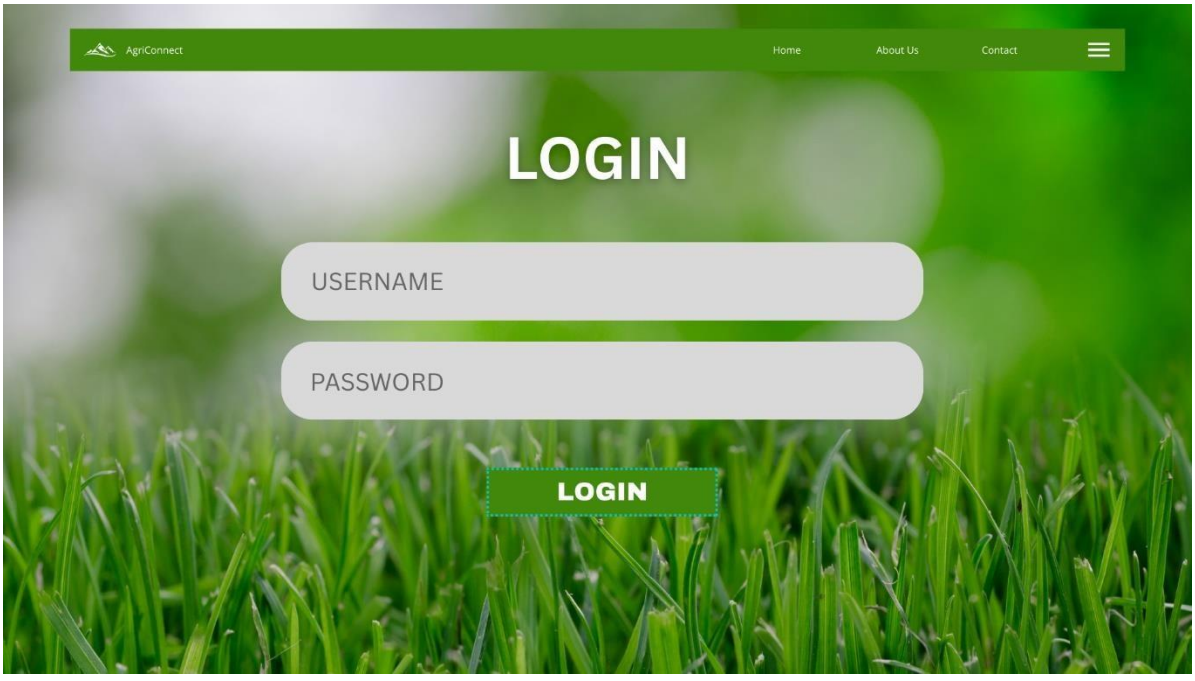
Rubric for Project Assessment (CO4)

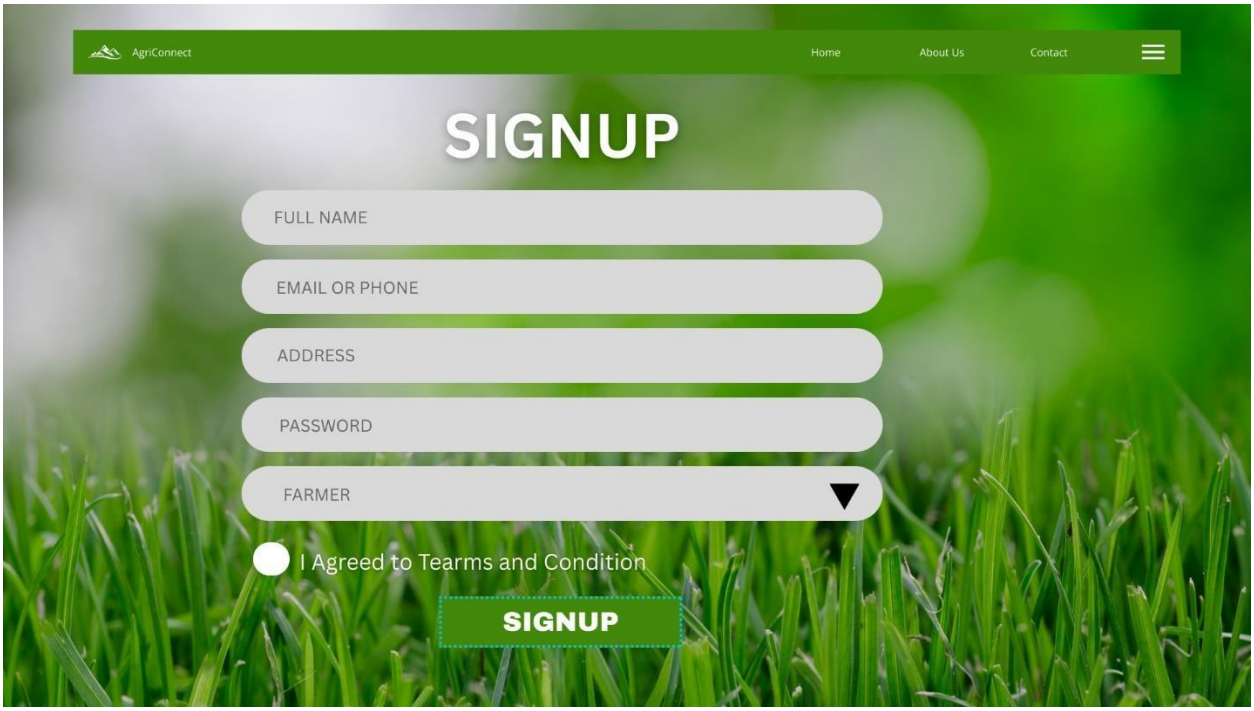
Marking Criteria	Marks Distribution (Maximum 3X5=15)				Acquired Marks
	Inadequate (1-2)	Satisfactory (3)	Good (4)	Excellent (5)	
Project Planning	No background information regarding the project is given; project goals and benefits are missing.	Insufficient background information is given; project goals and benefits are poorly stated	Sufficient background information is given; the purpose and goals of the project are explained.	Thorough and relevant background information is given; project goals are clear and easy to identify.	
Effort Estimation and Scheduling	Student vaguely discuss the impact of societal, health, safety, legal and cultural issues in their project	Student provided with partial relevance to the impact of societal, health, safety, legal and cultural issues in their project	Student fairly provided the analysis to the impact of societal, health, safety, legal and cultural issues in their project	Student comprehensively provided the analysis to the impact of societal, health, safety, legal and cultural issues in their project	
Risk Management	Ambiguous representative example.	Partially identify / indicate towards real-life example.	Real-life example is fairly connected towards the definition.	Comprehensively defend with real life example.	
				Acquired Marks:	
				CO Pass / Fail:	

