# MEDICAL INVENTORY MANAGEMENT

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College Code: bru36

Team ID: BC0BCEAA26E26C38AD545A16345F6A2F

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## 1. INTRODUCTION

#### 1.1 Project Overview -

The Medical Inventory Management System is a Salesforce-based application designed to streamline the tracking and management of medicines, medical supplies, and equipment in healthcare organizations such as hospitals, pharmacies, and clinics.

The main objective of this project is to provide a reliable and efficient solution to common challenges like stockouts, expired medicines, and manual errors in inventory handling. By leveraging Salesforce features such as custom objects, relationships, validation rules, flows, Apex triggers, reports, and dashboards, the system ensures that medical inventory is always accurate, up to date, and accessible.

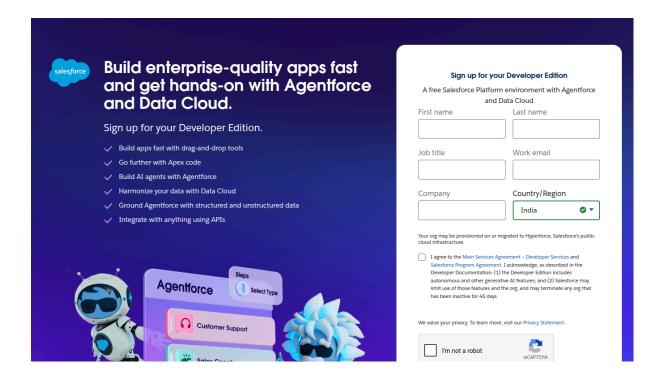
## 1.2 Purpose -

The purpose of this project is to design and implement a Salesforce-based Medical Inventory Management System that enables efficient monitoring, tracking, and management of medicines and medical supplies within healthcare organizations. The system is intended to address common issues faced in manual inventory handling, such as stock shortages, expired medicines, and data inaccuracy, by providing a centralized and automated solution. By leveraging Salesforce features like custom objects, automation tools, and dashboards, the project ensures that healthcare staff can maintain accurate records, reduce wastage, and make better decisions in real time. Ultimately, the purpose of this project is to improve the overall efficiency and reliability of medical inventory processes, while also demonstrating the flexibility of Salesforce beyond its traditional CRM role.

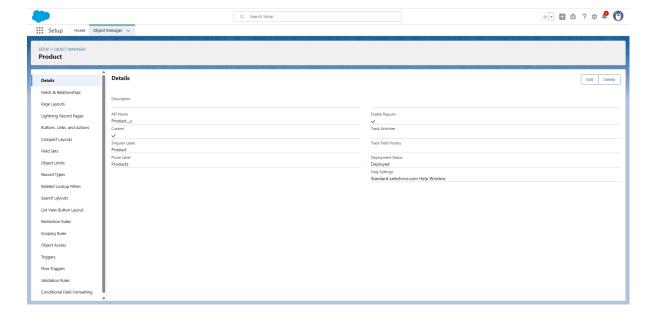
#### 2. DEVELOPMENT

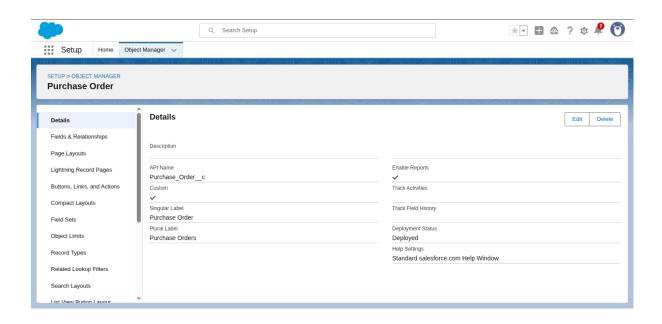
**Creating a developer account :** We can create an developers account in salesforce by using the following ur

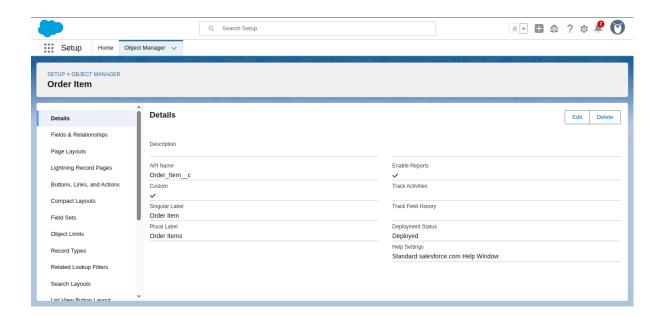
URL: https://www.salesforce.com/form/developer-signup/?d=pb

