

Online Agriculture Products Store Part :2

1. Prepare 4 quarterly Audits for BA:

Stage	Q1 Audit Report (Requirement gathering phase)
Completed	9-10 weeks
Check list	BRD Template
	Elicitation results report
	Duplicate requirement report
	Grouping of functionalities-feature client sign off
	Email communication
Stage	Q2 Audit Report (Requirement Analysis phase)
Completed	8-9weeks (9th to 20th week)
Check list	UML Diagrams
	Business to functional req. mapping
	Client sign off document
	RTM document version control
	Email communication
Stage	Q3 Audit Report (Design)
Completed	8-9 weeks (21st to 29th week)
Check list	Tool utilization
	Documented proofs on client communication
	Stakeholder MOM
	Email communication
Stage	Q4 Audit Report (Development)
Completed	35 weeks (30st to 64th week)
Check list	JAD session report
	End user manual preparation
	BA and Developer MOM
	Email communication

2. Ba approach strategy:

1. What Elicitation techniques to apply:

We have many elicitation techniques to apply used to gather requirements.

Brainstorming, Document analysis, Reverse engineering, focus groups & observation.

2. How to do Stakeholder analysis RACI:

Stakeholder can be divided using RACI (Responsible, Accountable, Consulted and informed).

This way we can perform stakeholder analysis.

3. Documents to be prepared:

BRD, FRD Use case documentation, test case documents etc.

4.What process to follow to sign off on Documents:

Sign off to be taken on SRS this is a primary & important document.Sign off can be taken by using E-mail confirmation from Client.

5.How to take approvals from the Client:

Establish a formal meeting with the clients to keep them informed and get continuous feedback

6.What Communication channels to establish n implement:

Regular meetings-weekly, status meetings, bi-weekly sprint reviews, and monthly stakeholders updates.

7.How to handle change request:

Change request form, Do impact analysis, approval process, documentation.

8.How to update the progress of the project to the stakeholders:

Weekly status reports, monthly review meetings.

9.How to take sign off on the UAT-Client project acceptance form:

UAT preparation, conduct UAT, fix issues, acceptance form, final review, obtain sign-off

3. 3-Tier approach:

3-Tier Architecture is a software design pattern that separates an application into three layers: Presentation, Business Logic, and Data. This improves scalability, maintainability, and security.

1. Presentation Layer (Client Tier)

Role: User interface that interacts with end users.

Technologies: HTML, CSS, JavaScript, React, Angular, Vue.js.

Examples: Web browsers, mobile apps, desktop applications.

2. Business Logic Layer (Application Tier)

Role: Processes business rules, logic, and workflows.

Technologies: Java, Python, .NET, Node.js, Spring Boot, Express.js.

Examples: API servers, middleware, authentication services.

3. Data Layer (Database Tier)

Role: Stores and manages application data.

Technologies: MySQL, PostgreSQL, MongoDB, Oracle DB.

Examples: User accounts, transaction history, product inventory.

User Interaction (Presentation Layer) – The user submits a request via a web app or mobile app.Processing (Business Logic Layer) – The application processes the request, applies business logic, and interacts with the database.Data Retrieval (Data Layer) – The database fetches the

required data and sends it back through the business layer to the user interface.

4. BA approach strategy or framing questions:

The 5W1H framework is useful tool for gathering information and understanding a situation by answering questions about who, what, when, where, why and how.

The SMART technique can help in creating questions: Specific, measurable, attainable, relevant & time bound.

The RACI charts help define and clarify roles and responsibilities within the team by outlining who is responsible, accountable, consulted and informed for each task.

UML is standardized way of diagramming and modeling software systems to aid in design, development and communication between team members.

An activity diagram, a type of Unified Modeling Language (UML) diagram, visually represents the flow of activities within a system or process, similar to a flowchart, but with more specific symbols and notations

5.Elicitation Techniques:

1. Interviews

One-on-one or group discussions with stakeholders to gather information.

Understanding business needs, clarifying requirements.

Time-consuming, dependent on stakeholder availability.

2. Surveys & Questionnaires

A set of structured questions sent to multiple stakeholders.

Collecting quantitative data and feedback from a large audience.

Low response rates, unclear responses.

3. Workshops

Interactive sessions involving multiple stakeholders.

Brainstorming, collaborative requirement gathering, aligning stakeholders.

Requires skilled facilitation and stakeholder availability.

