



## 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. Ibti hazaman	22-49153-3	25%	
4.	Md. Anisur Rahman	22-49553-3	25%	

The project will be evaluated for the following Course Outcomes

CO4: <i>Develop</i> 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

<p>Student Name: Ishan, Ibnul Ibnul Ishtiak  Student ID: 22-49545-3  Contribution in Percentage (%): 25%  <u>Contribution in the Project:</u></p> <ul style="list-style-type: none"> <li>▪ UI/IX design (Admin)</li> <li>▪ Test Case (Admin)</li> <li>▪ WBS</li> <li>▪ Gant Chart (Short+Detailed)</li> <li>▪ EVA</li> </ul> <p>_____  Signature of the Student</p>
<p>Student Name: Siddique, Md Abu Bakar  Student ID: 22-48322-3  Contribution in Percentage (%): 25%  <u>Contribution in the Project:</u></p> <ul style="list-style-type: none"> <li>▪ UI/IX design (Authentication)</li> <li>▪ Test Case (Authentication)</li> <li>▪ COCOMO</li> <li>▪ EVA</li> <li>▪ RMM</li> </ul> <p>_____  Signature of the Student</p>
<p>Student Name: Md. Ibti hazaman  Student ID: 22-49153-3  Contribution in Percentage (%): 25%  <u>Contribution in the Project:</u></p> <ul style="list-style-type: none"> <li>▪ UI/IX design (Consumer)</li> <li>▪ Test Case (Consumer)</li> <li>▪ Gant Chart (Short+Detailed)</li> <li>▪ EVA</li> <li>▪ RMM</li> </ul> <p>_____  Signature of the Student</p>
<p>Student Name: Md. Anisur Rahman  Student ID: 22-49553-3  Contribution in Percentage (%): 25%</p>

Contribution in the Project:

- UI/IX design (Farmer)
- Test Case (Farmer)
- Gant Chart (Short+Detailed)
- COCOMO
- RMM

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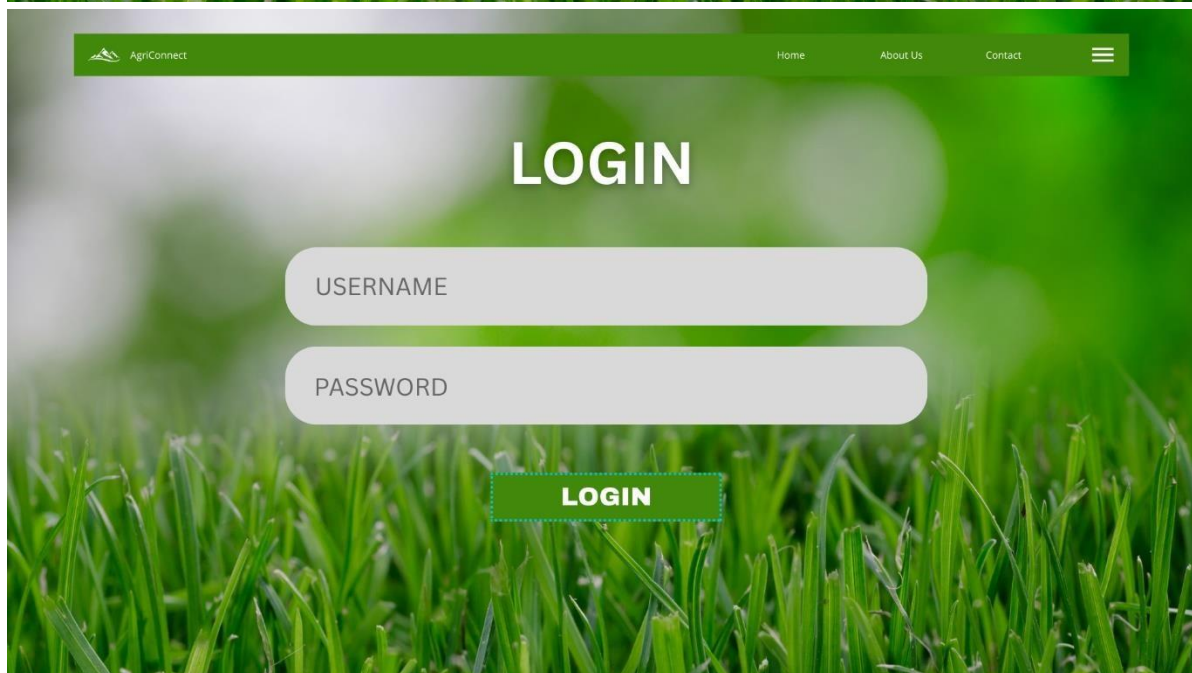
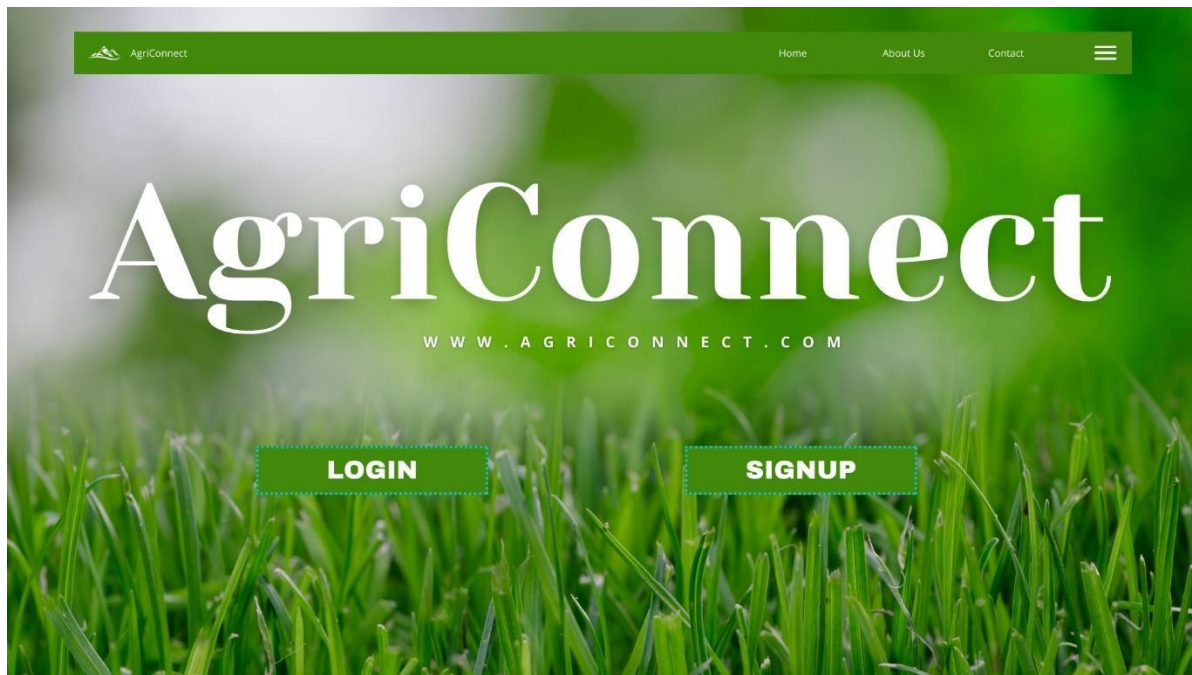
 Signature of the Student

