

Assignment 1

BRD Document

Project Title: Dairy Inventory

Client: Company Name – Ice-cream & Milk Products Manufacturer

Prepared By: Navadeep

Date: 12-09-2025

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1. Document Revisions

Date	Version number	Document change
12-09-2025	1.0	Initial draft prepared

2. Approvals

Role	Name	Title	Signature	Date
Project sponsor	Karthik	Dairy stores	Karthik	12-09-25
Business owner	Priya	Operation head	Priya	12-09-25
Project manager	Vamshi	Sr. PM	Vamshi	12-09-25
Development lead	Alex	Development lead	Alex	14-09-25
UI/UX lead	Sathvik	UI/UX designer	Sathvik	14-09-25
Quality lead	Pranay	QA lead	Pranay	14-09-25

3. RACI Chart

R- responsible A-accountable C- consulted I- informed

Name	Position	R	A	C	I
Navadeep	Business analyst	R		C	I
Vamshi	Project manager		A	C	I
Priya	Head			C	I
Alex	Development lead			C	I
Sathvik	UI/UX				I

4. Introduction

4.1 Business Goals

The goal is to build a system that manages stock across all plants and warehouses and ensures quick delivery of ice-cream and milk products. This will help reduce wastage, cut costs, and improve customer satisfaction.

4.2 Business Objectives

- Build one system to manage stock across all locations.
- Assign customer orders to the nearest warehouse automatically.
- Plan the best delivery routes to save time and cost.
- Allow customers and managers to track orders easily.
- Create useful reports for stock, sales, expiry, and deliveries.

4.3 Business Rules

- Stock must be issued on a First In, First Out (FIFO) basis.
- All milk and ice-cream products must be checked for expiry.
- Orders should always go from the nearest warehouse with enough stock.

4.4 Background

The company makes ice-cream and milk products in different plants and stores them in warehouses across the state. Right now, stock and delivery are handled manually or with basic tools. This causes problems like:

- Difficulty in checking stock in different warehouses.
- Loss of products due to expiry.
- Delay in customer deliveries.

4.5 Project Objective

The main objective of this project is to create a single software system that can manage stock in all plants and warehouses and also make deliveries faster. The system will track products with batch and expiry dates, assign customer orders to the nearest warehouse, and plan the best delivery routes. It will also provide real-time updates and reports, helping the company reduce waste, save costs, and keep customers satisfied.

4.6 Project Scope

1. In scope

- Stock tracking at plants and warehouses.
- Customer order management.
- Automatic warehouse selection for deliveries.
- Route planning and delivery tracking.
- Dashboards and reports.

2. Out scope

- Third-party vendor management portal
- Delivery/logistics tracking

5. Assumptions

- All warehouses and plants will have internet access for using the system.
- Users (staff, managers, delivery team) will be trained to use the software.
- Master data like product details, warehouse locations, and customer information will be provided by the company.
- Delivery vehicles will have GPS or mobile devices for tracking routes.

6. Constraints

- The system must be completed within the planned budget and timeline.
- It should work with the existing hardware and network setup of the company.
- All data should be secure and follow company policies.

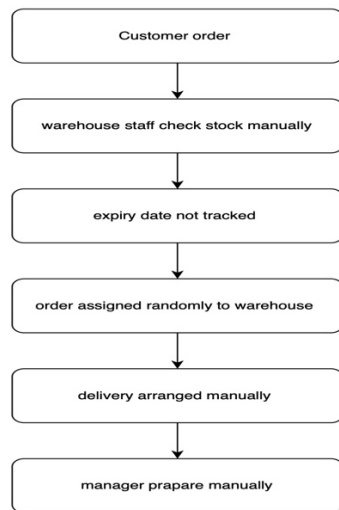
7. Risks

- Delay in finalizing requirements can slow down the project.
- Staff may take time to adapt to the new system.
- If internet connectivity is poor in some warehouses, the system may not work smoothly.
- Extra cost may come from using third-party tools like Google Maps.
- Data entry mistakes by users can cause stock or delivery issues.

8. Business Process Overview (Gap Analysis)

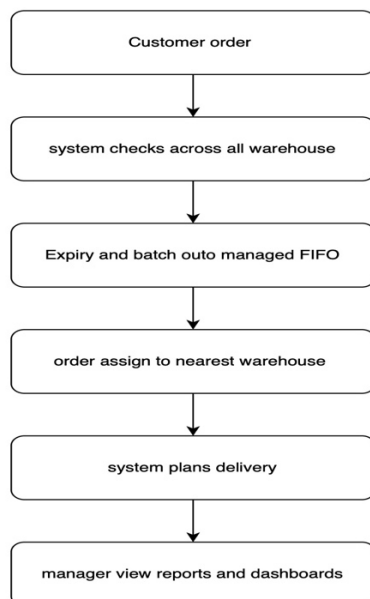
Current Process (As-Is):

- Stock is managed manually or in Excel.
- No single system for all plants and warehouses.
- Expiry dates are not tracked well, so products get wasted.
- Orders are given from any warehouse, not always the nearest one



Future Process (To-Be):

- One system will track stock in all plants and warehouses.
- Expiry and batch will be managed automatically using FIFO.
- Orders will be assigned to the nearest warehouse with stock.
- Routes will be planned automatically for faster delivery.
- Managers will get live dashboards and reports.



9. Business Requirements

Functional Requirements (What the system should do)

- Track stock at all plants and warehouses.
- Record batch numbers and expiry dates of products.
- Give alerts for low stock and products near expiry.
- Assign customer orders to the nearest warehouse with stock.
- Plan the best delivery route automatically.

Non-Functional Requirements (How the system should be)

- The system should be easy to use for staff with little training.
- It should be fast and handle many orders at the same time.
- Data must be secure and accessible only to authorized users.
- The system should work on both web and mobile devices.
- It should be reliable with minimum downtime.

10. Appendices

10.1 Acronyms

- FIFO - (First In, First Out)
- FEFO - (First Expiry, First Out)

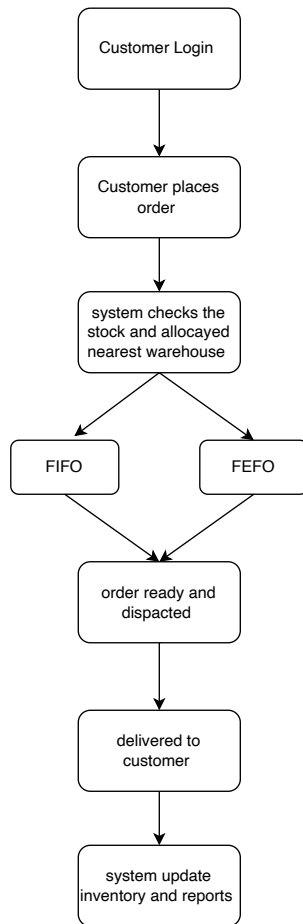
10.2 References

- Company's current stock management process notes.
- Industry best practices for dairy supply chain.
- API documentation for Google Maps / Mapbox.

10.3 Supporting Documents

Sample reports (stock report, sales report, delivery report).

Process Flow Diagram



Assignment 2

1. Letter to a Client

Subject: Business Analyst for Diary Inventory

Dear Suman,

I hope you are doing well. My name is Navadeep, and I will be working as the Business Analyst for your project. My role is to work closely with you and your team to understand your business needs, gather requirements, and make sure the solution we build truly supports your goals.

I will be reaching out to schedule discussions and workshops with your team. These sessions will help us get a clear picture of your current processes, the challenges you are facing, and the outcomes you expect from the new system.

I look forward to collaborating with you and your team to ensure the project is a success. Please feel free to share any initial thoughts, documents, or expectations that you believe would help us start on the right track.

Thank you,

Best regards,
Navadeep
Business Analyst

2. Prepare a brief BRD and SRS for a project - Ticketing system

BRD

Project Title: Ticketing System

Client: Company Name – Ticket Booking service

Prepared By: Navadeep

Date: 13-09-2025

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3. RACI Chart

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4. Introduction

The company needs a Ticketing System to manage customer issues, service requests, and internal tasks. Currently, requests are handled manually, leading to delays and lack of tracking. The new system will centralize ticket management and improve response times.

4.1 Business Goals

- Provide a single platform to log and track all tickets.
- Reduce response and resolution times.
- Improve customer satisfaction and internal efficiency.

4.2 Business Objectives

- Automate ticket creation, assignment, and tracking.
- Provide dashboards for managers and agents.
- Enable customers to check ticket status online.

4.3 Project Scope

In Scope: Ticket logging, auto-assignment, status tracking, notifications, reporting.

Out of Scope: Integration with third-party CRM (future phase).

4.4 Project objective

The objective of this project is to create a Ticketing System that helps customers raise issues easily, assigns them to the right support agents, and tracks progress until the issue is resolved. The system should improve response time, reduce confusion, and give managers better control through reports and monitoring.

4.5 Business rule

- Every ticket must have a unique Ticket ID.
- A ticket cannot be closed until the customer confirms or the agent marks it as resolved.

- Tickets are assigned automatically based on category or agent workload.
- Customers can only view and track their own tickets.
- Managers have the right to reassign or escalate tickets.

5. Assumptions

- Customers and agents will have internet access.
- All users will receive basic training before using the system.
- Email/SMS services will be available for sending notifications.

6. Constraints

- The system must be delivered within the agreed project timeline and budget.
- Only approved technologies (web-based system with secure database) can be used.
- Integration with third-party tools (CRM, chatbot, etc.) is not part of the first phase.

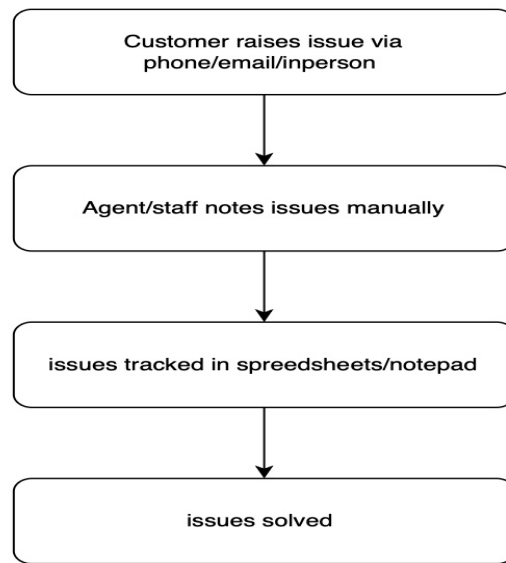
7. Risks

- Staff may take time to adapt to the new system.
- Delays if requirements are not finalized quickly.

8. Business Overview

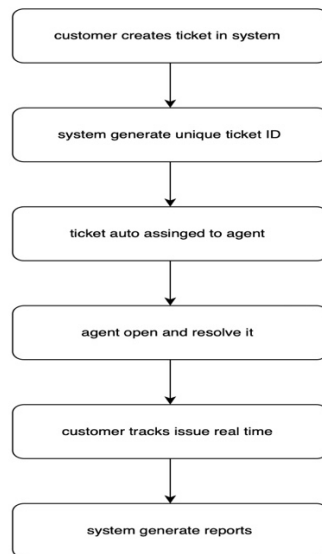
As-Is (Current Process)

- Customers raise complaints/issues through phone calls, emails, or in person.
- Issues are tracked manually in spreadsheets or notebooks.
- No clear system for assigning tickets to the right agent.
- Customers cannot see the status of their issues.
- Managers spend extra time collecting updates from agents.



To-Be (Future Process)

- Customers create tickets directly in the system (web or mobile).
- Each ticket gets a unique ID and is automatically assigned to an agent.
- Customers can track their ticket status in real time.
- Agents update the ticket progress in the system (Open → In Progress → Resolved → Closed).
- Managers have dashboards to monitor SLA compliance and team performance.



9. Business Requirements

Functional requirements

- Customers should be able to create a new ticket with details of their issue.
- The system must generate a unique Ticket ID for each ticket.
- Tickets should be assigned automatically to the right agent based on category or workload.
- Agents should be able to update the status of tickets (Open, In Progress, Resolved, Closed).
- Customers should be able to view and track the status of their tickets in real time.
- The system should send notifications (email/SMS) when ticket status changes.

Non- Functional requirements

- The system should be user-friendly and easy to navigate for customers and agents.
- It should be accessible via web and mobile devices.

- Ticket data should be secure with role-based access control.
- The system should support at least [X] concurrent users without performance issues.
- It should provide 99.9% uptime for reliability.

10.Appendices

References

- Current manual process documents (spreadsheets, email logs).
- Industry best practices for ticket management systems.

Supporting Documents

Sample process flow diagrams (AS-IS and TO-BE).

SRS Document.

Functional requirements

Functional requirements are the specific behaviors, functions or operations of a system. They describe what the system should do, tasks, actions, or activities it must perform to achieve its objectives.

Req ID	Req Name	Req Description
FR0001	Ticket Creation	Customers can create tickets via web/mobile.
FR0002	Ticket Assigning	Auto-assign tickets to agents based on rules.
FR0003	Ticket Tracking	Customers and agents can view ticket status.
FR0004	Notifications	Email/SMS alerts on ticket updates.
FR0005	Ticket Updates	Agents can change priority, add notes, and close tickets.
FR0006	Reports	Generate reports for managers
FR0007	Role Management	Different access for customers, agents, and managers.

