Nurturing Process - Capstone Project1 – Part -2/3

Question 1 – Audits

5 Quarterly Audits are planned Q1 , Q2, Q3, Q4, Q5 for this Project What is your knowledge on how these Audits will happen for a BA?

ANSWER:

AUDITOR will address the issues by creating road map for change

- Take a 360 view of BA's work
- Auditor will show us a detailed practical steps towards improvement
- The audit report provides a snapshot of where your team is today and roadmap of where it should be and an outline of how to get there
- AUDITOR can help us to identify errors in on going project which BA can rectify
- He will identify from where resources are coming
- He will check what tools we are using while making APP
- Auditor will check what processes organization is following up for completion of project
- Audit report includes:
    1. description of the current state of the project in terms of business analysis of related team activities
    2. list of identified risks and problems, and recommendations for their resolution or mitigation
    3. Suggestions for changing the processes for working with requirements
    4. Specific recommendations for tools and templates

The results of the audit are presented to the client, the procedure for implementing the proposed changes are discussed, and responsible persons are appointed.

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 n 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)

ANSWER:

BA Approach Strategy

- Discover Primary Business Objective
- Define Scope (Scope Statement)
- Formulate BA Plan
- Define Detailed requirements
- Support Technical Implementation
- Help Business implement the Solution

- Assess Value created by Solution

What Elicitation techniques to apply?

- Brainstorming: We can get innovative ideas and requirements, it can be an efficient way for users/ stakeholders to define their requirements. Brainstorming is used in identifying all possible solutions and simplifies the details of opportunities. It casts a broader net, determining various discreet possibilities. It promotes equal participation of everyone and multiple perspectives.
- FOCUS GROUPS- It is used to explore opinions, knowledge, perception and concern of individuals in regards to a particular topic. The participants share their impressions, preferences and needs, guided by a moderator. Easy to organize in a B2C setting. Cheaper light analysis. Discovering varieties within a population. Signifies and focuses on a specific group only

How to do Stakeholder Analysis RACI/ILS

NAME	POSITION	RASCI (responsible, accountable, support, consultant, informed)
Mr. Vandanam	PM	A
Ms. Juhi	Sr.JAVA DEV	C
Mr. Teyson, Ms, Lucie, Mr, Tucker, Mr Bravo	JAVA DEVELOPERS	I
Mr, Mike	NETWORK ADMIN	I
Mr John	DB ADMIN	S
Mr Jason and Ms Alekya	TESTERS	I
ME -Rupesh	BA	R

What Documents to Write:

- Project Vision Document
- Business Analysis Plan
- Business Requirement Document (BRD)
- Functional Requirement Specification (FRS)
- System Requirement Specification (SRS)
- Requirement Traceability Matrix (RTM)
- Use Case Diagrams/ Use Case Specification document
- Wireframes/Mockups
- Change Request Document

What process to follow to Sign off on the Documents

- Identify key deliverables and log document repository tool
- Co ordinate review session and forward draft to reviewer (A/C)
- Review draft deliverable prior to session (A/C)

- Conduct draft deliverable review session (RAC)
- Submit deliverable changes to the owner(R)
- Complete deliverable content with reviewer changes
- Coordinate / conduct technical review
- Coordinate review session and forward to reviewer(A,C)
- CONDUCT final deliverable review session (RAC)
- POST FINAL deliverable in document repository tool and update status
- Update final deliverable and contact approver

How to take Approvals from the Client

BA to take necessary approvals over email by copying PM

What Communication Channels to establish n implement

- Formal
- Informal
- Face to Face
- Written
- Digital

How to Handle Change Requests

- Understand the scope
- Check impact post incorporating change
- Seek approval for change request
- Communicate and implement the approved CR

How to update the progress of the project to the Stakeholders

BA maintains a sheet on daily basis, which he keeps updating. That sheet he will send to stakeholders with marking cc to his PM on daily basis

How to take signoff on the UAT- Client Project Acceptance Form

As a business analyst we will be following below steps to complete a project. First, we will go through project idea and will meet the business stakeholders and other Stakeholders to identity requirements, to identity requirement we will use focus group, Interview, survey or questionnaire and document analysis. We will use RACI method to do Stakeholder analysis which will provide us who are the influencer and who are decision makers for this project. Once all requirements are gathered then stakeholder analysis will be done, we will start preparing BRD/FRD and we will Email both the document to Client for sign off and will also take all approval on email only from the client to proceed with this Project. We will have daily meeting in the morning and evening wherein all team members will participate for 15 minutes wherein client will also participate and will have quick updates on What needs to be done today and where we are currently now, this will keep client also inform about all the progress and if any changes need to be done then client can refer the same to us. This will enable us to handle any change request then and there only without any delay in project duration. By this way we will keep stakeholders updated on the project and once all Development and testing are done, we will call off for UAT for which we will send official mail to Client for the same.

