Project Design Phase
Proposed Solution

Date	01 November2025
Team ID	NM2025TMID02455
Project Name	Medical Inventory Management
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Requirement Gathering	Identify inventory issues such as out-of-stock items, excess stock, expiry handling, and supplier management needs in hospitals/pharmacies.
2.	System Analysis	Analyze current manual methods, data flow, risk of errors, and workflow delays affecting patient care.
3.	Plan Development	Develop functional requirements like automated tracking, alerts, reporting, secure access, dashboard, etc.
4.	System Implementation	Implement inventory tracking system with modules for stock update, purchase entry, expiry & low stock alerts
5.	Testing & Validation	Perform functionality and integration testing to ensure accuracy in stock logs, alerts, and data security.

6.	Monitoring & Optimization	Continuously monitor inventory performance, gather user feedback, and optimize workflows to improve efficiency..

Conclusion

The Medical Inventory Management System streamlines inventory processes, ensures timely availability of supplies, reduces wastage, and improves operational efficiency, ultimately enhancing the quality of healthcare services.

Reference: Chatgpt

Solution Description:

The Medical Inventory Management System provides an automated and centralized platform for managing medical supplies, equipment, and medicines in healthcare facilities. The system enables real-time tracking of stock levels, while alerting staff about low inventory and upcoming expiry dates to prevent shortages and wastage. It allows authorized users such as pharmacists, nurses, and administrators to easily update stock records, generate purchase requests, and maintain supplier details. With features like detailed reports, secure login access, and efficient data handling, the system improves accuracy, reduces human errors, and enhances decision-making. Ultimately, it supports seamless workflow and ensures timely availability of essential items required for quality patient care.