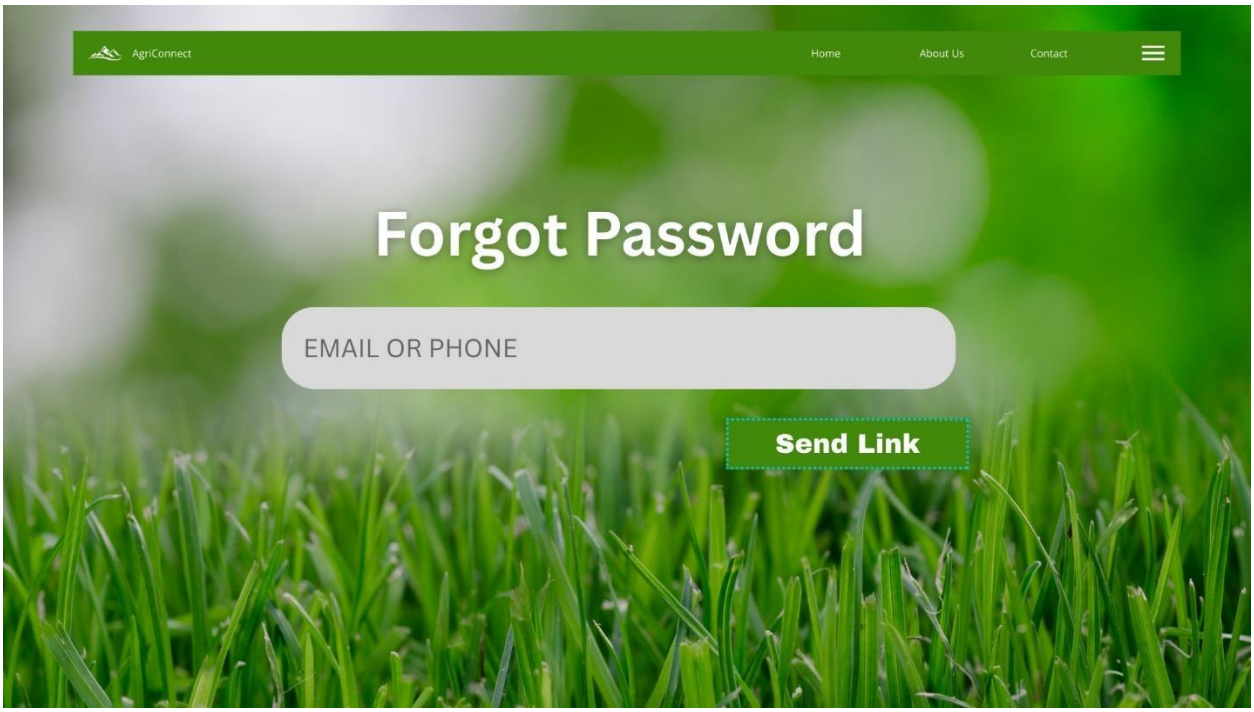
UI UX Design

1. Authentication

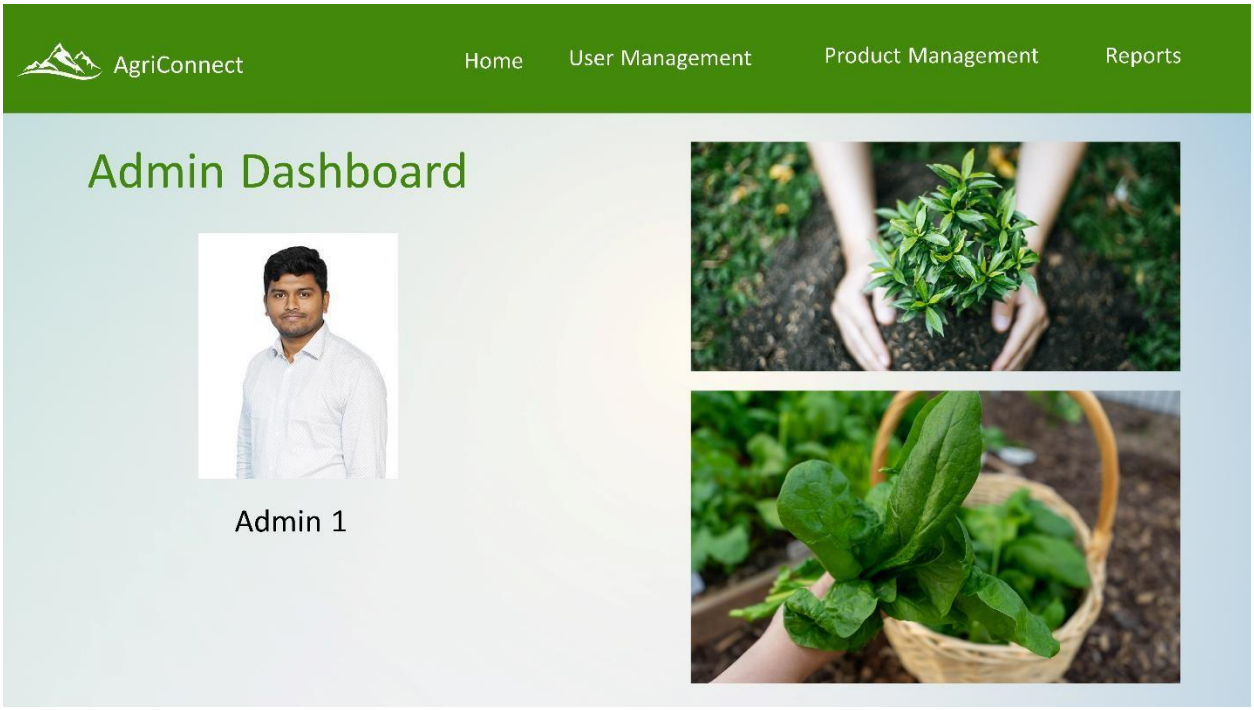





AgriConnect
Home
About Us
Contact
SIGNUP
FULL NAME
EMAIL OR PHONE
ADDRESS
PASSWORD
FARMER
I Agreed to Tearms and Condition
SIGNUP


AgriConnect
Home
About Us
Contact
Forgot Password
EMAIL OR PHONE
Send Link

2. Admin

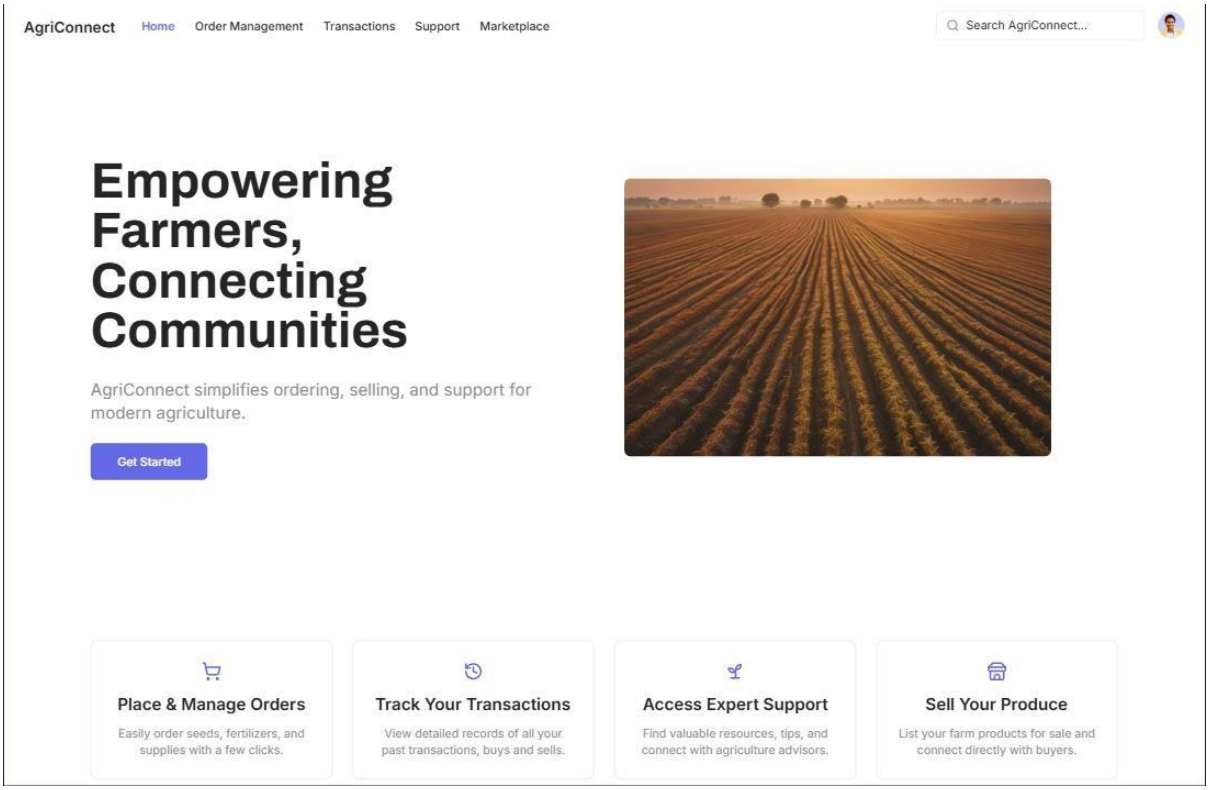

AgriConnect
Home
User Management
Product Management
Reports
Admin Dashboard
Admin 1

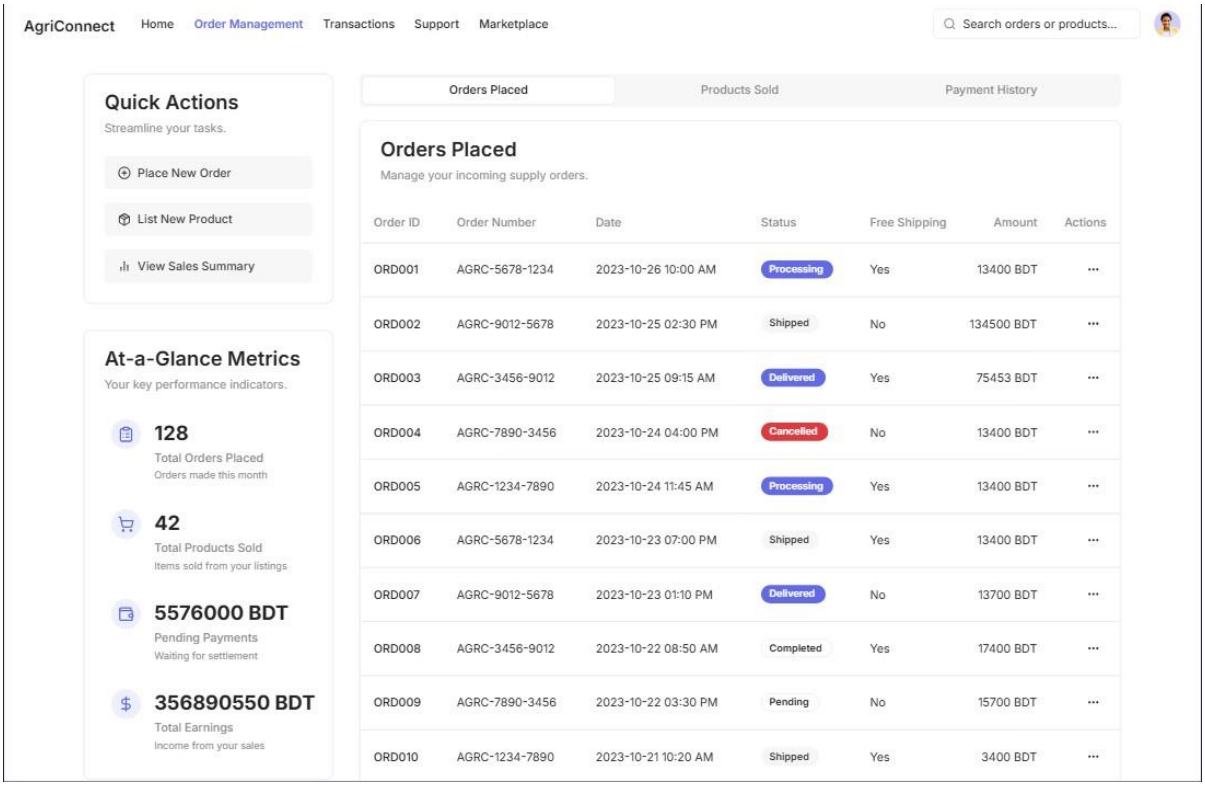

AgriConnect
Product Management
Chinigura Rice Premium
Chinigura Rice Premium (Special Offer)
Paijam Rice (Boiled)
Athash Rice (Boiled) ± 50 gm
Potato Regular (± 50 gm)
Lal Alu (Red Potato Cardinal) ± 50 gm
Potato Regular (± 25 gm)
Boro Alu (Big Diamond Potato) ± 50 gm
Add to bag
Request Stock
Lal Peyaj (Onion Red Imported) ± 50 gm
Deshi Peyaj (Local Onion) ± 25 gm
Peyaj Pata (Spring Onion) ± 12 gm
Mango Gobindobhog ± 50 gm
Mango Gopalbhog ± 50 gm
Guava Premium (± 50 gm)

