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?

As a Business Analyst, I would be involved in the quarterly audits for the Online Agriculture

Products Store project in a support role. During these audits, I would provide relevant

information and documentation related to the project requirements, design, development,

testing, and deployment. The purpose of these audits is to assess the progress of the project,

ensure that it is on track to meet the goals and timeline, and identify any potential risks or

issues that need to be addressed

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testing, and deployment. The purpose of these audits is to assess the progress of the project,

ensure that it is on track to meet the goals and timeline, and identify any potential risks or

issues that need to be addressed

Answer:

These audits are planned to assess project progress, ensure that the project is meeting its goals and timeline, and identify any potential risks or issues.

It would be my responsibility to provide information and documentation on the requirements, design, development, testing, and deployment of the project during these audits.

|  |  |
| --- | --- |
| Stage | Quarter 1 Audit Report – Requirement Gathering Phase |
| Status | Completed |
| Duration | 10 weeks (week 1 to week 10) |
| Check list | BRD template |
|  | Elicitation result report |
|  | Duplication requirement report. |
|  | Grouping of functionalities/features |
|  | Client sign off |
|  | Email communication – To, CC, BCC |

|  |  |
| --- | --- |
| Stage | Quarter 2 Audit Report – Requirement Analysis Phase |
| Status | Completed |
| Duration | 7 weeks (week 16 to week 23) |
| Check list | UML diagram |
|  | Business to functional requirement mapping |
|  | Client sign off |
|  | RTM document |
|  | Email communication – To, CC, BCC |

|  |  |
| --- | --- |
| Stage | Quarter 3 Audit Report – Design phase |
| Status | Completed |
| Duration | 7 weeks (week 30 to week 37) |
| Check list | Utilization off tool |
|  | Documented evidence on client communication |
|  | Stakeholder MOM |
|  | Email communication – To, CC, BCC |

|  |  |
| --- | --- |
| Stage | Quarter 4 Audit Report – Development phase |
| Status | Completed |
| Duration | 20 weeks (week 40 to week 60) |
| Check list | JAD session report |
|  | End User manual preparation document |
|  | BA and developer MOM |
|  | Email communication – To, CC, BCC |

|  |  |
| --- | --- |
| Stage | Quarter 5 Audit Report – Development phase |
| Status | Completed |
| Duration | 20 weeks (week 58 to week 78) |
| Check list | Test case summary |
|  | Training report to end users |
|  | Lessons learnt document |
|  | Email communication – To, CC, BCC |

Question 2 – BA Approach Strategy

Before the Project is going to Kick Start, The Committee asked Mr Karthik to submit BA Approach Strategy Write BA Approach strategy (As a business analyst, what are the steps that you would need to follow to complete a project – What Elicitation Techniques to apply, how to do Stakeholder Analysis RACI/ILS, What Documents to Write, What process to follow to Sign off on the Documents, How to take Approvals from the Client, What Communication Channels to establish an implement, How to Handle Change Requests, How to update the progress of the project to the Stakeholders, How to take signoff on the UAT- Client Project Acceptance Form)

Project Manager - Mr Vandanam Senior

Java Developer - Ms. Juhi

Java Developers - Mr Teyson, Ms Lucie, Mr Tucker, Mr Bravo

Network Admin - Mr Mike

DB Admin - Mr John.

Testers - Mr Jason

Ms Alekya BA – You

Answer:

The business analysis approach is a comprehensive outline of the activities, durations, and resources required to conduct successful business analysis. It serves as a bridge between the current state and the desired future state of a project, guiding actions to achieve project objectives effectively.

A. What Elicitation Techniques to apply?

(i) Interview: To gather requirements, I will schedule interview with stakeholders like Mr. Henry, Mr. Pandu, Mr. Dooku, Mr. Peter, Mr. Kelvin & Mr. Ben. We can get better understand their goal & expectation for this project.

(ii) Focus group: To understand the needs of farmer’s which are living in remote areas I will organise focus group.

(iii) Surveys/questioners: To gather more information, I will arrange surveys or questioners with farmers & manufacturer. Understand their requirement.

(iv) Document Analysis: I will also go through the existing process of procurement, requirement document, Email communication and MOM for better understanding.

