Project Design Phase

Problem – Solution Fit

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Project Name: Medical Inventory Management

User Story

The **Medical Inventory Management System** is a comprehensive **Salesforce-based application** developed to streamline and automate the management of medical inventory operations. The system enables healthcare organizations to efficiently handle all aspects of inventory management—from supplier coordination to product lifecycle tracking.

Through this application, users can:

- Maintain **detailed supplier records**, including contact and performance information.

- **Manage purchase orders** efficiently, ensuring timely procurement and replenishment.

- **Track product details and transactions** to maintain data accuracy and transparency.

- **Monitor product expiry dates** to prevent the usage of expired medical items and ensure patient safety.

By integrating these functionalities, the system enhances **operational efficiency**, **data reliability**, and **decision-making** within healthcare inventory processes, providing a centralized and intelligent management solution.

Project Overview

The **Medical Inventory Management System** is a **Salesforce application** designed to optimize and automate the complete workflow of medical inventory management. It enables healthcare facilities, pharmacies, and distributors to effectively manage their inventory and supply chain through a single, unified platform.

Key Objectives:

- **Supplier Management:** Maintain complete profiles of suppliers with contact details, performance history, and associated purchase orders.

- **Purchase Order Management:** Streamline order creation, approval, and tracking processes to ensure timely procurement.

- **Product Tracking:** Catalog detailed product information, including descriptions, categories, stock levels, and pricing details.

- **Expiry Monitoring:** Automatically track and alert users about upcoming product expirations to ensure safety and compliance.

- **Reporting and Analytics:** Generate comprehensive reports to analyze supplier performance, purchase trends, and stock utilization.

By implementing this Salesforce-based solution, healthcare organizations can achieve:

- **Improved data accuracy** through centralized record-keeping.

- **Enhanced efficiency** in inventory operations.

- **Reduced wastage and financial loss** due to expired or misplaced stock.

- **Better decision-making** through real-time analytics and insights.

Problem – Solution Fit Overview

The **Problem–Solution Fit** ensures that the medical inventory management challenges faced by hospitals, pharmacies, and clinics are clearly understood and effectively addressed. It enables healthcare institutions to streamline operations, reduce wastage, and ensure the consistent availability of critical medicines and equipment.

Purpose

- **Solve complex inventory issues** by ensuring accurate stock visibility and control.

- **Prevent shortages or overstocking** through predictive analysis and alert systems.

- **Improve patient safety** by eliminating expired or unavailable products.

- **Automate manual tasks** to minimize human errors and administrative burden.

- **Ensure compliance** with healthcare and pharmaceutical standards.

Problem Statement

Healthcare organizations often face **inefficient inventory management** that leads to drug shortages, wastage, and expired stock. Manual or semi-automated systems cause data inaccuracy, miscommunication between departments, and regulatory non-compliance. These inefficiencies increase operational costs, reduce productivity, and may impact patient care quality.

| STEP 1 | STEP 2 | STEP 3 | STEP 4 | STEP 5 |

RECEIVING PHARMACY INVENTORY · STOCK LEVEL MONITORING · ORDER GENERATION · EXPIRATION DATE MANAGEMENT · REPORTING & ANALYTICS

References

1. **World Health Organization (WHO)**. *"Model guidance for the storage and transport of time- and temperature–sensitive pharmaceutical products."* WHO Technical Report Series, 2022.

2. **HealthIT.gov**. *"How Health IT Improves Inventory Management and Supply Chain Efficiency."* U.S. Department of Health and Human Services, 2023.

3. **International Journal of Healthcare Management**. *"A Study on Automation of Medical Inventory Systems in Hospitals."* Vol. 15, Issue 2, 2024.

4. **Journal of Pharmacy Practice and Research**. *"Optimizing Medicine Inventory Management Using Technology."* 2023.