

Q1.Functional requirement:Functional requirements refers to specific, behaviours, features and function that system, product or solution must perform in order to meet the needs of stakeholders.These requirements describes how system should behave and what it should do in terms of its operation, process and interactions.They provide detailed guidance for developer, tester and designer to build and evaluate system.

Non-Functional requirement:These requirements define the quality attributes, performance standard, and constraint that a system or solution must meet.Unlike functional requirement Which specify what system should do, non functional requirement describe how the system should perform under certain condition It ensures that the system operates efficiently, securely.

List of Functional requirement:

Req Id	Req type	Req description	Priority
FR0001	Farmer registration	Farmer should be able to register with application	9
FR0002	Farmer search for product	Farmer should be able to search for products in fertilizer, seeds, pesticides.	8
FR0003	Manufacturer's registration	Manufacturer should be able to register with application.	8
FR0004	Manufacture product listing	Manufacturer should be able to list their product with application.	7
FR0005	Product Details	Display the application should display detailed information about each product, including description,pricing,specification.	9
FR0006	Add to cart	User should be able to add their product in cart	8
FR0007	Cart Management	User should be able to view and manage their contents of their shopping cart.	8
FR0008	Wishlist management	User should be able to manage their Wishlist or buy later list, including adding product.	7
FR0009	Multiple Payment gateway	The platform should integrate with multiple payment gateway to facilitate secure transactions	9
FR0010	Order Placement	User should be able to place order for selected products, specifying quantity and delivery address	9
FR0011	Order confirmation	User should receive an order confirmation with details such as order number, products.	9
FR0012	Order tracking	User should be able to track the status and location of their orders in real time	9
FR0013	Customer Support	User should have access to customer support, either through live chat,email,or phone	7

FR0014	Order history	User should be able to view their order history, including past history.	8
FR0015	User ratings and review	User should be able to provide ratings and reviews for products they have purchased	7
FR0016	Product Recommendation	The platform should provide personalised product recommendation based on history.	8
FR0017	Social Sharing	User should have option to share products or their purchase experience on social media.	7
FR0018	Secure Transaction	The platform should ensure secure transactions by implementing appropriate encryption and security measures	9
FR0019	Product filtering	User should be able to filter products based on various criteria such as price range, brand.	8
FR0020	Account Management	User should be able to manage their account settings, including profile information, password.	7

List of Non-Functional Requirements are below:

Req ID	Req Name	Req Description	Priority
NFR001	Usability	The application should have intuitive and user friendly	9
NFR002	Performance	The application must load pages in 3 seconds	8
NFR003	Security	The application must ensure secure user authentication	8
NFR004	Compatibility	The application should be compatible with major web browser	8
NFR005	Response time	The application should be compatible with major web browser.	9
NFR006	Representation	Visual representation of the pages must be detailed	7
NFR007	Auto readable	OTPs must be auto readable by the application	7
NFR008	Session time out	Session time out readable by the application	6
NFR009	Accuracy	Location must be accurate up to 2 mins	8
NFR010	Refresh	Pages must be refreshed after every 30 seconds.	6

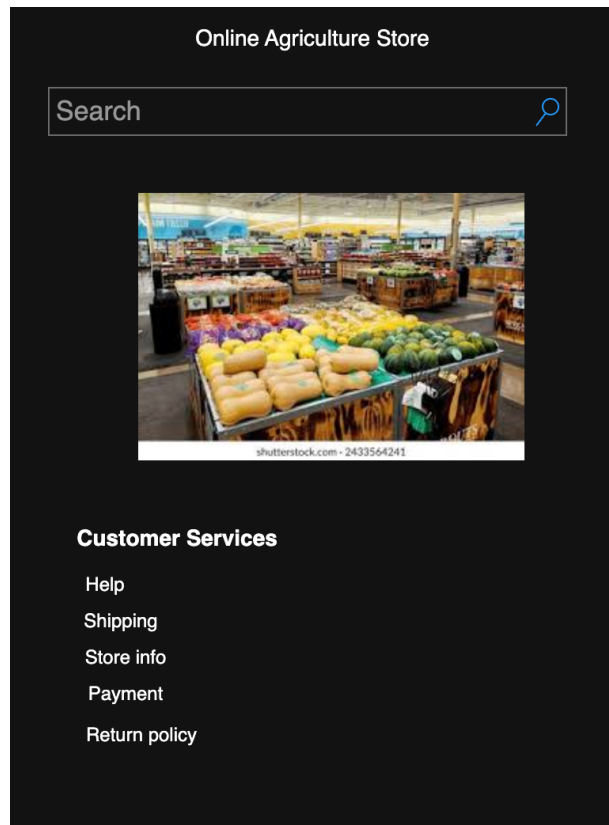
Q2.Wireframes and prototypes:

Wireframes are visual representations or blue prints of user interfaces that outlines the structure and layout of a web page, application, or system without focusing on detailed

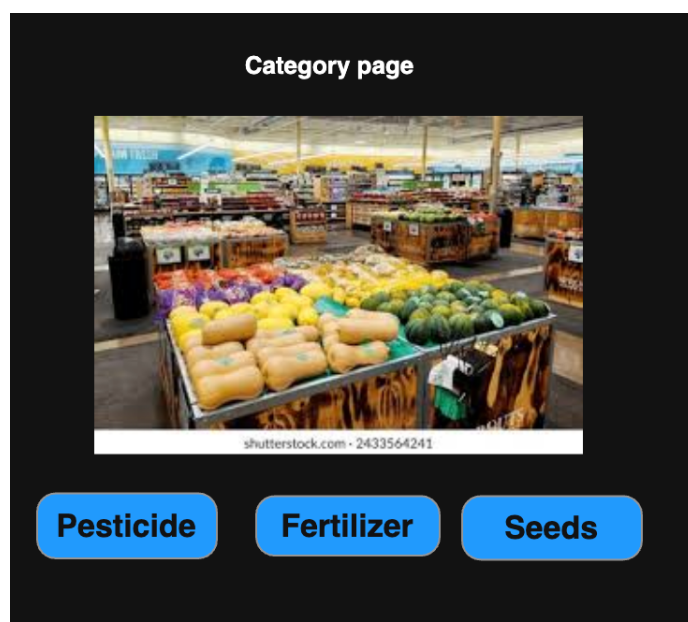
design elements like colours, fonts, or graphics. Wireframes are used for represent basic framework of products interface, showing how different elements will be arranged and how users will interact with the system.

Prototypes are early, simplified models or representations of a system or product that simulate the functionality, user interface(UI),or processes of the final solution.prototype allows stakeholders, including business users, clients, and the development team, to explore and evaluate the proposed system's features before final product developed.They help gather feedback, validate requirements, and refine system designed by providing tangible representation of the software or product early in the project lifecycle.

1. Application Dashboard:



2. Category Page:



3. Login Page

Online Agriculture Store



Email

email@example.com

Password

Login

4. Registration Page

Online Agriculture Store



FirstName

MiddleName

LastName

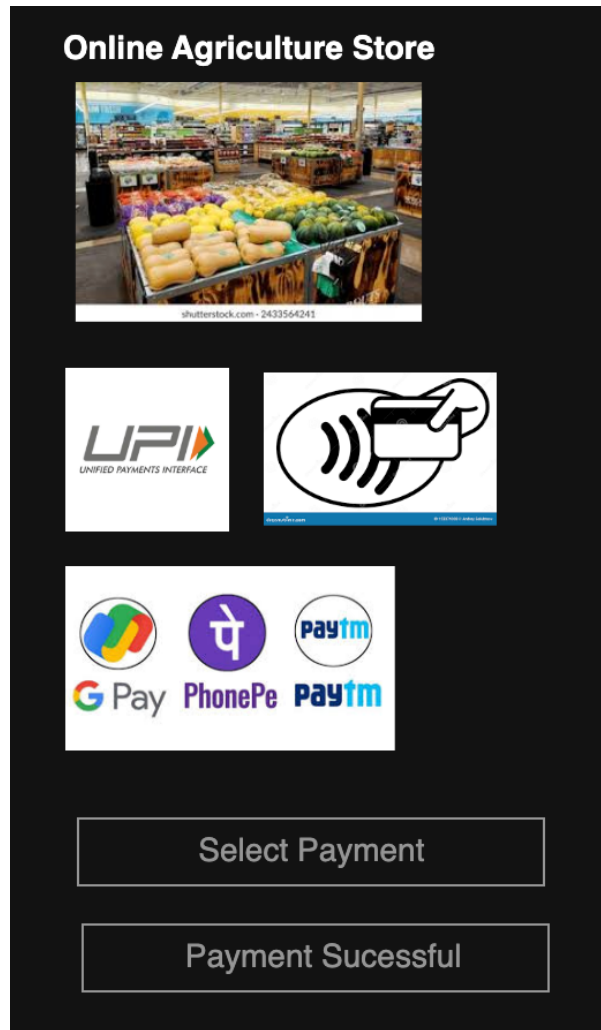
Email ID

Password

Confirm Password

Register

5. Payment Page



Q3. Visio and balsamic

Business Analysis Tools-Business Analytics Tools are technique to prepare a raw design, process flow diagram and prototypes of an end product of an end product which will be covering all the aspects of the project requirements and represents the activity of how the process flows inside the project inside the project.

