## COEPD – Traditional Development

Capstone Project1 – Part -3/3 – 100 Marks - Pass 60 %

#### 12 Questions

## Instructions to follow:

- 1. Copy paste (either image, diagram or text) is not entertained. If done, the document will not be evaluated.
- 2. After submission of the answers of this prep exam, You should be prepared to attend viva and justify your answers in the prep exams. If in Viva, participant is NOT justifying the answers, Viva will be repeated until Candidates justify 60% correctness.
- 3. Mentor calls are scheduled only if the participant have submitted their task at least for one time.

(should apply their knowledge in this task first)

- 4. For attempting prep exams participant should be thorough on the topics using their references.
- 5. Please format the document properly (Always have a question no., question and answer).
- 6. Have a consistent format (Font name: Arial/ Calibri -Font size 12, Font Color: Black).
- 7. Few Questions are related to the case study, check Questions thoroughly before you answer.
- 8. Answers should be elaborated in detail(\*not as per the allotted marks).
- 9. Please focus on learning and applying the knowledge as this knowledge will be helpful in contributing at your BA job.
- 10. In the evaluation, students must answer all questions and should be able to justify at least 60% content and correctness of each answer.

# Online Agriculture Products Store

Mr. Henry, after being successful as a businessman and has become one of the wealthiest persons in the city. Now, Mr. Henry wants to help others to fulfil their dreams. One day, Mr. Henry went to meet his childhood friends Peter, Kevin and Ben. They live in a remote village and do farming. Mr. Henry asked his friends if they are facing any difficulties in their day-to-day work.

Peter told Mr. Henry that he is facing difficulties in procuring fertilizers which are very important for farm. Kevin said that he is also facing the same problem in-case of buying seeds for farming certain crops. Ben raised his concern on lack of pesticides which could help in greatly reducing pests in crops.

After listening to all his friends' problems, Mr. Henry thought that this is a crucial problem faced not only by his friends but also by so many other farmers. So, Mr. Henry decided to make an online agriculture product store to facilitate remote area farmers to buy agriculture products. Through this Online Web / mobile Application, Farmers and Companies (Fertilizers, seeds and pesticides manufacturing Companies) can communicate directly with each other.

The main purpose to build this online store is to facilitate farmers to buy seeds, pesticides, and fertilizers from anywhere through internet connectivity. Since new users are involved, Application should be user friendly.

This new application should be able to accept the product (fertilizers, seeds, pesticides) details from the manufacturers and should be able to display them to the Farmers. Farmers will browse through these products and select the products what they need and request to buy them and deliver them to farmers location.

Mr. Henry has given this project through his Company SOONY. In SOONY Company, Mr Pandu is Financial Head and Mr Dooku is Project Coordinator. Mr. Henry , Mr Pandu , and Mr Dooku formed one Committee and gave this project to APT IT SOLUTIONS company for Budget 2 Crores INR and

18 months Duration under CSR initiative. Peter, Kevin and Ben are helping the Committee and can be considered as Stakeholders share requirements for the Project.

Mr Karthik is the Delivery Head in APT IT SOLUTIONS company and he reached out to Mr Henry through his connects and Bagged this project. APT IT SOLUTIONS company have Talent pool Available for this Project. Mr Vandanam is project Manager, Ms. Juhi is Senior Java Developer, Mr Teyson, Ms Lucie, Mr Tucker, Mr Bravo are Java Developers. Network Admin is Mr Mike and DB Admin is John. Mr Jason and Ms Alekya are the Tester. And you joined this team as a BA. Your Team

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 and Ms Alekya

BA - You

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.

Identify Business Requirements (which includes Stakeholder Requirements)

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

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

Make suitable Assumptions and identify at least 10 Business Requirements.

#### List your assumptions

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

Req ID	Req Name	Req Description	Priority
BR001	Farmer Search for Products	Farmers should be able to search for available products in fertilizers, seeds, pesticides	8
BR002	Manufacturers upload their Products	Manufacturers should be able to upload and display their products in the application	8

Once the requirements are finalized, as a business analyst, one of the major roles is to act as a liaison between the client and the project team. To gather the requirements correctly from the client side and then to deliver those requirements to the project team in a way they understand.

To make the project team understand the requirements, you need to convert those requirements into UML diagrams and screen mock-ups.

You will draw use case diagram

Prepare use case specs for all use cases

And you will all Activity diagrams required

# Question 1 – Functional Requirements - 15 Marks

Identify minimum 20 functional requirements Example :

<u>Functional requirement</u>: When an order is fulfilled, the local printer shall print a packing slip.

<u>Non-Functional Requirement</u>: Packing slips shall be printed on both sides of 4"x 6" white paper, the standard size for packing slips used by local printers.

