

Ideation Phase

Project Title: Medical Inventory Management System

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1.1 Introduction

In today's healthcare sector, managing medical supplies effectively is vital to ensure smooth operations and patient safety. Many organizations still depend on manual inventory systems that result in human errors, product wastage, and delays in procurement. The *Medical Inventory Management System* addresses these challenges using Salesforce's cloud infrastructure, providing a centralized and automated solution.

1.2 Objective

The main objective is to design a Salesforce-based system that can efficiently manage suppliers, products, and purchase orders while tracking inventory levels and expiry dates. The system aims to automate repetitive tasks, provide actionable insights, and ensure real-time visibility across all medical inventory operations.

1.3 Problem Statement

Manual inventory systems cause multiple issues, such as:

- Difficulty in tracking product expiry and availability.
- Delays in procurement due to missing supplier details.
- Inaccurate stock counts and redundant data.
- Lack of automated alerts and analytics for management decisions.

These limitations make it crucial to develop a cloud-based digital solution that ensures data accuracy, transparency, and operational efficiency.

1.4 Proposed Solution

The proposed Salesforce application introduces automation through Apex Triggers, Flows, and Validation Rules to minimize manual work. It integrates Supplier, Product, and Purchase Order modules into a unified platform, enabling users to easily monitor stock levels, generate reports, and receive expiry alerts.

1.5 Key Features

- Supplier and product management modules.
- Automated purchase order tracking.
- Expiry and low-stock alerts.
- Validation rules for accurate data entry.
- Reports and dashboards for performance insights.
- Role-based access control for security.

1.6 Technology Stack

- **Platform:** Salesforce Developer Edition
- **Frontend Tools:** Lightning App Builder, Object Manager
- **Backend Logic:** Apex Triggers, Flows, Validation Rules
- **Data Storage:** Salesforce Cloud Database
- **Analytics Tools:** Reports and Dashboards

1.7 Expected Outcome

A smart, automated system that simplifies inventory operations, reduces wastage, and enhances medical supply chain transparency.

1.8 Conclusion

The ideation phase helped in clearly identifying the challenges within existing inventory systems and formulating a robust Salesforce-based solution. This stage laid a strong foundation by defining objectives, features, and technologies to be used. It sets the direction for the upcoming planning phase, ensuring the project has a clear vision and achievable goals.