

Project Design Phase-II

Technology Stack Template

Date:	03.11.2025
Project Name:	Medical Inventory Management
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Introduction:

The Medical Inventory Management System (MIMS) leverages Salesforce's cloud-based architecture to automate and streamline inventory processes for healthcare institutions. The technology stack combines CRM features, Apex programming, automation tools, and analytics to ensure secure, efficient, and real-time operations.

Objective :

The main goal of the technology stack is to build a scalable, reliable, and secure healthcare inventory system using Salesforce's low-code and high-code capabilities. It enables real-time analytics, process automation, and cloud accessibility from anywhere.

Technology Stack Overview:

Category	Technology / Tool	Purpose
Platform	Salesforce Cloud	Core CRM platform hosting all modules of MIMS.
Database	Salesforce Object Storage (SOQL)	Stores product, supplier, purchase, and transaction data.

Programming Language	Apex	Custom logic, triggers, and backend processing.
Automation Tools	Salesforce Flows, Workflow Rules, Validation Rules	Custom logic, triggers, and backend processing.
User Interface (UI)	Lightning App Builder, Lightning Components	Creates responsive and dynamic app interfaces.
Analytics and Reporting	Salesforce Reports & Dashboards	Visualizes stock status and supplier performance.
Integration	Salesforce API / AppExchange	Connects with third-party systems.
Security	Profiles, Roles, and Permission Sets	Ensures controlled access and data protection.
Version Control	GitHub	Maintains version control and collaboration.
Documentation Tools	Notion, Google Docs, Canva	For collaboration, design, and documentation.

Advantages of Chosen Stack:

- 100% cloud-based – no local installation required.
- Highly customizable for hospitals and pharmacies.
- Combines low-code and high-code flexibility.
- Built-in data security and access control.
- Real-time analytics for smarter decision-making.

Future Enhancement Possibilities:

- Integration with Hospital Management Systems (HMS).
- Mobile application using Salesforce Mobile SDK.
- AI-based demand forecasting and expiry prediction.
- IoT-based real-time stock tracking.

Conclusion:

The Technology Stack of MIMS forms the backbone of its success. By leveraging Salesforce's automation tools, Apex logic, and analytics capabilities, the system ensures secure, intelligent, and scalable management of medical inventory across healthcare sectors.

“Technology is the medicine that cures inefficiency.”