Req			
ID	Req Name	Req Description	
FR0012	Data Security	The application should ensure data security for all the farmers information	10
FR0005	Secure Login	Farmers and Manufacture should be able to log in securely using email and password.	9
FR0001	Farmer Registration	Farmer should be able to register to the application	8
FR0003	Manufacturing Registration	Manufacture Should be able to register to the application.	8
FR0004	Product CatLog Display	The application Should display a available products in the Application	8
FR0014	Product addition	Manufacture Should be able to add the new product available with them in the application.	8
FR0002	Farmer Search for Product	Farmer should be able to search for the available product (Fertilizer, seeds and pesticide) in the application	7
FR0019	Farmer Account Management	Farmers should be able to manage their account information like personal details, password and profile details	7
FR0020	Manufacturer Account Management	Manufacturer should be able to manage their account information like personal details, password and profile details	7
FR0007	Payment Gateway Integration	The application should include multiple payment options such as COD, credit/debit card and UPI	6
FR0008	Order confirmation Email	Farmer should receive the email confirmation of their orders.	6
FR0009	Delivery Tracking	Farmer should be able to track the delivery status of their order.	6

		Farmers should be able to view their past order which they	
FR0015	Order History	have purchased	6
		Manufacturers should have a dashboard to manage their	
FR0016	Manufacturer Dashboard	products and view sales analytics	6
		Providing training materials to the farmers and the	
FR0018	Training materials	manufacturer	6
FR0006	Add to Buy later List	Farmer should be able to add products buy later list	5
		The application Should provide a customer support feature for	
FR0010	Customer Support Feature	handling queries and issues	5
FR0011	Multi Language support	The application should support multiple language	5
		Farmers should be able to review and rate the ordered	
FR0013	Product Reviews and ratings	products.	5
		The system should provide product recommendation based on	
FR0014	Product Recommendation	farmers activity	5
		The system should send the notification to the farmers and the	
FR0017	Notification	manufacturer of their activities like.	5

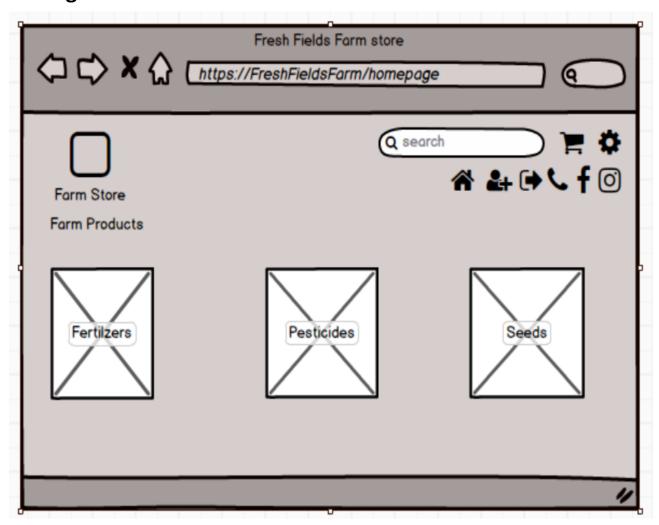
# NON-Functional Requirements:

Req		
ID	Req Name	Req Description
NFR01	Usability	Application should be farmer friendly, so that farmers should understand each and every thing very clearly
		Application should be compatible on the different browsers
NFR02	Compatibility	and mobiles as well
NRF03	Performance	Application page should render in few seconds
NRF04	Load	Application should handle high number of farmers requests
		Application should be scalable it should not be tightly
NFR05	Scalability	coupled
		Farmers Personal data should be secure and stored in the
NFR06	Security	form of encrypted text

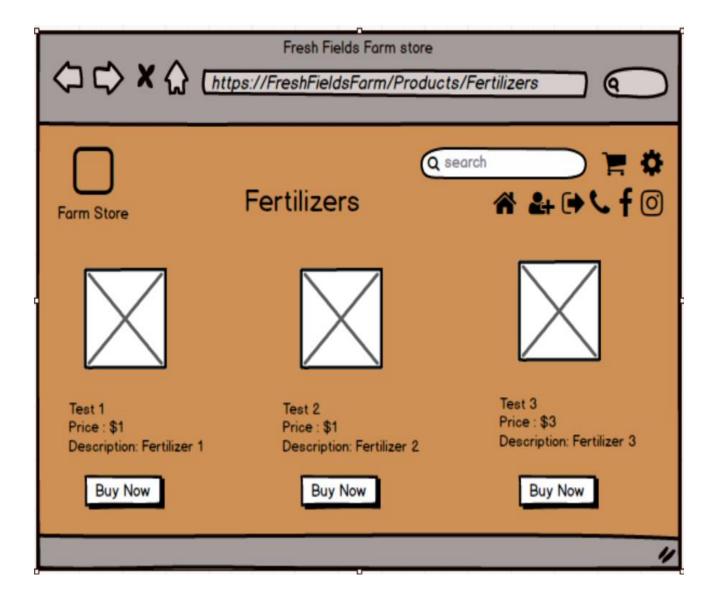
Question 2-Minimum 5 page designs - 15 Marks

