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:** A **Use Case Diagram** is a type of **UML (Unified Modeling Language) diagram** that visually represents the interactions between **users (actors)** and a **system**. It shows **how users interact** with the system through **different functionalities (use cases)**.



**Question 11 – (minimum 5) Use Case Specs**

**Prepare use case specs for all use cases**

**ANSWER:**

|  |  |
| --- | --- |
| Use Case ID | UC001 |
| Use Case Name | Buying a product |
| Actors | Customer, Seller |
| Description | This use case describes how users can make purchase via App |
| Pre - Condition | User should have been registered into the application |
| Post - Condition | Successfully able to login the Account |
| Basic Flow | Step 1: User create and account and loginStep 2: User search for a product from the search bar.Step 3: same product and related product option from different manufacture will be appeared on the screen.Step 4: User select one product, selects the size and quantity of the product and click on "buy now option".Step 5: System will take to another page, where total price calculation will be displayed along with the products added to cart.Step 6: User click on "Place order button".Step 7: User need to to choose the mode of the payment.Step 8: User need to enter the banking details and make payment.Step 9: User will receive order confirmation on email along with the tracking id.Step 10: Basic flow end here. |
| Alternate Flows | Step 1: User is not able to login and redirected to forgot "Username/Password" page.Step 2: If you user is not able to get the right information, he can request for a call from customer care.Step 3: once he get connected with the customer care he will explain the issue to the customer care representative,Step 4: Customer care will send a link to reset password to his email account.Step 5: User will go to that link and system will take to new page, where user will be able to change new password.Step 6: User will be put a new password.Step 7: System will ask to reconfirm the password.Step 8: User will be able to login the account now. |
| Exceptions | If internet connectivity lost while doing this use case, system displays "check with your internet connectivity |
| Frequency of use | High |
| Assumptions | It is assumed that the customer is registeredIt is assumed that the customer has the computer knowledgeIt is assumed that the customer has a suitable device to use the APP. |

|  |  |
| --- | --- |
| Use Case ID | UC002 |
| Use Case Name | Exchange of Product |
| Actors | Customer, Seller |
| Description | This use case describes how users can exchange a purchased product. |
| Pre - Condition | User should have purchased a product before in order to make a exchange. |
| Post - Condition | Successfully able to exchange the product |
| Basic Flow | Step 1: User login to account via credentials.Step 2: User click on AccountStep 3: System takes to different page with other details.Step 4: User select option "Exchange" among those options.Step 5: System will take to another page, where recently ordered products will be displayed on the screen.Step 6: User has to choose the product which he wants to exchange.Step 7: User will get another option where he will be asked- "different size in same product" or "want to buy another product"Step 8: User need to choose one of the option and take action according to chosen option.Step 9: Once the product is chosen, user will have to click on button“Exchange”Step 10: User will get the confirmation on email. |
| Alternate Flows | Step 1: User couldn't find the size which he wanted.Step 2: User call customer care agent to get a solutionStep 3: Agent suggested to wait for the size to be restocked and gave a tentative date or go for similar products.Step 4: Agent share the link of similar products to the registered email of the customer.Step 5: User choose the productStep 6: User will be put a new password.Step 7: System will ask to reconfirm the password.Step 8: User will be able to login the account now. |
| Exceptions | If internet connectivity lost while doing this use case, system displays "check with your internet connectivity |
| Frequency of use | High |
| Assumptions | It is assumed that the customer is registeredIt is assumed that the customer has the computer knowledgeIt is assumed that the customer has a suitable device to use the APP. |

|  |  |
| --- | --- |
| Use Case ID | UC003 |
| Use Case Name | Return of Product |
| Actors | Customer, Seller |
| Description | This use case describes how users can return a purchased product. |
| Pre - Condition | User should have purchased a product before in order to make a return. |
| Post - Condition | Successfully able to exchange the product |
| Basic Flow | Step 1: User login to account via credentials.Step 2: User click on “Account”Step 3: System takes to different page with other details.Step 4: User select option "Return" among those options.Step 5: System will take to another page, where recently ordered products will be displayed on the screen.Step 6: User has to choose the product which he wants to return.Step 7: User will get another option where he will be asked to provide the bank account number for amount of the returned product to be credited.Step 8: User need to enter the account number and submit.Step 9: User will get the confirmation on email. |
| Alternate Flows | Step 1: User didn't get the amount in his account within the TAT.Step 2: User call customer care agent to ask payment status.Step 3: Payment was stuck due to a technical glitch.Step 4: User was shared complaint form to be filled.Step 5: Once form submitted, user received another TAT on the email of amount to be credited.Step 6: User get the payment id in registered email. |
| Exceptions | User put the incorrect bank account. |
| Frequency of use | High |
| Assumptions | It is assumed that the customer has a valid bank account number.It is assumed that the customer has good internet connectivity.It is assumed that the customer has computer knowledge. |

|  |  |
| --- | --- |
| Use Case ID | UC004 |
| Use Case Name | Update the delivery address |
| Actors | Customer, Seller |
| Description | This use case describes how users can update address. |
| Pre - Condition | User should have a valid deliverable postal address. |
| Post - Condition | Successfully able to update address. |
| Basic Flow | Step 1: User login to account via credentials.Step 2: User click on “Account”Step 3: System takes to different page with other details.Step 4: User select option "Update" among those options.Step 5: System will take to another page, where mandatory fields like; Apt number, landmark, pin code, city name will be displayed and has to be field.Step 6: User need to click on "submit" button.Step 7: User can use the updated address for products delivery. |
| Alternate Flows | Step 1: User is not able to update the address.Step 2: User will refresh the page.Step 3: User gets error again while submitting details.Step 4: User use live chat boxStep 5: User is asked to not leve blank any star marked field.Step 6: after updating all mandatory field, address was successfullySubmitted. |
| Exceptions | User put the incorrect address details like; pin exceeds the maximum number of digits. |
| Frequency of use | High |
| Assumptions | It is assumed that the customer has a valid bank postal address.It is assumed that the customer has good internet connectivity.It is assumed that the customer has computer knowledge.It is assumed that customer understands, what details has to be put in every field. |

|  |  |
| --- | --- |
| Use Case ID | UC005 |
| Use Case Name | Update the new contact number |
| Actors | Customer, Seller |
| Description | This use case describes how users can update/ change new phone No. |
| Pre - Condition | User should have a new contact number. |
| Post - Condition | Successfully able to change contact number. |
| Basic Flow | Step 1: User login to account via credentials.Step 2: User click on “Account”.Step 3: System takes to different page with other details.Step 4: User select option "Manage your Account" among those options.Step 5: System will take to another page, where personal details will be displayed.Step 6: User has to click on Mobile number.Step 7: User will get a red popup button “CHANGE”.Step 8: OTP will be sent to existing updated number.Step 9: once number is verified with the OTP user put. User can update new contact number.Step 10: New contact number is successfully updated. |
| Alternate Flows | Step 1: User didn’t get the OTP in registered existing number.Step 2: User restarts the phone.Step 3: User raised a ticket with the customer care.Step 4: User was shared issue ticket number in the registered email.Step 5: Issue got fixed with the help of support team.Step 6: contact number is successfully changed. |
| Exceptions | User put the incorrect phone number. |
| Frequency of use | Low |
| Assumptions | It is assumed that the customer has a valid phone number.It is assumed that the customer has good phone network to receive OTP.It is assumed that the customer has checked the message inbox for OTP. |

Question 12 – (minimum 5) Activity Diagrams

ANSWER:









