

Question 1 – Functional Requirements (20 FRs + NFRs)

Functional requirements = what the system should *do*.

Non-Functional requirements = how the system should *perform*.

Functional Requirements

Req ID	Req Name	Req Description	Priority
FR0001	Farmer Registration	Farmers should be able to register with the application	8
FR0002	Manufacturer Registration	Manufacturers should be able to register with the application	8
FR0003	Farmer Login	Farmers should be able to login with email & password	9
FR0004	Manufacturer Login	Manufacturers should be able to login with email & password	9
FR0005	Product Upload	Manufacturers should be able to upload fertilizers, seeds, pesticides	9
FR0006	Product Catalog	Farmers should be able to browse catalog	9
FR0007	Product Search	Farmers should be able to search products by name, type, price	10
FR0008	Add to Cart	Farmers should be able to add products to cart	9
FR0009	Buy Later List	Farmers should be able to save products in a wishlist	7
FR0010	Place Order	Farmers should be able to place an order	10
FR0011	Payment Gateway	Application should support COD, Debit/Credit, UPI	10
FR0012	Order Confirmation Email	Farmers should receive confirmation emails	8
FR0013	Delivery Tracking	Farmers should be able to track delivery status	9
FR0014	Update Inventory	Manufacturers should be able to update product availability	7

Req ID	Req Name	Req Description	Priority
FR0015	Profile Management	Users can update their personal details	6
FR0016	Forgot Password	Users should be able to reset password	6
FR0017	Admin Panel	Admin should manage farmers, manufacturers, and products	9
FR0018	Reports	Admin should generate sales and order reports	6
FR0019	Notifications	Farmers should get SMS/email notifications for order status	8
FR0020	Feedback/Rating	Farmers should be able to rate products and sellers	5

Non-Functional Requirements (NFRs)

Req ID	Req Name	Req Description	Priority (1–10)
NFR0101	Page Loading Time	Each page should load within 2 seconds under normal load.	9
NFR0102	Accessibility (WCAG)	The system must comply with WCAG 2.1 accessibility standards.	8
NFR0103	Concurrent Users	The system must support at least 10,000 concurrent users.	9
NFR0104	Search Response Time	Product search results must be displayed within 2 seconds.	9
NFR0105	Uptime Availability	The application must maintain 99.9% uptime annually.	10
NFR0106	Data Backup	System must perform daily automated backups of all critical data.	8
NFR0107	Disaster Recovery	System should recover from crashes within 30 minutes.	8
NFR0108	Security Encryption	All user passwords must be stored using SHA-256 or higher encryption.	10

Req ID	Req Name	Req Description	Priority (1–10)
NFR0109	Secure Payments	Payment processing must comply with PCI-DSS standards.	10
NFR0110	Data Privacy	Farmers' and Manufacturers' data must comply with the Indian IT Act, 2000.	9
NFR0111	Multi-Language Support	The application should support English + 1 local language.	7
NFR0112	Mobile Responsiveness	The application should work smoothly on Android, iOS, and web browsers.	9
NFR0113	Scalability	The system should support up to 100,000 products in the catalog.	8
NFR0114	Modular Updates	The system should allow for feature updates without affecting core modules.	7
NFR0115	Error Handling	The system should provide clear error messages and log all failures.	8
NFR0116	Browser Compatibility	The web app should support latest versions of Chrome, Firefox, Edge, Safari.	7
NFR0117	Session Timeout	User sessions should automatically log out after 15 minutes of inactivity.	8
NFR0118	Logging & Monitoring	The system should maintain audit logs for all user activities.	8
NFR0119	Response Scalability	The system should scale to handle peak loads during seasonal sales.	7
NFR0120	Packing Slip Standard	Packing slips shall be printed on both sides of 4"x 6" white paper.	6

Question 2–Minimum 5 page designs

Make wireframe and prototypes

1.Register



The image shows a registration form for an 'Online Agriculture Store'. The form is centered on a gray background. It features a title 'Online Agriculture Store' in a large, bold, dark gray font, followed by a subtitle 'Register' in a slightly smaller, bold, dark gray font. Below the subtitle, there are four white input fields with dark gray placeholder text: 'User_Name', 'mobile_Number', 'Email', and 'Password'. At the bottom of the form, there is a white button with rounded corners and the text 'Register' in a dark gray font.

Online Agriculture Store

Register

User_Name

mobile_Number

Email

Password

Register

2.Login



The image shows a login form for an 'Online Agriculture Store'. The form is centered on a gray background. It features a title 'Online Agriculture Store' in a large, bold, dark gray font, followed by a subtitle 'Login' in a slightly smaller, bold, dark gray font. Below the subtitle, there are two white input fields with dark gray placeholder text: 'User_Name' and 'Password'. At the bottom of the form, there is a white button with rounded corners and the text 'Login' in a dark gray font.

Online Agriculture Store

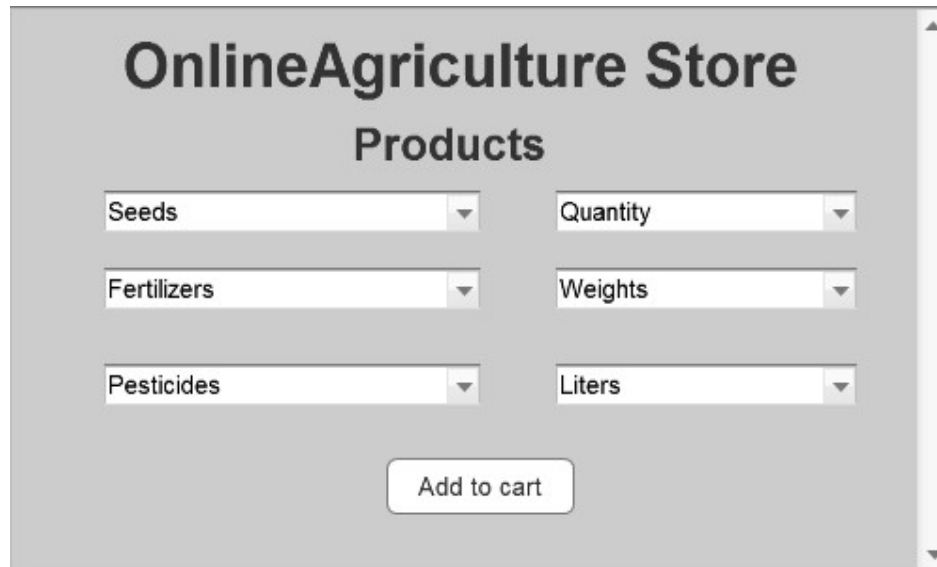
Login

User_Name

Password

Login

3.Product Catlog



The screenshot shows a web interface for an online agriculture store. At the top, the title 'OnlineAgriculture Store' is displayed in a large, bold, black font, followed by the subtitle 'Products' in a slightly smaller, bold, black font. Below the title, there are three rows of dropdown menus. The first row contains 'Seeds' and 'Quantity'. The second row contains 'Fertilizers' and 'Weights'. The third row contains 'Pesticides' and 'Liters'. Each dropdown menu has a small downward arrow on its right side. At the bottom center of the form, there is a white button with a black border and the text 'Add to cart'.

4.Add to cart



The screenshot shows a web interface for an online agriculture store. At the top, the title 'OnlineAgriculture Store' is displayed in a large, bold, black font, followed by the subtitle 'Products' in a slightly smaller, bold, black font. Below the title, there are two dropdown menus. The first dropdown menu is labeled 'Seeds' and the second is labeled 'Quantity'. Each dropdown menu has a small downward arrow on its right side. At the bottom center of the form, there is a white button with a black border and the text 'Buy'.

5. Payment

The screenshot shows a web page titled "OnlineAgriculture Store" with a sub-header "Payment". Below the header, there are three radio button options: "UPI", "Cards", and "COD". At the bottom of the form, there is a button labeled "Payment". The page has a light gray background and a vertical scrollbar on the right side.

6.Payment Status

The screenshot shows a simple web page with a light gray background. In the center, there is a large, bold text label that reads "Payment Status".

Question 3 – Tools (Visio, Balsamiq)

Ms Visio Tool

Microsoft Visio is a diagramming software developed by Microsoft. It is used to create professional diagrams and visuals such as:

- Flowcharts
- Organizational charts
- Network diagrams
- UML diagrams

Ms Visio Used for

1. Visual Representation: Helps convert complex ideas, processes, and systems into easy-to-understand diagrams.

2.Business Analysis: Used by BAs to design **process flows, use case diagrams, workflows** for projects.

3.Project Management: To map timelines, roles, and organizational structures.

4.IT and Engineering: To design **system architecture, networks, and technical diagrams**.

5.Communication: Helps teams and stakeholders clearly see how a process or system works.

Balsamiq Tool

Balsamiq is a wireframing and prototyping tool used to design the layout and structure of user interfaces (UI) for websites, mobile apps, and software applications.

It allows you to create sketch-style mockups that show how a product will look and work before development begins.

Who Uses Balsamiq?