Make wireframe and prototypes

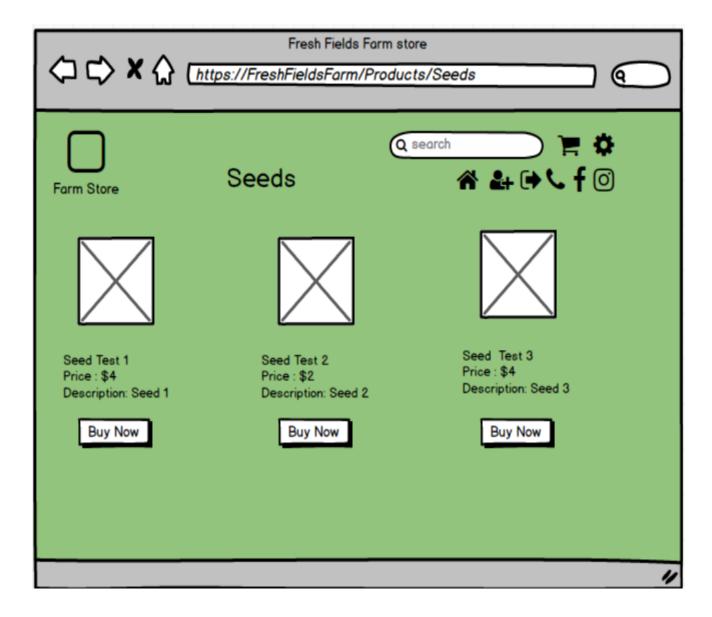
# **Home Page**



# **Products/Fertilizers**



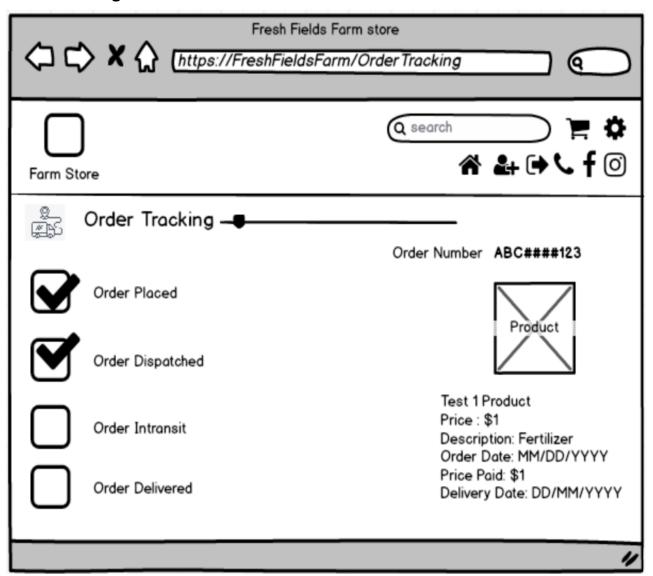
# **Products/Seeds**



# **Create Account**

Fresh Fields Farm store  https://FreshFieldsFarm/Create_account					
Farm Store	© search ☐ ♣ ♣ ♠ C f ©				
	Create An Account				
Personal Informati	on				
First Name					
Last Name					
Contact Number					
Login Information					
Email Id					
Username					
Password					
Confirm Password					
Su	bmit Clear Cancel				

# **Order Tracking**



#### Question 3 – Tools (Visio, Balsamig) - 15 Marks

Make a note of the Tools, which you are using for above concepts.

**Balsamiq** is a popular wire framing tool used for creating low-fidelity prototypes. It focuses on

simplicity and sketch-like designs to quickly visualize and communicate design ideas. With its drag-and- drop interface and pre-built UI elements, Balsamiq allows users to rapidly iterate and gather feedback on the basic structure and layout of a digital product.

## 1. Fast Wireframing

- o Helps you quickly sketch out how a website or app screen will look.
- o Feels like drawing on a whiteboard but in digital form.

#### 2. Focus on Structure, Not Details

- Balsamiq uses a hand-drawn style so stakeholders don't get distracted by colors or fonts.
- Keeps attention on layout and functionality.

## 3. Better Communication

- Makes it easy to explain ideas to:
  - Designers
  - Developers
  - Clients
  - Product owners

## 4. Early Feedback

- o You can show mock-ups early in the project.
- Helps get agreement on workflows and features before spending time on detailed design or coding.

#### 5. Collaboration

o Supports sharing and commenting so teams can work together and iterate quickly.

**Microsoft Visio** is a versatile diagramming tool that allows users to create a wide range of diagrams, including flowcharts, organizational charts, and network diagrams. With its extensive library of shapes

and customization options, Visio enables users to visually represent complex information and processes.

It offers collaboration features, data linking capabilities, and seamless integration with other Microsoft

Office applications

Here are the key reasons:

#### 1. Professional Diagrams

- o Visio helps you build clear diagrams such as:
  - Flowcharts
  - Organizational charts
  - Network diagrams
  - Process maps
  - Floor plans

# 2. Visualizing Complex Systems

 Makes it easier to understand and communicate systems, processes, and relationships.

# 3. Standard Templates and Shapes

- o Provides ready-made shapes for:
  - IT infrastructure
  - Business processes (BPMN)
  - UML diagrams (software design)
  - Engineering drawings

# 4. Process Documentation

- o Helps document workflows or business processes clearly.
- o Commonly used in **business process modelling** and **compliance documentation**.

## 5. Collaboration

o Supports sharing diagrams so teams can review and edit together.

# 6. Integration with Other Microsoft Tools

o Easily links diagrams to data in Excel, SharePoint, and database

# Question 4 – RTM - 6 Marks

A business analyst's key responsibilities are to keep track of the requirements and make sure that no requirement is missed.

Mr. Henry and peter have approached you regarding the current status of the project. How will you tackle this situation?

Req ID	Req Description	Category	Sub category	Design	Code	Unit testing testing	System integrati testing	Component System on testing	UAT
RQ001	Farmers can browse and search for product	Functional	User Interface Complete	ABCD.Docx Product display Product display and features Page Page Incomplete 11,14 Incomplete 11.14	ABCD.Docx Product display Product display and features Page Page Incomplete 11,14 Incomplete 11.14	Complete	Incomplete	Incomplete	Incomplete
RQ002	Farmers can view product details and specification	Functional	User Interface	Complete	Complete	Complete	Incomplete	Incomplete	Incomplete
RQ003	Farmers can add product to their card	Functional	Cart Management	Complete	Complete	Complete	Incomplete	Incomplete	Complete
RQ004	farmers can place orders for selected products	Functional	Order Management	Complete	Complete	Complete	In Progress	Incomplete	Incomplete
RQ005	farmers can provide delivery address during checkout	Functional	Order Management	Complete	Complete	Complete	Complete	Incomplete	Incomplete
RQ006	Manufacturers can update product details to the platform	Functional	Product Management	Complete	Complete	Complete	Complete	Incomplete	Incomplete
RQ007	Manufacturers can update product details to the platform	Functional	Product Management	Complete	Complete	Complete	Complete	Incomplete	Incomplete
RQ008	System should calculate shipping charges based on location	Functional	Order Management	Complete	Complete	Complete	Complete	Incomplete	Incomplete
RQ009	System should send order confirmation email to farmer	Functional	notification	Complete	Complete	Complete	Complete	Incomplete	Complete
RQ010	System should provide a user-friendly	Non- Functional	User Interface	Complete	Complete	Complete	Complete	Incomplete	Incomplete