(v) Workshops: Workshop is a structures way of meeting where relevant stakeholders and SME work together to describe the requirement of a project. Conduct Workshops with Mr. Peter, Mr. Kelvin & Mr. Ben and with Technical leads Mr. Vandanam & Mr. Juhi to discuss and understand high level of functional & non-functional requirements.

(vi) Brainstorming: We will arrange brainstorming sessions, where participants are allowed to provide inputs, for discussion and evaluation. So that we can generate more new ideas and details for this domain in a short period of time.

B. How to do Stakeholder Analysis RACI/ILS?

A stakeholder is a person or group of people or organization with an assigned interest in the decision making and activities of business organisation, or project. They can directly or indirectly influence the activities of project of an organization. Their support is often crucial for the success of a business project.

Here I have used RACI analysis. RACI Analysis is conducted to determine each stakeholder's role & responsibilities. Identify the key stakeholder and prioritize their requirement. Communicate effectively with stakeholders to keep them informed about the project's progress.

Identify the stakeholder:-

1. Mr. Karthik: Delivery head at APT IT Solutions
2. Mr. Vandanam: Project Manager at APT IT Solutions
3. Technical team at APT IT Solutions (Java developer, NW Admin, DB Admin, Tester & BA)
4. Mr. Peter, Mr. Kelvin & Mr. Ben: Farmers
5. Mr. Henry: Project Sponsor
6. Mr. Pandu: Financial Head
7. Mr. Dooku: Project Co ordinator

Roles & responsibilities:-

Each Stakeholder has a specific role and responsibilities in the project. In this way, expectations are clarified and confusion is minimized during the project execution process.

1. Responsible: In this analysis, mention the responsible stakeholders for performing the assigned task.
2. Accountable: In this analysis, mention the accountable stakeholders who are ultimately accountable for the project. In this analysis usually a senior persons are listed.
3. Consulted: In this analysis, mention consulted stakeholders, which are important for the project whose decision is required for action or whose information is required to progress the project. Like Mr. Peter, Mr. Kevin & Me. Ben, Mr. Henry, Mr. Vandanam, Manufacturers.
4. Informed: In this analysis, mention those stakeholders who needs to be informed about decision or progress of the project?

RACI Matrix

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stage | Responsible | Accountable | Consulted | Informed |
| Requirement gathering | BA | Mr. Henry | Mr. Peter, Mr. Kevin & Mr. Ben | Mr. Vandanam |
| Project planning | Mr. Vandanam | Mr. Karthik | Technical team | Mr. Henry, Mr. Pandu & Mr. Dooku |
| Design phase | Ms. Juhi | Mr. Vandanam | Technical team | BA |
| Development | Technical team | Mr. Vandanam | BA | Mr. Henry, Mr. Dooku |
| Testing | Mr. Jason & Mr. Alekya | Mr. Vandanam | Technical team & BA | Mr. Henry, Mr. Dooku |
| Change request management | BA | Mr. Vandanam | All stakeholders | All stakeholders |
| User Acceptance testing (UAT) | BA | Mr. Vandanam | All stakeholders, Technical team | All Stakeholder |

(C) What Documents to Write?

(i) Business Requirement Document: In this document, all the detailed documents of business requirements gathers from each stakeholder.

(ii) Functional Requirement Document: In this document, list all functional requirement. How the system will work to meet project goal.

(iii) Non-functional requirement: In this document, list non-functional requirement like what is customer’s expectation, its usability, how the application should perform.

(iv) User case: Identify the specific scenarios in which the user will interact with the system.

(v) Change request log: Document all the change request raised during project life cycle.

(vi) User Acceptance Test: Mention detailed process for user acceptance test.

(D) What process to follow to Sign off on the Documents?

(i) Draft document: Draft the final document properly.

(ii) Review document: Review the document for accuracy & completeness.

(iii) Update document: If any change or update is required, update the document accordingly.

(v) Final approval: Send final copies to relevant stakeholder for approval & signing.

(E) How to take Approvals from the Client?

(i) Share document to relevant stakeholder.

(ii) Get feedback & discuss areas for improvement.

(iii) Develop and share new document, if any change is required.

(iv) Get final approval from client with sign off. (Requirement, development & UAT)

(F) What Communication Channels to establish and implement?