1. **Business Analysts (BAs):** To capture requirements visually and show the client how the system screens will look.
2. **UI/UX Designers:** To design user-friendly interfaces and plan navigation flow.
3. **Project Managers:** To communicate features and requirements with stakeholders.
4. **Developers:** To understand what screens need to be built and how users will interact.
5. **Clients / Stakeholders:** To review the mockups and give feedback before coding starts.

Why is Balsamiq Useful?

- **Fast & Simple:** Lets you quickly sketch wireframes without worrying about detailed design.
- **User-Friendly:** No advanced design skills needed.
- **Clarity:** Helps stakeholders visualize the system early.
- **Saves Cost & Time:** Errors are caught early in the design stage instead of later in development.
- **Collaboration:** Teams can discuss and refine ideas visually.

Question 4 – RTM

Req ID	Req Name	Req Description	Design	Dev/Code	Test Cases (T1–T4)	UAT	Status
FR0001	Farmer Registration	Farmers should be able to register with the application	D1	C1	T1, T2	UAT1	In Progress
FR0002	Farmer Search for Products	Farmers should be able to search for fertilizers, seeds, pesticides	D2	C2	T3, T4	UAT2	Pending
FR0003	Secure Login	Farmers and Manufacturers should log in with email & password	D3	C3	T5	UAT3	Pending
FR0004	Product Upload	Manufacturers should upload & display products	D4	C4	T6, T7	UAT4	Pending
FR0005	Payment Gateway	Farmers should be able to pay via COD, Card, UPI	D5	C5	T8, T9, T10	UAT5	Pending
FR0006	Order Confirmation Email	Farmers should get order confirmation email	D6	C6	T11	UAT6	Pending
FR0007	Delivery Tracking	Farmers should track order status (dispatched, delivered)	D7	C7	T12	UAT7	Pending
NFR0101	Page Loading Time	Each page should load within 2 seconds	D8	Perf Test	T13 (Performance Test)	UAT8	Pending

Req ID	Req Name	Req Description	Design	Dev/Code	Test Cases (T1–T4)	UAT	Status
NFR0102	WCAG 2.1 Compliance	System must meet accessibility standards (WCAG 2.1)	D9	C8	T14 (Accessibility Test)	UAT9	Pending

Question 5 – 10 Test Case Documents

A Test Case Document is a structured document that defines how to test a particular feature, module, or functionality of a system to ensure it works as expected.

1. Test case document for Create Farmer Account

Test case ID	TC_CFA_001	Test Case Name	Creat Farmer Account
Project ID	TC_PID_001	Project Name	Online Agriculturne Shop
Test Strategy Id	TC_TSI_001	Date of Test	
Test Plan ID	TC_PID_001		
Description	Verify that a farmer can successfully create an account with valid details.		
Input Data	1. Enter valid name, mobile, email, password	1. Enter details with an already registered mobile	1. Enter valid Email
	2. Click Submit	2. Submit	2. Submit
Expected Behaviour	Farmer account is created successfully and confirmation message/email is sent.		
Actual Behaviour			
Results	Pass		

2. Test case document for Manufacture upload product

Test case ID	TC_CFA_002	Test Case Name	Manufacture upload product
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Project ID	TC_PID_002	Project Name	Online Agricluture Shop
Test Strategy Id	TC_TSI_002	Date of Test	
Test Plan ID	TC_PID_002		
Description	Manufacture uploaded product details in website		
Input Data	1. Open “Add Product” page 2. Enter all valid details 3. Click Submit Product uploaded successfully Confirmation message displayed	1. Leave required fields blank	1. Enter product name that already exists
		2. Submit form	2. Submit
Expected Behaviour			
Actual Behaviour			
Results	Pass		

3. Test case document for Search product

Test case ID	TC_CFA_003	Test Case Name	Search Product
Project ID	TC_PID_003	Project Name	Online Agricluture Shop
Test Strategy Id	TC_TSI_003	Date of Test	
Test Plan ID	TC_PID_003		
Description	Verify that a farmer can search product with valid details.		
Input Data	1. Enter valid product name	1. Enter partial name	1. Select category filter
	2. Click Search	2. Click Search	2. Click Search
Expected Behaviour	System should display matching product		
Actual Behaviour			
Results	Pass		

4. Test case document for Product Catlog

Test case ID	TC_CFA_004	Test Case Name	Product Catlog
Project ID	TC_PID_004	Project Name	Online Agricluture Shop
Test Strategy Id	TC_TSI_004	Date of Test	
Test Plan ID	TC_PID_004		
Description	Farmer added products in catlog		
Input Data	1. Select category (e.g., Seeds)	1. Select price range	1. Apply category & price filters together
	2. Apply filter	2. Apply filter	
Expected Behaviour	System should display all the product catlog		
Actual Behaviour			
Results	Pass		