# Question 5 – 10 Test Case Documents - 10 Marks

# **Prepare 10 Test Case Documents**

# 1.Test Case 1: User Registration

TC001	Test Case Name	User Registration
PQ001	Project Name	Online Agriculture Products Store
4567	PM Name	Mr Vandanam Senior
PQ098TS12	Tester ID	234567
PQ098TP098	Tester Name	Mr Jason
PQ098TS02	Date of Test	
	PQ001 4567 PQ098TS12 PQ098TP098	PQ001         Project Name           4567         PM Name           PQ098TS12         Tester ID           PQ098TP098         Tester Name

**Scenario**: Test the login functionality for registered users.

**Example**: John logs in using his email and password.

Link to that Page				
Steps	Set 1	Set 2	Set 3	Set 4
		Enter user details (name:		
		John, email:		
		john@example.com,		
	Navigate to the	password, user type:	Click on the	Verify registration success
Input Data	registration page.	farmer).	"Register" button.	message.
			User should be	
	User should be registered		registered and	
	successfully and redirected	The form fields should	receive a	
Expected	to the login page with a	accept the input without	confirmation	User should be redirected to
Behavior:	confirmation message.	error.	message.	the login page.
Actual	[To be filled after test	[To be filled after test	[To be filled after test	
Behavior:	execution]	execution]	execution]	[To be filled after test execution]
			Ensure the database	
	Ensure the registration	Check for validation	records the new	Verify the URL of the login
Comments:	page URL is correct.	messages.	user.	page
Result:				
[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]

# 2. Test Case 2: User Login

Test Case ID	TC002	Test Case Name	User Login
Project ID	PQ001	Project Name	Online Agriculture Products Store
PM ID	4567	PM Name	Mr Vandanam Senior
Test Strategy ID	PQ098TS12	Tester ID	234567
Test Plan ID	PQ098TP098	Tester Name	Mr Jason
Test Schedule			
ID	PQ098TS02	Date of Test	

**Scenario**: Test the login functionality for registered users.

**Example**: John logs in using his email and password.

Link to that Pag	e			
Steps	Set 1	Set 2	Set 3	Set 4
		Enter user details (name:		
		John, email:		
		john@example.com,		
		password, user type:	Click on the "Login"	Verify redirection to the
Input Data	Navigate to the login page.	farmer).	button.	dashboard.
		The form fields should	User should be	
Expected	Login page should load	accept the input without	authenticated and	User should be redirected to
Behavior:	successfully.	error.	logged in	the respective dashboard.
Actual	[To be filled after test	[To be filled after test	[To be filled after test	
Behavior:	execution]	execution]	execution]	[To be filled after test execution]
			Ensure	
			authentication	
		Check for validation on	service is	Check user-specific
Comments:	Verify page load time	incorrect credentials.	functioning.	dashboard content.
Result:				
[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]

# **Test Case 3: Product Listing by Companies**

Test Case ID	TC003	Test Case Name	Product Listing by Companies	
Project ID	PQ001	Project Name	Online Agriculture Products Store	
PM ID	4567	PM Name	Mr Vandanam Senior	
Test Strategy ID	PQ098TS12	Tester ID	234568	
Test Plan ID	PQ098TP098	Tester Name	Ms Alekya	
Test Schedule				
ID	PQ098TS02	Date of Test		
Scenario: Test the ability of companies to list products.				

Example: A co	Example: A company lists a new type of fertilizer.							
Link to that Pag	ge							
Steps	Set 1	Set 2	Set 3	Set 4				
		Enter product details						
		(name: Super Fertilizer,						
	Navigate to the product	category: fertilizer, price:	Upload product					
Input Data	listing page.	500, description).	images.	Click on the "Submit" button.				
		The form fields should	Images should be					
Expected	Product listing page	accept the input without	uploaded without	Product should be listed				
Behavior:	should load successfully.	error	error.	successfully.				
Actual	To be filled after test	To be filled after test	To be filled after test	To be filled after test				
Behavior:	execution	execution	execution	execution				
			Verify image upload					
		Validate form input	restrictions (size and	Confirm database entry for				
Comments:	Check page accessibility.	constraints.	format)	new product.				
Result:								
[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]				

**Test Case 4: Browsing Products by Farmers** 

Test Case ID	TC004	Test Case Name	Browsing Products by Farmers
Project ID	PQ001	Project Name	Online Agriculture Products Store
PM ID	4567	PM Name	Mr Vandanam Senior
Test Strategy ID	PQ098TS12	Tester ID	234568
Test Plan ID	PQ098TP098	Tester Name	Ms Alekya
Test Schedule			
ID	PQ098TS02	Date of Test	
Scenario: T	est the ability	of farmers to	browse and search for products.
Example: John s	earches for pesticides.		
-	•		
Link to that Page			
Steps	Set 1	Set 2 S	et 3 Set 4
	Navigate to the product	Enter search criteria A	Apply filters (price Verify the displayed
Input Data	browsing page.	(category: pesticides).	ange). products.
		F	ilters should refine Displayed products should
Expected	Product browsing page	Search should return t	he search results match the search and filter
Behavior:	should load successfully.	relevant results. a	ccurately. criteria.
Actual	To be filled after test	To be filled after test T	o be filled after test To be filled after test
Behavior:	execution	execution e	execution
	Check for page	Verify search algorithm T	est various filter Check for correct product
Comments:	responsiveness.	accuracy.	ombinations. details display.