(i) Face to face meeting

(ii) Emails communication

(iii) Zoom/Teams meeting

(iv) Daily stand up meeting

(v) Project Management tool: Tool like JIRA used for tracking updates.

(G) How to Handle Change Requests?

(i) Change request form: Create standard change request form and collect all the relevant supporting documentation.

(ii) Impact analysis: Do impact analysis of required change on budget, timeline, project scope, risk, quality.

(iii) Prioritise the change request: Set up a Change Control Board made up of key stakeholders who approve or reject change requests.

(H) How to update the progress of the project to the Stakeholders?

(i) Burndown Chart: Use burndown chart is a graphical representation of project completion against timelines.

(ii) Weekly Progress report: Send weekly report of achieved, pending task & potential risk.

(iii) Monthly Meeting: Represent progress report to committee in each month.

(I) How to take signoff on the UAT- Client Project Acceptance Form:

(i) UAT preparation: Prepare acceptance criteria mentioned in UAT Plan agreed upon client.

(ii) UAT Execution: During UAT, key stakeholder test the system based on test case.

(iii) Issue Resolution: Resolve all issues found during UAT.

(iv) Final Acceptance: After completion of UAT take signature of Client – Mr. Henry on Client Project Acceptance Form.

(v) Project closure: After getting sign off, prepare project closure report and submit to the client.

Question 3 – 3-Tier Architecture

Explain and illustrate 3-tier architecture.

Technical Team have assembled to discuss on the Project approach and have finalised to follow 3-tier architecture for this project.

Answer:

In 3 tier architecture there are three layers. It organize applications into three logical and physical computing tiers. The Application layer, Business Logic Layer and the database tier, where the data associated with application is stores.

1. Application layer: It is responsible for user interface and user experience. It handles all interaction with user and present data to them. It includes the Agriculture mobile application screen, display login page and its full functionality, sending request to business logic layer.
2. Business logic layer: This layer acts as an intermediary between the presentation layer and the data storage layer – layer contains business rule and logic of the application. It process the user request from the application layer and makes decision based on the business rules. It validate the user data, processing data and implement the business logic. This layer communicate with data base layer to fetch the data. Here it’s a payment methods, agricultural product company details.
3. Database layer: This layer is responsible for storing and retrieving data. Ex. MySQL, Oracle Database. It is also known as the data layer or the server layer. This layer is responsible for data storing and retrieving data from a database management system (DBMS). It is for storing and managing data. Performs Create, Read, Update and Delete operations. It ensure data security and integrity.

Request

Data

Response

1. Question 4 – BA Approach Strategy for Framing Questions

Business Analyst should keep What points in his/her mind before he frames a Question to ask to the Stakeholder ( 5W 1H – SMART – RACI – 3 Tier Architecture – Use Cases, Use case Specs, Activity Diagrams, Models, Page designs)

Answer:

In 3-tier architecture there are three layers. it will organizes applications into

three logical and physical computing tiers: the presentation tier, or user interface, the

application tier, where data is processed; and the data tier, where the data

associated with the application is stored and managed.

1. Application layer: it includes the Agricultural mob app screen, login page,

functionality.

2. Business logic layer: here in this case it’s a payment methods, agricultural

product company details, specific rules.

3. Database layer: it can be company’s details, product details data, farmer’s

data.

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data.

5W 1H:-

The 5W1H is a questioning approach and a problem-solving method that answers all the basic elements within a problem which are what, who, when, where, why, and how. Here as BA, I should ask below questions to stakeholders about the project.

Who is the client? Who are the users? Who are the team member?

What is project? What is the objective? What is the current problem? What is the farmer’s requirement?

When the project will be started? When the project will be completed?

Why is it a problem? Why the project been started?

Where does the problem occur? Where to get connected for requirement?

How can the problem be solved? How can we complete the project efficiently?

SMART:-

SMART technique will help to define and achieve the goal. It has five criteria as per below.

Specific: It is strategy to set a specific goal. What specific feature should the application have to search product? Develop a platform for farmers to browse, purchase and receive agricultural products.

Measurable: Measurement of the progress or process of achieving a goal. It should quantifiable outcome. How many products do you expect to be available at launch. At least 90% of farmers can place orders successfully during UAT.