5.Test case document for Place Order

Test case ID	TC_CFA_005	Test Case Name	Place Order
Project ID	TC_PID_005	Project Name	Online Agricluture Shop
Test Strategy Id	TC_TSI_005	Date of Test	
Test Plan ID	TC_PID_005		
Description	Farmer is sucessfully placing the order		
Input Data	1. Go to cart	1. Go to cart (empty)	1. Add product to cart
	2. Click Checkout	2. Try to place order	2. Enter valid/blank address
	3. Enter valid address & payment details		3. Confirm order
	4. Confirm order		
Expected Behaviour	Order placed successfully Confirmation message & order ID displayed		
Actual Behaviour			
Results	Pass		

6.Test case Document for Make Payment

Test case ID	TC_CFA_006	Test Case Name	Make payment
Project ID	TC_PID_006	Project Name	Online Agricluture Shop
Test Strategy Id	TC_TSI_006	Date of Test	
Test Plan ID	TC_PID_006		
Description	Farmer is ready to make payment		
Input Data	1. Select Credit/Debit Card	1. Select UPI option	1. Enter invalid card number
	2. Enter valid card details	2. Enter valid UPI ID	2. Click Pay
	3. Confirm payment	3. Authorize payment	
Expected Behaviour	Payment successful Confirmation & receipt generated		
Actual Behaviour			
Results	Pass		

7.Test Case Document for Order Conformation

Test case ID	TC_CFA_007	Test Case Name	Order Confirmation
Project ID	TC_PID_007	Project Name	Online Agricluture Shop
Test Strategy Id	TC_TSI_007	Date of Test	
Test Plan ID	TC_PID_007		
Description	Order confirmation after successful payment		
Input Data	1. Complete payment for items in cart	1. Place order using COD	1. Place order and confirm
	2. Submit order	2. Submit	
Expected Behaviour	System displays “Order Confirmed” with unique order ID and summary		
Actual Behaviour			
Results	Pass		

8.Test Case Document for Delivery Tracking

Test case ID	TC_CFA_008	Test Case Name	Deliver Tracking
Project ID	TC_PID_008	Project Name	Online Agricluture Shop
Test Strategy Id	TC_TSI_008	Date of Test	
Test Plan ID	TC_PID_008		
Description	Track delivery of placed order		
Input Data	1. Log in	1. Log in	1. Open tracking page
	2. Go to My Orders	2. Open My Orders	2. Enter order ID
	3. Select an order	3. Track each order	3. Confirm order
	4. Click Track Delivery		
Expected Behaviour	System displays current status (e.g., Pending, Shipped, Out for Delivery, Delivered)		
Actual Behaviour			
Results	Pass		

9.Test Case Document for Monitoring

Test case ID	TC_CFA_009	Test Case Name	Monitoring
Project ID	TC_PID_009	Project Name	Online Agricluture Shop
Test Strategy Id	TC_TSI_009	Date of Test	
Test Plan ID	TC_PID_009		
Description	Monitor total orders		
Input Data	1. Log in as admin	1. Go to Dashboard → Products	
	2. Navigate to Dashboard → Orders		1. Navigate to Dashboard → Payments
Expected Behaviour	Admin should see total orders with counts (Pending, Shipped, Delivered, Cancelled)		