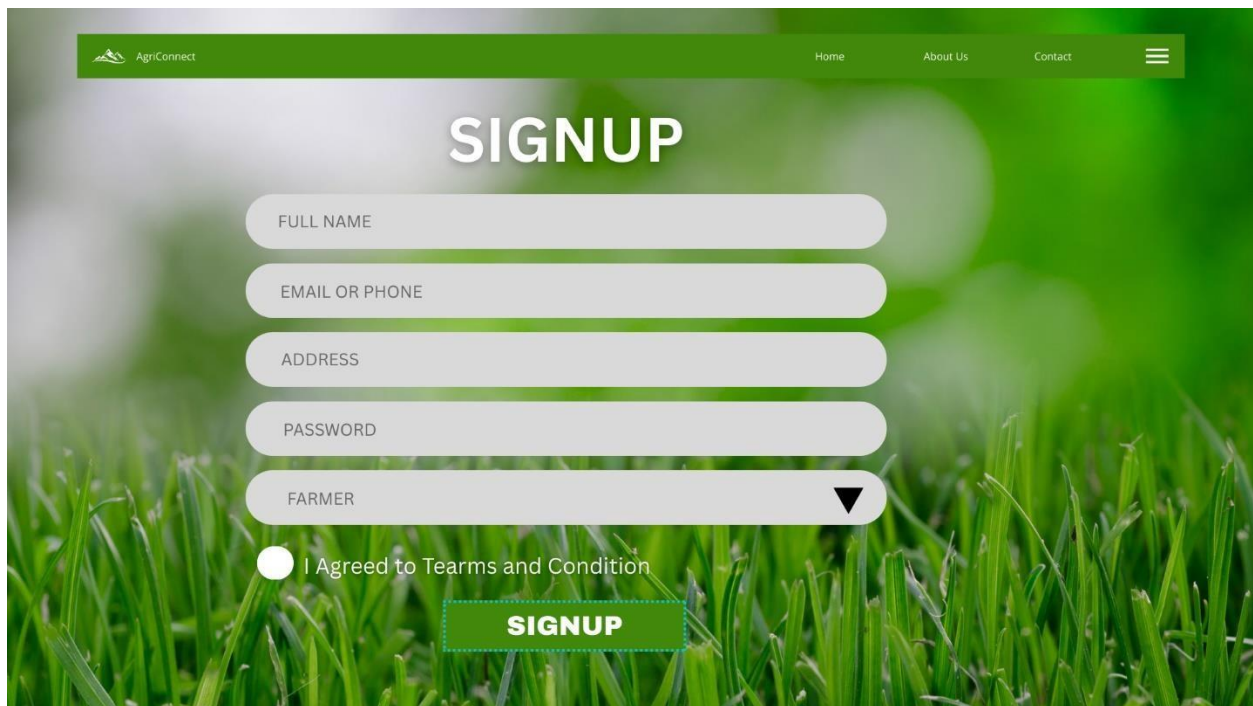
### 1.1 Rubric for Project Assessment (CO4)