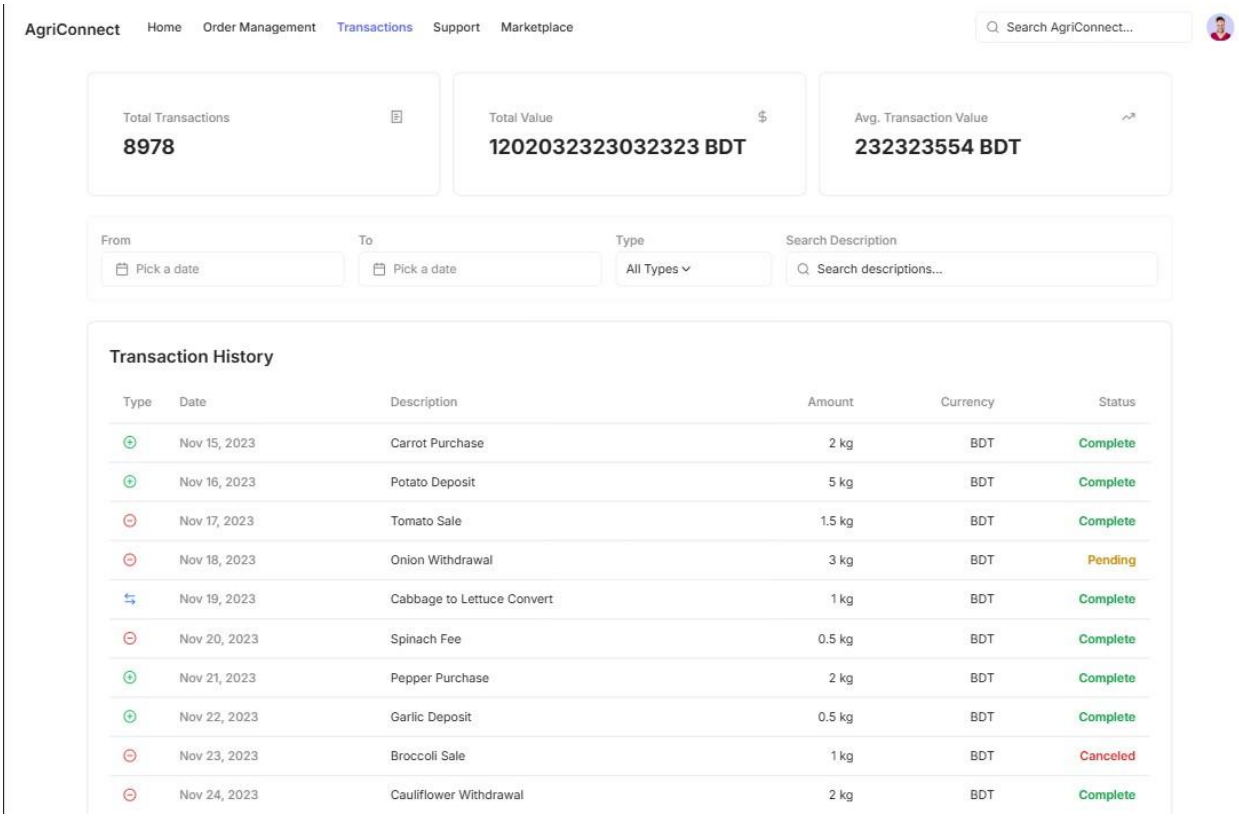

AgriConnect
User Management
Farmer
Consumer
Expert

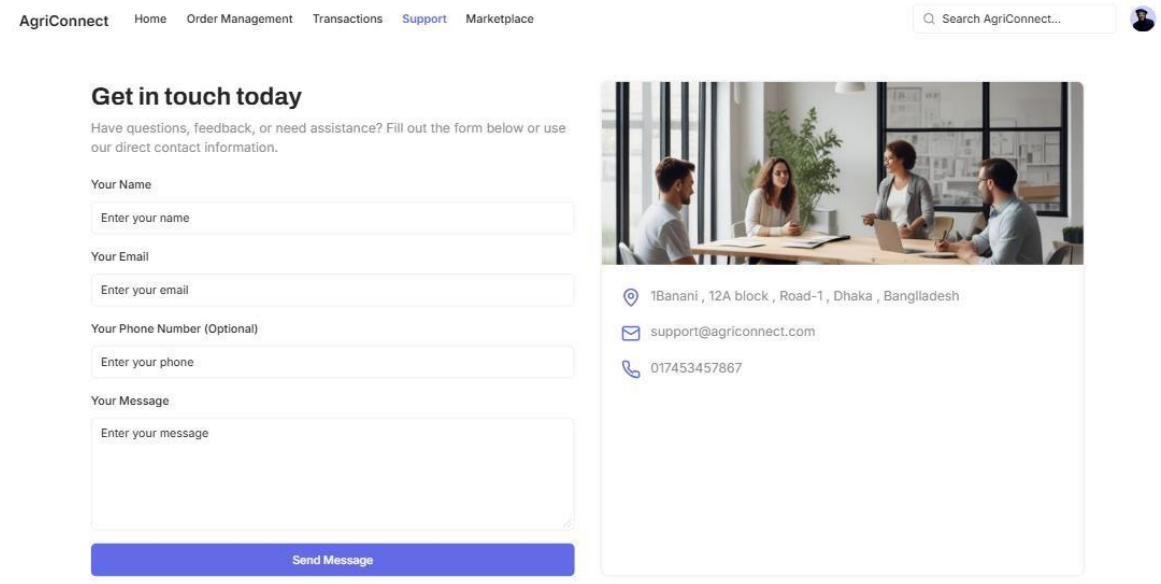

AgriConnect
Report
Farmer Data
Consumer Data
Transaction
Revenue

3. Farmer


AgriConnect
Home
Order Management
Transactions
Support
Marketplace
Search AgriConnect...
Empowering Farmers, Connecting Communities
AgriConnect simplifies ordering, selling, and support for modern agriculture.
Get Started
Place & Manage Orders
Easily order seeds, fertilizers, and supplies with a few clicks.
Track Your Transactions
View detailed records of all your past transactions, buys and sells.
Access Expert Support
Find valuable resources, tips, and connect with agriculture advisors.
Sell Your Produce
List your farm products for sale and connect directly with buyers.


AgriConnect
Home
Order Management
Transactions
Support
Marketplace
Search orders or products...
Quick Actions
Streamline your tasks.
Place New Order
List New Product
View Sales Summary
At-a-Glance Metrics
Your key performance indicators.
128
Total Orders Placed
Orders made this month
42
Total Products Sold
Items sold from your listings
5576000 BDT
Pending Payments
Waiting for settlement
356890550 BDT
Total Earnings
Income from your sales
Orders Placed
Products Sold
Payment History
Orders Placed
Manage your incoming supply orders.
Order ID | Order Number | Date | Status | Free Shipping | Amount | Actions
ORD001 | AGRC-5678-1234 | 2023-10-26 10:00 AM | Processing | Yes | 13400 BDT
ORD002 | AGRC-9012-5678 | 2023-10-25 02:30 PM | Shipped | No | 134500 BDT
ORD003 | AGRC-3456-9012 | 2023-10-25 09:15 AM | Delivered | Yes | 75453 BDT
ORD004 | AGRC-7890-3456 | 2023-10-24 04:00 PM | Cancelled | No | 13400 BDT
ORD005 | AGRC-1234-7890 | 2023-10-24 11:45 AM | Processing | Yes | 13400 BDT
ORD006 | AGRC-5678-1234 | 2023-10-23 07:00 PM | Shipped | Yes | 13400 BDT
ORD007 | AGRC-9012-5678 | 2023-10-23 01:10 PM | Delivered | No | 13700 BDT
ORD008 | AGRC-3456-9012 | 2023-10-22 08:50 AM | Completed | Yes | 17400 BDT
ORD009 | AGRC-7890-3456 | 2023-10-22 03:30 PM | Pending | No | 15700 BDT
ORD010 | AGRC-1234-7890 | 2023-10-21 10:20 AM | Shipped | Yes | 3400 BDT


AgriConnect
Home
Order Management
Transactions
Support
Marketplace
Search AgriConnect...
Total Transactions
8978
Total Value
1202032323032323 BDT
Avg. Transaction Value
232323554 BDT
From
Pick a date
To
Pick a date
Type
All Types
Search Description
Search descriptions...
Transaction History
Type Date Description Amount Currency Status
Nov 15, 2023 Carrot Purchase 2 kg BDT Complete
Nov 16, 2023 Potato Deposit 5 kg BDT Complete
Nov 17, 2023 Tomato Sale 1.5 kg BDT Complete
Nov 18, 2023 Onion Withdrawal 3 kg BDT Pending
Nov 19, 2023 Cabbage to Lettuce Convert 1 kg BDT Complete
Nov 20, 2023 Spinach Fee 0.5 kg BDT Complete
Nov 21, 2023 Pepper Purchase 2 kg BDT Complete
Nov 22, 2023 Garlic Deposit 0.5 kg BDT Complete
Nov 23, 2023 Broccoli Sale 1 kg BDT Canceled
Nov 24, 2023 Cauliflower Withdrawal 2 kg BDT Complete


AgriConnect
Home
Order Management
Transactions
Support
Marketplace
Search AgriConnect...
Get in touch today
Have questions, feedback, or need assistance? Fill out the form below or use our direct contact information.
Your Name
Enter your name
Your Email
Enter your email
Your Phone Number (Optional)
Enter your phone
Your Message
Enter your message
Send Message
1Banani , 12A block , Road-1 , Dhaka , Bangladesh
support@agriconnect.com
017453457867


Frequently Asked Questions
Find answers to common questions about AgriConnect's support and services.

AgriConnect Home Order Management Transactions Support Marketplace Search AgriConnect...

Premium Organic Fertilizer Blend

A rich blend of organic compost, worm castings, and natural minerals designed to provide essential nutrients for robust plant growth. Perfect for vegetables, fruits, and flowers.

299 BDT

4.8 • 158 Reviews • Sold by: Sunrise Farms

Free shipping on orders over $50

Choose Option:

5 lb Bag

Quantity:

– 1 +

Add to Cart Checkout

Benefits Ingredients How to Use Reviews FAQs

Related Products

Related Products

Organic Potting Mix
1800 BDT

Natural Pest Repellent
5000 BDT

Heirloom Tomato Seeds
700 BDT

Durable Gardening Gloves
2000 BDT

Ergonomic Hand Trowel
1000 BDT

Benefits

Enhances Soil Health
Improves soil structure and water retention, creating an optimal environment for root development.

Provides Balanced Nutrients
Supplies essential macro and micronutrients necessary for vigorous growth and higher yields.

100% Organic
Made from natural, sustainable sources, safe for organic gardening and beneficial for the environment.