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

Question 3 – 3-Tier Architecture

Explain and illustrate 3-tier architecture?

ANSWER:

Application layer – includes screens, pages, Validations on page, functionality, company specific Logic e.g., Employee login

Business logic layer – all reusable components, frequently changing components, governing Body rules and regulations, compliance e.g., Printer, payment gateways, RBI rules for banks etc.

Data layer – database components connecting to databases, e.g., employee details.

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:

5W 1H – means why, what, who, where, when and how, BA must follow this concept while asking Question to stakeholders.

SMART – BA must confirm the requirement is SMART before accepting it for development i.e., Specific, measurable, attainable, realistic and traceable.

RACI – Stakeholder analysis means responsible, accountable, consulted and informed, this will Help us to identify decision maker and influencer.

3 Tier Architecture – application layer, business logic layer and data layer

Use cases – identify who will be actor and relationships between actors and use cases Use

case specification – To get alternate flow of use case diagram

Activity diagram – it is use to show flow from one activity to other activity

Question 5 – Elicitation Techniques

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

ANSWER:

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

Brainstorming- This session is generally conducted around the table discussion. All participants should be given an equal amount of time to express their ideas.

Document analysis – Document analysis includes reviewing the business plans, technical documents, problem reports, existing requirement documents, etc. This analysis is helpful to validate the implementation of current solutions and is also helpful in understanding the business need.

Reverse Engineering- Reverse-engineering is the act of dismantling an object to see how it works. It is done primarily to analyze and gain knowledge about the way something works but often is used to duplicate or enhance the object.

Focus Group- By using a focus group, you can get information about a product, service from a group. The Focus group includes subject matter experts. The objective of this group is to discuss the topic and provide information. A moderator manages this session.

Observation- The main objective of the observation session is to understand the activity, task, tools used, and events performed by others.

Workshops- Probably the first thing project managers think of when considering how to work out the requirements for a project is to get the relevant stakeholders together in a workshop.
Workshops are interactive meetings with facilitated discussions. A good workshop facilitator can help a group uncover core requirements and help them with brainstorming.

JAD- This technique is more process-oriented and formal as compared to other techniques. These are structured meetings involving end-users, PMs, SMEs. This is used to define, clarify, and complete requirements.

Interview- This is the most common technique used for requirement elicitation. Interview techniques should be used for building strong relationships between business analysts and stakeholders. In this technique, the interviewer directs the question to stakeholders to obtain information. One to one interview is the most commonly used technique.

Prototype- Prototyping is used to identify missing or unspecified requirements. In this technique, frequent demos are given to the client by creating the prototypes so that client can get an idea of how the product will look like. Prototypes can be used to create a mock-up of sites, and describe the process using diagrams.

Questionnaire – For Survey/Questionnaire, a set of questions is given to stakeholders to quantify their thoughts. After collecting the responses from stakeholders, data is analyzed to identify the area of interest of stakeholders.

Use case specification – User stories have long been used on Agile projects as a way of documenting rich information about how a solution will be used in particular scenarios. A user story divides the

work into functional chunks (increments) that can then be delivered by the team.

Question 6 – This project Elicitation Techniques

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

Prototyping – How an App or portal looks like can be shown in a better way through this

Use case Specs – User story divides work into Functional chunk

Document Analysis – It is most important gathering technique evaluating the documentation present system can assist when making AS-IS process document and also driving Gap analysis

Brainstorming – It can be effective way to generate lots of ideas on a specific issue and then determine which idea is best solutions.

Interview – Interview of user and stakeholder are important in creating wonderful software.

Fertilizers, seeds, pesticides details from the manufacturers and should be able to display them to the Farmers.

To gather the business requirements from the client, you went to SOONY and met Mr. Henry. When Mr. Henry was asked about the project and what are they expecting from the project, Mr. Henry stated that he is expecting to have a login for all its users (fertilizers, seeds, pesticides manufacturers and Farmers), a product catalog of fertilizers, seeds, pesticides, a search option to search for products, payment process, and delivery tracking.

