

IDEATION PHASE

Brainstorm & Idea Prioritization

DATE	01/11/2025
TEAM ID	NM2025TMID08826
PROJECT NAME	MEDICAL INVENTORY MANAGEMENT
MAXIMUM MARKS	4

Medical Inventory Management Template:

This guided project demonstrates how to efficiently manage medical inventory within a healthcare environment. The system ensures accurate tracking of medical supplies, medicines, and equipment to prevent shortages, overstocking, and expiry-related issues.

The process begins by creating an inventory database containing product details such as item name, batch number, quantity, supplier, and expiry date. Automated alerts are configured to notify administrators when stock levels are low or when items are nearing expiration.

Additionally, the system supports supplier management, purchase orders, and stock audits to maintain transparency and accountability. Business rules are implemented to restrict the use or distribution of expired items, ensuring patient safety and compliance with healthcare regulations.

A test scenario validates the workflow: first, a test is performed to restock an item and verify that the updated quantity reflects correctly. Next, a low-stock alert is triggered to confirm that the system notifies the concerned personnel. This process ensures real-time monitoring, accurate inventory control, and streamlined operations in medical facilities.

Step-1: Team Gathering, Collaboration, and Problem Statement Selection

Task Summary:

The team collaborates to identify the problem statement — managing medical inventory efficiently to prevent stock issues, expiries, and ensure regulatory compliance.

Step-2: Brainstorm, Idea Listing, and Grouping:

Supplier ID	Actual Delivery Date	Purchase Order: Purchase Order ID	Product ID: Product ID	Order Count	Product ID: Product Name	Quantity Received	Amount
Supplier-001 (12)	18/06/2024 (2)	Purchase-0002 (2)	Gen-0001	2	Syringes	50	€250.00
			Cap-0001	2	Dolo 650	150	€3,000.00
	22/06/2024 (3)	Purchase-0001 (3)	Subtotal			200	€3,250.00
				2		200	€3,250.00
Supplier-002 (15)	23/06/2024 (3)	Purchase-0003 (3)	Gen-0001	3	Syringes	5	€25.00
			Gen-0001	3	Syringes	10	€50.00
			Cap-0001	3	Dolo 650	100	€2,000.00
			Subtotal			115	€2,075.00
Supplier-003 (10)	11/07/2024 (4)	Purchase-0004 (4)		3		115	€2,075.00
			Syr-0001	3	Calpol 120mg Syrup	100	€4,000.00
			Cap-0001	3	Dolo 650	50	€1,000.00
			Gen-0001	3	Syringes	400	€2,000.00
Supplier-004 (8)	11/07/2024 (4)	Purchase-0005 (4)	Subtotal			550	€7,000.00
				3		550	€7,000.00
			Syr-0001	4	Calpol 120mg Syrup	100	€4,000.00
			N-0001	4	Saline	50	€2,500.00
Supplier-005 (7)	11/07/2024 (4)	Purchase-0006 (4)	Cap-0001	4	Dolo 650	100	€2,000.00
				4		100	€2,000.00
				4		100	€2,000.00
				4		100	€2,000.00

Brainstorm:

Team members collaborate to explore innovative ideas for improving medical inventory control. Topics include real-time tracking, expiry alerts, supplier integration, and automated reporting. Creative input is encouraged to identify challenges and opportunities within the inventory workflow.

Idea Listing:

All proposed ideas are documented — from simple features like item search and barcode scanning to advanced solutions such as AI-based demand forecasting or blockchain for tracking medical supplies. This step ensures that every suggestion is captured for evaluation.

Grouping:

Ideas are categorized into relevant groups such as **Inventory Monitoring, Automation & Alerts, Data Integrity, Supplier Management, and Compliance & Safety**. This helps in identifying key focus areas and forming the foundation for project planning.

Step-3: Idea Prioritization:

Idea Prioritization:

Idea prioritization helps streamline the development of a comprehensive Medical Inventory Management System. The primary goal is to ensure real-time visibility, safety, and regulatory compliance in handling medical supplies.

This process allows the team to focus on high-impact areas such as **expiry management, low-stock notifications, and data integrity**. By prioritizing ideas, we separate critical safety functions (like preventing use of expired items) from routine stock updates and administrative tasks.