

## Capstone Project 1 – Part 3

### Question 1: Functional Requirements

Req ID	Require Name	Requirement Description	Priority
FR0001	Farmer Registration	Farmer should be able register with the application	9
FR0002	Farmer search for products	Farmer should be able to search for any available products in fertilizers, seeds, pesticides.	8
FR0003	Manufacturer registration	Manufacture should be able to register with the application	9
FR0004	Manufacturer Upload	Manufacturer need to upload product details- pesticides, seeds, fertilizers in application.	8
FR0005	System accepts products	Application should accept products details from manufacturer	8
FR0006	System display products	Application should be able to display the available products to farmers.	8
FR0007	Farmer browse for products	Farmer should be able to browse for products in product catalogue.	8
FR0008	Relevant product	Application should display relevant product as per the farmer search requirement.	9
FR0009	Farmer select for product	Farmer select the product what farmer need	8
FR0010	Details for product	Details of product features should be able to display to farmers.	9
FR0011	Buy product	Farmer can be able to buy any product in product catalogue	7
FR0012	Add to cart	Farmer can buy any product and add product to cart.	7

FR0013	Buy later list	Farmer can buy any product and add product to buy later list.	7
FR0014	Login for all users	Farmers and manufacturers need to have unique email id and password to login for application	8
FR0015	Payment mode	Farmer need to have an easy-to-use payment gateway that include cash on delivery, credit/debit card and UPI option	8
FR0016	Print payment receipt	Payment receipt will be printed once the payment is done by farmer	8
FR0017	Email confirmation	Farmer will get email confirmation once payment done for the order placed	9
FR0018	Order id created	Farmer will get Order ID once payment done for the order	8
FR0019	Internet Connection	Internet connection should be available for the application	8
FR0020	Delivery Tracker	Delivery tracker will be there for the order placed to farmer	8

## Question 2: Wireframe and Prototype

Online store

← → ↻

### Agriculture Store

User ID

Password

[Forgot Password](#)

**SUBMIT**

# Agriculture Store




## Login


Email Or Mobile Phone Number

Password

[Forgot Password](#)

**LOGIN**

 Search Product    view cart

☒ 

### TrustBasket Vermicompost




★★★★★ 52 Ratings


Size : 1kg  
**In stock**  
Payment  
Ships from  
Sold by


Secure transaction  
Agriculture store  
ETrade Online


Price : ₹ 361


**Add to Cart** **Buy Now**

 Search Product    view cart

☒  **TrustBasket**  
Vermicompost 5kg 100% Natural  
Organic Fertilizer for Plants **Add to Cart**

☐  **Ugao Organic**  
Vermicompost Fertilizer Manure  
For Plants - 5 Kg **Add to Cart**

☐  **TrustBasket**  
Potting Soil 5KG  
100% Natural, Organic  
Soil for Plants Home  
Gardens **Add to Cart**

☐  **Nurturing Green®**  
5kg Vermicompost | Organic  
Fertilizer with NPK **Add to Cart**

## Select payment method

☒ Credit / Debit card




VISA



☐ UPI



☐ Net Banking

Chosen an option 

☐ Cash on Delivery

Proceed to Buy

### **Question 3:**

#### **Visio:**

Microsoft Visio is software for drawing a variety of diagrams. These include flowcharts, org charts, building plans, floor plans, data flow diagrams, process flow diagrams, business process modelling, swim lane diagrams, 3D maps, and many more. It's a Microsoft product, sold as an addition to MS Office.

#### **Balsamiq:**

Balsamiq is small software tool to sketch out user interfaces, for websites and web / desktop / mobile applications.

With this service users can quickly come up with mock-ups and easily share with their clients. Balsamiq Mock-ups is a graphical user interface mock-up builder application.

#### **Axure:**

Axure is a UX/UI design and prototyping tool used to create wireframes, interactive prototypes, and documentation. It supports dynamic content, conditional logic, and team collaboration. Ideal for UX designers, it helps visualize workflows and user interactions without coding, streamlining the design process for web and mobile applications.

