Question 1– Audits

4 Quarterly Audits are planned Q1, Q2, Q3, Q4 for this Project What is your knowledge on how these Audits will happen for a BA?

An audit in the context of a Business Analyst refers to a structured review process that evaluates the effectiveness, accuracy, and compliance of business analysis activities within a project or organization. These audits ensure that the BA's work aligns with industry standards, stakeholder expectations, and project objectives.

Quarter 1-Audit Report

Requirement Gathering Phase

- BRD Template
- Elicitation result reports
- Duplicate requirements report.
- Grouping of functionalities / Features
- Client signoff

Quarter 2 -Audit Report

Requirement Analysis Phase

- UML diagrams
- Business to functional requirements mapping.
- Client signoff documents
- RTM document version control

Quarter 3 - Audit Report

Design Phase

- Utilization of tools
- Documented evidence on client communication
- Stakeholder MOM

Quarter 4 - Audit Report
Development & Testing

- JAD session report
- End user manual preparation document.
- BA and developer MOM.
- Test case summary.
- Training report to end user.
- Lessons learnt document.
- Email communication.

Question 2 – BA Approach Strategy

Business Analyst Approach Strategy

As a Business Analyst, ensuring a structured approach to project execution is crucial for successful delivery. Here's a detailed strategy outlining the steps, methodologies, and techniques to be followed before kicking off the project.

1. Elicitation Techniques

Elicitation is the process of gathering requirements from stakeholders. The most effective techniques for this project include:

Interviews: Conduct direct discussions with stakeholders to understand the project vision and business needs.

Workshops: Organize sessions with the technical team to ensure alignment on feasibility.

Document Analysis: Study existing business models, policies, or any reference materials related to online agricultural platforms.

Prototyping: Create wireframes and mock-ups to validate requirements.

Observation: Understand how farmers procure products traditionally to identify pain points.

2. Stakeholder Analysis

Identifying stakeholders and their influence on the project is critical:

Primary Stakeholders: Mr. Henry, Peter, Kevin, Ben (representing farmers).

Project Team: Developers, Testers, DB Admin, Network Admin.

Financial & Decision Makers: Committee Members (Mr. Henry, Mr. Pandu, Mr. Dooku).

RACI Matrix (Responsibility Assignment)

A RACI (Responsible, Accountable, Consulted, Informed) model ensures clarity in roles:

Responsible–BA, Project Manager, Developers.

Accountable – Delivery Head (Mr. Karthik).

Consulted– Stakeholders, Subject Matter Experts.

informed – Committee, Clients.

3. Documentation to Prepare

Business Requirement Document (BRD) – Captures high-level business needs.

Functional Requirement Document (FRD) – Defines system functionalities.

Use Case Diagrams & Activity Diagrams – Visually represent system interactions.

User Stories Describe how different users will interact with the application.

Process Flow & Data Flow Diagrams – Outline workflows and data movement.

Traceability Matrix – Ensures requirements align with deliverables.

4. Approval and Sign-off Process

To ensure smooth execution, approvals must be obtained at different phases:

BRD Sign-off: The client reviews requirements for completeness before development begins.

FRD Approval: Validate technical feasibility.

Wireframe & Prototype Approval: Ensure the usability of the application.

UAT Client Acceptance: Final client validation before deployment.

How to Secure Approvals?

Formal client meetings.

Email confirmation and recorded agreements.

Digital signatures on approved documents.

5. Communication Strategy

Effective communication ensures transparency and progress tracking:

Tools: Microsoft Teams, Slack, Email.

Meeting Cadence: Weekly updates, sprint reviews, stakeholder meetings.

Reports: Status updates, risk logs, impact analysis.

Escalation Path: Defined workflow for conflict resolution.

6. Managing Change Requests

Change is inevitable. A well-defined process is required:

Identify & Document Change – Capture proposed alterations.

Analyse Impact – Assess cost, timeline, and scope.

Secure Approval – Ensure client validation.