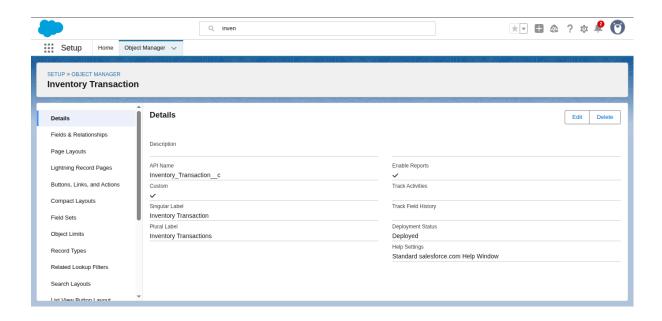


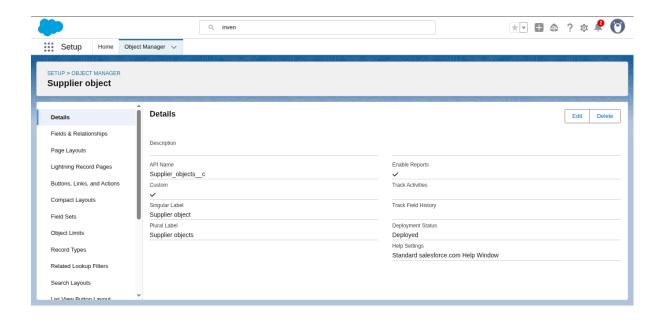
**Creating objects:**- We created object named Products , Purchase Order, Order Item, Inventory Transaction and Supplier.



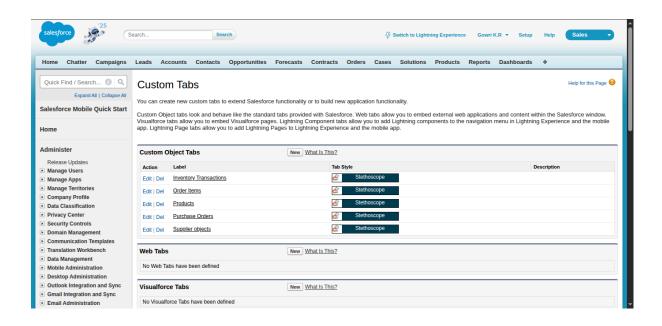




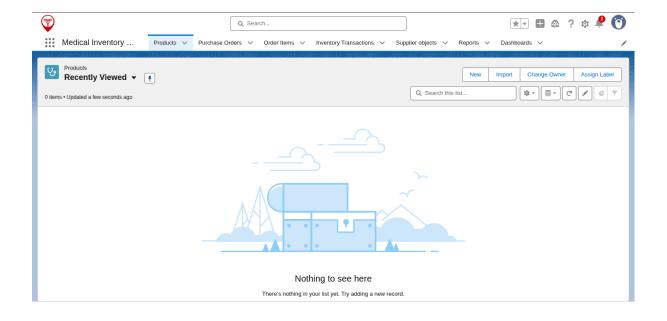




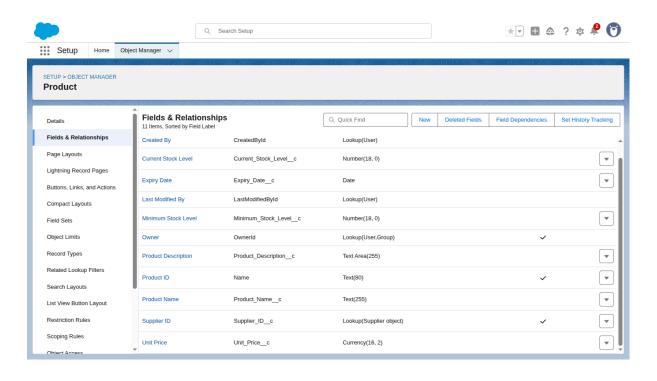
**Creating Tabs: -** For Tabs, We have created the tabs for the custom made objects Products , Purchase Order, Order Item, Inventory Transaction and Supplier.

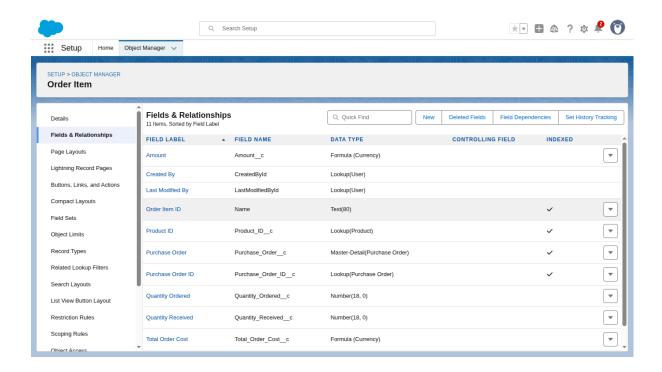


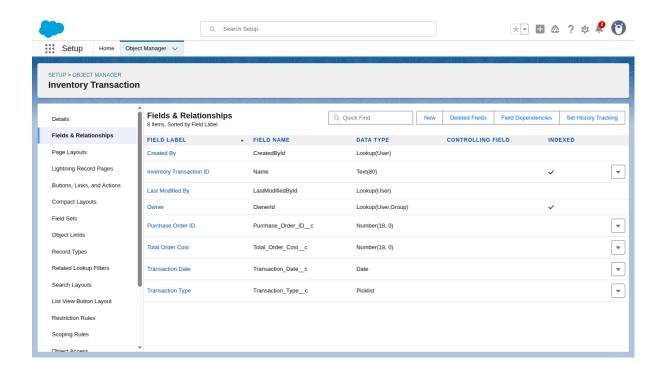
Creating the Lightning app: - We developed a Lightning app named 'Medical Inventory Management', which included all the essential items such as Products, Purchase Orders, Order Items, Inventory Transactions, Suppliers, Reports, and Dashboards. The app was configured with the required profiles, including the System Administrator, to ensure proper access and management