Non-functional requirements

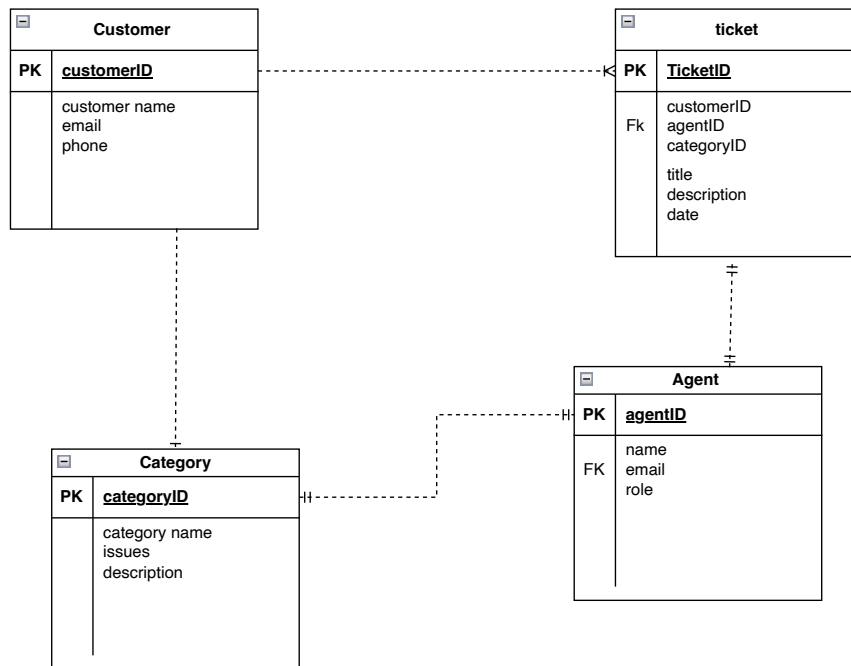
Non functional requirements will describe the qualities and a attributes of a system, focusing on how the system performs rather than specific behaviors or functions.

Req ID	Req Name	Req Description
NFR0001	Usability	Easy to use with simple UI.
NFR0002	Performance	Handle at least 1,000 concurrent tickets.
NFR0003	Security	Data access restricted by roles.
NFR0004	Availability	System should be available 99% of the time.
NFR0005	Scalability	Support future growth

Assumptions

- 11. Users will have internet access.
- 12. Customer details will be available in the system.
- 13. Notification service (email/SMS) will be integrated.

3. ER Diagram of creating a support ticket.



4. User story of shopping from ecommerce.

User story No: 1	Task: 1	Priority: HIGH
AS A CUSTOMER, I WANT TO CREATE AN ACCOUNT, SO THAT I CAN SHOP ONLINE.		
BV: 500	CP: 5	
ACCEPTANCE CRITERIA: User can register with email/phone system validates unique email sends confirmation.		

User story No: 2	Task: 1	Priority: HIGH
AS A CUSTOMER, I WANT TO LOGIN AND LOGOUT MY ACCOUNT , SO THAT I CAN ACCESS MY ACCOUNT.		
BV: 500	CP: 5	
ACCEPTANCE CRITERIA: Login works with valid credentials logout ends session error shown for invalid login		

User story No: 3	Task: 1	Priority: HIGH
AS A CUSTOMER, I WANT TO SEARCH PRODUCTS BY CATEGORY, SO THAT I CAN FIND ITEMS QUICKLY.		
BV: 500	CP:5	
ACCEPTANCE CRITERIA: Search results relevant filters by price/brand/category work “no results” shown if none found.		

User story No: 4	Task: 1	Priority: MEDIUM
AS A CUSTOMER, I WANT TO VIEW PRODUCTS DETAILS , SO THAT I CAN CHECK BEFORE PURCHASE.		
BV: 500	CP: 3	
ACCEPTANCE CRITERIA: Product page shows name, description, price, reviews, availability		

User story No: 5	Task: 1	Priority: HIGH
AS A CUSTOMER, I WANT TO ADD PRODUCTS TO CART, SO THAT I CAN BUY LATER.		
BV: 500	CP: 5	
ACCEPTANCE CRITERIA: Items added to cart, cart shows product details, quantity can be updated.		

User story No: 6	Task: 1	Priority: MEDIUM
AS A CUSTOMER, I WANT TO WANT TO REVIEW FOR PRODUCT, SO THAT I CAN SHARE MY EXPERIENCE OTHER CAN VIEW.		
BV: 200	CP: 3	
ACCEPTANCE CRITERIA: Only verified buyers can review, reviews display under products		

User story No: 7	Task: 1	Priority: MEDIUM
AS A CUSTOMER, I WANT TO UPDATE MY NEW NUMBER, SO THAT I CAN MY DETAILS ARE CORRECT IN PROFILE.		
BV: 200	CP: 3	
ACCEPTANCE CRITERIA: User can edit name, phone, address, system saves updates securely.		

