Project Design Phase

Proposed Solution

Date	07-11-2025
Team ID	NM2025TMID05637
Project Name	Medical Inventory Management

1. Introduction

The Proposed Solution describes the Medical Inventory Management System (MIMS) in detail, explaining how it addresses the challenges identified in the ideation phase. This section defines system functionalities, workflows, and user interactions to ensure operational efficiency, accuracy, and compliance in medical inventory management.

Objectives:

Provide a comprehensive description of system features.

Explain how each feature resolves specific user problems.

Include examples, scenarios, and workflows for clarity.

2. System Overview

The MIMS is a cloud-based Salesforce application that integrates:

1. Inventory Management – Tracks all medical products, stock levels, and categories.

2. Supplier Management – Stores supplier details, ratings, and history.

3. Purchase Order Automation – Generates, approves, and tracks POs.

4. Expiry Monitoring – Alerts users to products nearing expiry.

5. Reporting and Analytics – Dashboards and automated reports for informed decision-making.

6. Role-Based Access – Different user roles with tailored access permissions.

3. Feature Description

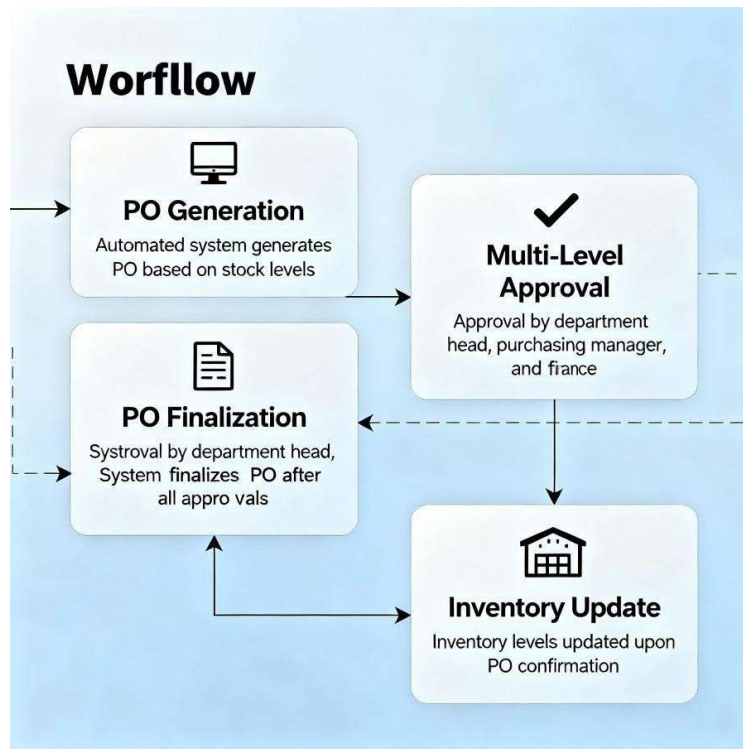| Feature	Description	User Impact
Real-Time Inventory	Dashboard shows stock levels, low-stock alerts	Prevents stockouts and overstocking
Supplier Performance	Supplier database with ratings and history	Faster, reliable procurement
PO Management	Auto-generated POs, approval workflow	Reduces duplication and delays
Expiry Alerts	Notifications for near-expiry products	Reduces wastage, ensures compliance
Reporting	Automated weekly/monthly reports	Quick, accurate decision-making
Role Management	Assign roles and permissions	Ensures security and proper data access

4. Workflow Scenarios

Scenario 1: Low Stock Handling

1. Inventory level drops below threshold.

2. System sends automated alert to Inventory Manager.

3. PO suggested based on supplier ratings.

4. Approval workflow triggers PO creation.

5. Inventory updated on receipt.

Scenario 2: Expiry Management

1. Warehouse Supervisor receives expiry alert.

2. System generates a report of products expiring in 30 days.

3. Manager schedules replacement or disposal.

4. Reports updated for audit compliance.

Worfllow

PO Generation
Automated system generates PO based on stock levels

Multi-Level Approval
Approval by department head, purchasing manager, and fiance

PO Finalization
Systroval by department head, System finalizes PO after all appro vals

Inventory Update
Inventory levels updated upon PO confirmation

5. Conclusion

The Proposed Solution leverages Salesforce's robust features to create a comprehensive, automated, and secure medical inventory management system. By integrating dashboards, alerts, automated workflows, and reporting, MIMS improves operational efficiency, reduces errors, ensures compliance, and supports informed decision-making