Marking Criteria	Marks Distribution (Maximum 3X5=15)				Acquired Marks
	Inadequate (1-2)	Satisfactory (3)	Good (4)	Excellent (5)	
<b>Project Planning</b>	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.	
<b>Effort Estimation and Scheduling</b>	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	
<b>Risk Management</b>	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.	
<b>Acquired Marks:</b>					
<b>CO Pass / Fail:</b>					

## UI UX Design

### 1. Authentication





The image shows a web page for AgriConnect with a green header and a background of green grass. The header contains the AgriConnect logo, navigation links (Home, About Us, Contact), and a menu icon. The main content area features a large 'SIGNUP' title and a form with five input fields: 'FULL NAME', 'EMAIL OR PHONE', 'ADDRESS', 'PASSWORD', and 'FARMER' (with a dropdown arrow). Below the fields is a checkbox labeled 'I Agreed to Terms and Condition' and a green 'SIGNUP' button.

AgriConnect

Home About Us Contact

# SIGNUP

FULL NAME

EMAIL OR PHONE

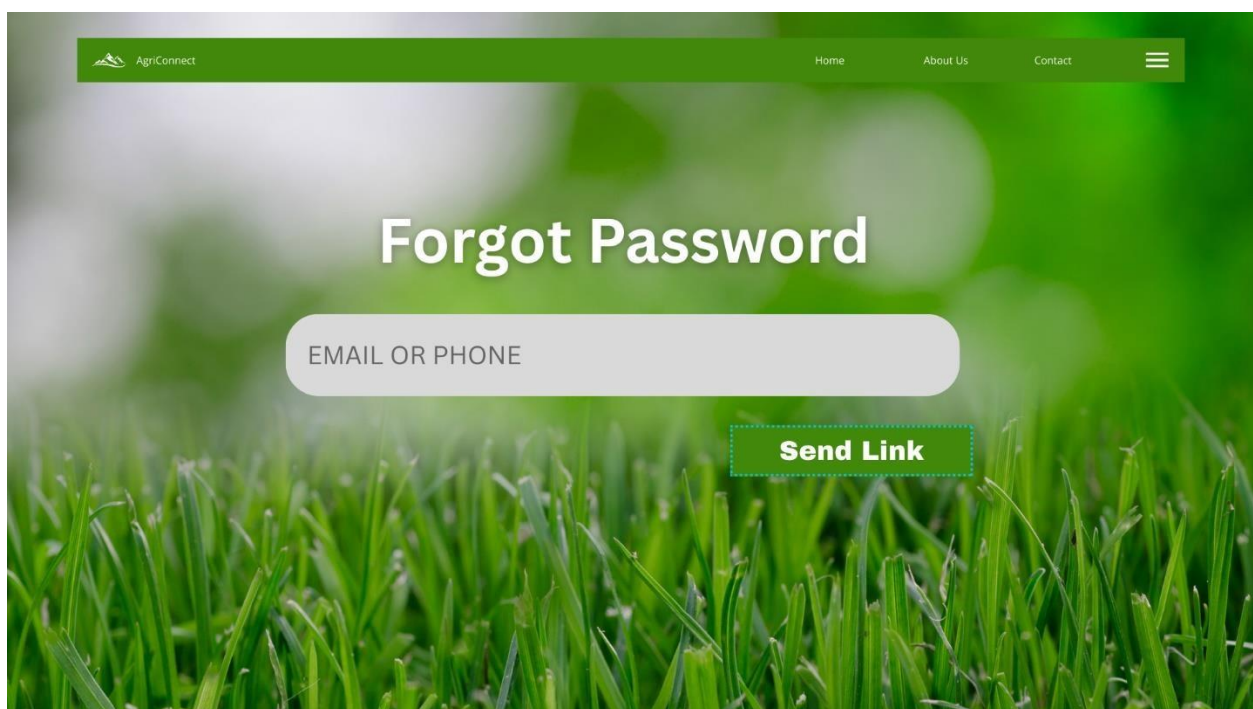
ADDRESS

PASSWORD

FARMER ▼

☐ I Agreed to Terms and Condition

**SIGNUP**



The image shows a web page for AgriConnect with a green header and a background of green grass. The header contains the AgriConnect logo, navigation links (Home, About Us, Contact), and a menu icon. The main content area features a large 'Forgot Password' title and a form with one input field: 'EMAIL OR PHONE'. Below the field is a green 'Send Link' button.