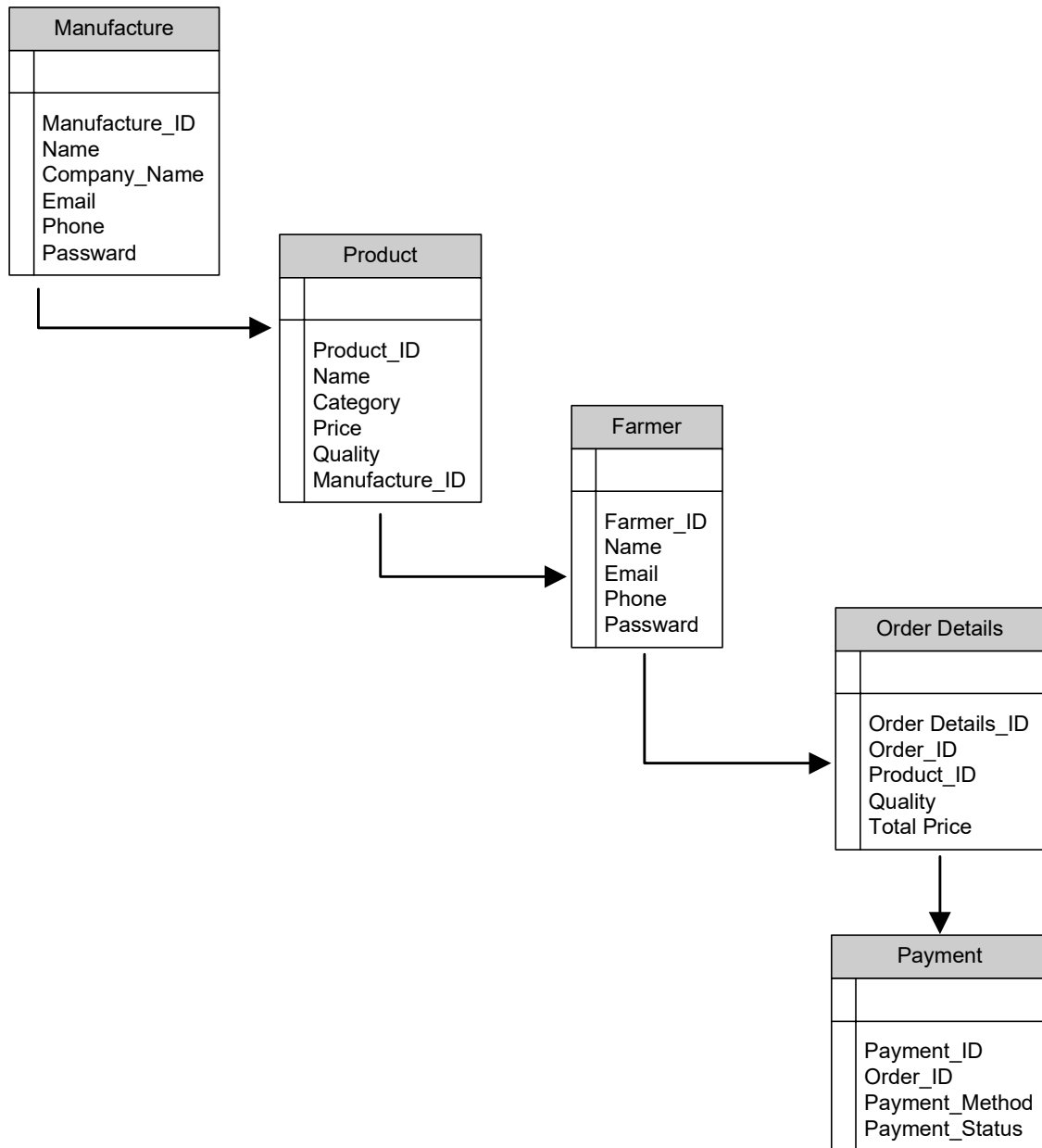
Actual Behaviour			
Results	Pass		

10.Test Case Document for Multi Language Support

Test case ID	TC_CFA_0010	Test Case Name	Multi Language Support
Project ID	TC_PID_0010	Project Name	Online Agricluture Shop
Test Strategy Id	TC_TSI_0010	Date of Test	
Test Plan ID	TC_PID_0010		
Description	Verify default language display		
Input Data	Open the website/app	1. Open language dropdown	1. Switch language to Telugu
		2. Select Telugu	
Expected Behaviour	System displays all UI elements in English		
Actual Behaviour			
Results	Pass		

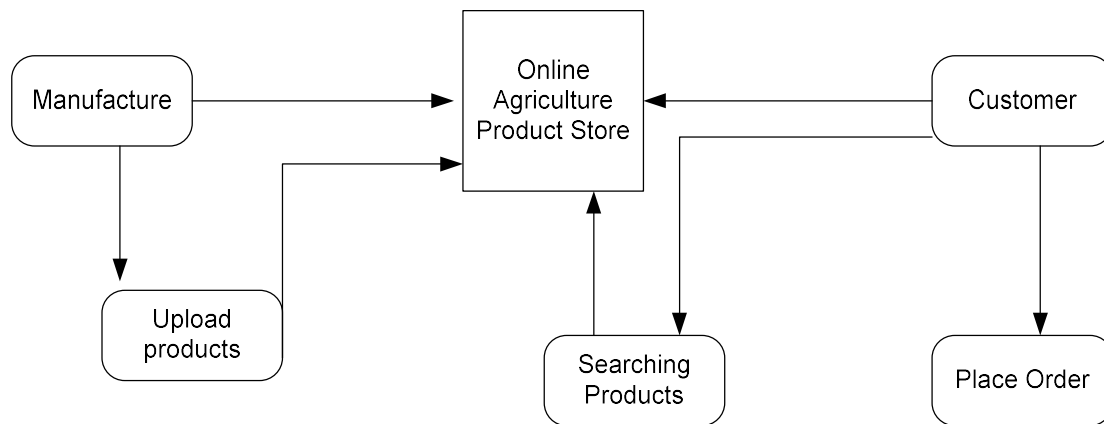
Question 6 – DB Design

Database Design (DB Design) is the structured process of creating a blueprint for how data will be stored, organized, and managed in a database system.



