

Question 1- Identify minimum 20 functional requirement.

REQ ID	REQ NAME	REQ DESCRIPTION	PRIORITY
FR0001	Farmer Registration	Farmers should be able to register with the application.	9
FR0002	Farmer Search for Products	Farmer should be able to search for available products in fertilizers, seeds, pesticides.	9
FR0003	Printer print the package slip	When an order is fulfilled, the local printer shall print a packing slip.	9
FR0004	Adding the product to the cart	Farmer should be able to add to cart once they select the product.	9
FR0005	Farmer login	Farmer should be able to log in using mobile/email and password/OTP.	9
FR0006	Product Filtering	Farmer should be able to filter product by category, price, or brand	8
FR0007	View Product Details	Farmer should be able to view details like price, stock availability, and description.	9
FR0008	Product tracking	Farmers should able must to track the ordered item	7
FR0009	New user email verification	For a new customer he has should do the email verification for the doing login	8
FR00010	Payment option for the customer	The farmers should have the payment options either UPI cod or through cards	8
FR00011	After Cancellation refund option	After cancellation is initiated the refund to be followed	7
FR00012	Manufacture tracking facility	When item is in the payment the OTP is send to registered mobile number.	7
FR00013	OTP initiation for payment	When item is in the payment the OTP is send to registered mobile number.	8
FR00014	Address update option	the farmer should be able to update his address every time of checkouts.	7
FR00015	Return Policy	Availability of product return policy option /Cancelation of product in the application	7
FR00016	Discounts& offers	System should display available offers and apply discounts at checkout.	7
FR00017	Order history	Farmer should be able to view their past orders and invoices	7
FR00018	Feedback & Rating	Farmers should be able to give feedback and ratings for products.	6
FR00019	Place Order	Farmer should be able to place an order for selected place	9
FR00020	Data backup	System should be performing periodic data backup to prevent loss.	7

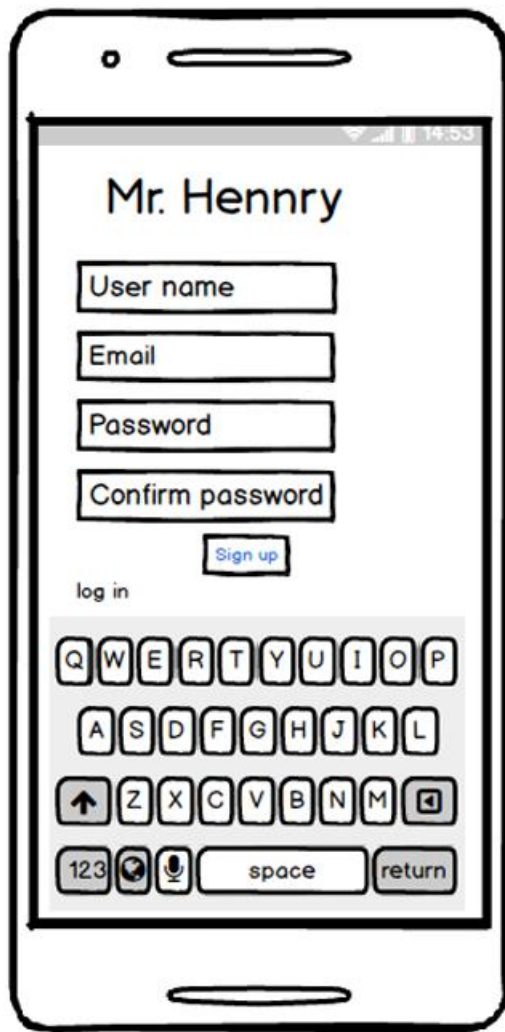
REQ ID	REQ NAME	REQ DESCRIPTION	PRIORITY
NFR0001	Performance	The system should handle up to 500 users simultaneously without crashing.	8
NFR0002	Reliability	The system should have 99.5% uptime throughout the year.	9
NFR0003	Security	All user data should be encrypted and secure using HTTPS and SSL	9
NFR0004	Scalability	The system should be able to add more features or handle more users in future	7
NFR0005	Usability	The application interface should be simple and user- friendly for Farmers.	8
NFR0006	Availability	The application should be available 24/7 except for scheduled maintenance.	8
NFR0007	Compatibility	The application should work on Android, iOS, and web browser	7
NFR0008	Maintainability	The System should allow easy updates and bug fixes without downtime	7
NFR0009	Backup & recovery	Automatic data backup should occur daily, and recovery should be possible within 1 hour	8
NFR00010	Response time	Each page should load within 3 second on internet connection	7
NFR00011	Payment receipt	The farmer should get the receipt with in hour of order.	7
NFR00012	Page timeout	After 15minute of activity the page will logout	8
NFR00013	Fascinating Home page	The home page should not contain much information and should look good.	6
NFR00014	Quick Payment option	Payment options should be quick and fast	7
NFR00015	Review option	After every order customer should be able to give review.	7
NFR00016	Security of data	Information of farmers could should not be shared	8
NFR00017	WCAG 2.1.	The system must meet Web Content Accessibility Guidelines WCAG 2.1	7
NFR00018	Portability	The system should work on mobile, tablet, and desktop	9
NFR00019	Error handling	The system should display meaningful error messages instead of technical errors.	6