Result:				
[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]

# **Test Case 5: Product Details View**

Test Case ID	TC005	Test Case Name	Browsing Products I	by Farmers
Project ID	PQ001	Project Name	Online Agriculture F	Products Store
PM ID	4567	PM Name	Mr Vandanam Senio	or
Test Strategy ID	PQ098TS12	Tester ID	234568	
Test Plan ID	PQ098TP098	Tester Name	Ms Alekya	
Test Schedule				
ID	PQ098TS02	Date of Test		
	Test the display	of detailed inf	formation for	a selected product.
Example: John v	views details of a pesticide.			
Link to that Page:				
Steps	Set 1	Set 2	Set 3	Set 4
эсерз	Jet 1	Verify product name,	Check availability	3614
	Click on a product from	description, price, and	and shipping	Ensure add-to-cart
Input Data	the product listing page.	images.	information.	functionality.
	Sp. St.	Correct product name	Correct price and	Availability status and
Expected	Detailed product page	and description should be	images should be	shipping information should
Behavior:	should load.	displayed.	displayed.	be accurate.
Actual	To be filled after test	To be filled after test	To be filled after test	To be filled after test
Behavior:	execution	execution	execution	execution
		Correct product name	Ensure images are	
	Ensure quick page load	and description should be	clear and price is	
Comments:	time.	displayed.	accurate.	Verify real-time stock status.
Result:				-
[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]

# **Test Case 6: Add Product to Cart**

Test Case ID	TC006	Test Case Name	Browsing Products by Farmers		
Project ID	PQ001	Project Name	Online Agriculture Products Store		
PM ID	4567	PM Name	Mr Vandanam Senior		
Test Strategy ID	PQ098TS12	Tester ID	234568		
Test Plan ID	PQ098TP098	Tester Name	Ms Alekya		
Test Schedule		_			
ID	PQ098TS02	Date of Test			
	est the functionali	ity of adding a	product to the shopping cart.		
Example: John adds a pesticide to the cart.  Link to that Page:					

Steps	Set 1	Set 2	Set 3	Set 4
		Verify product name,	Check availability	
	Click on a product from	description, price, and	and shipping	Ensure add-to-cart
Input Data	the product listing page.	images.	information.	functionality.
			Confirmation	
		Product should be added	message should	
Expected	Product details should	to the cart with a	appear indicating the	Cart icon should update to
Behavior:	load accurately.	confirmation message.	product was	reflect the added product.
Actual	To be filled after test	To be filled after test	To be filled after test	To be filled after test
Behavior:	execution	execution	execution	execution
		Verify cart update		
	Ensure product	without page reload.	Check for correct	
Comments:	information is complete.	page : e.eaa.	message content.	Ensure accurate cart count.
Result:				
[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]

# **Test Case 7: View Shopping Cart**

Test Case ID	TC007	Test Case Name	Browsing Products I	oy Farmers
Project ID	PQ001	Project Name	Online Agriculture P	
PM ID	4567	PM Name	Mr Vandanam Senio	or
Test Strategy ID	PQ098TS12	Tester ID	234568	
Test Plan ID	PQ098TP098	Tester Name	Ms Alekya	
Test Schedule				
ID	PQ098TS02	Date of Test		
Scenario: Te	est the functionality	of viewing the	shopping cart	with added products.
<b>Example</b> : John v	views his shopping cart with	products.		
Link to that Page:				
Steps	Set 1	Set 2	Set 3	Set 4
			Check product	
	Click on the "Cart" icon or	Verify the list of added	details (name,	
Input Data	menu item.	products.	quantity, price).	Verify total cost calculation.
			Correct product	
Expected	Shopping cart page	All added products should	details should be	Total cost should be
Behavior:	should load successfully.	be listed in the cart.	displayed.	calculated correctly.
Actual	To be filled after test	To be filled after test	To be filled after test	To be filled after test
Behavior:	execution	execution	execution	execution
	Ensure cart page		Ensure accurate	Include taxes and discounts if
Comments:	accessibility.	Check for missing items.	details.	applicable.
Result:	·			
[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]