MS Visio-In business analysis,MS Visio is powerful tool used to visually represent and communicate complex business processes, systems, workflows, and organizational structure. It plays a crucial role in helping business analyst model and analyse various aspects of business operations, enabling stakeholders to better understand, evaluate and optimize processes.We can prepare flowcharts, org charts, building plans, floor plans, data flow diagram, process flow diagrams, business process modelling.

Balsamic- Balsamic is a rapid wireframing tool. It creates mock-ups and wireframes for website, web apps, and desktop software.It allows us to picture ideas concept through a simple drag-and-drop interface.The wireframes created using balsamic have a hand-drawn style.It's designed to help business analysts, designers, product managers, and developers quickly sketch out the basic structure and layout of a user interface without focusing on visual design details.

Q4.RTM(Requirement Traceability Matrix): A RTM is document used in business analysis , project management and software development to ensure that all project requirement are being met throughout the project life cycle. It helps to track the relationship between requirements and various project elements, ensuring that each requirement is linked to corresponding deliverables, test cases and design specifications.

RTM is prepared for Online agriculture project is as below:

Note-1.Completed status is represented by “Com”.

2. Work in progress status represented by “WIP”.

[illegible]

FR0011	Order confirmation	Com	Com	Com	Com	Com	Com	Com	Com	Com	Com
FR0012	Order tracking	Com	Com	Com	Com	Com	Com	Com	Com	Com	Com
FR0013	Customer Support	Com	WIP	Com	Com	Com	Com	Com	WIP	Com	WIP
FR0014	Order history	Com	Com	Com	Com	Com	Com	Com	Com	Com	Com
FR0015	User ratings and review	Com	WIP	Com	Com	Com	Com	Com	Com	Com	WIP
FR0016	Product Recommendation	Com	Com	Com	Com	Com	Com	Com	Com	Com	Com
FR0017	Social Sharing	Com	Com	Com	WIP	Com	WIP	Com	Com	Com	WIP
FR0018	Secure Transaction	Com	Com	Com	Com	Com	Com	Com	Com	Com	Com
FR0019	Product filtering	Com	Com	Com	Com	WIP	Com	Com	Com	WIP	WIP
FR0020	Account Management	Com	Com	Com	Com	Com	Com	Com	Com	Com	Com

Approach to tackle query of Mr. Henry and Peter when Mr. Henry and Peter approaches to me regarding the status of project then I will explain them status with the help of Requirement Traceability Matrix which is prepared by each requirement and the development stages of the requirements are logged inside the matrix which will give overall picture overall picture of the project, how many requirements are completed, how many are in 'in progress' stages and how much more time it will take to complete all the cycle. Using this information, I can prepare a summary report to present in front of Mr. Henry and Peter convey them about development status, testing status, completion dates, critical areas, risk and dependencies.

Q5.Test Case Document- Test Case Document are structured document used in software testing to define and outline the specific conditions, steps and expected result for verifying a particular feature or functionality of a software application. They are essential for ensuring that software meets its requirements and behaves as expected in different scenarios.

10 different Test Case Scenarios and their respective documents are below:

Test Case ID	TC0001	Test case name	User Registration
Project ID	Agri0213	Project name	Online agriculture store project
PM ID	98562	PM Name	Mr. Vandaman
Test Strategy ID	OAS001	Tester ID	67542
Test Plan ID	TOAS01	Tester Name	Mr. Jason

Test Schedule ID	****	Date of Test	10-OCT-2025
Scenario	To register new user inside web application using e-mail id and creating password		
Link to that page	www.onlineagristore.com		
Pre Conditions	Internet connectivity should be stronger enough, website URL is working		
Post Conditons	Registration successful ,User able to login in to system with user name and password		
Input Data	Email Id, Mobile Number, Name of the user		
Expected Behaviour	Once user register, using name, mail id / mobile number and create password, System should show user created successfully.		
Actual Behaviour	After entering mandatory fields, if user clicks on register button, the system shows pop up saying 'User created successfully'		
Comments	NA		
Result	Pass		