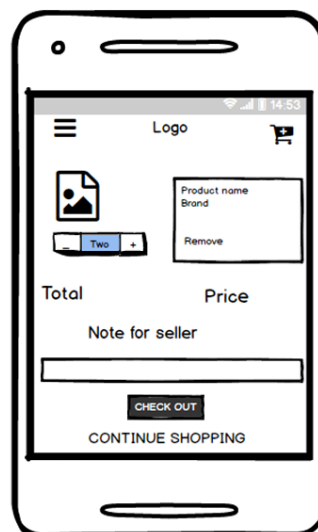
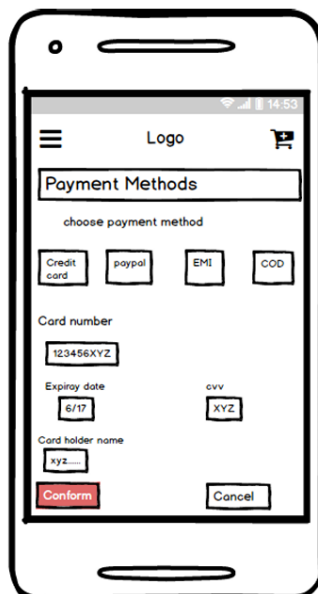
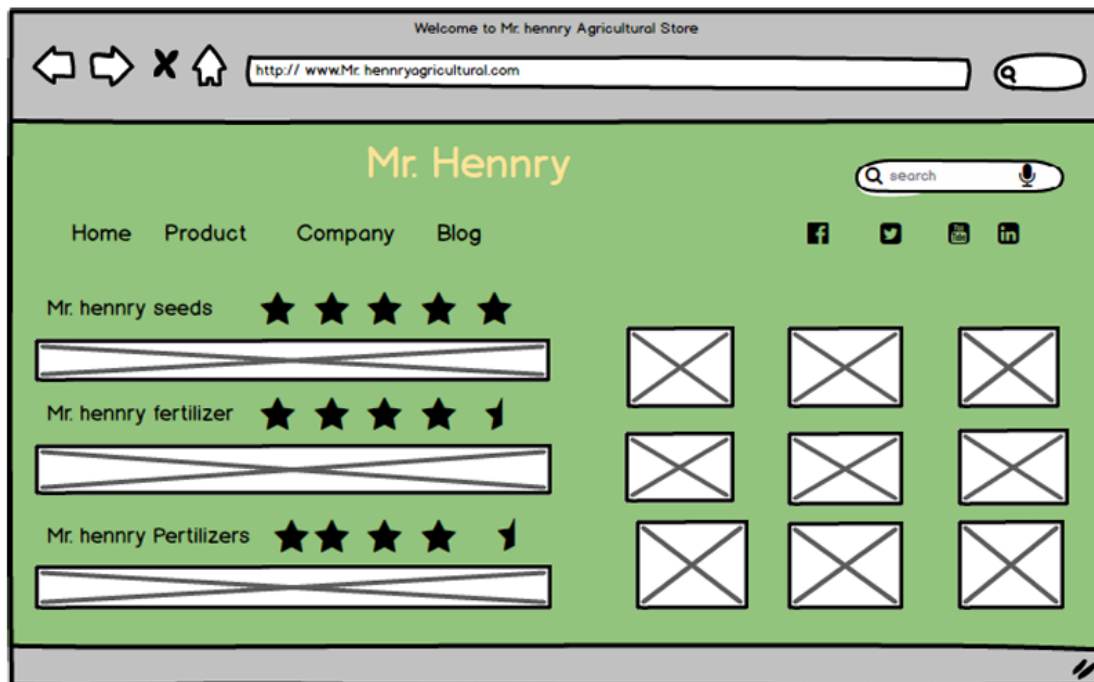
NFR00020	Data Privacy	Personal data should not be shared with third parties	7
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Question 2–Minimum 5-page designs

Marks Make wireframe and prototype







Tools (Visio, Balsamiq)

Microsoft Visio-

Microsoft Visio is a diagramming and vector graphics application and is part of the Microsoft Office family. It is used to create diagram types such as Flowcharts, Org Charts, Floor Plans, Network Diagrams, UML Diagrams, Mind maps and more. It is also commonly used for scenarios such as Process Mapping and Visual Collaboration. The latest version of Visio also has data visualization that allows users to create diagrams from Excel data and also embed Visio diagrams in Power BI dashboards.