Achievable: Check feasibility. Concept of deciding whether a goal is achievable or not? Relevant: Align with project goal. How does this application fit into the farmer’s daily routine? Align with CSR goals of Soony Company and address farmer’s challenge.

Time bound set deadlines for the target goal. Can we able to complete the project within 18 months?

RACI:-

Who is stakeholder?

A stakeholder is a person or group of people or organization with an assigned interest in the decision making and activities of business organisation, or project. They can directly or indirectly influence the activities of project of an organization. Their support is often crucial for the success of a business project.

Responsible: Who is responsible for a task or decision? Who will input the product details into the application? Technical Team, Mr. Karthik, Mr. Vandanam.

Accountable: Who is accountable for the overall project? Who is accountable for project’s success? Me. Henry

Consulted: Who must be consulted for their input on tasks or the overall project? Who among the farmer we should consult for requirement details. Mr. Peter, Mr. Kevin, Mr. Ben & Manufacturer.

Informed: Who should be informed of the ongoing status of the project? All Stakeholder, Mr. Henry, Mr. Pandu, Mr. Dooku

3 Tier Architecture:-

In 3 tier architecture there are three layers. It will organize applications into three logical and physical computing tiers. The Application layer, Business Logic Layer and the database tier, where the data associated with application is stores.

Application Layer:-

It focus on user experience.

How would be the first page of web application?

How can farmer search the product?

How can farmer place the order?

Business Logic Layer:-

It focus on business rule.

What are the rule govern the listing and ordering of product?

How would the system work after farmers places any order?

How would the products will be listed with “In stock” and “out of stock”?

Database Layer:-

It focus on Data management needs.

What type of details does the data store?

How does the datastore store the user information?

How does database secure the data?

Use Case: It refers to a description of how a farmer and manufacturer interacts with the

system to achieve a specific goal. Here we can ask questions like what type of product

we will deliver?, Where is the delivery location, Why this product will be used?, How we

will deliver this project?

Use Case Specs: It provides a detailed description of the functional behaviour of a

system from a user’s perspective. Here we can ask who are the primary and secondary

actors? What is their goal? What are the main task performed by actor? What

information does the actor desire form a system?

Activity diagram: It is a type of Unified Modeling Language diagram that visually

represent the workflow of a system or process. Here for Online Agriculture products

store case study, an activity diagram would show how farmers interact with the system

to browse, select and purchase agricultural products and how the system processes

these actions. Ask about existing process of procurement? How farmers are procuring

agricultural products currently?

Page design: After the requirements gathering and requirement analysis process, we can

start the page design along with the software designing process. We can discuss on the

layout of the page, customer’s requirement and the page design should be simple and

easy to understand.

Question 5 – Elicitation Techniques

As a Business Analyst, What Elicitation Techniques you are aware of? ( BDRFOWJIPQU)

Requirements elicitation is the process of gathering and defining the requirements for a software system. The goal of requirements elicitation is to ensure that the software development process is based on a clear and comprehensive understanding of the customer’s needs and requirements.