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

 <p>Chinigura Rice Premium</p> <p>1 kg ₹ 139 ₹145</p> <p>Add to bag</p>	 <p>Chinigura Rice Premium (Special Offer)</p> <p>3 kg ₹ 321 ₹335</p> <p>Request Stock</p>	 <p>Pajam Rice (Boiled)</p> <p>1 kg ₹ 65 ₹75</p> <p>Add to bag</p>	 <p>Athash Rice (Boiled) ± 50 gm</p> <p>5 kg ₹ 329 ₹359</p> <p>Add to bag</p>	 <p>Potato Regular (± 50 gm)</p> <p>1 kg ₹ 24</p> <p>Add to bag</p>	 <p>Lal Alu (Red Potato Cardinal) ± 50 gm</p> <p>1 kg ₹ 24</p> <p>Add to bag</p>	 <p>Potato Regular (± 25 gm)</p> <p>600 gm ₹ 15</p> <p>Add to bag</p>	 <p>Boro Alu (Big Diamond Potato) ± 50 gm</p> <p>1 kg ₹ 25</p> <p>Add to bag</p>
 <p>Lal Peyaj (Onion Red Imported) ± 50 gm</p> <p>1 kg ₹ 65</p> <p>Add to bag</p>	 <p>Deshi Peyaj (Local Onion) ± 25 gm</p> <p>500 gm ₹ 35</p> <p>Add to bag</p>	 <p>Peyaj Pata (Spring Onion) ± 12 gm</p> <p>250 gm ₹ 79</p> <p>Add to bag</p>	 <p>Mango Gobindobhog ± 50 gm</p> <p>3 kg ₹ 369 ₹540</p> <p>Add to bag</p>	 <p>Mango Gopalbhog ± 50 gm</p> <p>3 kg ₹ 399 ₹540</p> <p>Add to bag</p>	 <p>Guava Premium (± 50 gm)</p> <p>1 kg ₹ 119</p> <p>Add to bag</p>		



### 3. Farmer

AgriConnect

Home


Order Management

Transactions

Support

Marketplace


Q 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


Q 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	...





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



## 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@agricconnect.com

☎ 017453457867

## Frequently Asked Questions

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



## 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.

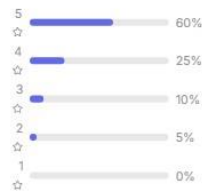
Easily apply by broadcasting evenly over the soil surface around plants or mixing into the top layer of soil before planting. Water thoroughly after application.

### Customer Reviews

[Write a Review](#)

# 4.8

158 Reviews



- Aisha Khan** ★★★★★  
Saw a huge difference in my tomato plants after just one application! Highly recommend.

2 days ago
- Ben Carter** ★★★★★  
Good quality fertilizer, easy to use. My cucumbers are thriving.

1 week ago
- Chen Liu** ★★★★★  
Excellent organic product. My leafy greens have never looked healthier.

3 weeks ago
- David Rodriguez** ★★★★★  
Seems okay, haven't noticed a dramatic change yet. Maybe takes time?

1 month ago
- Elena Petrova** ★★★★★  
This is my go-to fertilizer now. My flowers are blooming like never before!

2 months ago

AgriConnect
Home
Shop
About Us
Contact
Search for vegetables...
List Your Produce

## Fresh from the Farm, Delivered to You

Connecting farmers directly with consumers. Find the freshest, locally grown vegetables here.

#### Filter by Category

- All Produce
- Leafy Greens
- Root Vegetables
- Fruits
- Other

#### Sort By

- Price (Low to High)
- Price (High to Low)
- Name (A-Z)
- Name (Z-A)