Microsoft Office Visio is a tool that eases the process of making complex diagrams. Especially for business purposes. It can help in the making of presentations, floor plans, org charts, etc. Listed below are some uses of Visio:

Followings things can draw BA by using MS Office Visio

1.Flowchart: A flowchart helps to show the steps in sequential order. These are steps that need to be taken to complete a certain process. It is effective in conveying information. Thus, it can be used in various other fields too.

2.Organization Chart: An org chart displays the roles and reporting relationships in a business organization. It can be used in also any other organization. It depicts the names and positions of employees in a company. In short, we can say it shows the structure of an organization.

3.Floor Plan: A floor plan is the structure of a room or a floor. Architects use floor plans to place doors, windows, and other objects. Visio also offers a floor plan template.

4.usiness Process Modelling Notation: BPMN is a flowchart method of displaying all the processes in a business that is to be taken. In other words, it helps in give a clear understanding of the processes in a particular business through visual representation

Balsamiq-Balsamiq Mock-ups is an effective tool for presenting the software requirements in the form of wireframes. This helps the software development team to visualize how the software project will look like in the very early stages of development. This is a small tutorial where we will cover all the basic steps needed to start with Balsamiq Mock-ups

Question 4 RTM

[illegible]

		up to 500 users simultaneously without crashing.							
NFR0002	Reliability	The systems should have 99.5% uptime throughout the year.	complete	complete	complete	complete	Incomplete	complete	complete
NFR0003	Security	All user data should be encrypted and secure using HTTPS and SSL	complete	complete	complete	complete	complete	complete	Incomplete
NFR0004	Scalability	The system should be able to add more features or handle more users in future	complete	complete	complete	complete	complete	complete	complete
NFR0005	Usability	The application interface should be simple and user- friendly for Farmers.	complete	complete	complete	complete	complete	complete	complete
NFR0006	Availability	The application should be available 24/7 except for scheduled maintenance.	complete	complete	complete	complete	complete	complete	complete
NFR0007	Compatibility	The application should work on Android, iOS, and web browser	complete	complete	complete	complete	complete	Incomplete	Complete
NFR0008	Maintainability	The System should allow easy updates and bug fixes without downtime	complete	complete	complete	complete	complete	complete	Incomplete
NFR0009	Backup & recovery	Automatic data backup should occur daily, and recovery should be possible within 1 hour	complete	complete	complete	complete	complete	complete	Incomplete

Que. 5. 10 Test case documents.

Ans- 1.

Ans-

1.

Test Case ID	PQ9437	Test Case Name	login
Project ID	1234	Project Name	Farmers website
PMID	786	PM Name	Mr. Vandanam
Test strategy ID	PQ9437	Tester ID	
Test plan ID	PQ9437	Tester name	
Test schedule ID	PQ9437	Date of test	

Scenario: website for online shopping of farm products, in that we have login we have 4inputs
3compulsory 1 optional and after that results are being shown

Link to that page

Expected behavior	Home page /error page pops up				
Actual behavior	Home page /error page pops up				
comments	Test was good				
Pass/fail	Pass				

	Set 1				
Input data	1.Userid 2.password 3.captcha 4.otp				

2.

Test Case ID	PQ9437	Test Case Name	New user
Project ID	1234	Project Name	Farmers website
PMID	786	PM Name	Mr. Vandanam
Test strategy ID	PQ9437	Tester ID	
Test plan ID	PQ9437	Tester name	
Test schedule ID	PQ9437	Date of test	

Scenario: website for online shopping of farm products, in that we have new user we have 1
4compulsory 1 optional and after that results are being shown

Link to that page

Input data	1.User name 2.set password				
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	3. mail 4. captcha 5. mobile OTP				
Expected behavior	Registered done and home page shows				
Actual behavior	Home page comes				
comments	Test was good				
Pass/fail	Pass				

3.

Test Case ID	PQ9437	Test Case Name	Online purchasing
Project ID	1234	Project Name	Farmers website
PMID	786	PM Name	Mr. Vandanam
Test strategy ID	PQ9437	Tester ID	
Test plan ID	PQ9437	Tester name	
Test schedule ID	PQ9437	Date of test	

Scenario: website for online shopping of farm products, in that we perform online purchasing we have 1 compulsory 1 optional and after that results are being shown

Link to that page

Input data	1.Product name 2.filters				
Expected behavior	Product option				
Actual behavior	Different product pops				
comments	Test was good				
Pass/fail	Pass				

4.

Test Case ID	PQ9437	Test Case Name	Product availability
Project ID	1234	Project Name	Farmers website
PMID	786	PM Name	Mr. Vandanam
Test strategy ID	PQ9437	Tester ID	
Test plan ID	PQ9437	Tester name	
Test schedule ID	PQ9437	Date of test	

Scenario: website for online shopping of farm products, in that we should have product available in which we have 3 inputs 3 compulsory and after that results are being shown

Link to that page

Scenario: website for online shopping of farm products, in that we should have payment gateway in which we have 4 inputs 4 compulsory and after that results are being shown

Link to that page

Input data	1.Expiry 2.cvv 3. OTP 4. name				
Expected behavior	Transaction page				
Actual behavior	Same as expected				
comments	Test was good				
Pass/fail	Pass				
Input data	1.Manufacturing code 2.captcha 3. password				

Expected behavior	stock information				
Actual behavior	Same as expected				
comments	Test was good				
Pass/fail	Pass				

5.