Question 7 – Data Flow Diagram

A Data Flow Diagram (DFD) shows how data moves through the system, between processes, external entities, and data stores. Let's create a simple DFD for Online Agriculture Store.



Question 8 – Change Request

1. Request Submission The first step is for the person or group requesting the change to formally submit it. This is usually done using a **change request form** or a project management tool. The form should capture essential details like:

- **Description:** What's the proposed change?
- **Reason:** Why is the change necessary (e.g., government mandate, new business requirement)?
- **Impact:** A preliminary assessment of how the change will affect the project.
- **Priority:** How urgent is the change?

2. Impact Analysis Once a request is submitted, the project manager and relevant team members (subject matter experts, developers, etc.) analyze the full impact of the proposed change. This is the most crucial step. They need to answer questions like:

- How will this change affect the **project scope**?
- What is the impact on the **project schedule** and deadlines?
- What are the **cost implications** (e.g., additional resources, new software)?
- Will it affect the **quality** of the final deliverable?
- What are the **risks** associated with implementing or not implementing the change?

For the taxation change, this analysis would involve determining what tax rules need to be updated, which parts of the system are affected, and how much time and effort the development and testing would require.

3. Review and Decision The change request, along with the detailed impact analysis, is presented to a designated group for a decision. This group is often called a **Change Control**

Board (CCB) and may include the project sponsor, key stakeholders, and senior management. The CCB will:

- Review the request and the analysis.
- Discuss the benefits versus the costs and risks.
- Make a decision to **approve, reject, or defer** the request.
- If approved, the CCB may also allocate additional budget or extend the timeline as needed.

4. Communication and Implementation After a decision is made, it's critical to communicate the outcome to all relevant stakeholders. If the change is approved, the project plan is officially updated to reflect the new requirements. The project manager then works with the team to **implement the change**, which may involve:

- Updating the work breakdown structure (WBS) and schedule.
- Assigning tasks to team members.
- Adjusting the budget and resources.
- Communicating the updated plan to everyone involved.

Question 9 – Change Request Vs an Enhancement

Aspect	Change Request	Enhancement
Definition	Modification to existing agreed requirements	New feature/improvement beyond current scope
Timing	During the project execution	After go-live / future releases
Reason	To fix gaps, comply with regulations, or stakeholder change of mind	To add extra value or usability
Impact	May affect cost, scope, schedule	Usually deferred, less impact on current project
Example (Agri Store)	Update tax calculation due to govt policy	Add auction system for farmers' crops

Question 10 – Estimations

1. The team consists of:
 - Project Manager: 1
 - Senior Java Developer: 1
 - Java Developers: 4
 - Network Admin: 1
 - DB Admin: 1
 - Testers: 2
 - Business Analyst: 1 (You)
2. Project duration: **18 months** (~78 weeks)
3. Each team member works **40 hours/week**
4. Estimation is based on major project phases:
 - Requirements Gathering & Analysis
 - Design
 - Development
 - Testing
 - Deployment & Support

Manhour Estimation by Phase

Phase	Activities	Team Members	Estimated Hours	Notes
1. Requirements Gathering & Analysis	Stakeholder meetings, BRD creation, approvals	BA, PM	400	4 months × 2 team × 50 hrs/month
2. System Design & Architecture	DB design, system architecture, UI/UX mockups	PM, Senior Dev, DB Admin, Network Admin	600	Includes high-level & detailed design

Phase	Activities	Team Members	Estimated Hours	Notes
3. Development	Coding backend & frontend, APIs, integration	Senior Dev + Java Devs	4800	4 developers × 18 months × ~20 hrs/month per module
4. Testing & QA	Unit testing, integration testing, UAT	Testers, BA, Devs	800	Includes test case creation, bug fixing
5. Deployment & Support	Hosting setup, production deployment, support	PM, Network Admin, Devs	200	Includes initial training for farmers/manufacturers

Total Estimated Manhours

- Requirements & Analysis: 400 hrs
- Design & Architecture: 600 hrs
- Development: 4800 hrs
- Testing & QA: 800 hrs
- Deployment & Support: 200 hrs

Total = 6800 Manhours

Breakdown by Role (Approximate)

Role	Estimated Manhours
Business Analyst	500
Project Manager	400
Senior Java Developer	800
Java Developers (4)	3200
Network Admin	200
DB Admin	200

Role	Estimated Manhours
Testers (2)	1400

Question 11 – UAT

1.Prepare for UAT

- Identify UAT scope: login, catalog browsing, product search, add-to-cart, payment (COD, UPI, card), email confirmation, delivery tracker.
- Prepare UAT Test Plan: objectives, roles, responsibilities, timelines.
- Prepare UAT Test Cases/Scenarios based on business requirements (e.g., BR001–BR010).
- Ensure UAT environment is ready (similar to production).