Implement & Track – Update project plans accordingly.

7. Project Tracking & Status Updates

Keep stakeholders informed through:

Dashboards & Reports – Real-time updates via tracking tools.

Sprint Demos – Showcase incremental progress.

Feedback Mechanism – Stakeholders contribute to refinements.

8. UAT & Project Sign-off

Final validation ensures all requirements meet client expectations:

Conduct User Acceptance Testing (UAT) – Validate application with farmers.

Document Client Project Acceptance Form – Obtain formal approval.

Handover & Training – Ensure users understand system functionality.

Question 3 – 3-Tier Architecture

3-Tier Architecture is a client-server architecture divided into Presentation, Business Logic, and Data Access layers. It enhances scalability, maintainability, and separation of concerns.

1. Presentation Layer – User Interface (e.g., website or mobile app)
2. Business Logic Layer – Application logic (e.g., Java code validating transactions)
3. Data Layer – Database (e.g., MySQL storing product details)
This structure allows each layer to be developed, updated, and scaled independently.

Question 4 – BA Approach Strategy for Framing Questions
Framing questions effectively involves techniques like 5W1H, SMART goals, RACI analysis, and using visual models to extract clear requirements.

1. 5W1H – What, Why, Who, When, Where, How
2. SMART – Specific, Measurable, Achievable, Relevant, Time-bound
3. RACI Matri – Define roles clearly
4. Use Case Specs – Understand stakeholder interaction with system
5. Activity Diagrams and Models – Visualize processes before questioning
6. Mockups /Page Design – Helps stakeholders visualize end result.

Question 5 – Elicitation Techniques

Elicitation techniques are methods used by BAs to gather information from stakeholders. Examples include Interviews, Brainstorming, Document Analysis, and Prototyping

The techniques I'm aware of are:
B – Brainstorming
D – Document Analysis
R – Reverse Engineering
F – Focus Groups
O – Observation
W – Workshops
J – JAD (Joint Application Development)
I – Interview
P – Prototyping
Q – Questionnaire
U – Use Case Modelling

Question 6 – This project Elicitation Techniques

Selecting appropriate elicitation techniques depends on stakeholder availability, project complexity, and required clarity.

For this project, the following techniques are suitable:
- Prototyping: To visualize UI for farmers and manufacturers.
- Use Case Specs: To define system interactions.
- Document Analysis: To understand existing systems or forms.
- Brainstorming: To generate ideas with stakeholders like Peter, Kevin, and Ben.

Question 7 – 10 Business Requirements

Business Requirements are high-level needs that define what the system must do to deliver value to stakeholders

BR001 – Farmers should be able to search for available products in fertilizers, seeds, pesticides.

BR002 – Manufacturers should be able to upload and display their products in the application

BR003 – Users should register/login with email and password

BR004 – Users can Browse product categories.

BR005 – Payment methods should include UPI, Card, COD

BR006 – User should get email confirmation on orders

BR007 – User should Track the order

BR008 – Admin Should manage product categories.

BR009 – User can add wish list / Buy later

BR010 – Application should support both web and mobile platforms.

Question 8 –Assumptions

Assumptions are conditions believed to be true without proof during the planning phase

1. Internet connectivity is available in remote areas.
2. All users can access smartphones or computers.
3. Manufacturers will regularly update product inventory.
4. Farmers are familiar with digital payments.
5. Delivery services are available in remote areas.

Question 9 – This project Requirements Priority

Requirements Priority refers to the ranking or classification of project requirements based on their importance, urgency, or business value. Prioritizing requirements helps teams focus on delivering the most critical functionalities first, especially when resources, time, or budget are limited.

BR001 – Farmers should be able to search for available products in fertilizers, seeds, pesticides. – Priority

BR002 – Manufacturers should be able to upload and display their products in the application

BR003 – Users should register/login with email and password

BR004 – Users can Browse product categories.