4. Focus Groups

A selected group of stakeholders discussing their needs and expectations.

Gathering diverse perspectives on a product or service.
Group dynamics can sometimes lead to biased feedback.

5. Observation (Job Shadowing)

Watching users perform their tasks in real-time.
Understanding real workflows and identifying pain points.
Users may alter behavior when observed (Hawthorne effect).

6. Document Analysis

Reviewing existing documents, reports, policies, or system artifacts.
Understanding current processes, legal constraints, and historical data.
Documents may be outdated or incomplete.

7. Prototyping

Creating visual models or wireframes of a system before development.
Validating user requirements and refining UI/UX.
Requires time and design expertise.

8. Brainstorming

Generating multiple ideas in a group setting without judgment.
Exploring new solutions and innovative ideas.
Can be unstructured if not facilitated well.

9. Mind Mapping

Visually organizing ideas and relationships. Structuring complex ideas and identifying dependencies. Requires visualization tools or skilled facilitators.

10. Interface Analysis:

Evaluating how different systems interact with each other. Understanding data flow between applications. Requires technical knowledge of integrations.

6. Justify the project elicitation techniques:

7. 10 Business requirements:

- BR001: Farmer 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: farmer should be able to check the variety of products for same category.
- BR004: Farmer should be able to filter the products on the basis of price, weight, brands.
- BR005: Farmer should be able to give feedback to the manufacturer and rate the product.
- BR006: farmer should be able to get invoice on mail and the tracking status on sms.
- BR007: Manufacture should be able to add new product to category.
- BR008: Logistic and delivery agents should be able to update the tracking status to order.
- BR009: Farmer should be able to return the product if it is no matching the expectations.
- BR010: Manufacturer should be able to update regarding availability of product.

8. Assumptions:

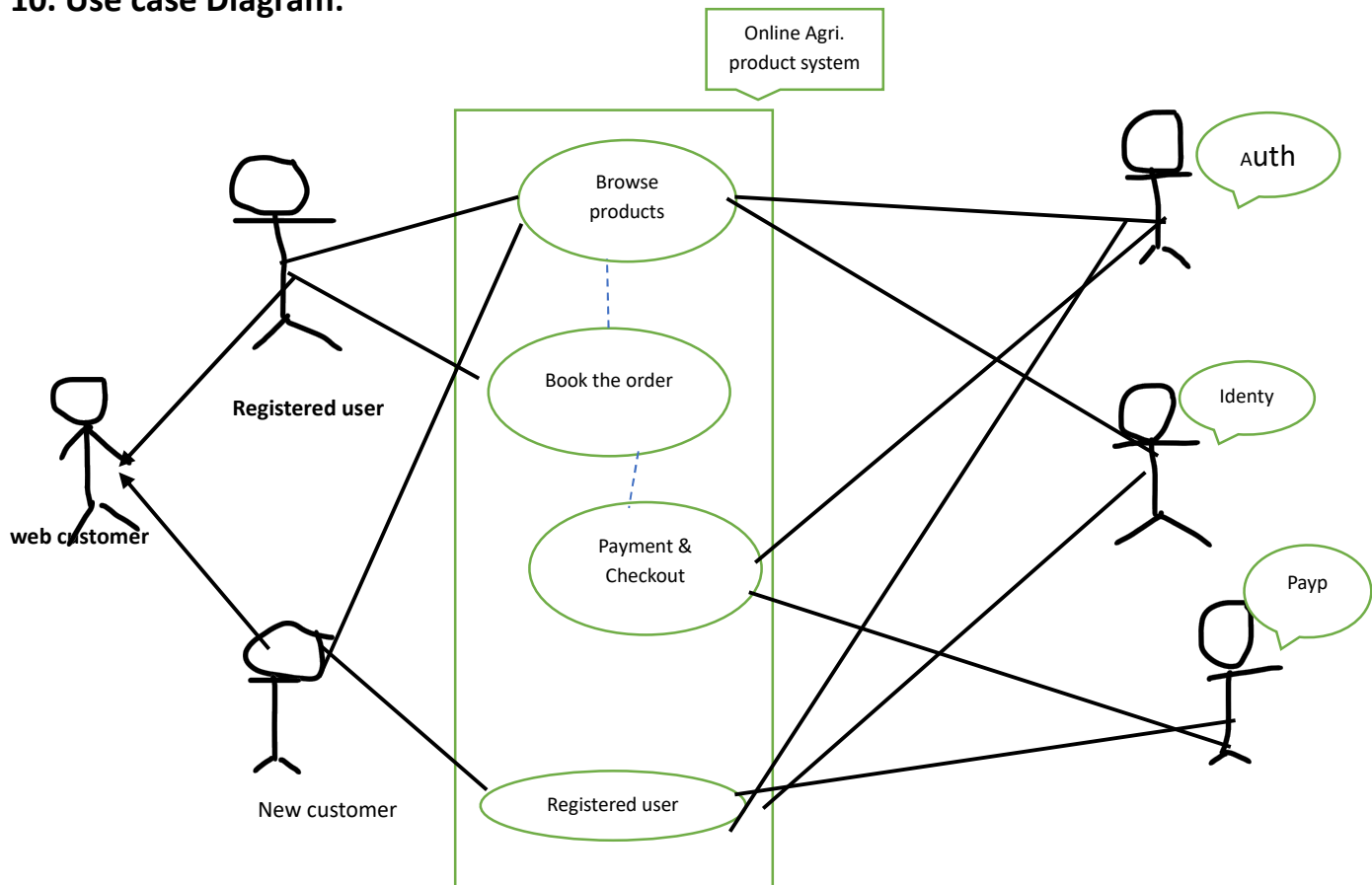
1. A user can login using facebook or google account.
2. A user has a minimum farming knowledge.
3. Online shopping trend is increasing, the farmers prefer online shopping.
4. The manufacturer has the products to add into the category in the application, the need is to reach at right person.
5. The logistic and delivery system has found the rout to reach such remote locations.