1. Brainstorming:The requirements elicitation process begins with brainstorming. To facilitate focused and fruitful brainstorming sessions, business analysts should set up a team with representatives of all stakeholders for capturing new ideas. Suggestions coming out of brainstorming sessions should be properly documented in order to draft the plan of action.
2. Document analysis: Document analysis is a qualitative research technique. The process involves evaluating electronic and physical documents to interpret them, gain an understanding of their meaning and develop upon the information they provide. It is the study of current system which could provide some of the input for the new system requirement. It may be interface, user manual and software vendor manuals.
3. Reverse Engineering: It is a situations where the software for an existing system has little or outdated documentation and it is necessary to understand what the system actually does, reverse engineering is an elicitation technique that can extract implemented requirements from the software/source code.
4. Focus group: A focus group is a means to elicit ideas and attitudes about a specific product, service or opportunity in an interactive group environment. The participants share their impressions, preferences and needs guided by a mediator. It has typically 6-12 attendees.
5. Observation: Also referred to as job shadowing, observation is an excellent elicitation technique that helps understand requirements based on observations related to process flows and work environments of stakeholders. Practical insights into actual workflows serve as the basis for modifications and enhancements. The observation approach allows business analysts to elicit real-world data that other requirements elicitation methods cannot capture.
6. Workshops: For multi-stakeholder, complex projects, workshops are one of the most resource-efficient methods to elicit requirements. Intense, focused, and highly productive workshops have a key role to play in getting all parties onto the same page. Workshop events help Subject Matter Experts and Stakeholders to collaborate, resolve conflicts, and come to an agreement.
7. Joint Application Development: JAD is a highly structured, facilitated session where business users, IT staff and other stakeholder come together to discuss and define system requirements. It is a collaboration between stakeholders and system analyst to identify needs or requirements in a concentrated and focused effort. It follows define sessions, research product, prepare, conduct session and draft document steps.
8. Interviews: A great way to extract critical data is via interviews. Business analysts engage in group or one-to-one interviews in an informal or formal setting to elicit project requirements through questions directed at Subject Matter Experts, stakeholders, and end-users. By exploring diverse opinions, business analysts gain in-depth knowledge of the requirements.
9. Prototyping: One of the most important phases of the requirements elicitation process, prototyping enables business owners and end-users to visualize realistic models of applications before they are finally developed. Prototyping helps generate early feedback, and it boosts stakeholder participation in requirements elicitation.
10. Questionnaire/Surveys: Questionnaire/Surveys are written tools used to collect information from a large group of stakeholders. These can be used together quantitive data or opinions about needs, priorities and current changes in a more scalable way.
11. Use case specs: Use case describes how users will interact with a system to achieve a specific goal. Creating use case with stakeholders helps to define functional requirements in a structures way by detaining system actions, user interactions and expected out comes.

Question 6 – This project Elicitation Techniques

Which Elicitation Techniques can be used in this Project and Justify your selection of Elicitation Techniques?

Answer:

I will use following elicitation techniques.

1. Interview: To gather requirements, I will arrange schedule interview with stakeholders like Mr. Henry, Mr. Pandu, Mr. Dooku, Mr. Peter, Mr. Kelvin & Mr. Ben. We can get better understand their goal & expectation for this project.
2. Focus group: Using this techniques we can better understand the needs of farmer’s which are living in remote areas.
3. Surveys/questioners: Surveys/questioners sent to all stakeholders, which can include multiple range of open and closed ended questions. We can extract the information about their requirement.
4. Observation: Observation can be used to understand the current problem facing by Mr. Peter, Mr. Kevin & Mr. Ben.
5. Workshops: Workshop is a structures way of meeting where relevant stakeholders and SME work together to describe the requirement of a project. Conduct Workshops with Mr. Peter, Mr. Kelvin & Mr. Ben and with Technical leads Mr. Vandanam & Mr. Juhi to discuss and understand high level of functional & non-functional requirements.
6. Brainstorming: We will arrange brainstorming sessions, where participants are allowed to provide inputs, for discussion and evaluation. So that we can generate more new ideas in a short period.

Question 7 – 10 Business Requirements

Business requirements are the specific needs or conditions that a business must meet to achieve its objective.

|  |  |  |
| --- | --- | --- |
| Requirement ID | Requirement name | Decription |
| BR001 | Registration | Farmers and manufacturer can register themselves using mail id and contact number. |
| BR002 | Login | Farmers and manufacturer can login to web application using mail ID & password along with user authentication. |
| BR003 | Search & filter product | User should be able to search and filter the desired product. |
| BR004 | Ease of access | Application should be easy accessible over mobile, desktop, laptop. User should be able to add product into shopping cart, checkout, review any payment process. |
| BR005 | Data privacy | User data should be secure. |
| BR006 | Tracking | User should able to track order easily and are notified over SMS/MAIL. |
| BR007 | Payment mode | System should have different payment modes. |
| BR008 | Support & feedback | Web application should provide support and feedback to users for their shopping. |
| BR009 | Notification & alert | Users should notified about discounts, delivery, system error, change request. |
| BR010 | Multiple language support | Web application must have 3-4 different language |

Question 8 –Assumptions

Answer:-

Assumption 1: User can login using registered mail ID and password.

Assumption 2: Using this online platform farmer’s can easily procure agricultural products like seeds, fertilizers & pesticides.

Assumption 3: User is ready to procure agricultural products using this application and have some idea of online shipping.