BR005 – Payment methods should include UPI, Card, COD

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Question 10 – Use Case Diagram

A use case diagram is a visual representation in UML (Unified Modeling Language) that depicts the interaction between a system and its users (or actors) to achieve specific goals. It outlines the system's functionality from a user's perspective without detailing the internal workings of the system. Essentially, it shows "who" (actors) can "do what" (use cases) within a system.

Key Components of a Use Case Diagram:

- ❖ System:

Represented by a rectangle, it defines the boundaries of the system being modeled.

- ❖ Actors:

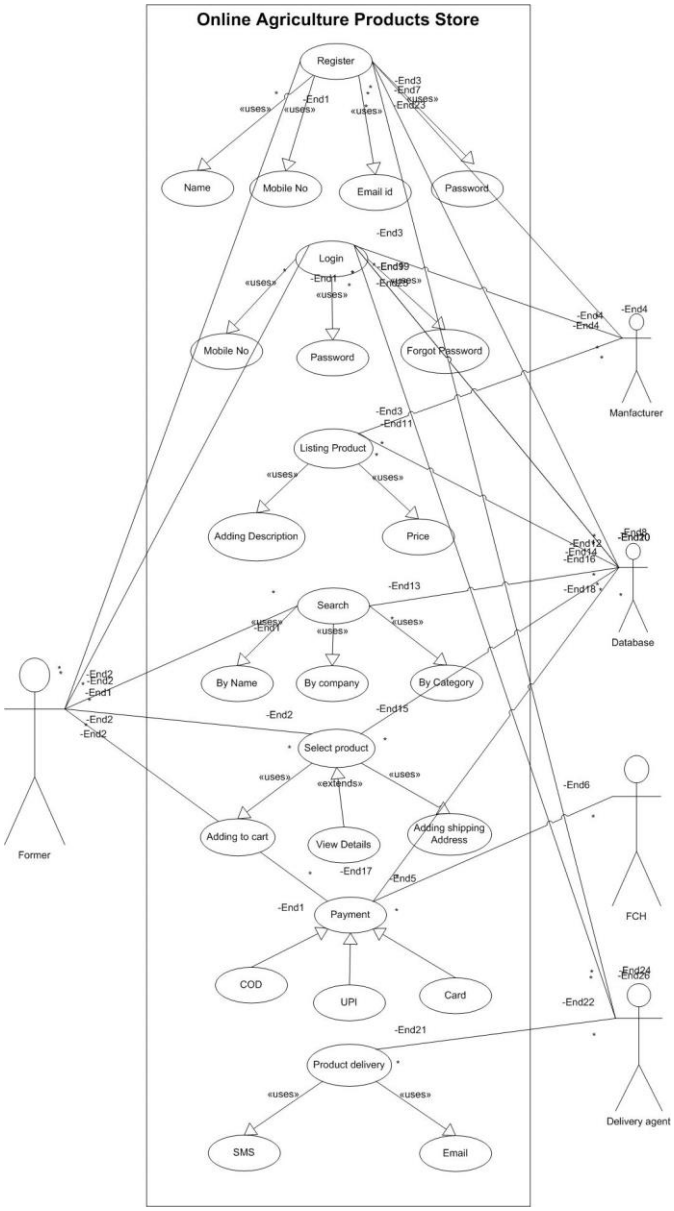
External entities (users, other systems, hardware) that interact with the system. They are depicted as stick figures.

- ❖ Use Cases:

Actions or tasks that actors can perform within the system. They are represented by ovals.

- ❖ Relationships:

Show how actors and use cases interact, including associations (simple interaction), includes (one use case uses another), extends (one use case extends another), and generalizations (inheritance).



Question 11 – (minimum 5) Use Case Specs

A Use Case Specification Document describes a use case in detail, including its flow of events, conditions, actors, and business rules, forming a foundational part of functional requirements in system analysis.