Increases Yields
Supports strong, healthy plants that produce more abundant and nutritious crops.

Easily apply by broadcasting evenly over the soil surface around plants or mixing into the top layer of soil before planting. Water thoroughly after application.

Customer Reviews

Write a Review

4.8

158 Reviews

5 ☆ 60%
4 ☆ 25%
3 ☆ 10%
2 ☆ 5%
1 ☆ 0%

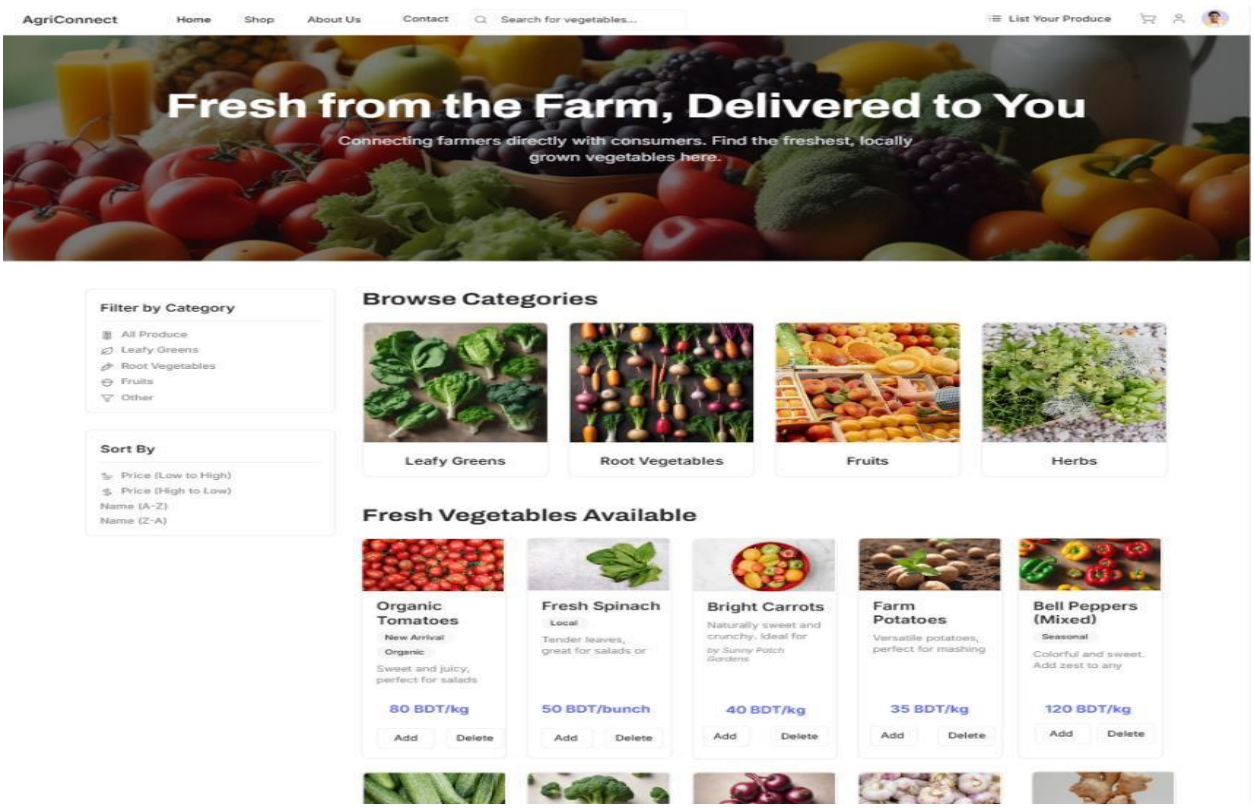
Aisha Khan ☆☆☆☆☆ — 2 days ago
Saw a huge difference in my tomato plants after just one application! Highly recommend.

Ben Carter ☆☆☆☆☆ — 1 week ago
Good quality fertilizer, easy to use. My cucumbers are thriving.

Chen Liu ☆☆☆☆☆ — 3 weeks ago
Excellent organic product. My leafy greens have never looked healthier.

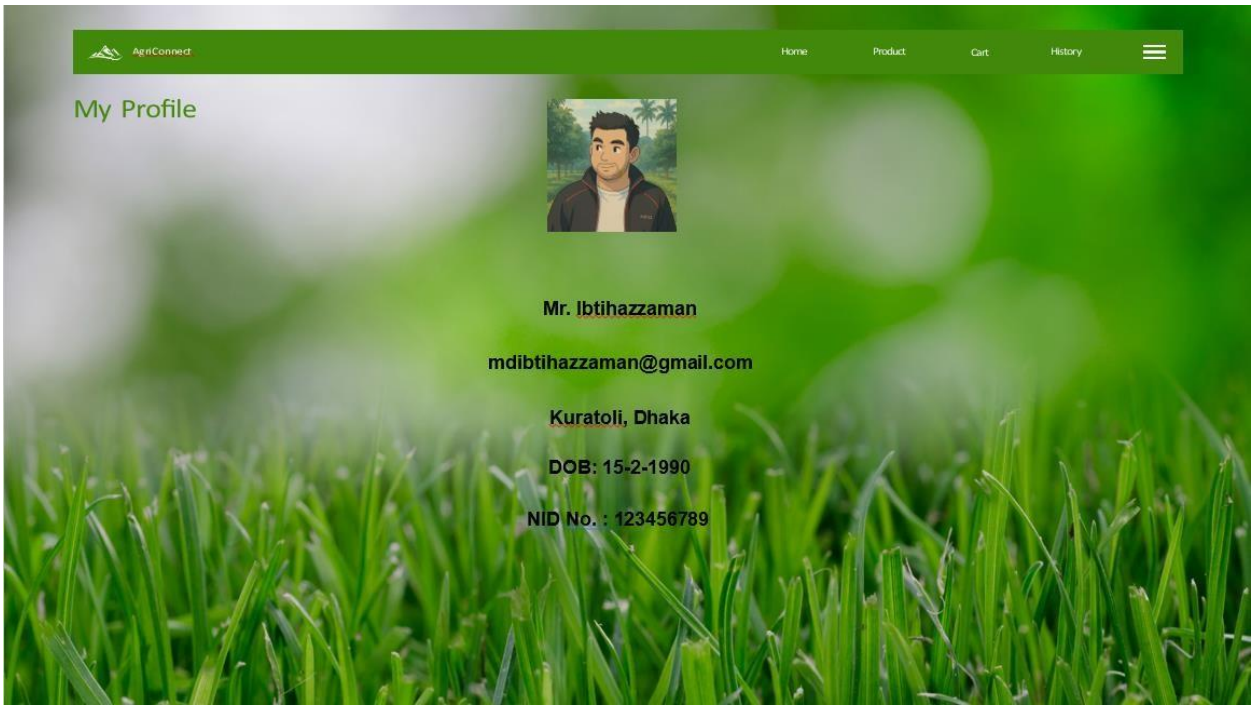
David Rodriguez ☆☆☆☆☆ — 1 month ago
Seems okay, haven't noticed a dramatic change yet. Maybe takes time?

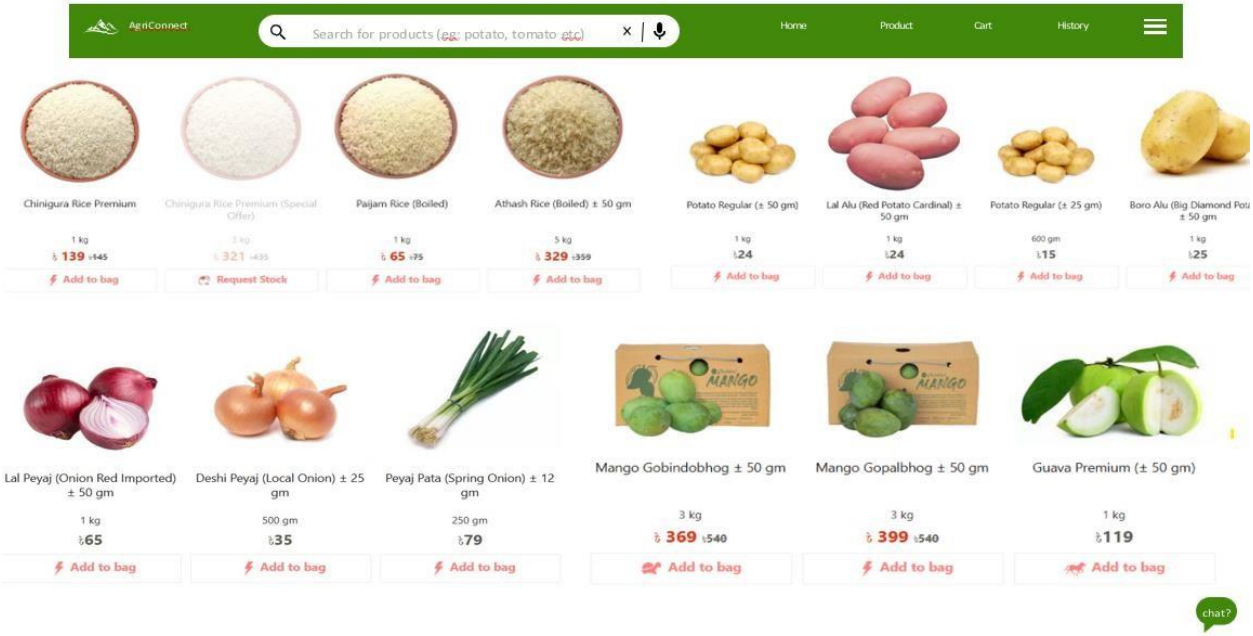
Elena Petrova ☆☆☆☆☆ — 2 months ago
This is my go-to fertilizer now. My flowers are blooming like never before!