Test Case ID	TC0002	Test case name	User Login
Project ID	Agri0213	Project name	Online agriculture store project
PM ID	98562	PM Name	Mr. Vandaman
Test Strategy ID	OAS001	Tester ID	67542
Test Plan ID	TOAS01	Tester Name	Miss Alekya
Test Schedule ID	****	Date of Test	12-OCT-2025
Scenario	To login registered user using username and creating password		
Link to that page	www.onlineagristore.com		
Pre Conditions	User is already registered		
Post Conditons	Login successful ,User able to search for required product		
Input Data	User name, Password, Captcha		
Expected Behaviour	User enter Username and Password along with captcha to login and system shows login successfully		
Actual Behaviour	After entering username, password and captcha , if user clicks on Login button, the system shows pop up saying 'Login successfully'		
Comments	NA		
Result	Pass		

Test Case ID	TC0003	Test case name	Add to cart
Project ID	Agri0213	Project name	Online agriculture store project
PM ID	98562	PM Name	Mr. Vandaman
Test Strategy ID	OAS001	Tester ID	67542
Test Plan ID	TOAS01	Tester Name	Mr Jason
Test Schedule ID	****	Date of Test	15-OCT-2025
Scenario	User should be able to add selected products to cart		
Link to that page	www.onlineagristore.com		
Pre Conditions	Products are available in inventory and add to cart is enabled		
Post Conditons	Total prices will be shown,Payment option would be shown		
Input Data	Product Id, Product pictures, Product prices		
Expected Behaviour	Once login, User will search products on the basis of requirement and he must be able to add products in cart for purchase.		
Actual Behaviour	After selecting required products , user clicks on Add to Cart option, to add products in the cart for purchase		
Comments	NA		
Result	Pass		

Test Case ID	TC0004	Test case name	Coupon code apply
Project ID	Agri0213	Project name	Online agriculture store project
PM ID	98562	PM Name	Mr. Vandaman
Test Strategy ID	OAS001	Tester ID	67542
Test Plan ID	TOAS01	Tester Name	Miss Alekya
Test Schedule ID	****	Date of Test	17-OCT-2025
Scenario	User should be able to add coupon code at checkout time to available discount		
Link to that page	www.onlineagristore.com		
Pre Conditions	Coupon code must be valid		
Post Conditons	Total price will be adjusted as per coupon code		
Input Data	Coupon code, Discount codes		
Expected Behaviour	At the time of checkout,User must be able to enter coupon code to get the discount on total bill		

Actual Behaviour	After adding to cart ,User puts coupon code and gets discount on total prices of the product
Comments	NA
Result	Pass

Test Case ID	TC0005	Test case name	Payment
Project ID	Agri0213	Project name	Online agriculture store project
PM ID	98562	PM Name	Mr. Vandaman
Test Strategy ID	OAS001	Tester ID	67542
Test Plan ID	TOAS01	Tester Name	Mr. Jason
Test Schedule ID	****	Date of Test	19-OCT-2025
Scenario	User must be able to choose payments and do payment.		
Link to that page	www.onlineagristore.com		
Pre Conditions	Product added to cart and total price is calculated		
Post Conditons	Redirected to 3rd party apps or COD option		
Input Data	Card details,UPI details,Payment method		
Expected Behaviour	User should be able to choose payment option from Net banking,UPI or Cash on delivery		
Actual Behaviour	At the payments stage user is able to select options from Net Banking, Card payments,UPI or cash on delivery		
Comments	NA		
Result	Pass		

Test Case ID	TC0006	Test case name	Payment Confirmation
Project ID	Agri0213	Project name	Online agriculture store project
PM ID	98562	PM Name	Mr. Vandaman
Test Strategy ID	OAS001	Tester ID	67542
Test Plan ID	TOAS01	Tester Name	Miss Alekya
Test Schedule ID	****	Date of Test	21-OCT-2025
Scenario	User should be get payment confirmation message in phone or mail		
Link to that page	www.onlineagristore.com		
Pre Conditions	Payment is successful		

Post Conditons	Redirected to order confirmation page and expected delivery date
Input Data	Payment ID, Total price
Expected Behaviour	Once payment are done and amount deducted from user's account, user should get text or mail confirmation for payments
Actual Behaviour	After payments user gets payment confirmation message or mail that payment has been successfully proceed
Comments	NA
Result	Pass