After doing the stakeholder analysis, you have found out that Peter, Kevin, Ben are the key stakeholders and you have scheduled an appointment to meet them. After meeting with them and trying to gather the stakeholder requirements, Kevin said that, a Farmer should be able to browse through the products catalog once they visit the website and need to have a search option so that they can search for any product they need. Peter said that, if a farmer wants to buy any product or add them to buy-later list, they need to login first using their email id and password. If it is a new user, then they can create a new account by submitting their email ID and creating a secure password. Ben added saying that, Farmers needs to have an easy-to-use payment gateway which should include cash- on-delivery (COD), Credit/Debit card and UPI options so that the user's experience should be better.

Kevin mentioned that, a user gets an email confirmation regarding their order status. A delivery tracker to track the whereabouts of their order.

Question 7 – 10 Business Requirements

Make suitable Assumptions and identify at least 10 Business Requirements.

ANSWER:

Requirement Id	Requirement Description
BR001	The farmers should be able to login or sign up in agricultural Portal/App after creating user id and password
BR002	All type of Farm related products should be available in Portal/App
BR003	Farmers should be able to search for available products in Fertilizers, Seeds, Pesticides
BR004	The design of an app should be user friendly as end user is from Rural area
BR005	Transport facility should be available in all areas
BR006	Manufacturers should be able to login to the Portal/App
BR007	Manufacturers should be able to upload and display their products in Portal/App
BR008	A farmer should have an easy-to-use payment option which include cash on delivery, credit/debit card payment and UPI option
BR009	There should be good internet connectivity in Rural area
BR0010	Farmer should be able to Track their order after making payment

Question 8 –Assumptions
List your assumptions

ANSWER:

- All users will have sufficient internet connectivity to use application
- Remote area has adequate available of transport facility to deliver products
- Farmer should have a Valid Mobile Number/Email id
- Farmers should be aware about online payment system
- Farmers should have UPI or Debit or credit card facility from their respective bank
- All user should be knowing English or Hindi language to understand and use application better

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

ANSWER:

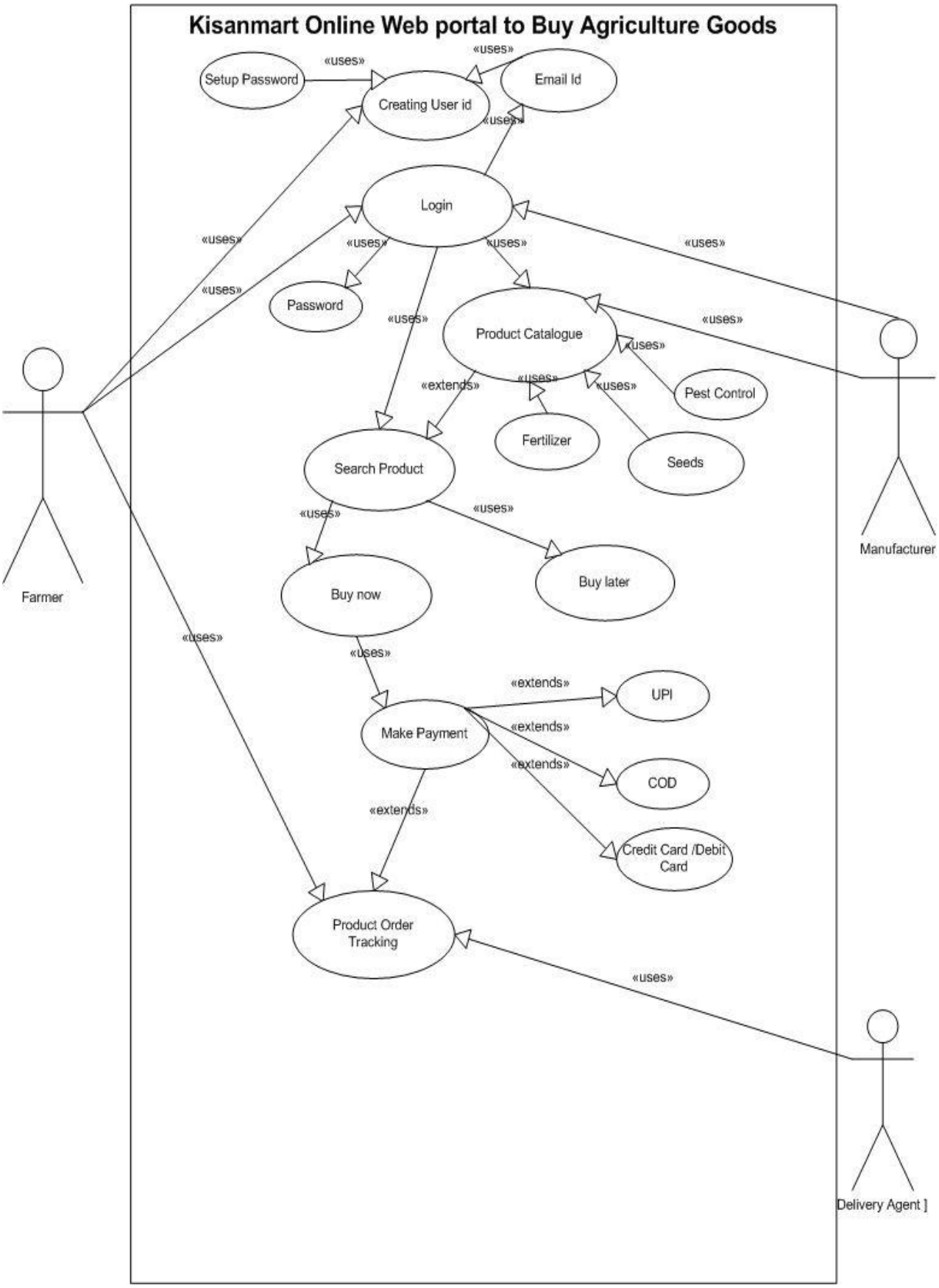
Req ID	Req Name	Req Description	Priority

