

# Project Design Phase-II

## Technology Stack Template

|                      |                                  |
|----------------------|----------------------------------|
| <b>Date:</b>         | 03.11.2025                       |
| <b>Project Name:</b> | Medical Inventory Management     |
| <b>Team Id:</b>      | E6B89203D9C618592C84F3385E57DB7C |

**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.”**