Test Case ID	PQ9437	Test Case Name	Payment gateway
Project ID	1234	Project Name	Farmers website
PM ID	786	PM Name	Mr. Vandanam
Test strategy ID	PQ9437	Tester ID	
Test plan ID	PQ9437	Tester name	
Test schedule ID	PQ9437	Date of test	

6.

Test Case ID	PQ9437	Test Case Name	Browse product
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Project ID	1234	Project Name	Farmers website
PM ID	786	PM Name	Mr. Vandanam
Test strategy ID	PQ9437	Tester ID	
Test plan ID	PQ9437	Tester name	
Test schedule ID	PQ9437	Date of test	

Scenario: website for online shopping of farm products, in that we should have browse product in which we have 4 inputs 4 compulsory and after that results are being shown
Link to that page

Input data	1.category 2.size 3.availability 4.price range				
Expected behavior	Different product options				
Actual behavior	Same as expected				
comments	Test was good				
Pass/fail	Pass				

7.

Test Case ID	PQ9437	Test Case Name	Experience rating
Project ID	1234	Project Name	Farmers website
PM ID	786	PM Name	Mr. Vandanam
Test strategy ID	PQ9437	Tester ID	
Test plan ID	PQ9437	Tester name	
Test schedule ID	PQ9437	Date of test	

Scenario: website for online shopping of farm products, in that we should have browse product in which we have 4 inputs 3 compulsory and after that results are being shown
Link to that page

Input data	1.experience 2.name 3. phone number				
Expected behavior	Review done				
Actual behavior	Same as expected				
comments	Test was good				
Pass/fail	Pass				

8.

Test Case ID	PQ9437	Test Case Name	Product cancel
Project ID	1234	Project Name	Farmers website
PM ID	786	PM Name	Mr. Vandanam
Test strategy ID	PQ9437	Tester ID	
Test plan ID	PQ9437	Tester name	
Test schedule ID	PQ9437	Date of test	

Scenario: website for online shopping of farm products, in that we should have product cancel in which we have 2 inputs and click ok and after that results are being shown

Link to that page

Input data	Order id Captcha				
Expected behavior	Order cancellation page				
Actual behavior	Yes Same as expected				
comments	Test was good				
Pass/fail	Pass				

9.

Test Case ID	PQ9437	Test Case Name	Helpline
Project ID	1234	Project Name	Farmers website
PM ID	786	PM Name	Mr. Vandanam
Test strategy ID	PQ9437	Tester ID	
Test plan ID	PQ9437	Tester name	
Test schedule ID	PQ9437	Date of test	

Scenario: website for online shopping of farm products, in that we have helpline option in which we have 4 inputs and click ok and after that results are being shown

Link to that page

Input data	Name Number Query				
Expected behavior	Call person calls you				
Actual behavior	Same as expected				
comments	Test was good				
Pass/fail	Pass				

10.

