

Phase 4 : Requirement Analysis Phase

Project Title : Medical Inventory Management System

Introduction

The **Requirement Analysis Phase** focuses on identifying and understanding the functional and non-functional requirements of the Medical Inventory Management System. This phase ensures that the system is aligned with the goals of healthcare organizations by automating and simplifying the process of tracking, managing, and analyzing medical supplies through Salesforce CRM.

Purpose of the System

The main purpose of the Medical Inventory Management System is to create a **centralized and automated platform** for managing medical supplies. The system helps hospitals, clinics, and pharmacies to monitor stock levels, prevent expiry losses, automate purchase workflows, and generate detailed inventory reports using Salesforce tools and automation.

Functional Requirements

The system must support the following key functionalities:

1. Inventory Management:

- Add, update, and delete medicine records.
- Track available stock quantity and expiry date.

2. Supplier Management:

- Maintain details of suppliers, their products, and contact information.
- Link medicines with their respective suppliers.

3. Purchase Management:

- Record purchase details and update stock automatically.
- Generate purchase reports and track supplier performance.

4. Alerts and Notifications:

- Automatic alerts for low stock and near-expiry medicines using Salesforce Flow or Process Builder.

5. Reports and Dashboards:

- Create dynamic dashboards for stock levels, expired items, and purchase statistics.
- Generate real-time analytical reports using Salesforce Reports.

6. User Access Management:

- Provide role-based access to ensure data privacy and control.
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Non-Functional Requirements

The system should also meet the following non-functional requirements:

1. Performance:

- The system should update and display data in real-time.

2. Scalability:

- Easily adaptable to hospitals and clinics of different sizes.

3. Security:

- Protect sensitive medical and supplier data using Salesforce's profile and role-based security.

4. Usability:

- Simple and intuitive interface built using Salesforce Lightning App Builder.

5. Reliability:

- The system should ensure data consistency and accuracy at all times.
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User Requirements

The target users of the system include:

- **Admin / Project Lead:** Can manage users, suppliers, and overall system setup.
- **Pharmacist / Inventory Manager:** Manages stock updates, purchases, and reports.
- **Hospital Staff:** Can view stock availability and request medicines.
- **Management:** Can view analytics, performance reports, and inventory summaries.

System Requirements

Hardware Requirements:

- Computer or laptop with stable internet connection.

Software Requirements:

- Salesforce CRM Developer Edition or Organization Account.
 - Browser (Google Chrome / Microsoft Edge).
 - GitHub for version control and backup.
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Data Requirements

The system requires the following data for smooth operation:

- Medicine details (name, batch, expiry, quantity).
 - Supplier details (name, contact, supplied items).
 - Purchase records (date, quantity, cost, supplier).
 - Stock transactions (stock-in and stock-out entries).
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Expected Outcome

- Clearly defined functional and technical requirements for the system.
 - Blueprint for Salesforce object structure, automation flows, and dashboards.
 - A reliable and efficient base for development and implementation.
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Conclusion

The **Requirement Analysis Phase** helps establish a strong understanding of what the Medical Inventory Management System must achieve. By analyzing user needs, system functionality, and performance expectations, this phase ensures that the Salesforce-based solution will meet all objectives efficiently. It forms the foundation for the design, development, and implementation phases to follow.