Test Case ID	TC0007	Test case name	Order Confirmation
Project ID	Agri0213	Project name	Online agriculture store project
PM ID	98562	PM Name	Mr. Vandaman
Test Strategy ID	OAS001	Tester ID	67542
Test Plan ID	TOAS01	Tester Name	Mr. Jason
Test Schedule ID	****	Date of Test	24-OCT-2025
Scenario	User should be get Order confirmation message in phone or mail		
Link to that page	www.onlineagristore.com		
Pre Conditions	Payment is successful		
Post Conditons	Tracking of order is enabled		
Input Data	Product Id, Product picture, Product prices		
Expected Behaviour	Once payment are done user should get text or mail confirmation for order confirmation containing order Id and expected delivery date		
Actual Behaviour	At the payments done user should get order confirmation containing order id and expected delivery date		
Comments	NA		
Result	Pass		

Test Case ID	TC0008	Test case name	Cancel order
Project ID	Agri0213	Project name	Online agriculture store project
PM ID	98562	PM Name	Mr. Vandaman
Test Strategy ID	OAS001	Tester ID	67542
Test Plan ID	TOAS01	Tester Name	Miss Aletha

Test Schedule ID	****	Date of Test	27-OCT-2025
Scenario	User should be able to cancel wrong order		
Link to that page	www.onlineagristore.com		
Pre Conditions	Product already ordered,Cancel window is open		
Post Conditons	Order status is updated, refund initiated		
Input Data	User account details, Order Id , Product Id		
Expected Behaviour	User should be able to cancel order or orders done by mistake from cancel order page		
Actual Behaviour	User is able to cancel the order from cancel order page from the menu		
Comments	NA		
Result	Pass		

Test Case ID	TC0009	Test case name	Return of the order
Project ID	Agri0213	Project name	Online agriculture store project
PM ID	98562	PM Name	Mr. Vandaman
Test Strategy ID	OAS001	Tester ID	67542
Test Plan ID	TOAS01	Tester Name	Mr. Jason
Test Schedule ID	****	Date of Test	31-OCT-2025
Scenario	User should be able to Return of the order which the did not like		
Link to that page	www.onlineagristore.com		
Pre Conditions	Product already ordered, return window is open		
Post Conditons	Order status is updated,Refund initiated		
Input Data	Product Id, Order id, User details		
Expected Behaviour	User must be able to return the order from Return order page		
Actual Behaviour	User can return the order from Return order page with the help of order id and product id		
Comments	NA		
Result	Pass		

Test Case ID	TC0010	Test case name	Session Out Timing
Project ID	Agri0213	Project name	Online agriculture store project
PM ID	98562	PM Name	Mr. Vandaman
Test Strategy ID	OAS001	Tester ID	67542
Test Plan ID	TOAS01	Tester Name	Miss Alekya
Test Schedule ID	****	Date of Test	3-NOV-2025
Scenario	Application must be automatically session out after staying idle		
Link to that page	www.onlineagristore.com		
Pre Conditions	User is logged in and inactive		
Post Conditons	System should ask for re-login		
Input Data	Product Id,Order id,User details		
Expected Behaviour	Application must be session out after being idle for 30 seconds and should ask for login again		
Actual Behaviour	Application gets session out after being idle for 30 seconds and asks for login again		
Comments	NA		
Result	Pass		

Q6.Database schema and ER diagram

DB Schema- It is blueprint that outlines the structure of the database, including its tables, fields, relationship, constraints and other characteristics.

For the online agriculture store database below will be schema example:

Tables:User,Product,Orders

Columns in User:User Id, Name, Email, Password

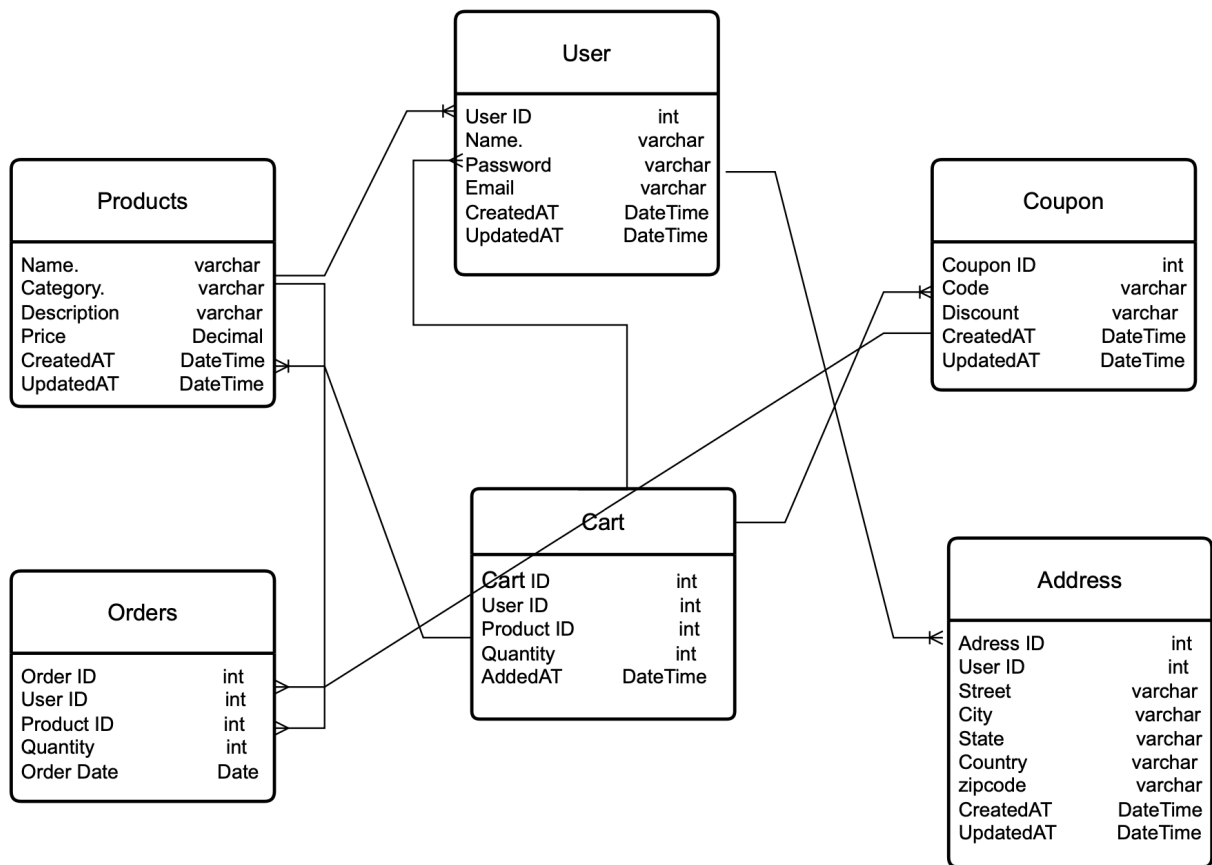
Columns in Product:Product Id, Name, Category, Price, Stock

Columns in Orders:Order Id, User Id, Product Id, Quantity, Order date

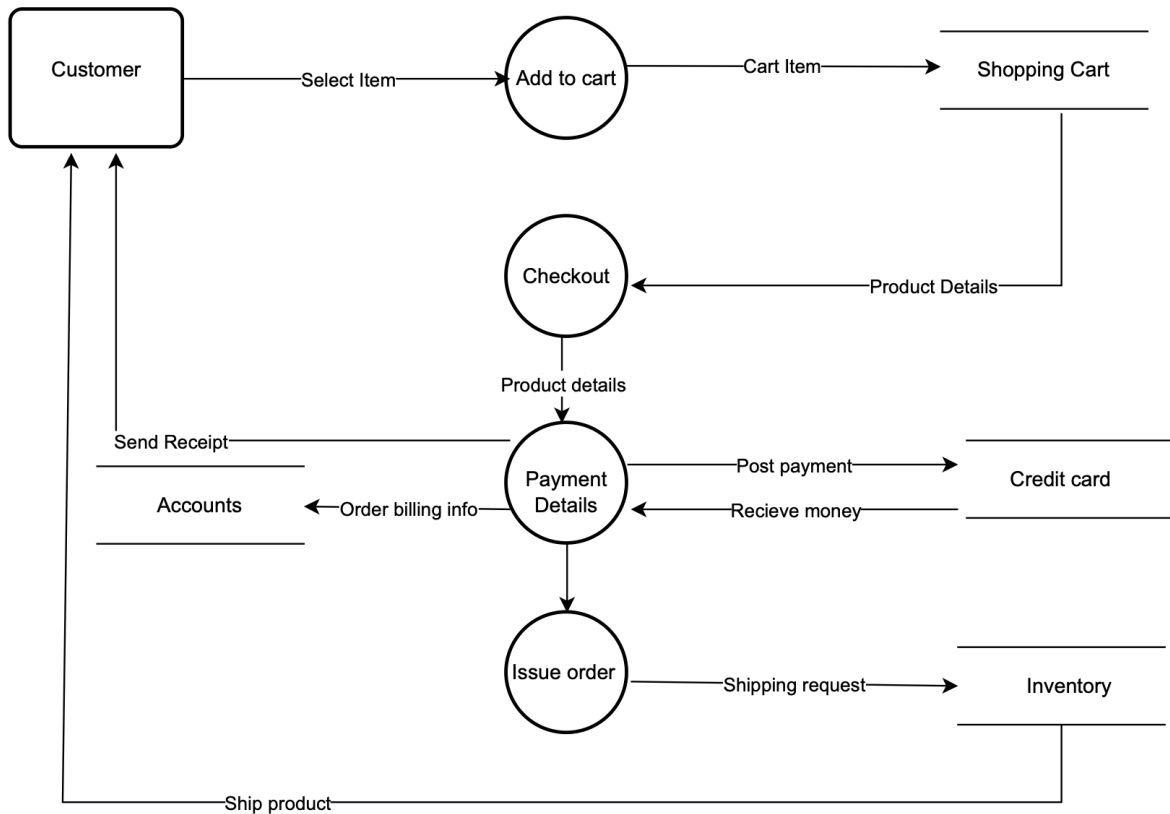
Entity Relationship diagram-An Entity Relationship diagram is visual representation of the relationships between entities in database.It depicts the entities(tables), attributes (properties/ fields), or relationship between them.