Use Case Spec

Use Case	Registration
Description	Name, Mobile number, Mail ID, Password
Actors	Former, Manufacturer

Pre-Conditions	Active internet, Browser comptable
Post-Conditions	Home page of actor should be displayed
Basic Flow	Registration completed Login using Your ID and password
Alternate Flow	ID already Registerd Enter correct mail ID Password should match Business Rules
Exceptional Flow	Continue without Registration Login With OTP
Assumptions	Users have basic computer knowledge, English Valid Email ID and Mobile Number
Constraints	User name cannot be name Password not be a mobile number OR number series
Dependencies	Active Mail and Mobile number to verify
Input	Name Mail ID Phone number
Output	A valid Account
Business Rules	User name cannot be name Password – 1 Cap,1small, 1num, 1special character Valid Mail and Number

Use Case	Login
Description	Username Password
Actors	Former, Manufacturer
Pre-Conditions	Active internet, Browser comptable

Post-Conditions	Home page of actor should be displayed
Basic Flow	Username and Password are correct
Alternate Flow	Password wrong Username wrong Both wrong
Exceptional Flow	Forgot Password Forgot Username
Assumptions	Users have basic computer knowledge, English
Constraints	User name cannot be name
Dependencies	User should exist / Registration process
Input	Username and Password
Output	Error Code / Status flag
Business Rules	Username - valid and unique Email ID Password – 1 Cap,1small, 1num, 1special character

Use Case	listing Product
Description	Adding products and details about the prodcut Pricing
Actors	Manufacturer

Pre-Conditions	Active internet,Database
Post-Conditions	Displaying listed products on the page available to buy
Basic Flow	Adding product Image detailed description Pricing
Alternate Flow	Image uploading error Remaining stock / quantity of product
Exceptional Flow	Image size Price INR
Assumptions	Stock of the products
Constraints	Description should not be empty Liste product stock should not zero/remove the product with no stock
Dependencies	Manufacturer should register first to listing the product Stock of the product
Input	Listing the product
Output	Able to buy the product
Business Rules	Dscription of the product How to use the product(quantity related) Expire date Quality of product

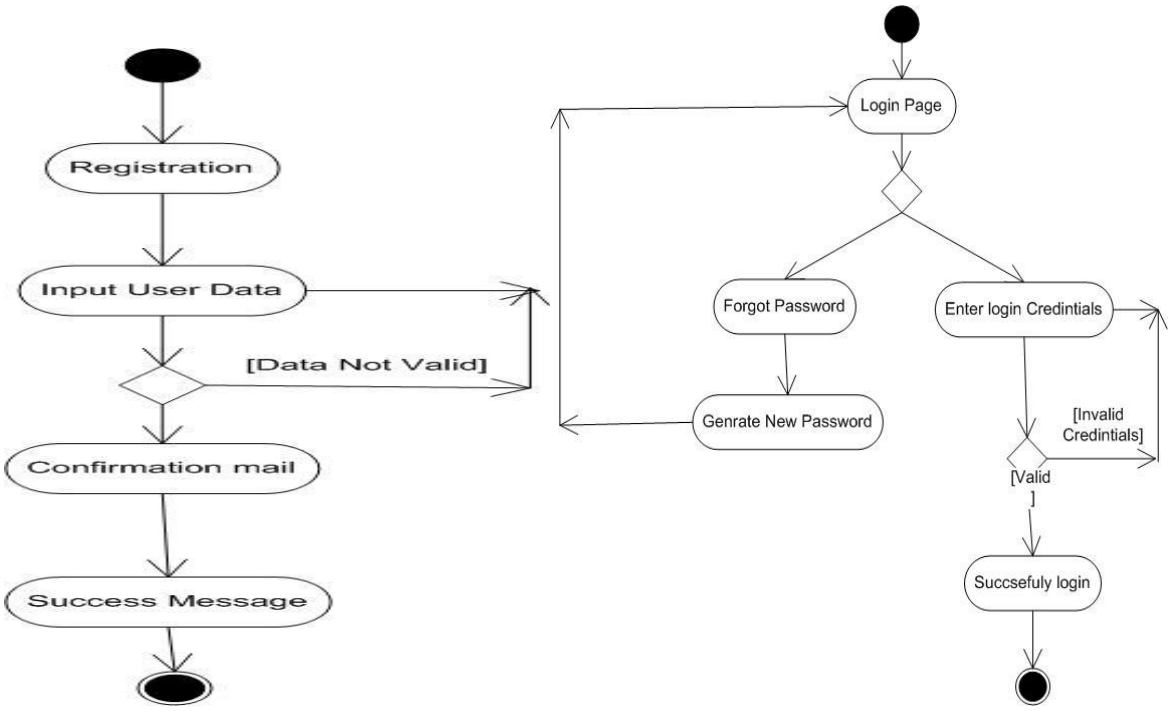
Use Case	Search
Description	Serch the product by name/ Manufacturer
Actors	Former