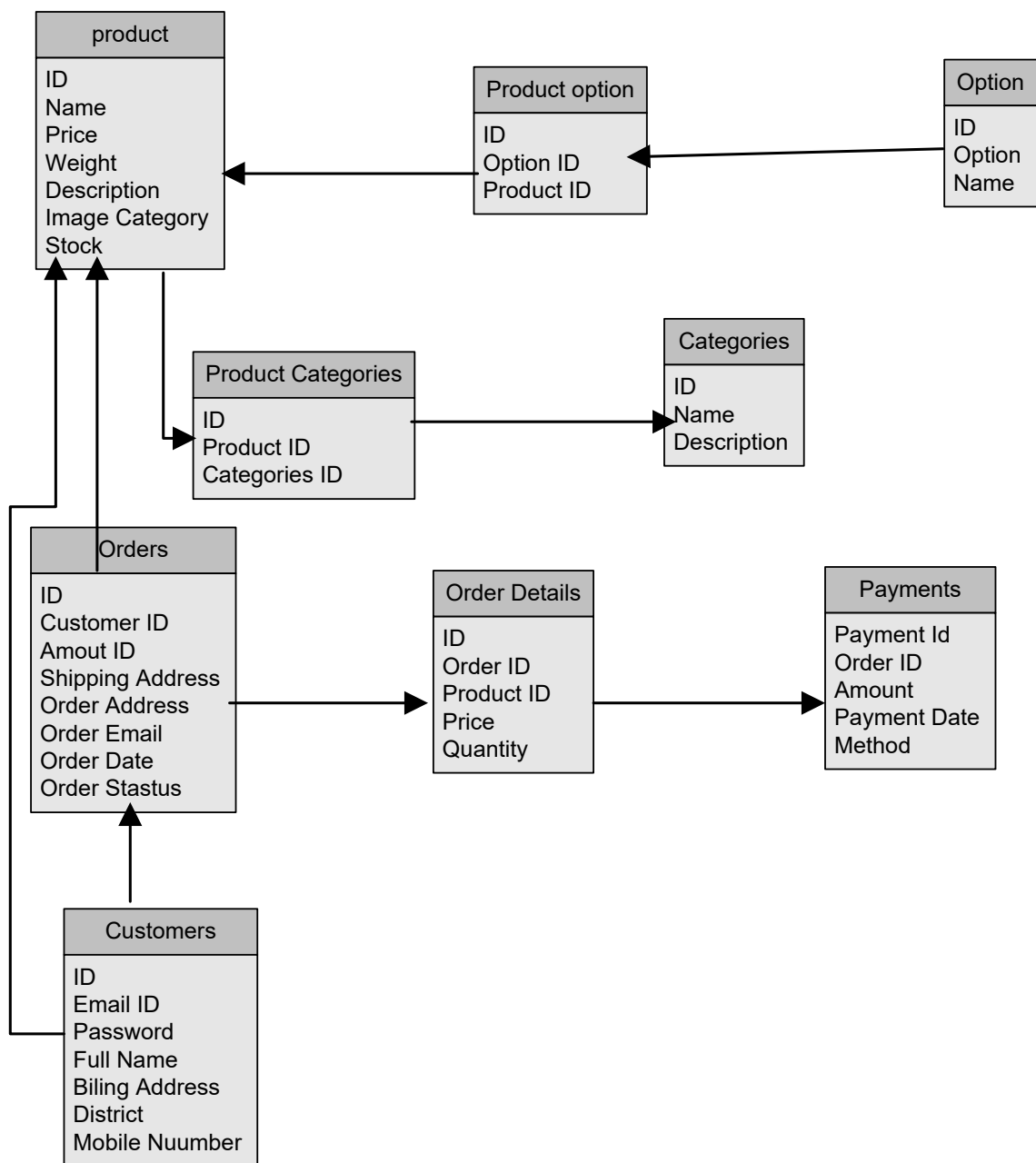
Test Case ID	PQ9437	Test Case Name	Download Payment Receipt
Project ID	1234	Project Name	Farmers website
PM ID	786	PM Name	Mr. Vandanam
Test strategy ID	PQ9437	Tester ID	
Test plan ID	PQ9437	Tester name	
