Project Design Phase-II
Data Flow Diagrams & User Stories

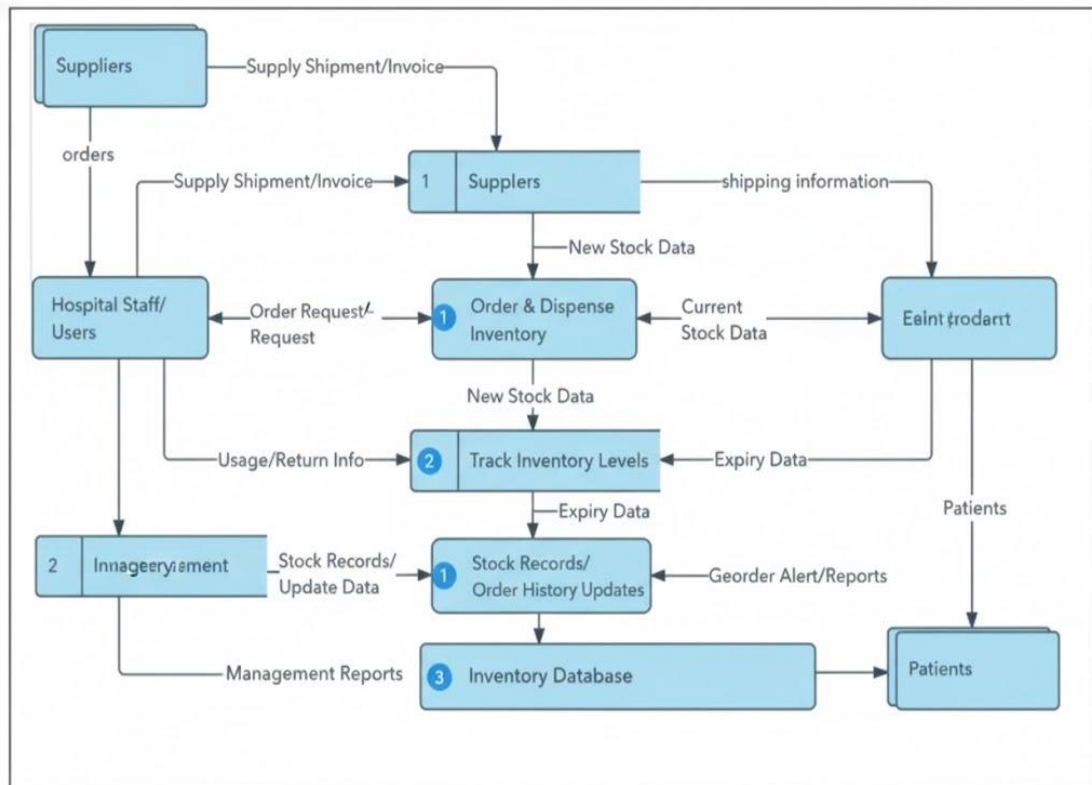| Date	2 November 2025
Team ID	NM2025TMID00728
Project Name	Medical Inventory Management System
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

In the Medical Inventory Management System project, the DFDs illustrate how inventory-related operations are processed within the system. The DFD shows interactions between external actors (Admin, Supplier, Pharmacist), the system processes (Manage Suppliers, Create Purchase Order, Update Stock, Monitor Expiry, Generate Reports), and data stores (Supplier DB, Product & Stock DB, Purchase Orders DB). If a product is linked to an expired batch, the system generates an alert and blocks its usage to maintain data integrity and patient safety.

Example:

Flow:

- Admin enters supplier and product details using user interface forms.
- System stores details into Supplier DB and Product DB.
- Admin creates purchase order and updates incoming stock.
- System runs expiry check and sends alert if any medicine batch is near expiry.

User Stories

User stories define what different users need from the system in simple, goal-focused language. These ensure the system blocks unsafe actions (for example, issuing expired medicine) and automates checks when necessary.

User Type	Functional Requirement (Epic)	User Story No	User Story / Task	Acceptance criteria	Priority	Release
Administrator	Supplier Management	USN-1	As an admin, I want to add/edit supplier details so that supplier	Admin can create/update supplier; supplier saved in Supplier DB; supplier visible in supplier list.	High	Sprint-1

			contact & bank informatio n is maintained .			
Inventory Manager / Pharmacist	Product Management	USN -2	As an inventory manager, I want to add medicines with batch no., qty, MRP, and expiry date so stock is recorded accurately.	New product entry saved with batch, qty, expiry; stock reflected in Product & Stock DB.	High	Sprint-1
System (auto-check)	Expiry Monitoring	USN -3	As a system, I must check product expiry and alert if any batch will expire within X days.	System runs expiry job; generates alerts for batches expiring within threshold; alerts appear in dashboard and sent to admin/pharmacist .	High	Sprint-2