**Test Case 8: Remove Product from Cart** 

Test Case ID	TC008	Test Case Name	Browsing Products b	by Farmers
Project ID	PQ001	Project Name	Online Agriculture P	roducts Store
PM ID	4567	PM Name	Mr Vandanam Senio	or
Test Strategy ID	PQ098TS12	Tester ID	234568	
Test Plan ID	PQ098TP098	Tester Name	Mr Jason	
Test Schedule				
ID	PQ098TS02	Date of Test		
Scenario: Te	est the functionality	y of removing a	product from	the shopping cart.
<b>Example</b> : John r	removes a pesticide from the	e cart.		
Link to that Page:				
Steps	Set 1	Set 2	Set 3	Set 4
			Verify product	
	Navigate to the shopping	Verify the list of added	removal	Verify product removal
Input Data	cart page.	products.	confirmation.	confirmation.
			A confirmation	
			message should	
			appear indicating the	
Expected	Shopping cart page	Product should be	product was	Total cost should be updated
Behavior:	should load successfully.	removed from the cart.	removed.	correctly.
Actual	To be filled after test	To be filled after test	To be filled after test	To be filled after test
Behavior:	execution	execution	execution	execution
	Ensure cart items are	Check for a removal	Ensure message	Verify correct cost
Comments:	displayed.	confirmation message.	clarity.	calculation.
Result:	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]
[Pass/Fail]				

# **Test Case 9: Place Order**

Test Case ID	TC009	Test Case Name Browsing Products by Farmers		
Project ID	PQ001	Project Name	Online Agriculture Products Store	
PM ID	4567	PM Name	Mr Vandanam Senior	
Test Strategy ID	PQ098TS12	Tester ID	234568	
Test Plan ID	PQ098TP098	Tester Name	Mr Jason	
Test Schedule				
ID	PQ098TS02	Date of Test		
Scenario: To	est the functionality	of placing an	order for products in the cart.	
<b>Example</b> : John p	places an order for the prod	ucts in his cart.		
Link to that Page:				
Steps	Set 1	Set 2	Set 3 Set 4	

Input Data	Navigate to the shopping cart page.	Click on the "Checkout" button.	Enter shipping details and select a payment method.	Click on the "Place Order" button.
Expected Behavior:	Shopping cart page should load successfully.	User should be redirected to the checkout page.	Form should accept valid input without error.	Order should be placed successfully, and a confirmation message should be displayed.
Actual Behavior:	To be filled after test execution	To be filled after test execution	To be filled after test execution	To be filled after test execution
Comments:  Result: [Pass/Fail]	Ensure cart items are listed.  [Pass/Fail]	Verify redirection. [Pass/Fail]	Check for input validation.  [Pass/Fail]	Ensure order is recorded in the database.  [Pass/Fail]

# **Test Case 10: Order History**

Test Case ID	TC010	Test Case Name	Browsing Products I	oy Farmers
Project ID	PQ001	Project Name	Online Agriculture P	Products Store
PM ID	4567	PM Name	Mr Vandanam Senio	or
Test Strategy ID	PQ098TS12	Tester ID	234568	
Test Plan ID	PQ098TP098	Tester Name	Mr Jason	
Test Schedule	DO000TC03	Data of Task		
ID	PQ098TS02	Date of Test		
	Test the function	nality of viewing	past orders	for a farmer.
<b>Example</b> : John v	views his order history.			
Link to that Page:				
Steps	Set 1	Set 2	Set 3	Set 4
			Check order details	
	Navigate to the "Order		(order ID, date,	
	History" page from the	Verify the list of past	status, total	Verify the ability to view
Input Data	user dashboard.	orders.	amount).	individual order details.
				User should be able to view
Expected	Order history page	All past orders should be	Correct order details	detailed information for each
Behavior:	should load successfully.	listed.	should be displayed.	order.
Actual	To be filled after test	To be filled after test	To be filled after test	To be filled after test
Behavior:	execution	execution	execution	execution
			Verify accurate	Check for detailed order view
Comments:	Verify page accessibility.	Ensure no missing orders.	information.	functionality.
Result:	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]	[Pass/Fail]
[Pass/Fail]				