BR001	login	Should have login for all its users	10
BR002	Product catalogue	Should have product catalogue for all products	8
BR003	Farmers search for Products	Farmers should be able to search for available products in fertilizers, seeds and pesticides	8
BR004	Payment option	Farmer should have an easy-to-use payment option which include cash on delivery, credit/debit card payment and UPI option	7
BR005	Delivery tracking	A delivery tracking system should be available to know whereabouts of the products	4
BR006	Email confirmation	A farmer should get email confirmation of their order status	3
BR007	Manufacturers upload their products	Manufacturer should be able to upload and display their products in the application	9
BR008	New user login	new user should be able to sign up with email id and creating a secure password	7
BR009	Buy later list	Should have buy later list option to buy product in future	2
BR0010	User Friendliness of Portal/App	The design of the app should be in such a way that that each farmer should be able to access the app as its a rural area	5

Question 10 – Use Case Diagram

Draw use case diagram

ANSWER:


Kisanmart Online Web portal to Buy Agriculture Goods
Setup Password
Email Id
Creating User id
Login
Password
Product Catalogue
Pest Control
Fertilizer
Seeds
Search Product
Buy now
Buy later
Make Payment
UPI
COD
Credit Card /Debit Card
Product Order Tracking
Farmer
Manufacturer
Delivery Agent]
«uses»
«extends»

Question 11 – (minimum 5) Use Case Specs

Prepare use case specs for all use cases

ANSWER:

Use Case ID **OAPS_CS6_UC1**

Use Case Name **Search Product**

Brief Description	**In this Use Case Farmer can access OAPS application System to search Product & check product availability**
Actors	**Farmer**
Pre-Condition	**-Farmer should have access to Application system.** **- Product details & Its availability details have been updated by system.**
Basic Flow	
Alternative Flow	**Exceptional Flow**
Post Condition	

- Active internet connection should be available.
Step 1. The Use case begins when Farmer opens an application.

Step 2. Then Farmer can click on "search" button to search for products. Step 3. Then Farmer can click on "Product availability" button to check availability of products

Step 4. The use case ends successfully.

A. If in Step 1 of the basic flow, Farmer is not able to open the application then system shows an error as "system error, kindly restart" then use case resumes at step 1.
B. If in Step 2 of the basic flow, Farmer won't be able to search product then system shows an error as "Try Again" then use case resumes at step 2.
C. If in Step 3 of the basic flow, Farmer won't be able to check product availability then system shows an error as "Try Again" then use case resumes at Step 3.
Valid error condition is displayed if there is any error in accessing the information.

- Successful Completion:
- Farmer should be able to search products.

Scenarios	**No Response from the server**

Use Case ID	**OAPS_CS6_UC2**
Use Case Name	**Product Catalogue**
Brief Description	**In this Use Case Farmer can access product catalogue in OAPS application system &** **Check product availability**
Actors	**Farmer**
Pre-Condition	**- Farmer should have access to Application system.** **- Product details & Its availability details have been updated by system.**