**Question 4: RTM**

<b>Req ID</b>	<b>Req Name</b>	<b>Req Description</b>	<b>Design</b>	<b>Develop</b>	<b>UAT ID</b>	<b>Project Status</b>	<b>Test Status</b>
FR001	Farmer registration	Farmer should be able to register with application	Design the application with valid registration details that include unique email id and valid password	Finished	UAT001	100%	<u>Passed</u>
FR002	Farmer search for products	Farmer should be able to search for products in product catalogue-fertilizers, pesticides seeds	Design the application with search option that farmer can search for any products-fertilizer, Pesticides, seeds	Finished	UAT002	100%	<u>Passed</u>
FR003	Manufacturer registration	Manufacturers should be able to register with application to upload the product details in application	Design the application in such a way that manufacturers will register with valid login credentials and able to upload product details	Finished	UAT003	100%	<u>Passed</u>

Req ID	Req Name	Req Description	Design	Developing Report	UAT ID	Project Status	Test Status
FR004	Relevant product	Application should display relevant product to farmers requirement	Design application with relevant information of products available in application	Finished	UAT004	70%	<u>Partial</u>
FR005	Payment mode & Email confirmation	Farmer can use any one option for the payment to be done by using card or cash on delivery or UPI option. Once payment successfully done by farmers farmer will get email confirmation regarding order status of the product	App should be designed with payment mode for farmers using card or cash on delivery or UPI option to make payment, Farmers can use any one payment mode and get email confirmation to registered email id with order id created	Not Started	UAT005	70%	<u>Partial</u>
NFR01	Page Loading Time	Each page should load within 2 seconds time	The page should load within 2 seconds time to command given by farmers/manu factures	Finished	UAT01	30%	<u>Partial</u>
NFR02	Usability	The System should be User friendly	The application should have User - Friendly	Yes	UAT02	100%	<u>Passed</u>

NFR03	Security	The security on their application/webpage databases may include firewalls to prevent unauthorized access.	Farmer creates account to access application; a security system should be developed grant access to accounts	Yes	UAT03	70%	<u>Partial</u>
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**Question 5:** Test case documents

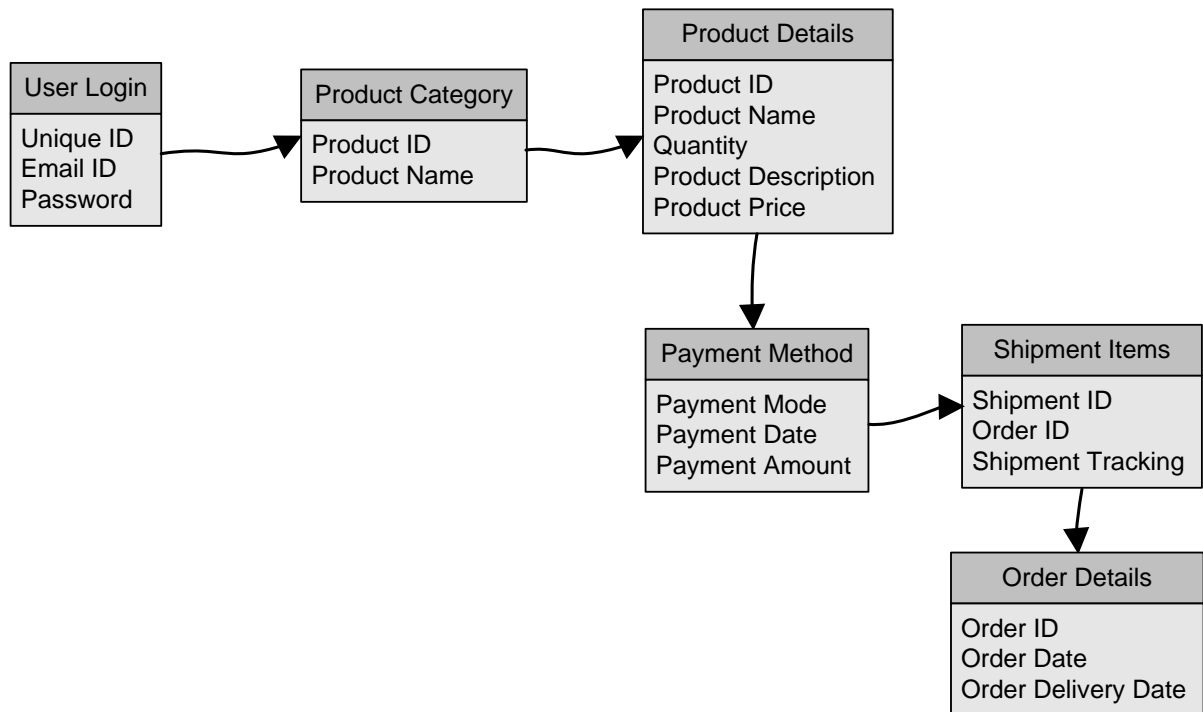
Test case of Online Agriculture Product Store for login page (farmers/manufacturers)