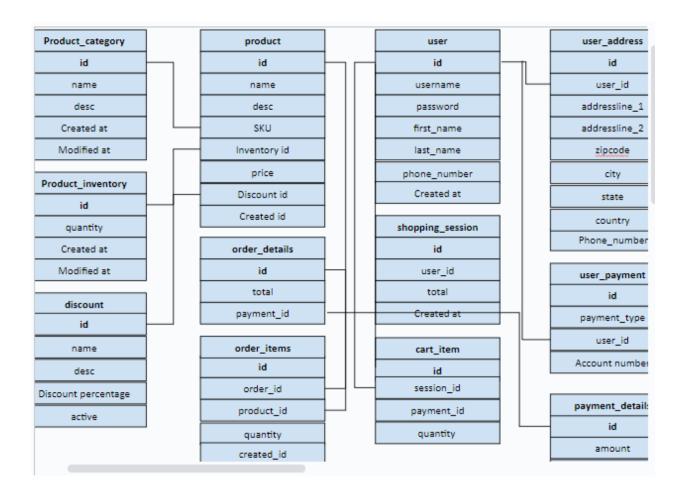
#### Question 6 - DB Design - 8 Marks

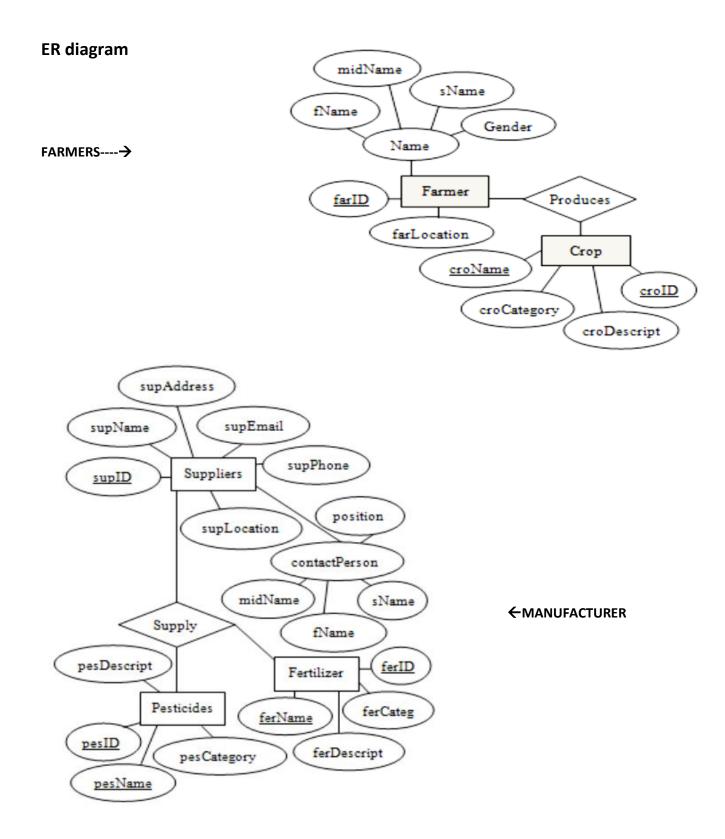
After the requirements are thoroughly explained to the entire project team by business analyst, the Database architects have decided to do the database design and also to represent the in-flow and outflow of data.

#### Draw database schema and ER diagram

**Ans.** DB schema is the blueprint that outlines the structure of a database, including its table, fields, relationships, and other characteristics.

An entity relationship diagram is a visual representation of the relationship between entities in a database. It depicts the entities and attributes, and the relationship between them.



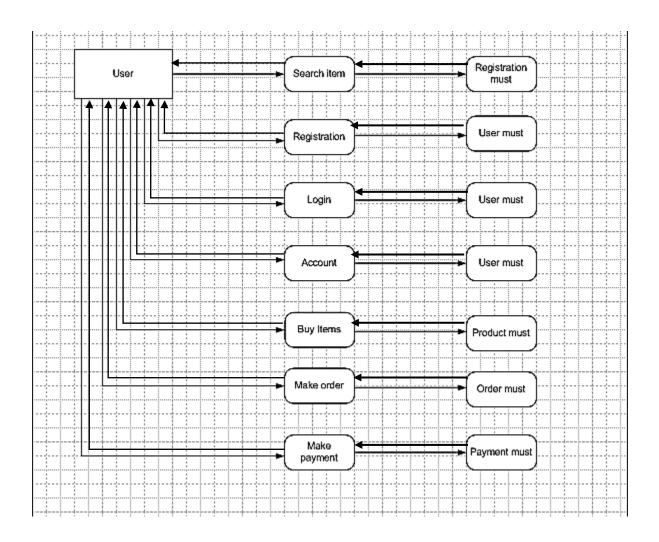


#### Question 7 - Data Flow Diagram - 3 Marks

# What is a data flow diagram? Draw a data flow diagram to represent the in-flow and out-flow of data when a Farmer is placing an order for the product

A Data Flow Diagram (DFD) is a graphical representation of the flow of data within a system. It visually shows ow data moves from one process to another, how its stored and where it ends up.

It help analysts and designers to understand the flow of data within a system, identify potential bottlenecks or inefficiencies, and communicate system requirements to stakeholders



#### Question 8 – Change Request - 10 Marks

Due to change in the Government Taxation structure . we should change the Tax structure How do you handle change requests in a project

#### ANS:

A change request is a formal proposal to alter a system, product, or project.

- 1. Understand the scope of change request and document the change request
- 2. Do the impact analysis project scope, schedule, budget, resources, and risks.
- 3. Prioritize change requests based on its urgency, importance, impact on project.
- 4. Seek approval from the project sponsor for the change request.
- 5. Communicate the change request and its potential impacts to all relevant stakeholders, including the project team.

#### **Question 9 – Change Request Vs an Enhancement - 5 Marks**

As the project is in process, Ben and Kevin have contacted you. The reason is to inform you that they want the Farmers to sell their crop yields through this application i.e. Farmers should be able to add their crop yields or products and display to general public and should be able to sell them. They also want to introduce Auction system for their Crop yields. As a BA, what will be your response?

#### ANS

As a Business Analyst, you should document the requirements and work with the development team to determine the feasibility and impact of the new features. You should also consider the potential benefits, risks, and costs associated with the enhancements before making any recommendations to the client.

Given the nature and scope of the requested features, this would be classified as an enhancement to the existing system. It expands the application's functionality beyond its current capabilities, adding substantial new features."

#### **Change Request vs. Enhancement**

#### **Change Request vs. Enhancement:**

- **Change Request:** Typically involves modifications to existing requirements or correcting issues within the current scope.
- **Enhancement:** Involves adding new features or capabilities that extend the functionality of the existing system.

#### **Steps to Handle the Enhancement Request**

### 1. Requirement Analysis:

Understand the New Requirements:

- Farmers should be able to add their crop yields or products.
- Display these products to the general public.
- Enable farmers to sell their products through the application.
- Introduce an auction system for crop yields.

## Document Detailed Requirements:

Capture all necessary details about the new features.

#### 2. Impact Analysis:

#### Technical Feasibility:

- Assess how these new features will integrate with the existing system.
- Identify any potential challenges or limitations.

#### Resource Allocation:

Determine additional resources required (e.g., development time, cost, infrastructure).

#### Timeline Adjustment:

 Evaluate how this enhancement will impact the current project timeline and milestones.