#### Browse Categories

Leafy Greens

Root Vegetables

Fruits

Herbs

#### Fresh Vegetables Available

**Organic Tomatoes**  
New Arrival  
Organic  
Sweet and juicy, perfect for salads.  
80 BDT/kg  
Add Delete

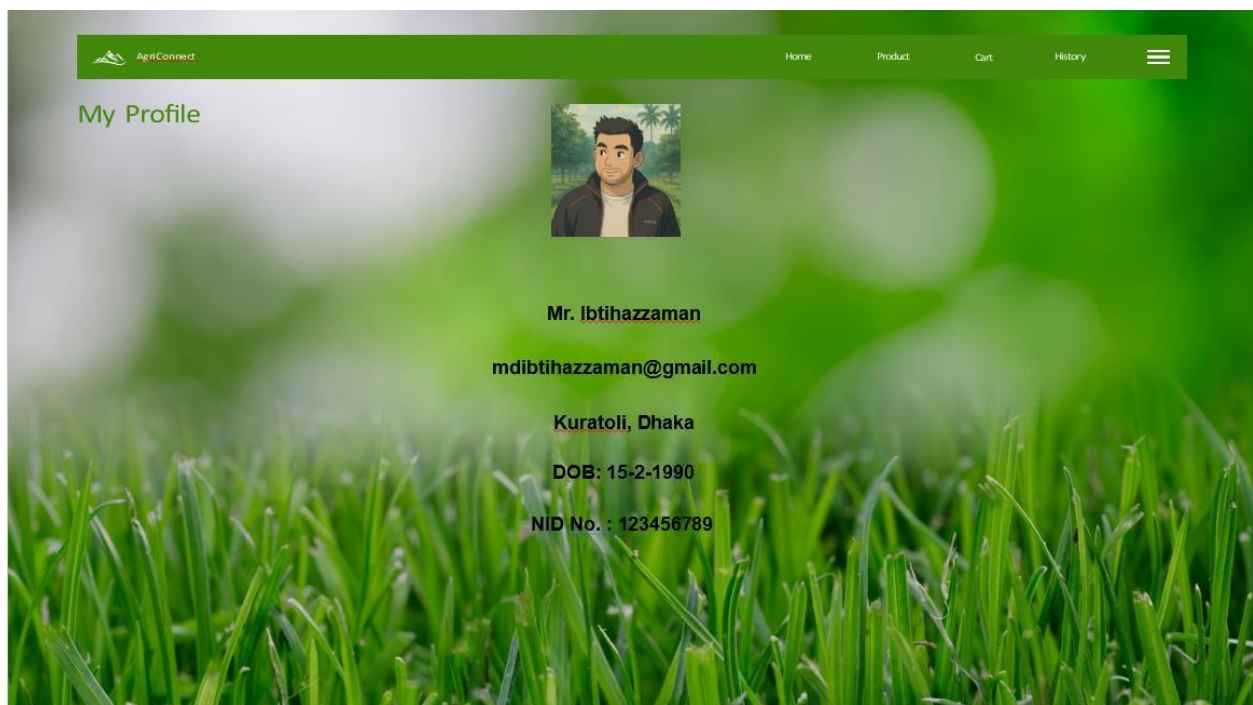
**Fresh Spinach**  
Local  
Tender leaves, great for salads or  
50 BDT/bunch  
Add Delete

**Bright Carrots**  
Naturally sweet and crunchy. Ideal for  
by Sunny Patch Gardens  
40 BDT/kg  
Add Delete

**Farm Potatoes**  
Versatile potatoes, perfect for mashing  
35 BDT/kg  
Add Delete

**Bell Peppers (Mixed)**  
Seasonal  
Colorful and sweet. Add zest to any  
120 BDT/kg  
Add Delete

## 4. Consumer





Home
Product
Cart
History

<p>Chinigura Rice Premium</p> <p>1 kg</p> <p>₹ 139 ₹445</p> <p>Add to bag</p>	<p>Chinigura Rice Premium (Special Offer)</p> <p>3 kg</p> <p>₹ 321 ₹435</p> <p>Request Stock</p>	<p>Pajam Rice (Boiled)</p> <p>1 kg</p> <p>₹ 65 ₹75</p> <p>Add to bag</p>	<p>Athash Rice (Boiled) ± 50 gm</p> <p>5 kg</p> <p>₹ 329 ₹399</p> <p>Add to bag</p>	<p>Potato Regular (± 50 gm)</p> <p>1 kg</p> <p>₹ 24</p> <p>Add to bag</p>	<p>Lal Adu (Red Potato Cardinal) ± 50 gm</p> <p>1 kg</p> <p>₹ 24</p> <p>Add to bag</p>	<p>Potato Regular (± 25 gm)</p> <p>600 gm</p> <p>₹ 15</p> <p>Add to bag</p>	<p>Boro Adu (Big Diamond Poi) ± 50 gm</p> <p>1 kg</p> <p>₹ 25</p> <p>Add to bag</p>
<p>Lal Peyaj (Onion Red Imported) ± 50 gm</p> <p>1 kg</p> <p>₹ 65</p> <p>Add to bag</p>	<p>Deshi Peyaj (Local Onion) ± 25 gm</p> <p>500 gm</p> <p>₹ 35</p> <p>Add to bag</p>	<p>Peyaj Pata (Spring Onion) ± 12 gm</p> <p>250 gm</p> <p>₹ 79</p> <p>Add to bag</p>	<p>Mango Gobindobhog ± 50 gm</p> <p>3 kg</p> <p>₹ 369 ₹540</p> <p>Add to bag</p>	<p>Mango Gopalbhog ± 50 gm</p> <p>3 kg</p> <p>₹ 399 ₹540</p> <p>Add to bag</p>	<p>Guava Premium (± 50 gm)</p> <p>1 kg</p> <p>₹ 119</p> <p>Add to bag</p>		

Home
Product
Cart
History

## Place Order

**Your Name**

First Name Last Name

**Your Email**

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](#)



AgriConnect Home Product Cart History

## Place Order

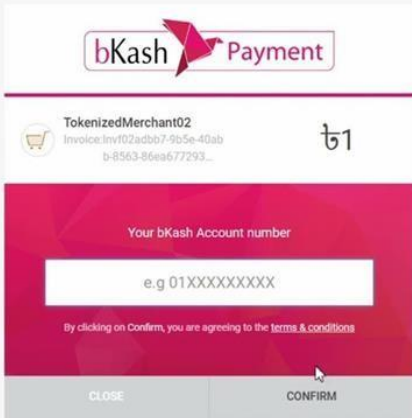
Your Name

Your Email

Shipping Address

Payment Method

- ☐ Cash
- ☒ Bkash
- ☐ Online



7890/+

16247

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**

7890/+

chat?