2.Coordinate with Client & Stakeholders

- Contact Mr. Henry and SOONY Committee to schedule UAT.
- Train Peter, Kevin, Ben (farmers) and manufacturers on how to perform UAT.
- Provide test data (sample products, dummy orders).

3.Execute UAT

- Farmers test real scenarios: browsing catalog, logging in, placing orders, making payments, and tracking delivery.
- Manufacturers test product upload and display.
- BA monitors, records results, and logs defects.

4.Defect Handling

- If any issues arise, BA reports them to the dev/test team.
- Retesting is done until business requirements are satisfied.

5.UAT Sign-off

- Once stakeholders confirm the system works as expected, BA collects formal acceptance sign-off from Mr. Henry/SOONY.
- This is the green signal for Go-Live.

Question 12 – Project Closure Document

A Project Closure Document is a formal report created at the end of a project to officially close it.

Project Closure Document Includes

The Project Overview is a short summary section of the Project Closure Document. It provides a high-level description of the project, its objectives, scope, duration, budget, and overall outcome.

1. Project Overview (Agriculture Store Project)

Project Overview

- **Project Name:** Online Agriculture Products Store
- **Project Sponsor:** Mr. Henry (SOONY Company)
- **Project Manager:** Mr. Vandanam
- **Budget:** ₹2 Crores
- **Duration:** 18 Months
- **Objective:** To create an online platform where farmers can buy agricultural products (fertilizers, seeds, pesticides) directly from manufacturers and get them delivered.
- **Scope Delivered:**
 - Farmer and Manufacturer login/registration
 - Product catalog and search option
 - Secure payment gateway (COD, UPI, Cards)
 - Order confirmation via email
 - Delivery tracking system
- **Outcome:** The project was delivered successfully within the given budget and timeline, accepted by stakeholders after UAT.

2. Achievements (Agriculture Store Project)

The **Achievements** section lists the **key milestones, goals, and benefits** that were accomplished during the project. It shows how well the project objectives were met.

- Successfully developed a **user-friendly online platform** for farmers and manufacturers.
- Implemented **secure login & registration** for farmers and suppliers.
- Delivered a **searchable product catalog** for fertilizers, seeds, and pesticides.

- Integrated **secure payment gateway** (COD, UPI, Cards).
- Enabled **delivery tracking system** and **email confirmations** for orders.
- Improved **access to agricultural products** for remote farmers, reducing travel effort.
- Project was delivered **within 2 Crores budget** and **on schedule (18 months)**.
- Stakeholders (Mr. Henry, Peter, Kevin, Ben) expressed **satisfaction with the solution**.
- The system aligns with **CSR objectives** of SOONY Company by empowering rural farmers.

3. Lesson Learned (Agriculture Store Project)

Lessons Learned are the **insights, experiences, and knowledge** collected during the project lifecycle. They help improve processes, avoid mistakes, and replicate successes in future projects.

- **Requirement Gathering:** Early involvement of farmers and manufacturers improved requirement clarity. Next time, conduct more workshops before finalizing scope.
- **Stakeholder Communication:** Regular stakeholder meetings helped avoid misunderstandings. Continue using status reports and RTM.
- **Time Management:** Some development tasks took longer due to integration issues with payment gateways. Next time, allocate buffer time for third-party integrations.
- **Testing:** Involving testers early in the design phase helped catch defects earlier. This should be standard practice.
- **Change Requests:** The request for auction and crop selling came late. Future projects should set up a **formal Change Request Process** from the start.
- **Technology Choice:** Java-based backend and simple UI design worked well for rural users. For future, explore lightweight mobile apps for offline access.
- **Risk Handling:** Identified risks early (like internet connectivity issues for farmers) but mitigation could have been stronger. Next time, do more risk scenario planning.
- **Team Coordination:** Cross-functional collaboration (developers, testers, DB admin) worked effectively due to strong project management. Keep this practice.

4. Quality Assurance (Agriculture Store Project)

Quality Assurance (QA) ensures that the project deliverables meet the defined standards, requirements, and client expectations before formally closing the project. It demonstrates that all outputs were verified, validated, and approved.

- Farmers can register, login, search products, order, pay, and track deliveries.
- Manufacturers can upload and manage product listings.
- Payment gateway is secure (supports COD, cards, UPI).
- Pages load within 2 seconds (NFR).