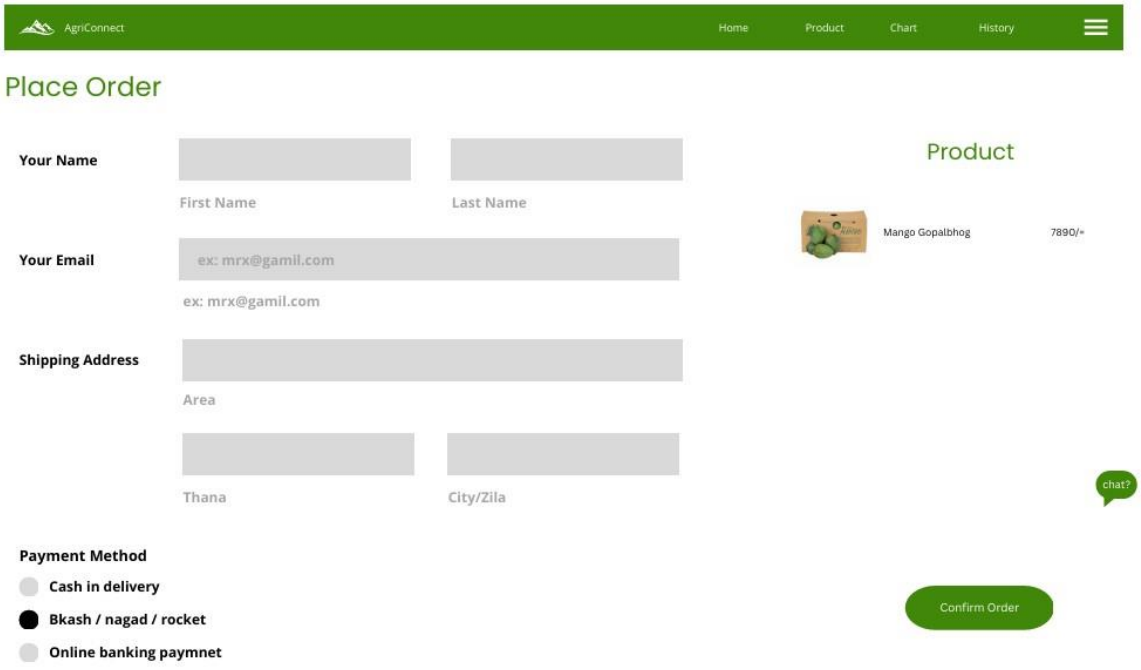


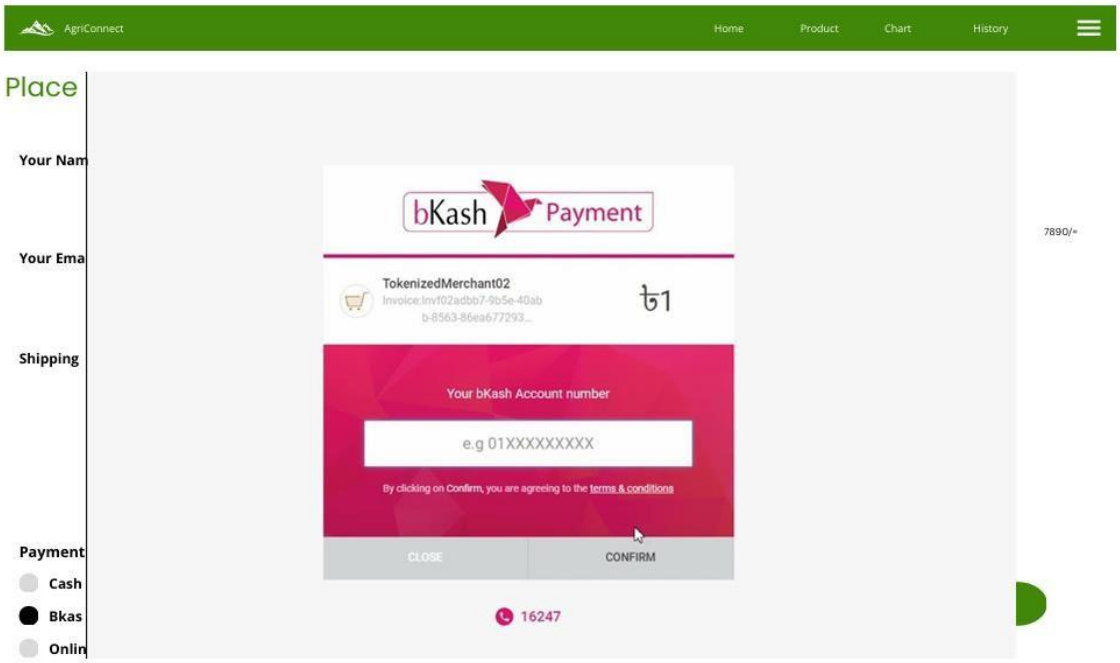
4. Consumer


AgriConnect
Home
Product
Cart
History
Agriculture
WWW.AGRICONNECT.COM
Contact


AgriConnect
Home
Product
Cart
History
My Profile
Mr. Ibtihazzaman
mdibtihazzaman@gmail.com
Kuratoli, Dhaka
DOB: 15-2-1990
NID No. : 123456789


AgriConnect
Search for products (eg: potato, tomato etc)
Home
Product
Cart
History
Chinigura Rice Premium
1 kg
৳ 139 ৳145
Add to bag
Chinigura Rice Premium (Special Offer)
Request Stock
Paijam Rice (Boiled)
1 kg
৳ 65 ৳75
Add to bag
Athash Rice (Boiled) ± 50 gm
5 kg
৳ 329 ৳359
Add to bag
Potato Regular (± 50 gm)
1 kg
৳24
Add to bag
Lal Alu (Red Potato Cardinal) ± 50 gm
1 kg
৳24
Add to bag
Potato Regular (± 25 gm)
600 gm
৳15
Add to bag
Boro Alu (Big Diamond Potu ± 50 gm
1 kg
৳25
Add to bag
Lal Peyaj (Onion Red Imported) ± 50 gm
1 kg
৳65
Add to bag
Deshi Peyaj (Local Onion) ± 25 gm
500 gm
৳35
Add to bag
Peyaj Pata (Spring Onion) ± 12 gm
250 gm
৳79
Add to bag
Mango Gobindobhog ± 50 gm
3 kg
৳ 369 ৳540
Add to bag
Mango Gopalbhog ± 50 gm
3 kg
৳ 399 ৳540
Add to bag
Guava Premium (± 50 gm)
1 kg
৳119
Add to bag
chat?


AgriConnect
Home
Product
Chart
History
Place Order
Your Name
First Name
Last Name
Your Email
ex: mrx@gamil.com
ex: mrx@gamil.com
Shipping Address
Area
Thana
City/Zila
Payment Method
Cash in delivery
Bkash / nagad / rocket
Online banking paymnet
Product
Mango Gopalbhog
7890/=
Confirm Order
chat?


AgriConnect
Home
Product
Chart
History
Place
Your Nam
Your Ema
Shipping
Payment
Cash
Bkas
Onlin
bKash Payment
TokenizedMerchant02
৳1
Your bKash Account number
e.g 01XXXXXXXXX
By clicking on Confirm, you are agreeing to the terms & conditions
CLOSE
CONFIRM
16247
7890/=


AgriCOnnect
Home
Product
Cart
History
Place Order
Your Name
Your Email
Shipping Address
Payment Method
Cash in delivery
Bkash / nagad /
Online banking
Dutch-Bangla Bank Limited
YOUR TRUSTED PARTNER
Nexus Gateway
Card Information
Card Holder Name
Card Type
Card Number
Expiry Date(MM/YY)
CVC2
Amount 375.00
Currency BDT
Description 120100001^375
SUBMIT
RESET
Norton SECURED
powered by VeriSign
VERIFIED by VISA
MasterCard SecureCode
Confirm Order
DBBL E-COMM
ecom.dutchbanglabank.com
7890/=
chat?

Test Plan and Test Cases

Project Description:

'AgriConnect' is a web-based platform that helps farmers and small business owners connect and work together. It gives the platform to the farmers to sell their products directly to the customers, buy farming supplies, and get advice from agricultural experts. People can sign up as farmers, customers, or admins and use features like order tracking, product listings, and reports. The system is built to be flexible, so new updates can be made quickly based on user feedback. The main goal is to cut out the middlemen, make farming more profitable, and create a better system for everyone involved.

Test Plan:

A test case is a set of specific steps, inputs, and expected results used to check whether a part of a software system works correctly or not. It helps ensure that each feature behaves as it should and meets the project's requirements. Test cases are essential for finding and fixing bugs before releasing the software.

In real software companies, the people who do this work are called software testers or QA (Quality Assurance) team members. Their job is to test every feature and find problems before the software is given to users. In our project, team members tested their own parts and also helped check each other's work to make sure everything worked properly.

For this project, "Black Box" Testing is suitable method. "Black Box" means testing the software without looking at how it was coded. Since our system has different users like farmers, admins, and customers using features like login, placing orders, and checking dashboards, Black Box Testing helps us see if the system gives the right results based on what users do. It's simple, user-focused, and works well for this kind of platform.

Authentication:

Project Name: 'AgriConnect' Connecting Micro Entrepreneurs with Farmers			Test Designed by:	
TestCase ID: ABS_01			Test Designed date:	
Test Priority (Low, Medium, High): High			Test Executed by:	
Module Name: Login Session			Test Execution date:	
Test Title: verify login with valid username and password				
Description: Test Application login page				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Enter username 3. Enter password 4. Click login	Username: A-001 Password: 1234	Users should login into the application		
Post Condition: User is validated with database and successfully login to account. The account session details are logged in the database.				

TestCase ID: ABS_02			Test Designed date:	
Test Priority (Low, Medium, High): Low			Test Executed by:	
Module Name: Login Session			Test Execution date:	
Test Title: Verify "Remember Me" functionality				
Description: Test login with "Remember Me" option enabled				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to login page 2. Enter valid email and password 3. Check "Remember Me" 4. Click login	Username: C-001 Password: 1234	User should stay logged in even after closing and reopening browser		
Post Condition: Session persists until user logs out manually.				

TestCase ID: ABS_03			Test Designed date:	
Test Priority (Low, Medium, High): High			Test Executed by:	
Module Name: Forgot Password			Test Execution date:	
Test Title: Verify password reset with registered email				
Description: Test functionality of password reset process				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to Forgot Password page 2. Enter registered email 3. Enter OTP 4. Set new password	Username: C-001 Password: 1234	User should receive confirmation of password reset and be able to login with new password		
Post Condition: Password updated successfully in the system.				