Test schedule ID	PQ9437	Date of test	

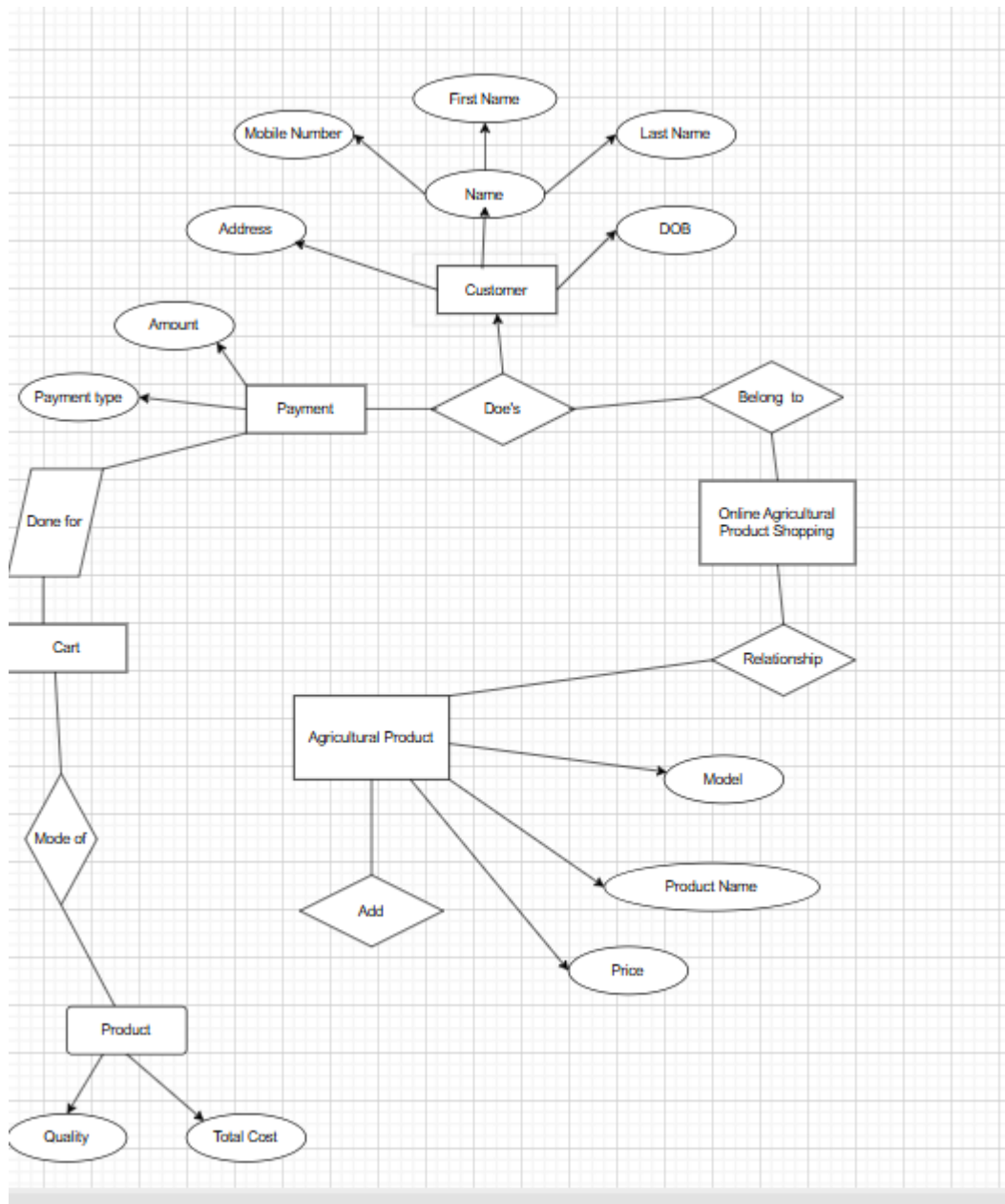
Scenario: website for online shopping of farm products, in that we have payment receipt option in which we have 3 inputs and click ok and after that results are being shown
Link to that page

Input data	Order id captcha password				
Expected behavior	Shows Payment receipt				
Actual behavior	Same as expected				
comments	Test was good				
Pass/fail	Pass				

Question 6- DB Design and ER diagram

Ans- Database Schema Diagram for online agricultural Product Store

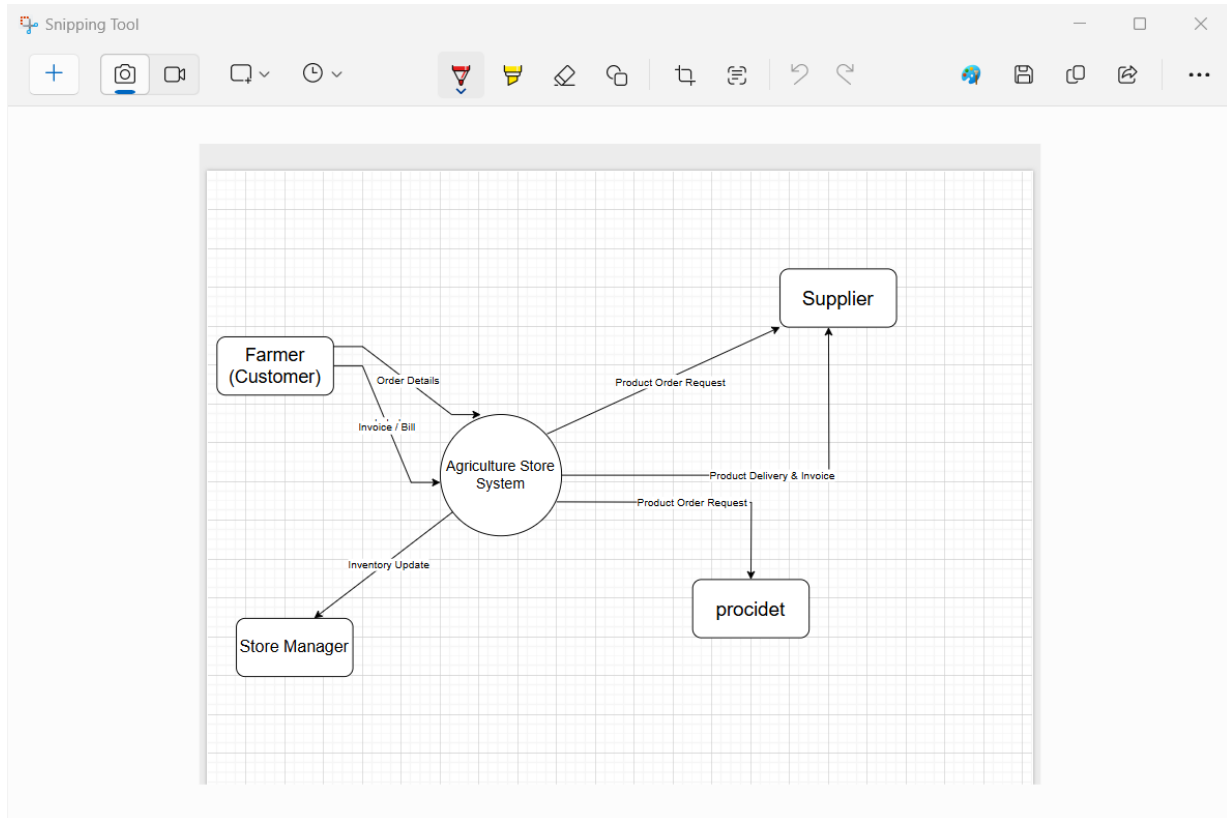




Question 7- Data flow Diagram

Ans-

According to Wikipedia.org a data flow diagram is a way of representing a flow of data through a process or a system. The DFD also provides Information about the outputs and inputs of each entity and the process itself. A data-flow diagram has no control flow there are no decision rules and no loops.



Question 8- Change Request-

Definition of a “Change”

For the purposes of this document, a Change is defined as the addition, modification, or removal of a configuration item (CI), service, or service component, and/or its associated elements.

When as a I receives a request of change from the client Due to change in government taxation structure, I will analyse the request and clarifies exactly what the request is asking me to do in that agriculture product store. I will perform some activities to improvise and change the project as per the Clients Requirement.

They are:

1. Feasibility Study

Basically, this is the first step I am as Business Analyst does whenever come across the Change Requests. This Feasibility Study helps me in answering the possible question like “Are we supposed to proceed with the proposed project change requirements?”. If yes, he will go accept the change request and goes to the Impact Analysis.

This change has occurred due to change in governments taxation structure change as BA we need to change privies taxation structure change.

When a change is requested, as a Business Analyst I should follow the following steps. In simple terms,

1. Firstly, I need to document the change requests.
2. BA identifies whether the change in the ongoing project is really worth it or not.
The taxation structure change by government is priority to consider point according to that I need to develop documents and into on-going sprint.
3. Project Manager should approve the change requests. If yes, the project will move further. As a BA I will take approval from PM and PO on email and forward this mail to all team and done this change on priority bases.
4. Business Analyst along with the Project Manager ensure whether the change is a minor or a major change.
If the policy change by government then it is major change request according to the government instruction, we need to make change with a given time.
5. If the new requirement is a major change, they make sure that it should not impact the delivery date of the project or any changes in the project scope.
6. Also try to help the other stakeholders to understand the importance of change requests which helps to reduce the negative impact of the project.

Question 9- Change Request Vs an Enhancement

According to my understanding change Request mean in any IT project we can change all process or we add new process or system instance of old remove. Enhancement is a part of change request. For example, we provide only service through web and we are not available at application services and we launch new application at android platform that change request.

Enhancement means add something new in existing process or system for example if farmer can process payment by only UPI and Debit card and now, we add new feature farmer can pay payment by credit card and online banking.

According to IBM.com A change request is a proposal from a stakeholder in the software development process to change something in a product or in a product process.

According to IBM.com Common change requests include defects and requests for product enhancements or new features

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?

As BA I will check introduce new link in online product store Buy and sale product from farmers. And in that add auction link also farmers can able to sale their agricultural product to other farmers by location wise we are already into delivery service of small amount of agricultural product is sale by farmer then can choose delivery service through application also

Question 10- Estimations -

- PM -\$130/Hr,

PM work every Month 60 Hr

For Entire Project He work 1080 Hr

Total work Cost \$64800

- Sol Architect – \$55/Hr,
Sol Architect work every Month 80 Hr

For Entire Project He work 1440 Hr

Total Work cost \$115200

- Programmers – \$50/Hr
Programmers work every Month 90 Hr

For Entire Project He work 1620 Hr

Total work cost \$145800

- Sr. Programmers – \$80/Hr
Sr. Programmers work every Month 85 Hr

For Entire Project he works 1530 Hr

Total Work cost \$122400

- Network Engineer – \$80/Hr NE work every Month 65 Hr
For Entire Project He work 1170 Hr

Total Work cost \$93600

- DBA - \$80/Hr
DBA work every Month 70Hr

For Entire Project He work 1260 Hr

Total Work Cost \$88200

- BA- \$60/Hr
BA work every Month 90 Hr

For Entire Project He work 1620 Hr

Total Work Cost \$145800

Total man-hours Required for project = 9720 Hr

Total Cost for the Project = \$775,800

Question 11- UAT-

The Business Analyst role is all about ensuring that online agricultural product store project delivers the value the business needs and expects. Actively participating in planning for and running User Acceptance Testing is an important way for the BA to ensure that value is indeed delivered.

Following why I handle the situation

I understand the functionality the system is supposed to deliver and as such, have the knowledge needed to validate the system (confirm whether the solution meets business needs or not). The fact that a system has been built to specification does not make it automatically acceptable. UAT helps stakeholders to determine whether the system can be put to use in real-life business scenarios or not.