Card Information	
Card Holder Name	<input type="text"/>
Card Type	<input type="text"/>
Card Number	<input type="text"/>
Expiry Date(MM/YY)	01 / 10
CVC2	<input type="text"/>
Amount	375.00
Currency	BDT
Description	120100001^375
<input type="button" value="SUBMIT"/> <input type="button" value="RESET"/>	





DBBL E-COMM  
ecom.dutchbanglabank.com

Confirm Order

## 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: <a href="mailto:farmer@gmail.com">farmer@gmail.com</a> 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: <a href="mailto:farmer@gmail.com">farmer@gmail.com</a> Phone:017xxxxxxxx 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)
<ul style="list-style-type: none"><li>• Navigate to admin dashboard</li><li>• Check farmer statistics</li><li>• Check consumer statistics</li><li>• Check transaction history</li><li>• Check top products section</li><li>• Check user acquisition metrics</li></ul>	N/A	<ul style="list-style-type: none"><li>• Total number of active farmers</li><li>• Total number of active consumers</li><li>• Transaction history with trend graphs</li><li>• Top products by transaction volume</li><li>• User acquisition metrics with conversion rates</li><li>• Critical issue alerts if any exist.</li></ul>		
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	<div>1. Success message appears</div> <div>2. Price and quantity limits are saved</div> <div>3. Farmers cannot list rice below the minimum price</div> <div>4. Farmers cannot sell less than minimum quantity</div>		
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: <a href="mailto:janesmith@agricconnect.com">janesmith@agricconnect.com</a> 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: 999999999999 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)
<div>1. Go to dashboard</div> <div>2. Go to order portal</div> <div>3. Go to buying option</div> <div>4. Select product Category</div> <div>5. Select Items</div> <div>6. Add to cart</div> <div>7. Order Confirmation</div>	<div>1.</div> <div>Username: 321</div> <div>Password: 321121212</div>	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 agricultural 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 agricultural 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.				

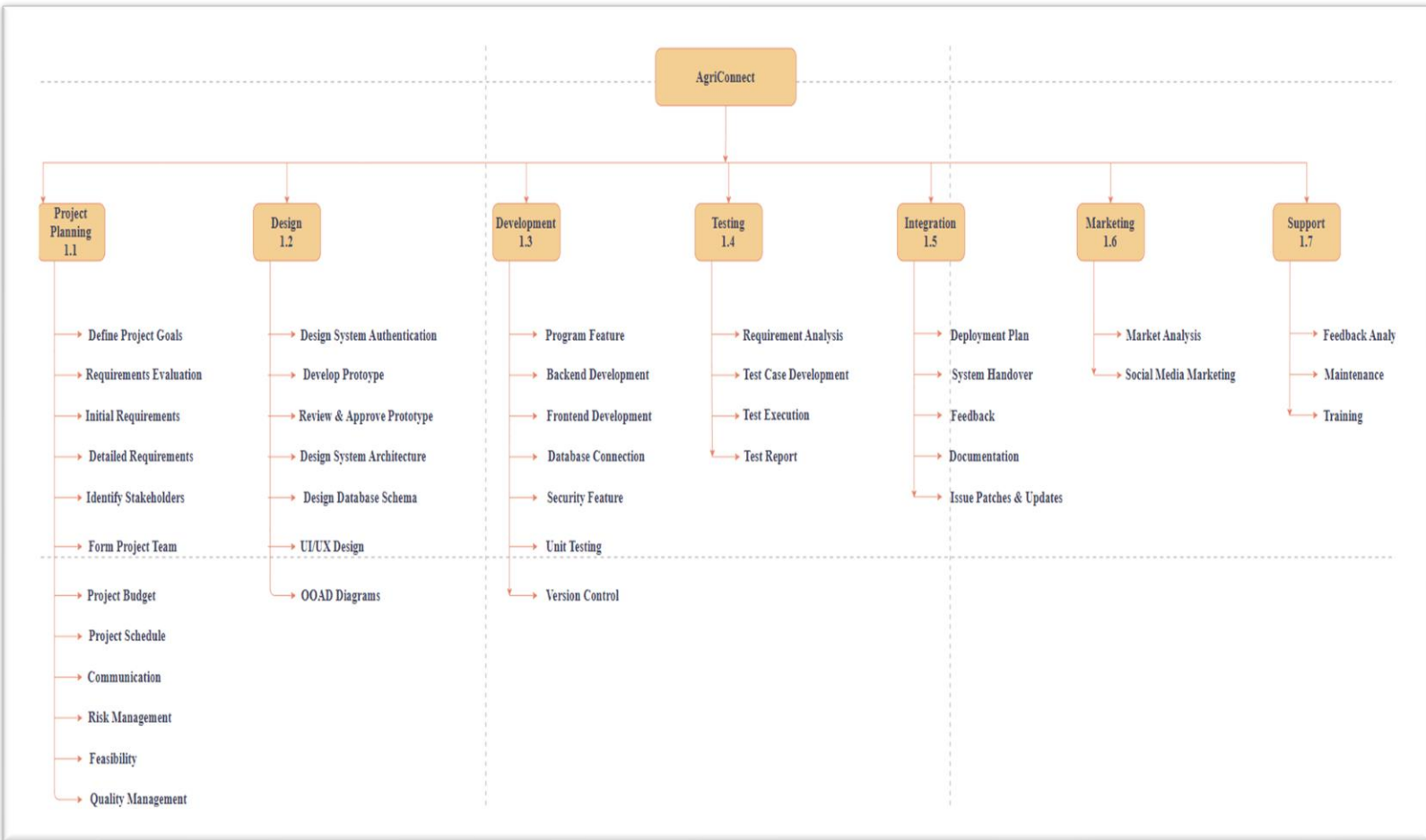
TestCase ID: CR_04		Test Designed date:		
Test Priority (Low, Medium, High): High		Test Executed by:		
Module Name: Cart		Test Execution date:		
Test Title: Verify the cart feature				
Description: Consumers can add products to their shopping cart and modify quantities				
Precondition (If any): User 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