Component of ER Diagrams

- Entities: It is represented as rectangle
- Attributes: It is represented as oval connected to entities
- Relationship: It is represented as diamond connecting entities.
- Primary key:Underlined attribute that uniquely identifies record.
- Foreign key:Attributes that links to another table.



Q7.Data flow diagram: A data flow diagram (DFD) is a graphical representation of the flow of data through an information system. It visualizes the processes, data stores, and external entities that interact to produce or consume data



Q8.Change Request:

In the world of business analysis, a change request is a formal proposal to alter a product or system. It is a critical component of change management processes and plays a significant role in ensuring that changes are implemented smoothly and efficiently.

- The reason/business justification for the change
- Why the change is needed – giving detailed information on implications of not implementing the change – i.e., security risks, Government taxation, Compliances etc.
- Known risks or impact to the business of implementing the change – consideration should also be given to the risk and impact to the business of not implementing the change.
- Required resources – including people, time, and investment/costs.

A change request is a vital tool in business analysis and change management. It provides a structured way for stakeholders to request changes, ensures that changes are reviewed and approved before they are implemented, and helps maintain project stability. By understanding the concept of a change request and its process, business analysts can better manage and control changes, leading to more successful projects.

Following are the steps for handle change request:

- 1) Identify the scope of the change request and assess its impact on the project.
- 2) Analyse the cost and time required to implement the change request.
- 3) Evaluate the benefits of the change request and its alignment with project goals.
- 4) Prioritize the change request based on its urgency and importance.
- 5) Communicate the change request to all relevant stakeholders, including the client, project manager, development team, and business analyst.
- 6) Update the project plan and documentation to reflect the change request.
- 7) Implement the change request and monitor its impact on the project.
- 8) Conduct testing and quality assurance to ensure the change request has been successfully implemented.
- 9) Obtain approval from the client or other relevant stakeholders before finalising the change request.
- 10) Communicate the status and impact of the change request to all stakeholders, including any updates to the project plan, timeline, or budget

Q9.Change Request Vs an Enhancement

As a business analyst, based on the request from ben and Kevin to enable farmers to sell their crop yield and introduce an auction system,I would classify this as Change request rather than an enhancement.

The reason for this classification is as below:

- A. Significant Shift in Scope: The request to allow farmers to sell their crop yields and introduce an auction system represents a fundamental change to the purpose of the application, expanding it into broader marketplace.The original scope of the project is to provide a platform for farmers to place orders for agriculture products.
- B. New Functionality:These features require new workflow, interface, business rules, and processes, none of which were part of the original scope or requirements.

- C. Impact on Timeline,Budget, and Resources: These new features would fundamentally change the purpose and deliverables of the project, requiring a reassessment of the timeline, budget and resources,Implementing these features would require additional development time, resources, and potentially an increased budget.
- D. Ongoing Process: Any significant deviation from the baseline during the execution phase qualifies as a change request.
- E. Change control board (CCB): It also allows the project stakeholders and change control board to device whether the new requirement should be integrated in to on going project.Any modification that impacts the scope in such substantial way would need formal review and approval through change request process.This ensures that the new feature are properly evaluated for feasibility and alignment with project's goal and it provide clear understanding of the impact on project's success.