Basic Flow

	- Active internet connection should be available. **Step 1. The Use case begins when Farmer opens the application.** **Step 2. Then Farmer can click on "product catalogue" button to Browse for products.**
Alternative Flow **Exceptional Flow**	**Step 3. Then Farmer can click on "Product availability" button to check availability of products** **Step 4. The use case ends successfully.**
Post Condition	**A. If in Step 1 of the basic flow, Farmer is not able to open the application then system shows an error as "system error, kindly restart" then use case resumes at step 1.** **B. If in Step 2 of the basic flow, Farmer won't be able to browse product then system shows an error as "Try Again" then use case resumes at step 2.** **C. If in Step 3 of the basic flow, Farmer won't be able to check product availability then system shows an error as "Try Again" then use case resumes at Step 3.** **Valid error condition is displayed if there is any error in accessing the information.** **- Successful Completion** **- Farmer should be able to browse products.**
Scenarios	**No Response from the server**

Use Case ID	**OAPS_CS6_UC3**
Use Case Name	**Buy product**
Brief Description	**In this Use Case Farmer can buy products online**
Actors	**Farmer**
Pre-Condition	**- Farmer should have access to online application System.** **- Farmer should have checked product details & Its availability in system.** **- Active internet connection should be available.**
Basic Flow	**Step 1. The Use case begins when Farmer click on "Buy Product" button to purchase product.** **Step 2. Then Farmer can click login button to enter his/her email id and password to buy product online.** **Step 3. Or if Farmer is new user, can create his new login id by entering email id and password to buy product online.** **Step 4. The use case ends successfully.**
Alternative Flow	**A. If in Step 1 of the basic flow, Farmer won't be able to buy product then system shows an error as "Try Again" then use case resumes at step 1.** **B. If in Step 2 of the basic flow, existing Farmer won't be able to login through email id and password then system shows an error as "Try Again" then use case resumes at step 2.**
Exceptional	**C. If in Step 3 of the basic flow, new Farmer won't be able to login through email id and password then system shows an error as "Try Again" then use case resumes at step 3.**

Flow	**Valid error condition is displayed if there is any error in accessing the information.** **- Successful Completion:**
Post Condition	**- Farmer should be able Buy available products online**
Scenarios	**No Response from the server**

Use Case ID	**OAPS_CS6_UC4**
Use Case Name	**Make Payment**
Brief Description	**In this Use Case Farmer can make payment**
Actors	**Farmer**
Pre-Condition	**- Farmer should have access to online application System.** **- Farmer should have checked product details & Its availability in system.** **- Active internet connection should be available.**
Basic Flow	**Step 1. The Use case begins when Farmer click on “Make Payment” button to make payment for the product.** **Step 2. Then Farmer can click on “COD” button if he wants to make payment on delivery of product.** **Step 3. Or Farmer can click on “Credit/Debit Card” button to make payment for the product.** **Step 4. Or Farmer can click on “UPI” button to make payment for the product. Step 5. Then system confirms the booking & email confirmation will be sent to Farmer registered email id.** **Step 6. The use case ends successfully.**
Alternative Flow	**A. If in Step 1 of the basic flow, Farmer won’t be able to make payment then system shows an error as “Try Again” then use case resumes at step 4.** **B. If in Step 2 of the basic flow, Farmer won’t be able to make payment through cash on delivery then system shows an error as “Try Again” then use case resumes at step 2.** **C. If in Step 3 of the basic flow, Farmer won’t be able to make payment through debit or credit card then system shows an error as “Try Again” then use case resumes at step 3.** **D. If in Step 4 of the basic flow, Farmer won’t be able to make payment through UPI then system shows an error as “Try Again” then use case resumes at step 4.**
Exceptional	

Flow	**Valid error condition is displayed if there is any error in accessing the information.** **- Successful Completion:**
Post Condition	**- Farmer should be able make payment online**
Scenarios	**No Response from the server.**

Use Case ID	**OAPS_CS6_UC5**
Use Case Name	**Track Order**

Brief Description	**In this Use Case Farmer track order**
Actors	**Farmer**
Pre-Condition	**- Farmer should have access to online application System.** **- Farmer should have bought product by making payment/COD.** **- Active internet connection should be available.**
Basic Flow	**Step 1. The Use case begins when Farmer click on "Track order" button to track whereabouts of Product.** **Step 2. Then Farmer will be shown the exact stage where his product is and probable date of receiving the product** **Step 3. The use case ends successfully.**
Alternative Flow Exceptional	**A. If in Step 1 of the basic flow, Farmer won't be able to Track order then system shows an error as "Try Again" then use case resumes at step 1.** **B. If in Step 2 of the basic flow, Farmer won't be able to see exact stage of his product then system shows an error as "Try Again" then use case resumes at step 2.**

Flow	**Valid error condition is displayed if there is any error in accessing the information.** **- Successful Completion:**
Post Condition	**- Farmer should be able Track order online**
Scenarios	**No Response from the server.**

Question 12 – (minimum 5) Activity Diagrams

ANSWER: