

Requirement Analysis Phase

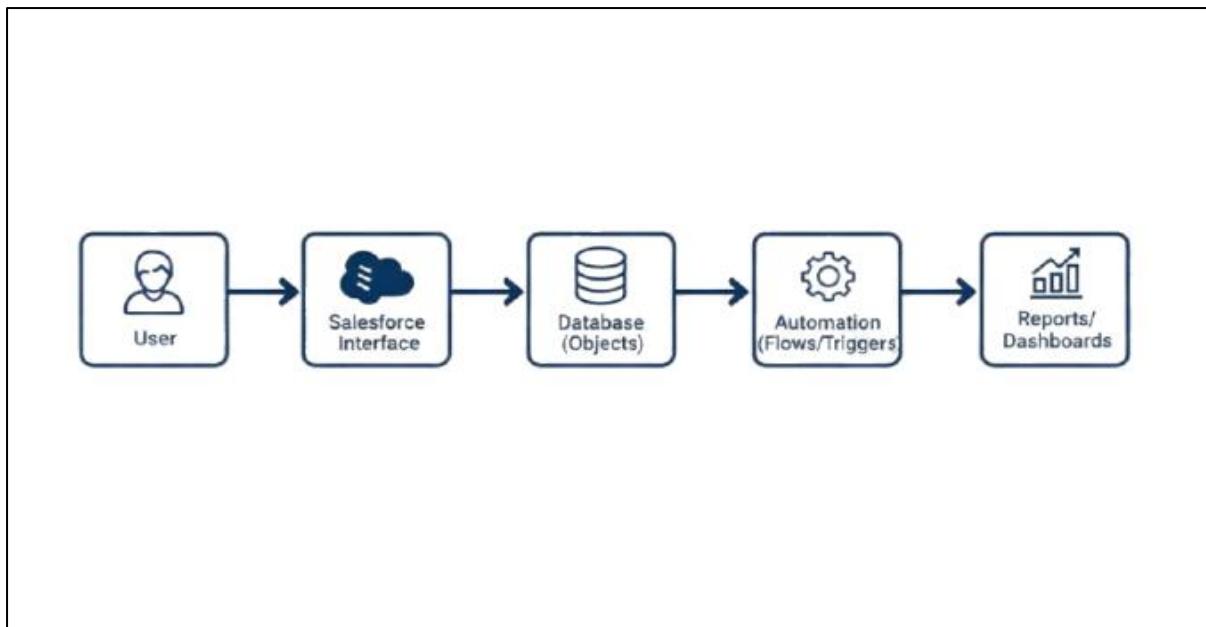
Data Flow Diagram & User Stories

Date	1 November 2025
Team Id	NM2025TMID04221
Project Name	Medical Inventory Management System
Maximum Marks	4 Marks

Data Flow Diagrams :

A **Data Flow Diagram (DFD)** provides a graphical view of how data moves through the **Medical Inventory Management System**. It shows interactions between users (Admins, Inventory Managers, Purchase Officers), the Salesforce system, and internal data stores (Supplier, Product, and Purchase Order Objects). The DFD captures how information is entered, processed, validated, and reported within the system.

Level 0: Data Flow



This high-level DFD shows that all users (Admins, Inventory Managers, Purchase Officers) interact with the Salesforce application, which processes and stores data in Salesforce Objects (Supplier, Product, Purchase Order, and Transaction Records). The processed data is then visualized through dashboards and reports.

Level 1: Process Flow :

Input:

Users enter supplier, product, and purchase order details.

Process:

1. Validation Rules ensure correct data entry.
2. Salesforce Flows automate stock updates and expiry tracking.
3. Triggers manage inventory transactions and reorder alerts.

Output:

Reports and dashboards display product stock levels, expiry alerts, supplier performance, and order summaries.

Data Flow Description:

Process No.	Process Name	Description	Data Stores / Entities
P1	Supplier Data Management	Records and updates supplier details including contact, address, and performance metrics.	Supplier Object
P2	Product Management	Tracks product details, categories, stock levels, and expiry dates.	Product Object
P3	Purchase Order Management	Creates and tracks purchase orders between suppliers and the medical organization.	Purchase Order Object
P4	Inventory Monitoring	Automatically updates stock counts	Inventory Transaction Object

		and triggers expiry alerts.	
P5	Reporting & Dashboards	Generates analytical reports on supplier efficiency, product movement, and expiry compliance.	Reports & Dashboards

User Stories :

User stories describe the system's expected behavior from different user perspectives to ensure functionality aligns with user needs and business objectives.

User Type	Functional Requirement (Epic)	User Story No.	User Story / Task	Acceptance Criteria
Administrator	Supplier & Product Management	USN-1	As an Admin, I want to create and manage supplier and product records to maintain accurate inventory details.	The system should allow creation, updating, and deactivation of supplier and product data.
Inventory Manager	Stock & Expiry Tracking	USN-2	As an Inventory Manager, I want to track stock levels and expiry dates to prevent shortages and use of expired items.	The system must automatically update stock counts and send expiry alerts before due dates.
Purchase Officer	Purchase Order Management	USN-3	As a Purchase Officer, I want to create and manage	The system should generate and track POs

			<p>purchase orders linked to suppliers for timely stock replenishment.</p>	with status updates and supplier details.
System (Automation)	Expiry Alert & Notifications	USN-4	<p>As a System, I must send notifications when products are nearing expiry or when stock falls below reorder level.</p>	Automated alerts must be sent to relevant users via email or dashboard notifications.
Healthcare Administrator	Reporting & Analytics	USN-5	<p>As an Administrator, I want to view comprehensive reports on stock, suppliers, and purchase performance.</p>	The dashboard should display real-time analytics and allow exporting of reports.
System (Integration)	Supplier API Integration	USN-6	<p>As a System, I must integrate with supplier APIs to synchronize order and product information automatically.</p>	Data should update in real-time between the Salesforce system and supplier portals.