#### 3. Stakeholder Consultation:

- o Discuss the enhancement request with Mr. Henry, Mr. Pandu, and Mr. Dooku.
- o Get approval from the committee for the additional features.
- o Ensure alignment with the overall project goals and budget.

### 4. Update Project Documentation:

#### Requirements Traceability Matrix (RTM):

Add new requirements to the RTM for tracking.

#### Use Case Diagrams:

Update or create new use cases to represent the new functionalities.

#### Activity Diagrams:

 Develop activity diagrams to illustrate the processes for adding products, selling them, and the auction system.

#### 5. Prototype/Wireframes:

- Develop wireframes for the new features to visualize the user interface changes.
- Share prototypes with stakeholders for feedback and approval.

#### 6. **Development and Testing:**

#### O Development:

Implement the new features as per the updated requirements.

#### Testing:

- Conduct thorough testing to ensure the new features work as intended.
- Include unit testing, integration testing, and user acceptance testing (UAT).

# Question 10 – Estimations - 6 Marks Come up with estimations – How many Manhours required

**ANS** 

#### **Detailed Estimation**

Task	Estimated Man-hours
Requirement Gathering and Analysis	40
Design	60
Front-end Development	120
Back-end Development	160
Database Design and Changes	40
Testing	100
Deployment and Training	20
Project Management and Coordination	40
Total	580

## **Summary**

• Total Estimated Man-hours: 580 man-hours

# **Team Allocation**

To distribute the work effectively across the team members:

# 1. Business Analyst:

- o Requirement Gathering and Analysis: 40 man-hours
- o Design: 20 man-hours
- o Project Management and Coordination: 20 man-hours

## 2. Senior Java Developer (Ms. Juhi):

- o Back-end Development: 80 man-hours
- Database Design and Changes: 20 man-hours

## 3. Java Developers (Mr. Teyson, Ms. Lucie, Mr. Tucker, Mr. Bravo):

- o Front-end Development: 120 man-hours
- o Back-end Development: 80 man-hours

- 4. Network Admin (Mr. Mike):
  - o Deployment and Training: 10 man-hours
- 5. **DB Admin (Mr. John):** 
  - o Database Design and Changes: 20 man-hours
  - Deployment and Training: 10 man-hours
- 6. Testers (Mr. Jason, Ms. Alekya):
  - o Testing: 100 man-hours

#### Question 11 – UAT – 6 Marks

Project has finally completed all the stages i.e., design, development, testing etc. Now, it is the role of a business analyst to contact the client for testing of the final product and have to successfully complete it. How are you going to handle this situation? And once it is done, what will be the process to close the project?

#### **Explain UAT Acceptance process**

#### **ANS**

**Planning**: In this step, Blue Prints are made to implement UAT testing for every feature that needs to test and minimum standards for accepting the test.

**Designing**: Here the Test cases are designed to hide all the possibilities of software packages in a real world environment.

**UAT Testers**: A Testing team consists of end users that meet the criteria for implementing testing. They should know the test cases to run and understand the functionalities.

**Bug Fixing**: Whatever Bugs are found in the UAT Testing, the development team should work on them and make it software error free.

**Sign Off**: After removing all the bugs, the testing team indicates acceptance of the completion of the bugs. In this phase, all the stakeholders come to a conclusion that the software is ready to GO LIVE and sign it off.

#### **Question 12 – Project Closure Document - 6 Marks**

#### **Explain Project closure document**

#### ANS

A project closure document is a comprehensive report prepared at the end of a project. It serves as an official record of the project's completion and provides an evaluation of the project's outcomes. The document includes key information about the project's execution and performance, helping to ensure that all stakeholders have a shared understanding of what was accomplished, what challenges were faced, and what lessons were learned. Below is an explanation of each point that should be included in a project closure document:

**Project Overview:** A summary of the project's objectives, scope, timeline, and key stakeholders.

The project aimed to develop an online agriculture products store to facilitate the purchase of fertilizers, seeds, and pesticides by farmers. The scope included the design, development, testing, and deployment of the application within an 18-month period. Key stakeholders included Mr. Henry, Mr. Pandu, Mr. Dooku, and APT IT SOLUTIONS team members.

Achievements: A detailed account of what was accomplished during the project.

The project successfully delivered a fully functional online store with features including user registration, product listing, browsing, shopping cart, and order management. All milestones were achieved on time, and the application met the specified requirements.

**Lessons Learned**: Insights gained from the project experience that can be applied to future projects.

The agile methodology used in the project facilitated better communication and faster resolution of issues. However, initial scope changes caused delays; future projects should implement stricter change management processes.

**Quality Assurance:** An assessment of the quality control measures applied and the quality of the final deliverables.

Comprehensive testing was performed, including unit tests, integration tests, and user acceptance testing (UAT). The project adhered to all quality standards, and stakeholder feedback indicated high satisfaction with the final product.

**Resource Utilization**: An evaluation of how resources (human, financial, material) were used throughout the project.

The project utilized a multidisciplinary team effectively, with all team members contributing significantly. The project was completed within the allocated budget of 2 Crores INR.

**Risk Management**: A review of how risks were managed during the project.

Risks such as delays due to scope changes and potential technical challenges were identified early. Mitigation strategies included regular scope reviews and technical training for team members. These measures effectively minimized the impact of these risks.

Challenges: An analysis of the difficulties encountered during the project and how they were addressed.

The project faced challenges with initial scope changes and integration with third-party services. These were addressed by implementing a stricter change management process and allocating additional resources to resolve integration issues. Despite these challenges, the project was completed on schedule and within budget.