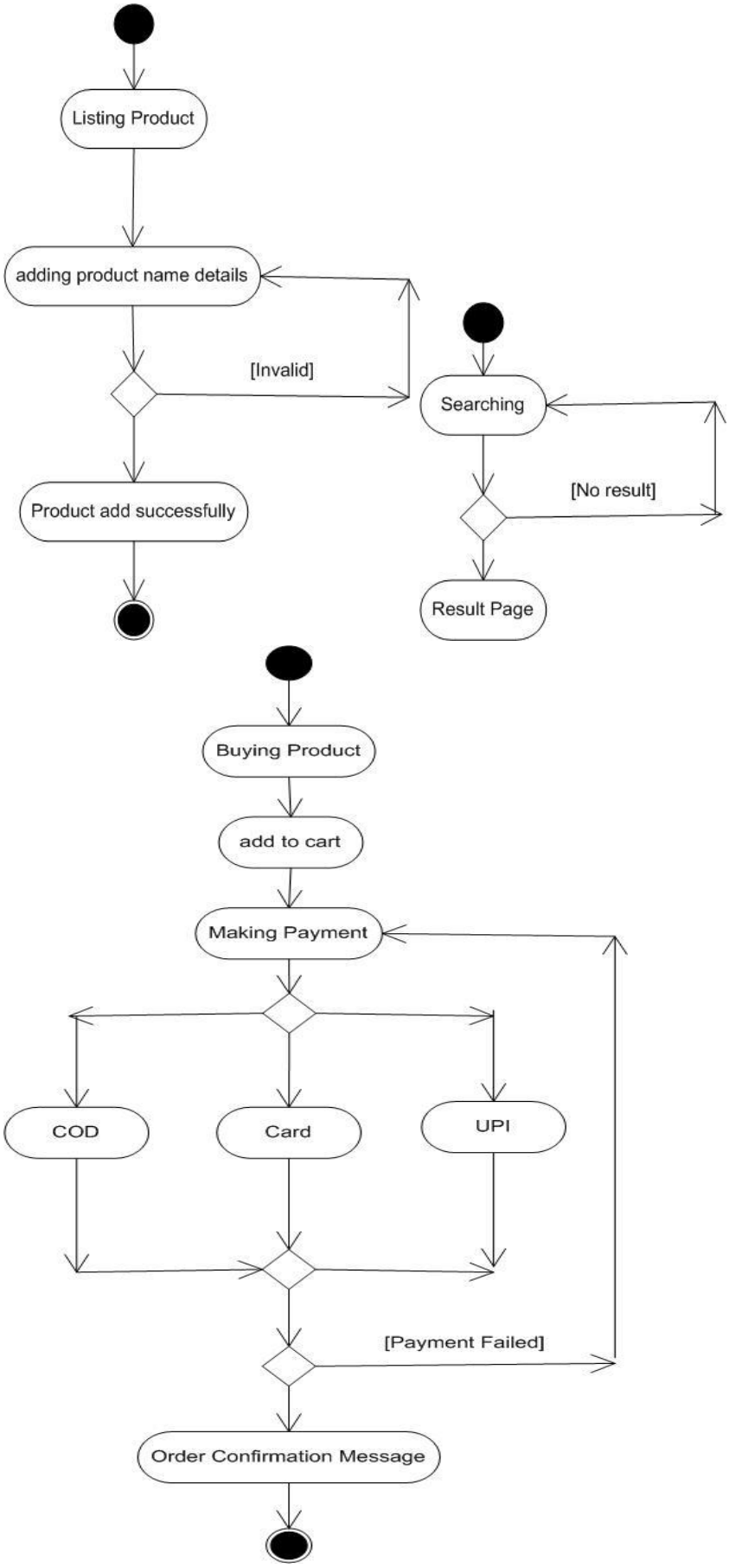
Pre-Conditions	Internet connectivity Browser comptable English
Post-Conditions	Search result Product descripton price and Quantity
Basic Flow	Shows Search results
Alternate Flow	The searched product is not available
Exceptional Flow	Shows similar product
Assumptions	Listed product stock maintenance Live Updating about product stocks and description
Constraints	Language issue Serching wrong product name
Dependencies	Database
Input	Searching the product name
Output	Displaying the products
Business Rules	Product must show if the product is good quality and in stock