TestCase ID: ABS_04			Test Designed date:	
Test Priority (Low, Medium, High): High			Test Executed by:	
Module Name: Signup Session			Test Execution date:	
Test Title: Verify successful account registration as Farmer				
Description: Test Farmer registration process				
Precondition: User must have valid information and select Farmer role				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to Signup page 2. Enter required details 3. Select Farmer role4. Enter OTP 5. Click register	Name: Ibnul Mia Email:farmer@gmail.com Phone:017xxxxxxx Address: Dhaka Crops: Rice Quantity: 2 acres NID:123456789 Password:Farmer@1234 OTP: 123456	Farmer accounts should be created and redirected to Farmer dashboard		
Post Condition: Farmer details stored securely, and user redirected.				

TestCase ID: ABS_05			Test Designed date:	
Test Priority (Low, Medium, High): High			Test Executed by:	
Module Name: Signup Session			Test Execution date:	
Test Title: Verify successful account registration as Consumer				
Description: Test Consumer registration process				
Precondition: User must have valid information and select Consumer role				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to Signup page 2. Enter required details 3. Select Consumer role 4. Enter OTP 5. Click register	Name: Ibnul Chowdhury Email:farmer@gmail.com Phone:017xxxxxxx Address: Dhaka Password:Consumer@1234 OTP: 123456	Consumer accounts should be created and redirected to Consumer dashboard		
Post Condition: Consumer details stored securely, and user redirected.				

Admin:

TestCase ID: ADMIIN_1		Test Design Date:		
Test Priority (Low, Medium, High): High		Test Executed by:		
Module Name: Admin Dashboard		Test Execution Date:		
Test Title: Verify Admin Dashboard Statistic Display				
Description: Test if the admin dashboard correctly displays key statistics and metrics				
Precondition(If any): Admin user is logged in with valid credentials				
Test Steps	Test Data	Expected Results	Actual Results	Status(Pass/Fail)
• Navigate to admin dashboard • Check farmer statistics • Check consumer statistics • Check transaction history • Check top products section • Check user acquisition metrics	N/A	• Total number of active farmers • Total number of active consumers • Transaction history with trend graphs • Top products by transaction volume • User acquisition metrics with conversion rates • Critical issue alerts if any exist.		
Post Condition: Admin can view all relevant statistics and metrics on the dashboard.				

Project Name: AgriConnect	Test Design by:
TestCase ID: ADMIIN_2	Test Design Date:
Test Priority (Low, Medium, High): High	Test Executed by:
Module Name: User Management	Test Execution Date:

Test Title: Verify User Search and Filtering

Description: Test if admin can search and filter users with different criteria

Precondition(If any): Admin user is logged in and multiple users exist in the system

Test Steps	Test Data	Expected Results	Actual Results	Status(Pass/Fail)
1. Navigate to user management 2. Enter search term in search box 3. Apply user type filter 4. Apply location filter 5. Click search 6. View search results	Search term: "John" User Type: "Farmer" Location: "West Region"	1. System displays list of farmers Results with name containing "John" in the West Region 2. Results show user ID, name, email, phone, Location: "West Region" location, and verification status 3. Results are properly paginated if more than one page		

Post Condition: Search results are displayed according to search criteria and admin can view filtered user list.

TestCase ID: ADMIIN_3		Test Design Date:		
Test Priority (Low, Medium, High): High		Test Executed by:		
Module Name: User Management		Test Execution Date:		
Test Title: Verify User Account Verification				
Description: Test if admin can verify a user's identity and documents				
Precondition(If any): Admin user is logged in and there is at least one unverified farmer account				
Test Steps	Test Data	Expected Results	Actual Results	Status(Pass/Fail)
1.Navigate to user management 2. Filter users by "Unverified" status 3. Select a farmer account 4. View user profile and submitted documents 5. Check NID information 6. Click the “Verify User" button 7. Confirm verification	User: farmer1@example.com NID: 9876543210	1. User documents are displayed for review 2. Upon verification, user status changes to "Verified" 3. Success message is displayed 4. User receives notification about verification		
Post Condition: Farmer account status is updated to "Verified" in the database and farmer receives notification.				

Project Name: AgriConnect	Test Design by:
TestCase ID: ADMIIN_4	Test Design Date:
Test Priority (Low, Medium, High): Medium	Test Executed by:
Module Name: Product Management	Test Execution Date:
Test Title: Verify Product Price Fixing	
Description: Test if admin can set minimum prices for products	
Precondition(If any): Admin user is logged in	

Test Steps	Test Data	Expected Results	Actual Results	Status(Pass/Fail)
1.Navigate to product management 2. Select a product category 3. Click on "Set Price Limits" 4. Enter minimum price for the product 5.Enter minimum quantity for the product 6. Click "Save"	Product: "Rice" Minimum Price: $1.50/kg Minimum Quantity: 5kg	1. Success message appears 2. Price and quantity limits are saved 3. Farmers cannot list rice below the minimum price 4. Farmers cannot sell less than minimum quantity		
Post Condition: Product price and quantity limits are saved in the database and enforced for new listings				

TestCase ID: ADMIIN_5		Test Design Date:		
Test Priority (Low, Medium, High): Medium		Test Executed by:		
Module Name: Report Generation		Test Execution Date:		
Test Title: Verify Financial Report Generation				
Description: Test if admin can generate and export financial reports				
Precondition(If any): Admin user is logged in and transactions exist in the system				
Test Steps	Test Data	Expected Results	Actual Results	Status(Pass/Fail)
1.Navigate to reports section 2. Select "Financial Reports" 3.Set date range 4.Select report metrics (revenue, payment processing) 5. Click "Generate Report" 6. Export report as Excel	Start Date: [1 month ago] End Date: [Current date] Format: Excel	1.Report loads with financial data 2. Report includes revenue, transaction fees, payment processing data 3. Excel export works correctly with proper formatting 4. Report contains timestamp and data source information		
Post Condition: Financial report is generated and exported in Excel format.				

TestCase ID: ADMIIN_6		Test Design Date:		
Test Priority (Low, Medium, High): High		Test Executed by:		
Module Name: Admin Account Creation		Test Execution Date:		
Test Title: Verify New Admin Account Creation				
Description: Test if primary admin can create new admin accounts with appropriate roles				
Precondition(If any): Director-level admin is logged in				
Test Steps	Test Data	Expected Results	Actual Results	Status(Pass/Fail)
1. Navigate to admin management 2. Click "Create New Admin 3. Enter admin details 4. Select admin role (Director, GM, Collector) 5. Assign permissions 6. Click "Create Account" 7. Set initial password	Name: Jane Smith Email:janesmith@agriconnect.com Role: GM Permissions: User Management, Product Management	1.Success message appears 2. New admin account is created 3. Activation email is sent to new admin 4. New admin appears in the admin list with assigned role and permissions		
Post Condition: New admin account is created in the database with appropriate role and permissions.				

Farmer:

Project Name: AgriConnect			Test Designed by:	
TestCase ID: FS_001			Test Designed date	
Test Priority (Low, Medium, High): High			Test Executed by:	
Module Name: Login Session			Test Execution date:	
Test Title: verify login with valid username and password				
Description: Test Application login page				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actually Results	Status (Pass/Fail)
1. Go to the website 2. Enter username 3. Enter password 4. Click submit	Username: 99999999999 Password: 321	User should login into the application	As expected,	Pass
Post Condition: User is validated with database and successfully login to account. The account session details are logged in the database.				

Project Name: AgriConnect		Test Designed by:		
TestCase ID: FS_002		Test Designed date		
Test Priority (Low, Medium, High): High		Test Executed by:		
Module Name: Login Session		Test Execution date:		
Test Title: verify login with valid username and password				
Description: Test Dashboard Features				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actually Results	Status (Pass/Fail)
1. Go to the to dashboard 2. Input ID,Password 3. Click Feature buttons	Username: 321 Password: 321121212	User should login to personal dashboard and able to access all the feature		
Post Condition: User is validated with database and successfully login to account. The session details are successful interactions in dashboard features				

Project Name: AgriConnect			Test Designed by:	
TestCase ID: FS_003			Test Designed date	
Test Priority (Low, Medium, High): High			Test Executed by:	
Module Name: Ordering supporting items in platform			Test Execution date:	
Test Title: verify				
Description: Test Order system in platform				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actually Results	Status (Pass/Fail)
1. Go to dashboard 2. Go to order portal 3. Go to buying option 4. Select product Category 5. Select Items 6. Add to cart 7. Order Confirmation	1. Username: 321 Password: 321121212	User should login to personal dashboard and able to buy necessary seeds, fertilizers for farming		
Post Condition: User is validated with database and successfully login to account. The session details are successful interactions in order portal for buying agicultural supporting items for farmers				

Project Name: AgriConnect			Test Designed by:	
TestCase ID: FS_004			Test Designed date	
Test Priority (Low, Medium, High): High			Test Executed by:	
Module Name: Selling Items to customers in AgriConnect platform			Test Execution date:	
Test Title: Selling Agricultural products in platform				
Description: Test Product Selling system in platform				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actually Results	Status (Pass/Fail)
1. Go to Dashboard 2. Go to Selling Portal 3. Select product category 4. Select Items 5. Select product quantity 6. Select product grade 7. List items 8. Accept orders	1. Username: 321 2. Password: 1213434	User should login to personal dashboard and able to sell Agricultural items in platform		
Post Condition: User is validated with database and successfully login to account. The session details are successful interactions in order portal for buying agicultural supporting items for farmers				

Project Name: AgriConnect		Test Designed by:		
TestCase ID: FS_005		Test Designed date		
Test Priority (Low, Medium, High): High		Test Executed by:		
Module Name: Expert Support Request		Test Execution date:		
Test Title: Requesting Agricultural expert support in platform				
Description: Test Agricultural Expert support request system in platform				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actually Results	Status (Pass/Fail)
1.Go to dashboard 2. Go to support option 3. Select the Agricultural Expert option 4. Select problem 5. Select time of visit/ consulting 6. Confirm experts session/ slot booking	3. Username: 321 4. Password: 1213434	User should login to personal dashboard and able to support request		
Post Condition: User is validated with database and successfully login to account. The session details are successful Expert request support				

Consumer:

Project Name: 'AgriConnect' Connecting Micro Entrepreneurs with Farmers		Test Designed by:		
TestCase ID: CR_01		Test Designed date:		
Test Priority (Low, Medium, High): High		Test Executed by:		
Module Name: Login Session		Test Execution date:		
Test Title: verify login with valid username and password				
Description: Test Application login page				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Enter username 3. Enter password 4. Click login	Username: C-001 Password: 1234	Users should login into the application		
Post Condition: User is validated with database and successfully login to account. The account session details are logged in the database.				