User story No: 8	Task: 1	Priority: LOW
AS A CUSTOMER, I WANT TO CHECKOUT EASILY, SO THAT I CAN PLACE MY ORDER QUICKLY.		
BV: 100	CP: 1	
ACCEPTANCE CRITERIA: System collects address, payment option, shipping method		

User story No: 9	Task: 1	Priority: HIGH
AS A CUSTOMER, I WANT TO MAKE PAYMENT, SO THAT I CAN COMPLETE MY PURCHASE.		
BV: 500	CP: 5	
ACCEPTANCE CRITERIA: Payment gateway integration success generates order failed payment allows retry		

User story No: 10	Task: 1	Priority: MEDIUM
AS A CUSTOMER, I WANT TO TRACK MY ORDER, SO THAT I CAN KNOW WHEN IT WILL ARRIVE.		
BV: 200	CP: 1	
ACCEPTANCE CRITERIA: Status updates (Processing, Shipped, Delivered) tracking ID visible notifications sent		

User story No: 11	Task: 1	Priority: HIGH
AS A ADMIN, I WANT TO CRATE CATAGORIES, SO THAT PRODUCTS ARE ORGANIZED.		
BV: 500	CP: 5	
ACCEPTANCE CRITERIA: Categories can be added/edited/deleted, products can be linked to categories.		

User story No: 12	Task: 1	Priority: MEDIUM
AS A ADMIN, I WANT TO ADD OR DELETE PRODUCTS, SO THAT INVENTORY IS ACCURATE.		
BV: 200	CP: 3	
ACCEPTANCE CRITERIA: New products saved updates reflected immediately deleted products not shown to customers		

User story No: 13	Task: 1	Priority: MEDIUM
AS A ADMIN, I WANT TO VIEW OR MANAGE CUSTOMER ORDERS, SO THAT I CAN PROCESS THEM.		
BV: 500	CP: 3	

ACCEPTANCE CRITERIA:

Admin dashboard shows orders by status,
can update order status

User story No: 14	Task: 1	Priority: MEDIUM
AS A ADMIN, I WANT TO MANAGE CUSTOMER ACCOUNTS, SO THAT I CAN RESOLVE ISSUES.		
BV: 500	CP: 3	
ACCEPTANCE CRITERIA: Admin can view, deactivate, reset user accounts securely		

User story No: 15	Task: 1	Priority: MEDIUM
AS A ADMIN, I WANT TO VIEW SALES REPORTS, SO THAT I CAN ANALAYZE BUSINESS PERFORMANCE.		
BV: 200	CP: 3	
ACCEPTANCE CRITERIA: Reports show revenue, export option available.		

User story No: 16	Task: 1	Priority: HIGH
AS A ADMIN, I WANT TO CREATE AND MANAGE DISCOUNT CODES, SO THAT CUSTOMERS CAN USE WHILE PAYMENT.		
BV: 500	CP: 5	
ACCEPTANCE CRITERIA: Admin can add, edit, and deactivate coupons Coupons apply correctly at checkout Expired or invalid coupons show error message		

User story No: 17	Task: 1	Priority: MEDIUM
AS A ADMIN, I WANT TO MANAGE RETURN AND REFUND, SO THAT CUSTOMERS ISSUES ARE SOLVED.		
BV: 200	CP: 3	
ACCEPTANCE CRITERIA: Admin can approve or reject return requests Refunds are tracked and marked as processed		

User story No: 18	Task: 1	Priority: MEDIUM
AS A ADMIN, I WANT TO ASSGIN ROLES, SO THAT TEAM MEMBERS WORK ON THAT.		
BV: 200	CP: 3	

ACCEPTANCE CRITERIA:

Roles (Admin, Manager, Staff) can be created
Permissions define what each role can access

User story No: 19	Task: 1	Priority: HIGH
AS A SYSTEM, I WANT TO SEND EMAIL/SMS NOTIFICATION, SO THAT CUSTOMERS GET UPDATES ON THEIR ORDER.		
BV: 500	CP: 5	
ACCEPTANCE CRITERIA: Notifications for order confirmation, shipment, delivery, payment success/failure.		

User story No: 20	Task: 1	Priority: HIGH
AS A SYSTEM, I WANT TO SECURE LOGIN DETAILS, SO THAT CUSTOMERS HAVE A SAFE EXPRIENCE.		
BV: 500	CP: 5	
ACCEPTANCE CRITERIA: Passwords encrypted, session timeouts, system handles at least 1000 concurrent users.		