$$\blacksquare \text{ Effort} = \text{PM} = 2.4 \times \left(\frac{5000}{1000}\right)^{1.05}$$

$$= 13.00$$

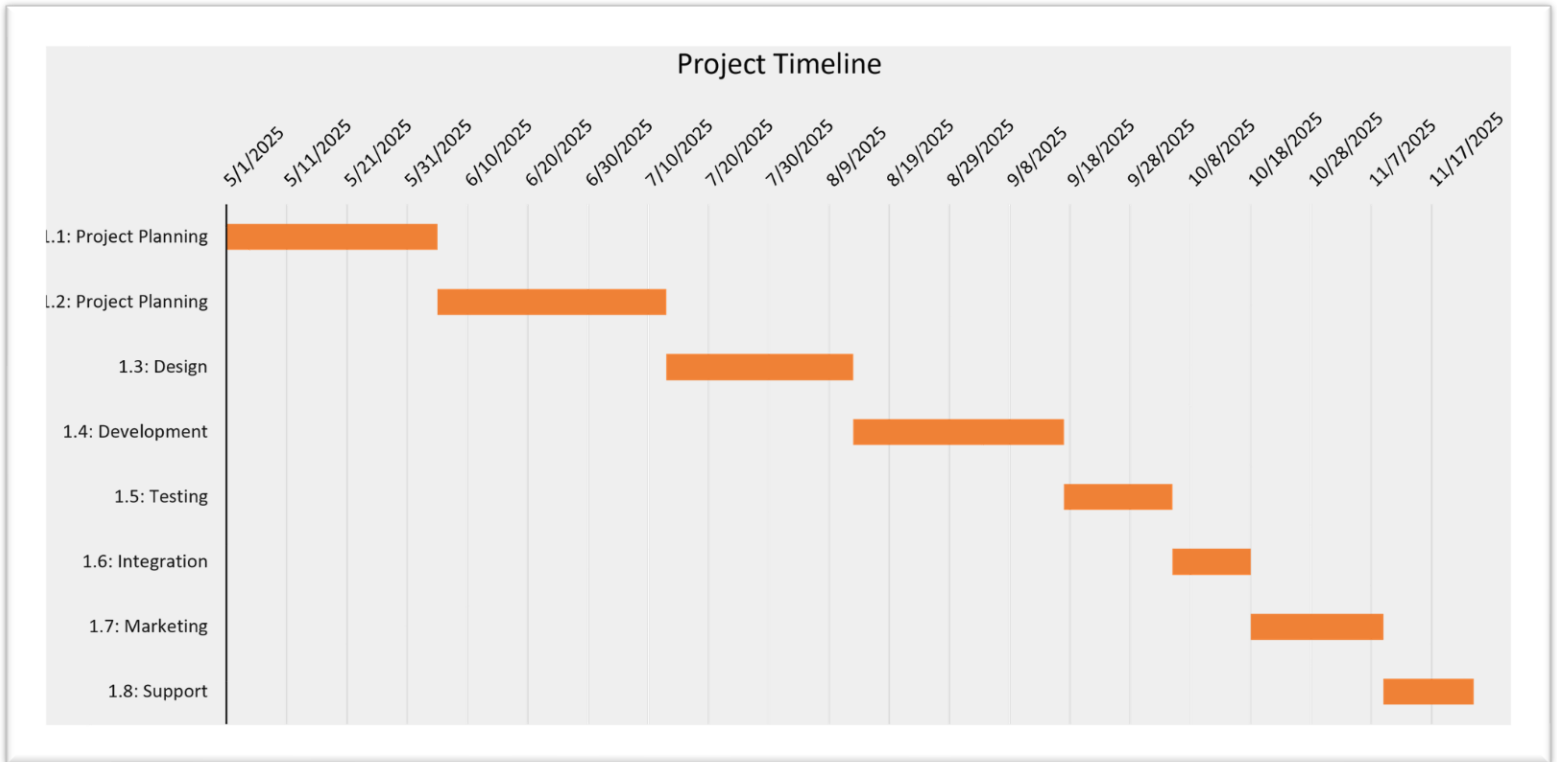
$$\blacksquare \text{ Development time} = \text{DM} = 2.50 \times (13.00)^{0.38}$$