TestCase ID: CR_02			Test Designed date:	
Test Priority (Low, Medium, High): High			Test Executed by:	
Module Name: Consumer Dashboard			Test Execution date:	
Test Title: Verify the user personal dashboard				
Description: Consumers will have access to their personal dashboard				
Precondition (If any): User must have login into the system with a valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Login with user information 2. Enter the user personal dashboard interface 3. Check all the feature/button in the dashboard and update his personal details	Username: C-001 Password: 1234	*User should enter his personal dashboard *Users can see his details and also update it.		
Post Condition: User is validated with database and successfully login to account. The account details are logged in the database and enter his personal dashboard.				

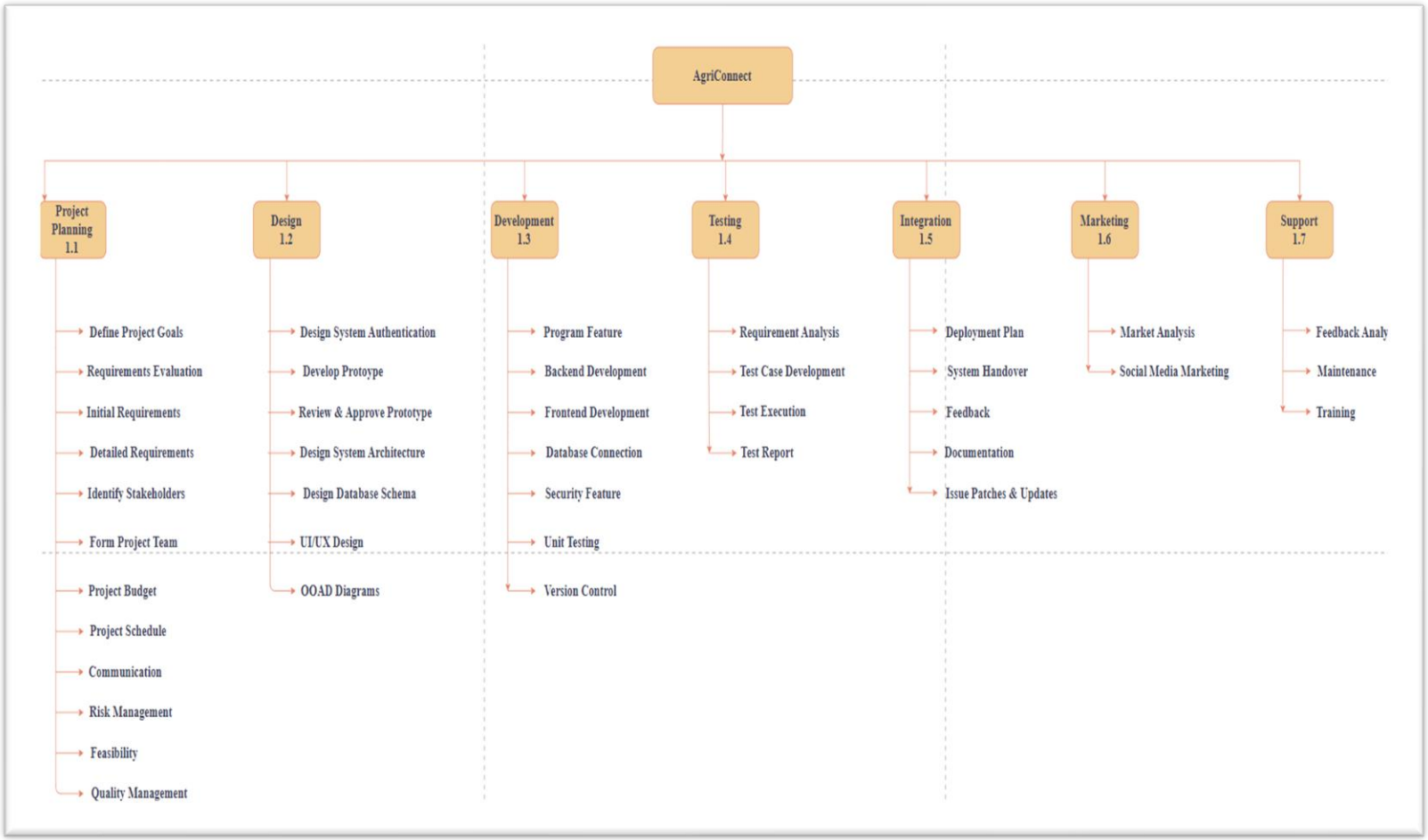
TestCase ID: CR_03			Test Designed date:	
Test Priority (Low, Medium, High): High			Test Executed by:	
Module Name: Product List			Test Execution date:	
Test Title: Verify the product list				
Description: Consumers can browse a categorized selection of agricultural products				
Precondition (If any): User must have entered his dashboard				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Login with user information 2. Enter the user personal dashboard interface 3. Go to product list 4. Purchase or add to cart a product	Username: C-001 Password: 1234	*Product list clear images, descriptions, prices, and availability status *Users can search products using keyword-based search and apply filters to refine results * Clicking on a product will open a detailed page with product specifications and seller information		
Post Condition: User will purchase product and add the product in to cart.				

TestCase ID: CR_04			Test Designed date:	
Test Priority (Low, Medium, High): High			Test Executed by:	
Module Name: Cart			Test Execution date:	
Test Title: Verify the cart feature				
Description: Consumers can add products to their shopping cart and modify quantities				
Precondition (If any): User must have entered his dashboard and select a product from the product list to add it in the cart				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Login with user information 2. Enter the user personal dashboard interface 3. Purchase any item 4. Go to the cart option	Username: C-001 Password: 1234	*Users should update the selected product quantities *User can confirm the order or remove the order.		
Post Condition: User will order the selected product.				

TestCase ID: CR_05			Test Designed date:	
Test Priority (Low, Medium, High): High			Test Executed by:	
Module Name: Order			Test Execution date:	
Test Title: Verify the order feature				
Description: Consumers can place orders directly from their cart				
Precondition (If any): User must have selected a product from the product list to add it in to the cart and select the payment option				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Login with user information 2. Enter the user personal dashboard interface 3. Purchase any item 4. Go to the cart option 5. Select the payment option 6. Confirm the order	Username: C-001 Password: 1234	*User should confirm order * Users can track order * A detailed invoice will be generated automatically for each completed order * Customers can cancel or modify orders before they are shipped		
Post Condition: Users can track orders and rate products based on their experience.				

TestCase ID: CR_06			Test Designed date:	
Test Priority (Low, Medium, High): Low			Test Executed by:	
Module Name: Rating			Test Execution date:	
Test Title: Verify the rating feature				
Description: Consumers can rate products based on their experience				
Precondition (If any): The User must have purchased a product from the system.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Log in with user information 2. Enter the user's personal dashboard interface 3. Purchase any item 4. Go to the cart option 5. Select the payment option 6. Confirm the order 7. Give a rate on product	Username: C-001 Password: 1234	* Consumers can rate products based on their experience. (Ex: star-based rating system) * Users will have the option to write detailed reviews about the products they will purchase * Users can edit or delete their reviews if they change their opinions.		
Post Condition: Admin will update the system performance and if any problem admin will fix the system.				

Work Breakdown Structure



Estimation using COCOMO

- **Effort = PM = $2.4 \times (\frac{5000}{1000})^{1.05}$**

  = 13.00

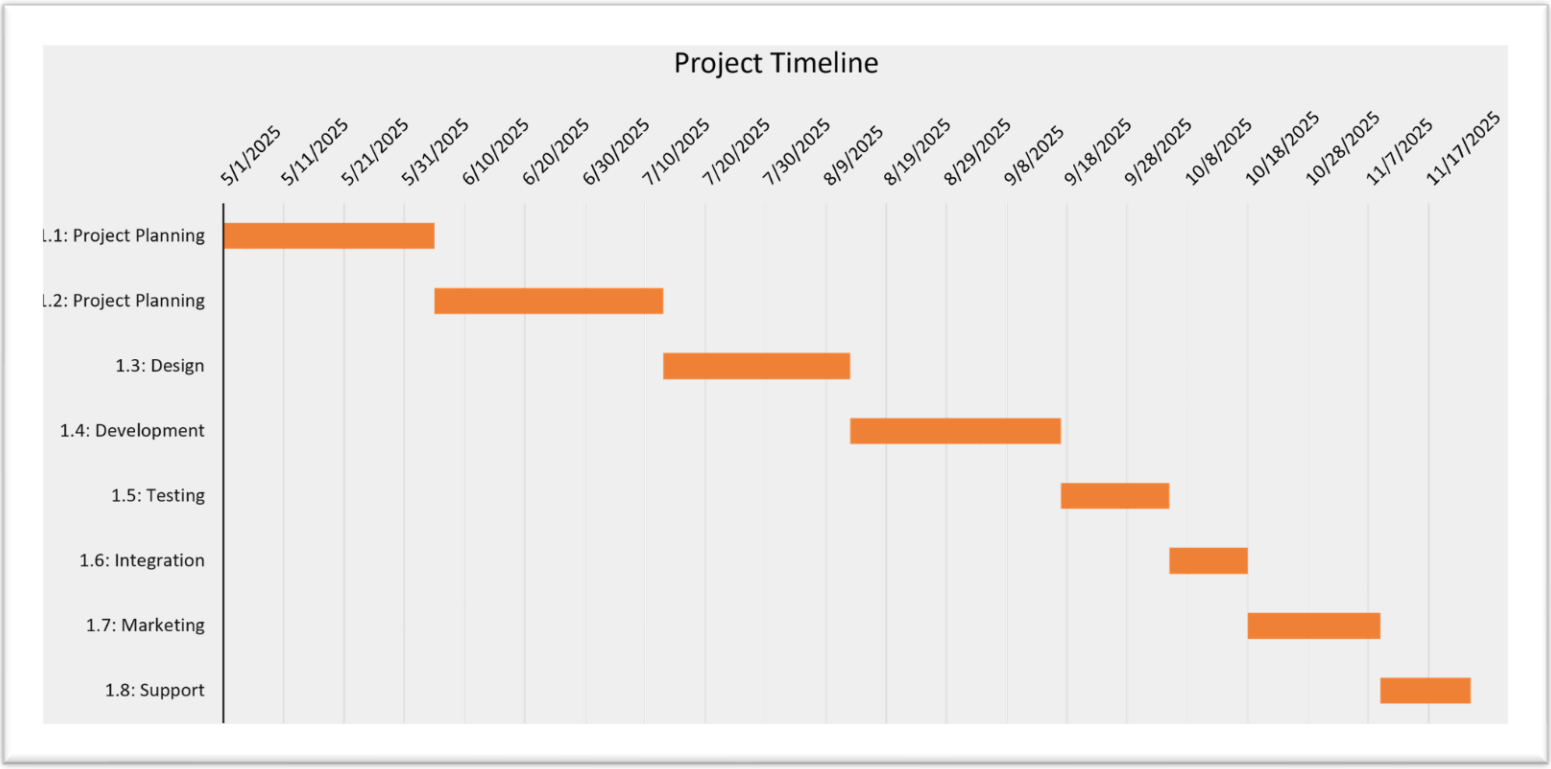
- **Development time = DM = $2.50 \times (13.00)^{0.38}$**