Assumption 4: The delivery of the product should be done easily in remote area and have internet availability.

Assumption 5: This application will be developed within given time & budget.

Assumption 6: User should have either mobile, laptop or desktop computer.

Assumption 7: User should be able to do online payments using debit/credit card/UPI/Wallet.

Question 9 – This project Requirements Priority

Give Priority 1 to 10 numbers (1 being low priority – 10 being high priority) to these Requirements after discussions with the stakeholders

|  |  |  |  |
| --- | --- | --- | --- |
| Requirement ID | Requirement name | Description | Priority |
| BR001 | Registration | Farmers and manufacturer can register themselves using mail id and contact number. | 10 |
| BR002 | Login | Farmers and manufacturer can login to web application using mail ID & password along with user authentication. | 10 |
| BR003 | Search & filter product | User should be able to search and filter the desired product. | 6 |
| BR004 | Ease of access | Application should be easy accessible over mobile, desktop, laptop. User should be able to add product into shopping cart, checkout, review any payment process. | 5 |
| BR005 | Data privacy | User data should be secure. | 8 |
| BR006 | Tracking | User should able to track order easily and are notified over SMS/MAIL. | 5 |
| BR007 | Payment mode | System should have different payment modes. | 9 |
| BR008 | Support & feedback | Web application should provide support and feedback to users for their shopping. | 4 |
| BR009 | Notification & alert | Users should notified about discounts, delivery, system error, change request. | 5 |
| BR010 | Multiple language support | Web application must have 3-4 different language | 4 |

Question 10 – Use Case Diagram

Draw use case diagram

Answer:

Use case diagram is a visual representation of the interactions between users (actors) and a system. Here the below use case diagram shows how the primary actors and secondary actors interacts with the systems.



Question 11 – (minimum 5) Use Case Specs

Prepare use case specs for all use cases

Answer:

Use Case Specification document, which provides a detailed description of a use case, outlining how users (actors) will interact with the system to achieve a specific goal.