Steps in UAT

Analyse Requirements –Requirements should be analysed and documented properly before conducting a UAT session. Even the users agreed with the Software Requirement Specification, there will be change requests after going through a UAT. That's where the users get the real look and feel of the system.

Identify major Test scenarios and Prepare the UAT Plan – UA Test plan is the document that outline to identify test cases which validate the deliverables.

Create UAT test cases - Test Cases are the steps to the user to guide the system in testing. It's important to write the proper test cases to conduct a good UA Test. User case which identified in requirements elicitation can be used to write the UA test cases.

Run the Test – To run the UAT test cases, testers should be the real-world end users of the business.

Record the results – When conducting a proper UAT scenario, it needs to be documented the progress and Issues in a defect log. Defects need to be documented to evaluate and fix.

Confirm the Business objectives are met – If the requirement hasn't met the product will send to further development. If there any change requests from users, they will be hand over to the development.

UAT Documents Created by Business analyst

UAT plan

UAT Test cases

Defect Log (after conducting the UAT)

Challenges when conducting a UAT session

UAT environment installation and proceeding. In some cases, it's difficult to allocate time from end users and their environment as not to distract the business process

Problems can be arising when the test plan is not completed properly. UAT plan is one important document that needs to be organized and accurate to conduct the UA Test.

Users with low business process knowledge and lack of training. When selecting testers, select end users with a good business knowledge.

I hope this article will help Business analysts and those who want to learn about UAT. Your reviews are mostly welcome)

Question 12- Project Closer Document-

The project closure doc prepaid the main purpose document of to make note of what went wrong the correct approach adopted deposit and negatives during the project. Varies initiatives taken by the team issues face by the members and solution obtaining in short, this document is existing of all positives negatives of the project which helps to avoid same mistake in future project it also helps to improve performance of the team member in future. In short closure report is a tool for management to access success of the project and its team members

Project Closure

Online Agriculture Product Store

Version: 1.0

Revision Date: MM/DD/YYYY

Submit the document to the Project Sponsor, Business Owner, and PPMO/PMO Division Director; and archive this closure document with the project artifacts once completed.

Approver Name	Title / Role	Signature	Date
Peter and Ben	Project Stakeholder*	ok	Xx/xx/xxxx
Mr. Henry	Exec Sponsor (AVP or Exec. Dir) *	ok	Xx/xx/xxxx
Mr. Pandu	Financial Head	ok	Xx/xx/xxxx
Mr. Vandanam	Project Manager	ok	Xx/xx/xxxx
Mr. Kartik	Delivery head	ok	Xx/xx/xxxx
Mr. Dooku	Project Coordinator	ok	Xx/xx/xxxx

*By authorizing this Project Closure, the Project Champion, Project Stakeholder(s), and Executive Sponsor agree to all terms within this document

Revision History

Identify document changes.

Version	Date	Name	Description
1.0	Xx/xx/xxxx	Mr. Henry	Ok to process

Section 1. General Information

Project Activity	Date
Project Start	[01/01/2025]
Project Closure ¹	[31/07/2026]

Section 2. Business Deliverables

As identified in section 2.2 of the Business Case.

Business Case Ref ID	Business Objective	Met/Not Met	Comments
BI0001	Farmer should able to buy and send agricultural product by online	Yes	Ok

*In addition to the project specific goals and objectives identified by the project champion/project stakeholders, University of Houston-Clear Lake requires business solutions uphold the integrity of the university by complying with

Section 3. Customer Expectation Management

Item	Question	Description
1	Were all expected benefits and business outcomes realized?	Yes
2	Were all expected performance standards satisfied?	Yes

1 Date of Project Closure refers to the project finish date, meaning all project tasks have been completed.

Item	Question	Description
Comments	ok	

Section 4. Outstanding Action Item and Issues

<i>Action Item and/or Issue</i>	<i>Transition and/or Resolution</i>

Section 5. Project Office Checklist

<i>Deliverable</i>	<i>Description</i>
Risk Assessment completed and posted on suitable shared storage.	☐ Yes ☐ No ☐
Business Case completed and posted on suitable shared storage.	☐ Yes ☐ No ☐
Project Charter completed and posted on suitable shared storage.	☐ Yes ☐ No ☐
Meeting Notes completed and posted on suitable shared storage.	☐ Yes ☐ No ☐
Additional project documentation and artifacts posted on suitable shared storage, including Requirements Template, Project Change Requests, Milestone Timeline, Work Breakdown Structure, etc.	☐ Yes ☐ No ☐
Lessons Learned documented.	☐ Yes ☐ No ☐
Project folder moved <i>completed-projects</i> on suitable shared storage.	☐ Yes ☐ No ☐
<i>Deliverable</i>	<i>Description</i>
Support Handover Document completed, archived, and provided to UCT Support Centre and Student Assistance Centre.	☐ Yes ☐ No ☐
Comments	
Ok to process application running properly.	