$$= 6.63$$

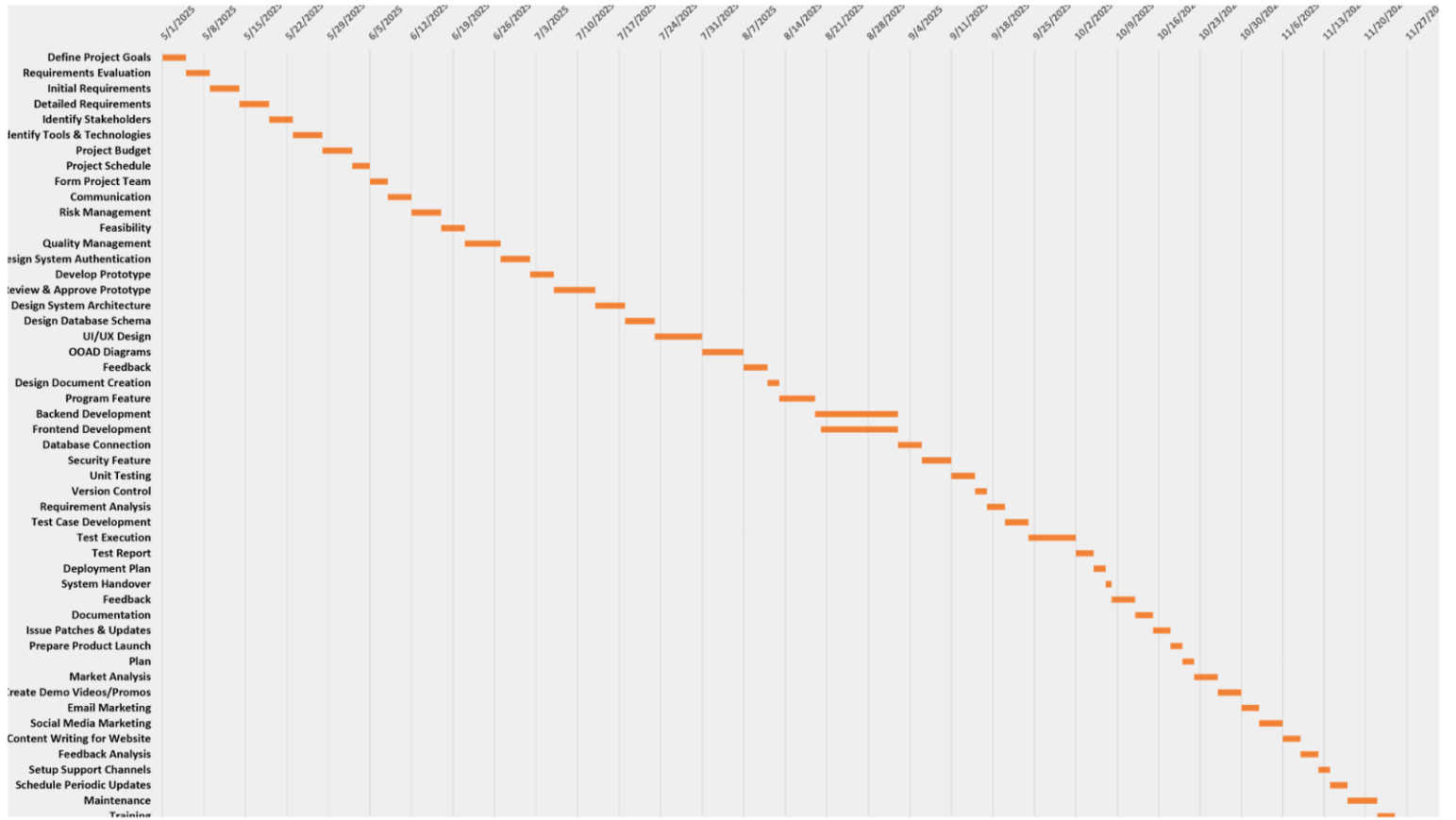
$$\blacksquare \text{ Required number of people} = \text{ST} = \frac{13.00}{6.63}$$

$$= 1.96 \approx 2$$

### 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**

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

[% of work scheduled to be done at this time]

- $\% \text{ complete} = BCWP / BAC = 443 / 521 = 85.02\%$   
[% of work completed at this time]

## Risk Management and Mitigation Plan

Risks	Cat ego ry	Prob abilit y	Im pa ct	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.