9.The project requirements Priority:

Req. ID	Name	Description	Priorit y
BR001	Farmer search for product	Farmer should be able to search for available products in fertilizers, seeds, pesticides.	10
BR002	Manufacturer upload products	Manufacturers should be able to upload and display their products in the application.	3
BR003	Farmer browse diff product	farmer should be able to check the variety of products for same category.	5
BR004	Farmer filter out products	Farmer should be able to filter the products on the basis of price, weight, brands.	4
BR005	Feedback to vendors	Farmer should be able to give feedback to the manufacturer and rate the product.	6
BR006	Order documents	farmer should be able to get invoice on mail and the tracking status on sms.	8
BR007	Manufacturer add product category	Manufacture should be able to add new product to category.	1
BR008	Logitics update the status	Logistic and delivery agents should be able to update the tracking status to order.	9

BR009	Return policy for farmer	Farmer should be able to return the product if it is no matching the expectations.	7
BR010	Availability update of product	Manufacturer should be able to update regarding availability of product.	2

10. Use case Diagram:



11. Use case specification:

Use case ID	APUC001
Use case name	Farmer login into the application
Actor	Farmer
Description	Farmer wants to buy some seeds, he will login into the online platform
Pre condition	The internet connectivity should be there. The mobile app or desktop browser should be available Valid credential
Post condition	User should be successfully logged in.

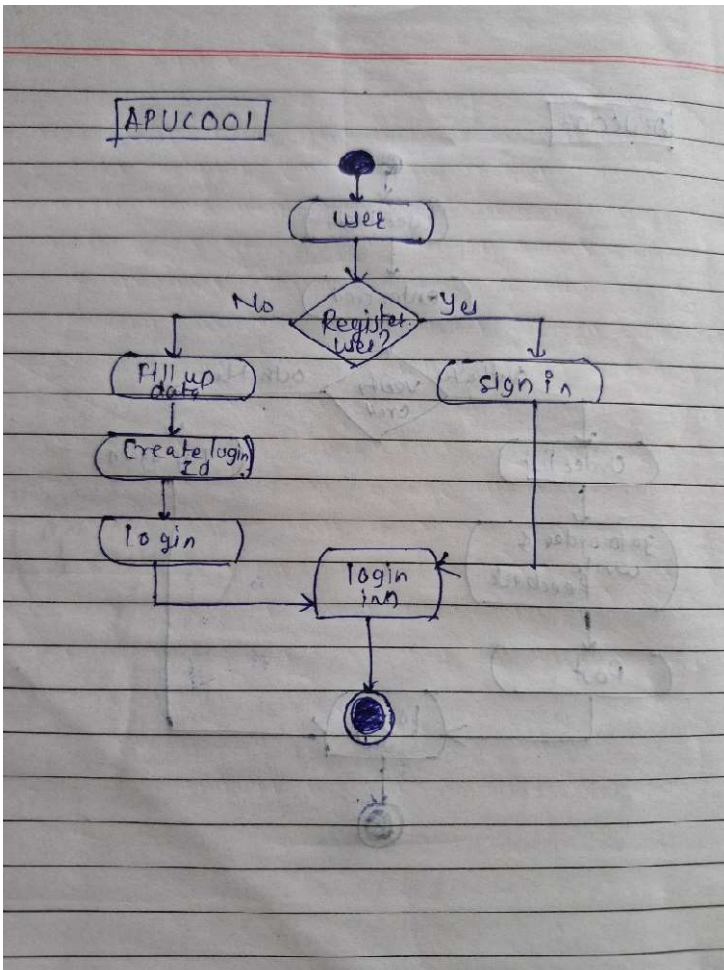
Use case ID	APUC002
Use case name	Farmer checkout with expected product application
Actor	Farmer
Description	Farmer wants to buy some seeds, he found the expected one and place order
Pre condition	The internet connectivity should be there. The mobile app or desktop browser should be available Valid credential
Post condition	User should be able to place order for expected product successfully .