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID | UC001 | | |
| Use case name | Registration | | |
| Created by | Ms. Komal | Last updated |  |
| Date created | 22/01/2025 | Last revision date |  |
| Actor | User | | |
| Description | This use case allows user to register themselves by entering their details. | | |
| Pre-condition | The user should have laptop/mobile with internet connectivity, registered email ID and mobile number to register themselves. | | |
| Post condition | The user have successfully register themselves using registered mail ID & mobile number and basic required details. | | |
| Normal flow of events/Basic flow/Happy path | 1. The user should select Sign Up OR New Registration option.  2. The user have to enter required Email ID, registered mobile number and other basic required details.  3. The user should verify details before submitting.  4. System will share verification email to the user and user should accept it.  5. After successful verification, user will be a registered member of online agriculture store application.  6. For successful login, User ID & password will be generated. | | |
| Alternative flow | If any error is found, user should recheck and verify the details and submit it again for registration. | | |
| Expectation | If the system or server is down, user will be notified. | | |
| Frequency of use | High | | |
| Assumptions | The user must have registered themselves for procuring agricultural products. The farmers have basic idea of online shopping. | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID | UC002 | | |
| Use case name | Login | | |
| Created by | Ms. Komal | Last updated |  |
| Date created | 22/01/2025 | Last revision date |  |
| Actor | Farmer, Manufacturer | | |
| Description | This use case allows user to login themselves by entering their credentials. | | |
| Pre-condition | The user should have login credentials like User ID, Password to login the account. | | |
| Post condition | The can successful login using login credentials. | | |
| Normal flow of events/Basic flow/Happy path | 1. User should select Sign In option.  2. User should enter login credentials for login.  3. The system will verify the credentials.  4. After successful login, system will redirected to the home page. | | |
| Alternative flow | If credentials are wrong, the system will show the error to enter the correct user name and password. | | |
| Expectation | If the system or server is down, user will be notified. | | |
| Frequency of use | High | | |
| Assumptions | The user should have credentials (User ID & password) for using the application. | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID | UC003 | | |
| Use case name | Search Product | | |
| Created by | Ms. Komal | Last updated |  |
| Date created | 22/01/2025 | Last revision date |  |
| Actor | Farmer, Manufacturer | | |
| Description | The User (Farmer) should able to browse the product whatever they required. | | |
| Pre-condition | The user must be logged in.  Manufacturer must upload products on web application. | | |
| Post condition | After successful selecting product and making payment the, system should send confirmation details over email. | | |
| Normal flow of events/Basic flow/Happy path | 1. The user should log in in the system.  2. The user should browse the product.  3. The user filter out the product.  4. The user should check its price, availability & description. | | |
| Alternative flow | If the exact product is not showing, the system should suggest alternative products. | | |
| Expectation | The product should be available as per customer’s requirement. | | |
| Frequency of use | High | | |
| Assumptions | The user should successful browse the desired product. | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID | UC004 | | |
| Use case name | Add To Cart | | |
| Created by | Ms. Komal | Last updated |  |
| Date created | 22/01/2025 | Last revision date |  |
| Actor | Farmer, Manufacturer | | |
| Description | This use case allows farmers to add the product in to the cart or add in wish list or update the product. | | |
| Pre-condition | The manufacturer should have all the required products in stock and uploaded on application. Product details should be visible to farmers. | | |
| Post condition | After selecting the product, the farmer can proceed for the payment & delivery | | |
| Normal flow of events/Basic flow/Happy path | 1. The farmer should have log in into the web application.  2. The farmer can search & filter the product.  3. The farmer can able to wish list the product or able to add in the cart.  4. The system should able to modify the quantity the product. | | |
| Alternative flow | If product is shown out of stock, the system should display alternate products. | | |
| Expectation | Farmer should be able to add & modify their requirement. | | |
| Frequency of use | High | | |
| Assumptions | The manufacturer has successfully uploaded the valid product on web application. | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID | UC005 | | |
| Use case name | Making Payment | | |
| Created by | Ms. Komal | Last updated |  |
| Date created | 22/01/2025 | Last revision date |  |
| Actor | Farmer | | |
| Description | This use case allows farmers to make the payment & shows order confirmation details. | | |
| Pre-condition | The farmer should enter valid delivery details and complete the payment successfully. Manufacturer should ensure delivery as per given delivery date. | | |
| Post condition | Product is successfully deliver to the farmer timely. | | |
| Normal flow of events/Basic flow/Happy path | 1. The farmer can able to make the payment through any payment mode.  2. The manufacturer should arrange delivery as per the order.  3. Payment data should be stored securely.  4. The farmer should able to track the delivery.  5. The farmer gets the desired product after placing order and successful payment. | | |
| Alternative flow | If payment shows error, the web page should redirect for the payment page again OR customer can select COD Option. | | |
| Expectation | Farmer should be able to do online payment. | | |
| Frequency of use | High | | |
| Assumptions | Payment done successfully. | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID | UC006 | | |
| Use case name | Delivery of the product | | |
| Created by | Ms. Komal | Last updated |  |
| Date created | 22/01/2025 | Last revision date |  |
| Actor | Farmer & manufacture | | |
| Description | This use case allows farmers to track delivery status. Manufacturer should update farmer regarding delivery status. | | |
| Pre-condition | The farmer should enter valid delivery details and complete the payment successfully. Manufacturer should ensure delivery as per given delivery date. | | |
| Post condition | Product is successfully deliver to the farmer timely. | | |
| Normal flow of events/Basic flow/Happy path | 1. The farmer can track the order status on web application.  2. The manufacturer should arrange delivery as per the order.  3. The farmer should give OTP to the delivery person.  4. The farmer gets the desired product after placing order and successful payment.  5. Farmer should check if the correct product is delivered or not.  5. Farmer should give review or feedback on web application. | | |
| Alternative flow | If delivery address in incomplete, the farmer should enter correct delivery address with mobile number. | | |
| Expectation | If wrong product was delivered, the farmer should raise a concern on web application using return or exchange the product.  If the system or server is down, user or manufacturer will be notified. | | |
| Frequency of use | High | | |
| Assumptions | The manufacturer should deliver the correct product timely. | | |

Question 12 – (minimum 5) Activity Diagrams

Answer:

Activity diagram is a type of diagram in the Unified Modelling Language (UML) that visually represent the flow of activities within a system.

1. Registration & Login



1. Search product



1. Add product to the cart



1. Making payment



1. Delivery