Test case of Online Agriculture Product Store for Home page that include fertilizer, pesticides, seeds

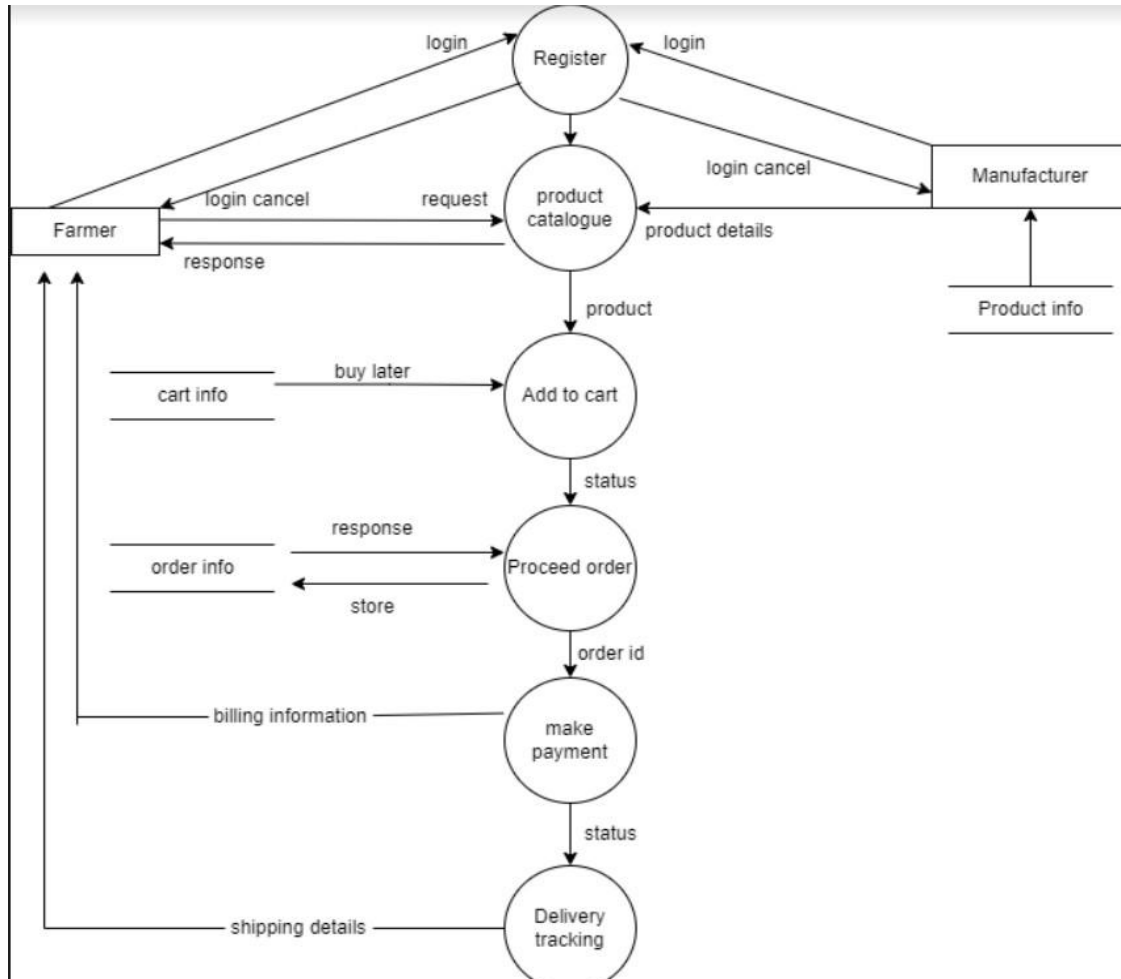
Test case ID	Test case name	Pre-Conditions	Test steps	Test data	Expected result	Actual result	Status
TC-L001	Check login functionality with valid username and valid password	The system/application must meet Web Content Accessibility Guidelines WCAG 2.1	*Launch application *Click sign into login	User name: <a href="mailto:abc@gmail.com">abc@gmail.com</a> Password: Abc123	Login successfully	Login successful	PASS
TC-L002	Check login functionality with invalid username and valid password	The system/application must meet Web Content Accessibility Guidelines WCAG 2.1	*Launch application *Click sign into login	User name: <a href="mailto:ab@gmail.com">ab@gmail.com</a> Password: Abc123	Login failed	Login failed	FAIL
TC-L003	Check login functionality with valid username and invalid password	The system/application must meet Web Content Accessibility Guidelines WCAG 2.1	*Launch application *Click sign into login	User name: <a href="mailto:abc@gmail.com">abc@gmail.com</a> Password: abc123	Login failed	Login failed	FAIL
TC-L004	Check login functionality with invalid username and invalid password	The system/application must meet Web Content Accessibility Guidelines WCAG 2.1	*Launch application *Click sign into login	User name: <a href="mailto:ac@gmail.com">ac@gmail.com</a> Password: abc123	Login failed	Login failed	FAIL