Use case ID	APUC003
Use case name	Farmer write down the review for received product
Actor	Farmer
Description	Farmer wants to give the review of the ordered product.
Pre condition	The internet connectivity should be there. The mobile app or desktop browser should be available Valid credential
Post condition	User should be able to add the review of the received product.

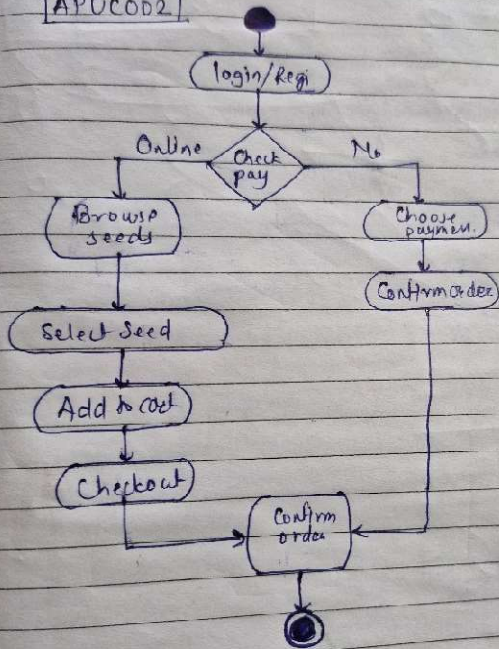
Use case ID	APUC004
Use case name	Manufacturer add the new product
Actor	Manufacturer
Description	Manufacturer wants add new product to category.
Pre condition	The internet connectivity should be there. The mobile app or desktop browser should be available Valid credential
Post condition	User should be able to add the new product to respective category.

Use case ID	APUC005
Use case name	Delivery agents update the tracking status
Actor	Delivery agents
Description	Delivery agent wants update the tracking status
Pre condition	The internet connectivity should be there. The mobile app or desktop browser should be available Valid credential
Post condition	User should be able to update the tracking status ordered product .

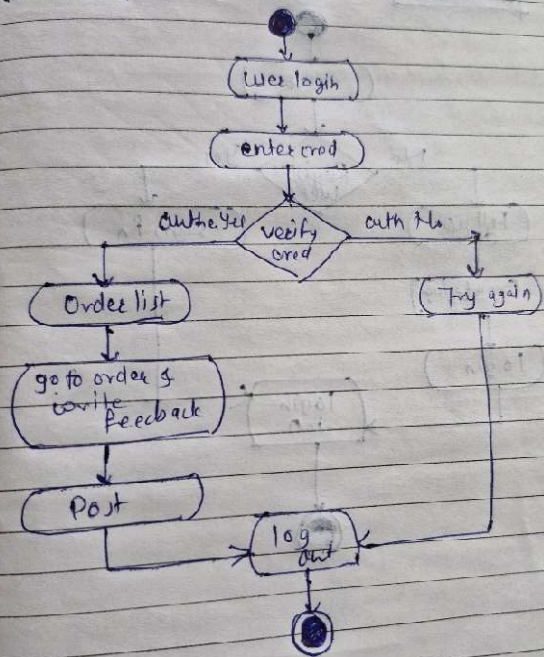
12.Activity diagrams:



APUC002



APUC003



APUC004