- Accessibility standards WCAG 2.1 are met.
- UAT completed and signed off by Peter, Kevin, and Ben.
- All critical defects resolved.

5.Resource Utilization (Agriculture Store Project)

In a project, resources refer to all the people, tools, equipment, and materials that are used to complete the project tasks. Resource utilization tracks how these resources are allocated and used throughout the project to ensure efficiency and avoid overuse or underuse.

Human Resources (Team Members)

- Project Manager
- Business Analyst
- Developers (Java Developers, Web/Mobile Developers)
- Testers
- Network/Admin Staff
- Subject Matter Experts (SMEs)

Technical Resources

- Software tools (MS Visio, Balsamiq, IDEs like Eclipse/IntelliJ)
- Hardware (computers, servers, mobile devices)

Financial Resources

- Project budget (e.g., 2 Crores INR in your case)
- Cost allocation for software, licenses, training, etc.

Material/Physical Resources

- Office equipment, printers, stationery
- Test devices for mobile/web applications

6.Risk Management (Agriculture Store Project)

In the Online Agriculture Products Store project, several risks can arise. Risks are uncertain events or conditions that, if they occur, can affect the project objectives

Technical Risks

- **System Performance Issues:** Slow loading of product catalog or search function may frustrate farmers.

- **Data Security:** Risk of unauthorized access to farmers' personal data and payment information.
- **Integration Issues:** Payment gateway or delivery tracking integration may fail.
- **Platform Compatibility:** Mobile app or website may not work well on all devices/browsers.

Operational Risks

- **User Adoption Risk:** Farmers in remote areas may struggle to use the platform due to lack of technical knowledge or internet connectivity.
- **Supplier Engagement Risk:** Fertilizer, seed, or pesticide manufacturers may not regularly update products, leading to incomplete catalogs.
- **Delivery Failures:** Logistics issues may cause delays in delivering orders.

Project Management Risks

- **Scope Creep:** Addition of new features (like farmers selling crops or auction system) may delay project or increase cost.
- **Resource Unavailability:** Key team members may leave the project or be unavailable, causing delays.
- **Timeline Risk:** 18-month duration may not be sufficient if unexpected issues arise.

Financial Risks

- **Budget Overrun:** Additional features, technical issues, or delays may increase cost beyond 2 Crores INR.
- **Payment Failures:** Issues with integrating multiple payment methods (COD, UPI, cards)

External Risks

- **Internet Connectivity:** Farmers in remote areas may face poor connectivity, affecting their access to the platform.
- **Regulatory Changes:** Government regulations related to agricultural sales or online transactions may affect operations.
- **Market Risk:** Competitors launching similar platforms could reduce adoption.

7.Challenges (Agriculture Store Project)

In the **Online Agriculture Products Store** project, several challenges can be anticipated due to its scope, stakeholders, and technical requirements. Here's a detailed list:

Technical Challenges

- **System Performance:** Ensuring the website and mobile app load quickly and handle multiple users simultaneously.
- **Integration Complexity:** Integrating payment gateways (COD, UPI, cards) and delivery tracking systems seamlessly.
- **Data Security:** Protecting sensitive user data (personal info, payment details) from breaches or hacks.
- **Platform Compatibility:** Making sure the application works on various devices, browsers, and operating systems.

User Adoption Challenges

- **Digital Literacy:** Farmers in remote areas may not be familiar with using web or mobile applications.
- **Connectivity Issues:** Poor internet access in rural areas may limit platform usage.
- **Trust Factor:** Farmers and manufacturers may be hesitant to use online systems instead of traditional methods.

Operational Challenges

- **Product Data Management:** Manufacturers may delay uploading products or updating stock details.
- **Delivery Logistics:** Ensuring timely delivery of products to remote locations.
- **Customer Support:** Handling user complaints, payment disputes, or order tracking queries effectively.

Project Management Challenges

- **Scope Management:** Preventing scope creep due to new feature requests like farmers selling crops or auction systems.

- **Resource Allocation:** Ensuring the availability of skilled developers, testers, and support staff throughout the project.
- **Timeline Constraints:** Completing development, testing, and deployment within the 18-month project duration.
- **Budget Constraints:** Staying within the allocated budget of 2 Crores INR despite unforeseen expenses.

Stakeholder Challenges

- **Requirement Clarity:** Different stakeholders (farmers, manufacturers, project committee) may have conflicting requirements.
- **Communication Gap:** Coordinating effectively between SOONY, APT IT Solutions, and remote users.

Market Challenges

- **Competition:** Other online agricultural marketplaces may exist or emerge.
- **Regulatory Changes:** New government rules related to agricultural sales or e-commerce may impact operations.