Q10.Man Power Estimation:

Estimation in software development life cycle refers to the process of predicting the resources (time, cost, effort) required to complete a software development project or specific tasks within that project.Estimation is a critical part of the planning phase of SDLC, as it helps in setting realistic expectation, managing resources efficiently, and determining the project's feasibility.

Man-hours estimation in software development refers to the process of estimating the total amount of human effort required to complete a software development task, project, feature.It is typically expressed in terms of the number of hours that a team or individuals will spend working on the project .This estimation is crucial for planning, budgeting, and scheduling the project. It helps determine resource requirement, assess project timelines, and evaluate project feasibility.

Types of project on the basis of Man-Hours:

1. Small project-Up to 500 Man-Hours
2. Medium project-Up to 1000 Man-Hours
3. Large project-Up to 1500 Man-Hours

Manhours Required =Total hour working per day*Total number of member*Total number of days worked over the specific period.

Number of working hours a day = 8 hours

Number of Resources=12

Time period provided=18 months=547 days=78 weeks(Including Weekends and public Holiday)

Assuming Weekends=156

Assuming public holidays=10

Total=166

Total working days=547-166=381 working days

Hence, Estimated Manhours = 8 hours* 12 resources*381 days=36,576 Man hours required.

Q11.UAT Acceptance process:

UAT (User Acceptance Testing) is the final stage of the software development lifecycle where the end-users of the system test the product to ensure that it meets their requirements and is ready for deployment. The UAT Acceptance process involves the following steps: Planning: The business analyst works with the client to plan the UAT phase, including defining the scope, identifying the test scenarios and cases, and setting the acceptance criteria. Test Execution: The end-users perform the testing on the software product in a real-world environment and provide feedback on its usability, functionality, and performance.

Planning: Blueprints are made to implement UAT testing for every feature that needs to test and minimum standards for accepting the test.

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

UAT Testers: A testing team consists of an end user that meet the criteria for the implementation

testing. The end user must have expertise in subject matter, the ability to report all problems.

Bug Fixing: The development team works on whatever bugs are found during UAT testing to make the 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 conclude that the software is ready to GO live and sign it off.

Regarding the process to close the project, it typically involves the following steps:

Final Documentation: All project documentation, including requirements documents, design documents, test cases, and project plans, are reviewed and updated.

Project Review:Conduct a project review meeting with key stakeholders, including the client to discuss the overall project performance, achievements and lesson learned.

Closure Meeting: A closure meeting is held with the stakeholders to discuss the success of the project, any lessons learned, and future recommendations.

Project Closure Report: The business analyst prepares a project closure report that includes the project review, documentation updates, closure meeting outcomes, and any final recommendations.

Archiving: The project documentation and artifacts are archived for future reference, and the project team is disbanded.

Q12.Project closure document:

The Project Closure Document is a formal report prepared at the end of a project to officially close the project and ensure all deliverables, processes, and responsibilities have been completed and handed off properly.

For your Online Agriculture Product Store project, this document acts as proof of project completion, stakeholder acceptance, and lessons learned for future initiatives.

Project Closure document typically includes the following section:

1. **Project Review:** This section provides an overview of the project including its objectives, scope, and stakeholders involved. It summarises project's purpose and sets the context for the closer report.
2. **Project Achievements:** Here the document highlights the key achievements and deliverables of the project
3. **Project timeline:** This section provides an overview of the project timelines, highlighting the start and end dates, major phases and milestone.
4. **Lessons learned:** The lesson learned section reflect on project successes and challenges. It includes comprehensive analysis of what work well and what could have been improved.
5. **Project Sign-Off:** The closure document includes formal sign-off or approval from key stakeholder, indicating their acceptance and satisfaction with the project's outcome. This signifies the official closure of the project.

S.No.	Points to Include	Details	Reference Link
1	Did the client sign off on the UAT testing		
	Date of Signoff	5-6-26	Business_Scope.docx
	Name of the resource		
2	Objectives of the project		
	User friendliness	Achieved	
	Customer satisfaction	ROI(Return of investment) In 6 months	
	More categories	Achieved	
3	Functionalities worked on		
	Secured payment process	Achieved	FRD.docx
	Categories	Achieved	
4	Infrastructure		

	Software installed	Achieved	Procurement.docx
	Laptops purchased	Achieved	
5	Funding		
	Amount approved	2 Crores	Financialdetails.xlsx
	Amount used	2 Crores	
6	Overall project information		
	Escalations	30	
	Customer satisfaction	High	
7	Value to the company		
	Positive/Negative	Company has gained successful integration of processes, increased turnover by 25%, increased efficiency by 20%	