Test case ID	Test case name	Test case description	Test step	Test data	Expected result	Actual result
TC-L005	Display Home page of Application	Farmers once login to app with valid username and valid password system should display home page	*Enter username and password *Click on login button	Home Page	System should display Home page in result	System had displayed home page of app after successfully providing login credentials
TC-L006	Display Product search functionality	In product search functionality farmer can search for any products	Enter search text in search field and click on search icon	Product search	User can search for any products related to pesticides, seeds, fertilizers	System had displayed search products according to information provided by user
TC-L007	Display Pesticide related products	Provide products related to pesticides in pesticide tab	Click on pesticides	Pesticide search	System display information related to pesticides	System had displayed related products in pesticide
TC-L008	Display Fertilizer related products	Provide products related to fertilizers in fertilizer tab	Click on fertilizers	Fertilizer search	System display information related to fertilizers	System had displayed related products in fertilizers
TC-L009	Display Seeds related products	Provide products related to seeds in seeds tab	Click on seeds	Seeds search	System display information related to seeds	System had displayed related products in seeds
TC-L010	Display payment options such as credit/debit card, cash on delivery and UPI option	Verify user should be provided with payment gateway which should include cash on delivery, credit/debit card and UPI options to make payment	Click on payment mode	Payment Mode	System displays payment options to make payment	System displayed payment options which includes credit/debit card, cash on delivery and UPI option

### Question 6 : DB design



### Question 7 : Data flow diagram



**Data flow diagram** is a graphical representation of the flow of data through an information, DFD is designed to show how system is divided into smaller portions and to highlight flow of data between those parts.

### Question 8 : Change request

Once the development of application is started, client will always come up with change request as a BA should do the following to handle change request

BA should do following:

- 1.Impact analysis
- 2.Feasibility study
- 3.Effort estimation

BA will be prepared for change requests and their management; Initially BA will perform feasibility study to accept the change and then the impact analysis to

measure change to project and finally effort estimation to implement change in project.

BA Must follow following steps:

- BA must document change request
- BA must analyse the change request in terms of whether the change request is real
- If BA wants to move in further to analyse the change request, then BA should take approval by PM
- PM must ensure that the requested change is complex one or minor change
- If the requested change is complex one, then the scope of project will expand which leads to increase in delivery of project
- BA will help stakeholder to understand impact and help to minimize negative impact that result from change.
- For successful change necessitate BA to articulate a realistic or convincing vision that appeal both internal and external stakeholder.

#### **Question 9 : Change request VS Enhancement**

BA should be prepared to handle the change request at any time, BA should analyse what would be further result if a change request has been implemented. For this BA need to discuss with stakeholders, client after consulting PM and technical team. BA should calculate total amount of resources which will be involved during the complete change request process and ensure all mandatory approvals are taken.

#### **Question 10 : Estimations**

Man Hour estimations:

500-1000 Man hours as this is a medium project

PM-250 MH

BA-250MH

JAVA developer-100 MH

Tester-80 MH

NW admin-50 MH

DB admin-60 MH

**Question 11 :UAT**

BA must give enough knowledge to client so that client will test the application and take the application. BA conducts regular status meetings with technical team and the client and prepares the client to participate in UAT

1. BA prepares Test Cases from Use Cases or assists Test Manager
2. BA performs high level testing - testing each scenario whether the output is satisfied or not
3. BA prepares Client for UAT
4. Test Data is requested by BA from Client
5. Updates End User Manuals
6. Updates RTM
7. Take signoff from Client on Client Project Acceptance form

**Question 12 : Project closure document**

BA should keep following into consideration during project closure:

- Did project achieve its goal
- Planning of project is done accordingly and completed within the budget
- Check for estimated time for project vs actual time taken to complete project
- Check for proper documentation and record the same
- Testing of application is done successfully with no errors
- Was the training session successfully conducted.