  =6.63

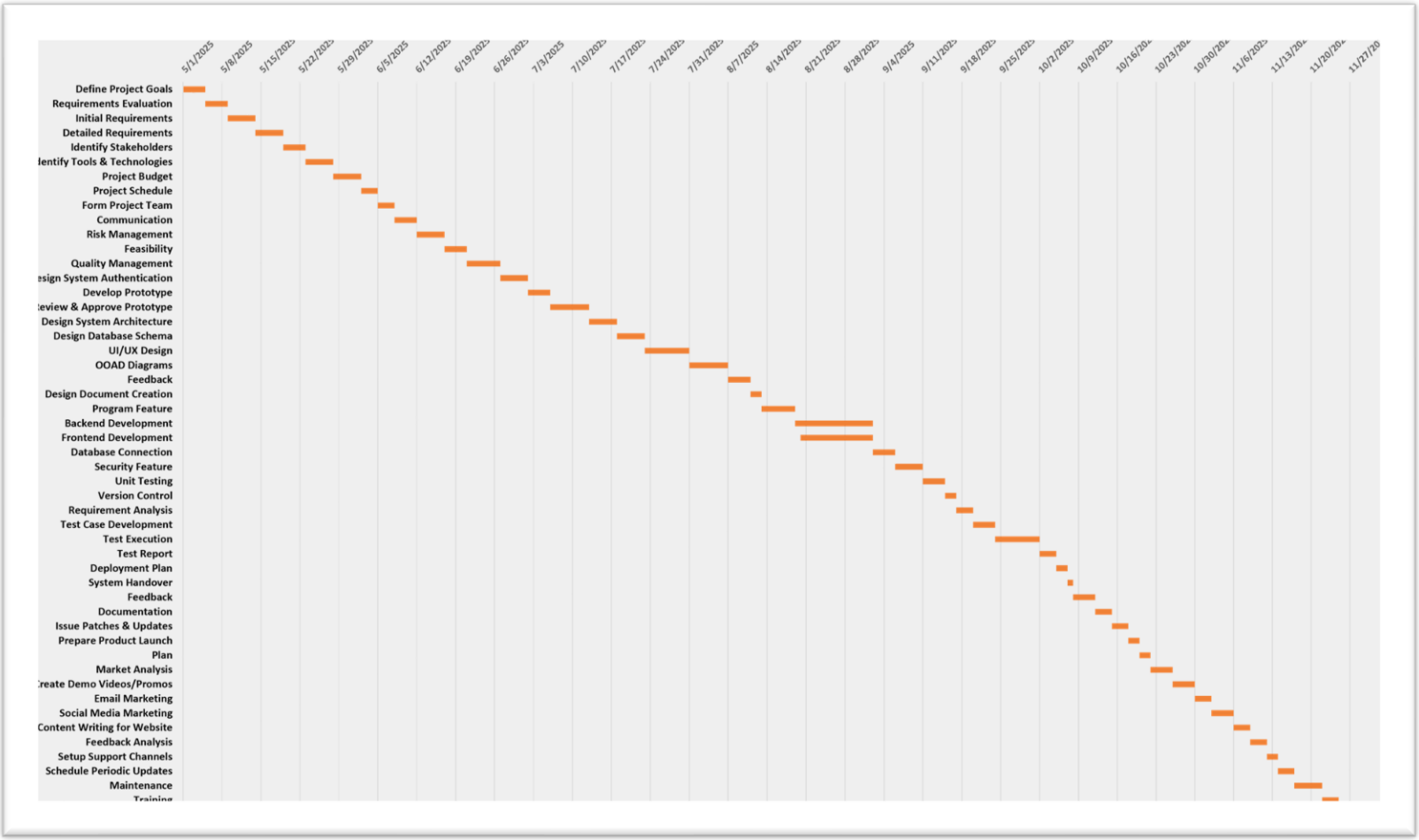
- **Required number of people = ST = $\frac{13.00}{6.63}$**

  =1.96 ≃ 2

Gantt Chart (overall schedule)



Gantt Chart (detailed schedule)



Earn Value Analysis

Task	Planned Effort (hrs)	Actual Effort (hrs)
Define Project Goals	5	5
Requirements Evaluation	8	9
Initial Requirements	6	5
Detailed Requirements	10	11
Identify Stakeholders	4	4
Identify Tools & Technologies	6	7
Project Budget	5	5
Project Schedule	6	7
Form Project Team	4	5
Communication	5	6
Risk Management	6	7
Feasibility	2	3
Quality Management	2	3
Design System Authentication	10	11
Develop Prototype	14	15
Review & Approve Prototype	6	5
Design System Architecture	15	14
Design Database Schema	12	13
UI/UX Design	13	14
OOAD Diagrams	8	7
UI/UX & OOAD Design Feedback	6	7
Design Document Creation	10	8
Program Feature	28	30
Backend Development	40	42
Frontend Development	36	34
Database Connection	28	29
Security Feature	24	23
Unit Testing	22	23
Version Control	20	17
Requirement Analysis	10	11
Test Case Development	16	15
Test Execution	21	20
Test Report	10	11
Deployment Plan	6	5
System Handover	5	6
Feedback	6	5

Documentation	8	9
Issue Patches & Updates	6	
Prepare Product Launch Plan	8	
Market Analysis	6	
Create Demo Videos/Promos	7	
Email Marketing	4	
Social Media Marketing	6	
Content Writing for Website	5	
Feedback Analysis	8	
Setup Support Channels	8	
Schedule Periodic Updates	6	
Maintenance	7	
Training	7	
	521	451

BAC	521
BCWS	457
BCWP	443
ACWP	451

Breakdown

- BAC = 521
- SPI = BCWP/ BCWS = 443/ 457 = 0.96936
- SV = BCWP - BCWS = 443 - 457 = -14 person-day
- CPI = BCWP/ ACWP = 443 / 451 = 0.98
- CV = BCWP – ACWP = 443 – 451 = -8 person-day
- % schedule for completion = BCWS/ BAC = 457/ 521
  =87.71 %

  [% of work scheduled to be done at this time]
- % complete = BCWP/ BAC = 443/ 521 = 85.02%
  [% of work completed at this time]

Risk Management and Mitigation Plan

Risks	Category	Probability	Impact	RMMM
Size estimate may be significantly low	PS	60%	2	Conduct detailed size estimation using historical data and expert judgment; review regularly.
Larger number of users than planned	PS	30%	3	Perform scalability testing; design architecture for scalability from the start.
Less reuse than planned	PS	70%	2	Identify reusable components early; prepare for backup development resources.
End-users resist system	BU	40%	3	Include users in design & testing; conduct change management training and awareness campaigns.
Delivery deadline will be tightened	BU	50%	2	Prioritize core features; apply agile/iterative delivery; build contingency time into schedule.
Funding will be lost	CU	40%	1	Engage stakeholders; communicate progress frequently; prepare a minimum viable version.
Customer will change requirements	PS	80%	2	Use flexible/agile methods; define change control process; include buffer in planning.
Technology will not meet expectations	TE	30%	1	Evaluate technology early via prototypes or PoC; have backup options.
Lack of training on tools	DE	80%	3	Provide early training and documentation; assign experienced mentors.
Staff inexperienced	ST	30%	2	Assign mentors; conduct skill development sessions; adjust tasks to experience levels.
Staff turnover will be high	ST	60%	2	Maintain knowledge base; apply pair programming; ensure proper documentation.
Delay in UI/UX delivery due to design iteration	TE	50%	2	Conduct early UI prototyping; freeze design specs before development starts.
Version control conflict	DE	60%	3	Define strict version control guidelines; use code reviews and CI/CD.
Test coverage is not sufficient	ST	75%	3	Enforce test-driven development; define test coverage benchmarks; perform regular audits.
Incomplete marketing assets before launch	BU	50%	3	Align marketing and dev teams early; create a shared launch checklist and timeline.

Third-party API (e.g. Weather, Maps) fails or changes	DE	50%	2	Monitor API status; have fallback mechanisms; cache critical data.
Loss of data	DE	60%	3	Implement regular backups; use transactional DB and disaster recovery plan.
Improper authentication and access control	SE	70%	2	Apply secure coding standards; conduct regular security audits and penetration tests.
Vulnerability to SQL injection or XSS attacks	DE	60%	1	Use input validation and sanitization; perform code reviews; apply security testing tools.
Weak password storage practices	SE	50%	2	Use secure hashing (e.g., bcrypt); enforce password policies and salting.
Poorly configured third-party services/APIs	TE	50%	2	Use secure and tested integration; monitor logs; set alerts for failures or misuse.
Lack of user session timeout	SE	40%	3	Implement session timeout policies; monitor session activities.
Deployment without security testing	ST	50%	2	Make security testing mandatory in the CI/CD pipeline; use static/dynamic analysis tools.