Use Case	Buying product
Description	User can buy the product by adding items to cart
Actors	Former

Pre-Conditions	Login Serching product Adding to the cart
Post-Conditions	Adding items to the cart Delivery location Payment page
Basic Flow	Added to cart Proceed to payment Payment confirmation
Alternate Flow	Item not available for the location Payment server issue
Exceptional Flow	The stock is not available Payment issue from bank side
Assumptions	Users has basic computer knowldge Maintaing quality and fast delivery Product delivering each and ever location
Constraints	Address filling by user Delivery issue Select suitable product
Dependencies	Registration/Login Data base Stock Delivery partners Payment Gateway
Input	Adding required products to cart Filling Delivery Address Selecting Payment mode Completing paymet
Output	Order completed page Tracking order Delivery the order
Business Rules	Maintaing the stocks Listing Quality Product Fast Delivery

Question 12 – (minimum 5) Activity Diagrams

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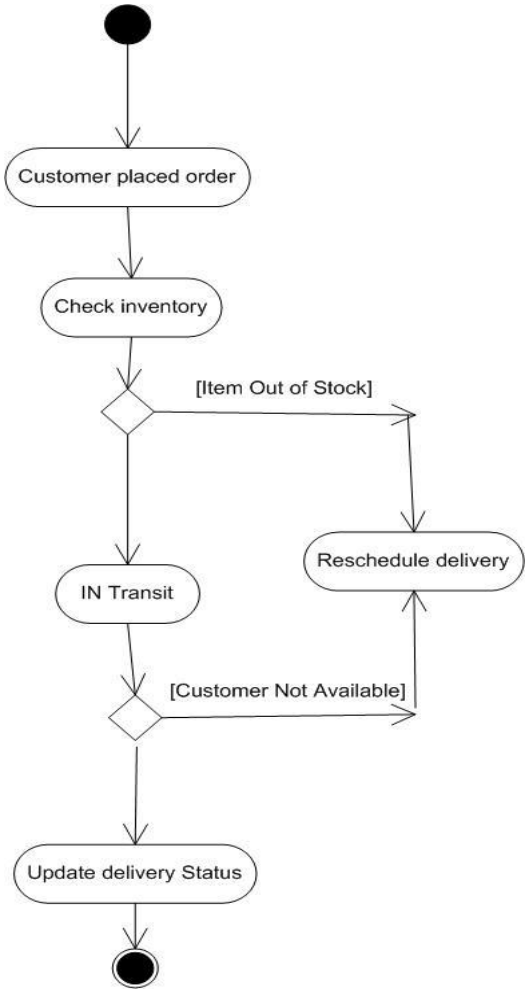

An Activity Diagram is a type of UML (Unified Modeling Language) diagram used to model the workflow or activities of a system or business process. It visually represents the sequence of actions and the flow of control from one activity to another.