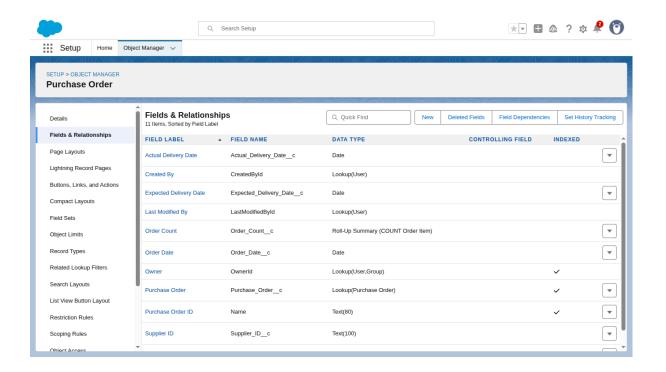


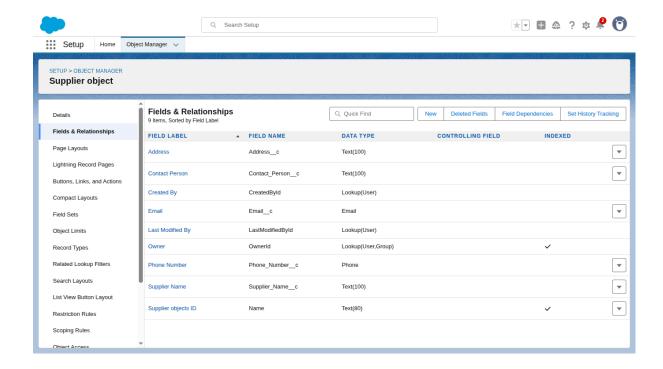
**Configuring Fields and Relationship :-** We created various fields and relationship for each custom objects.



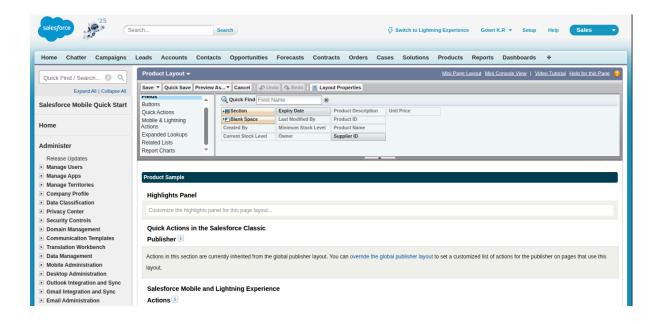


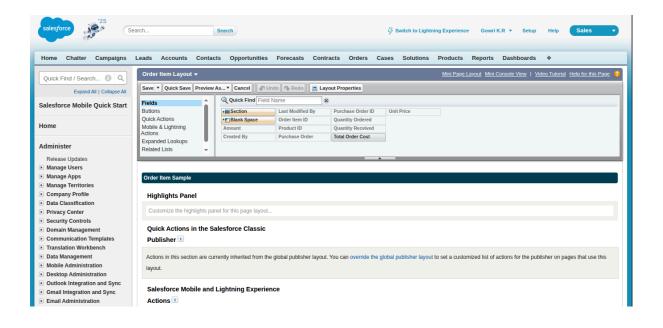


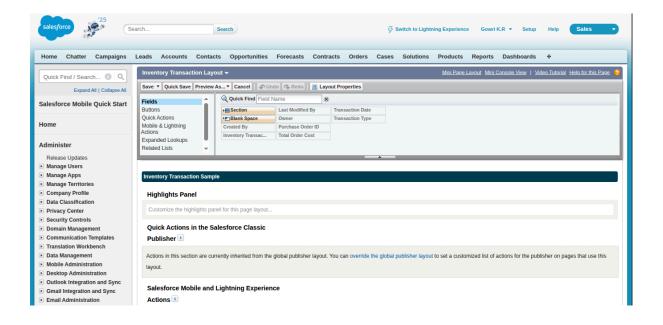


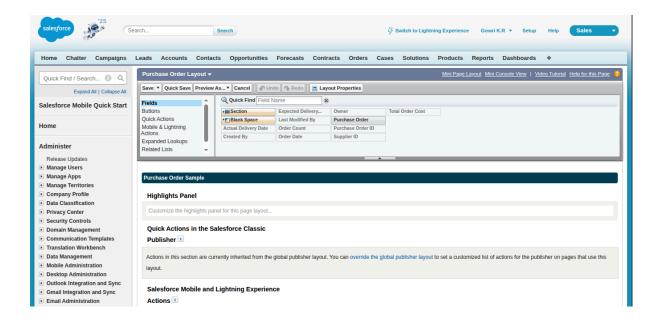


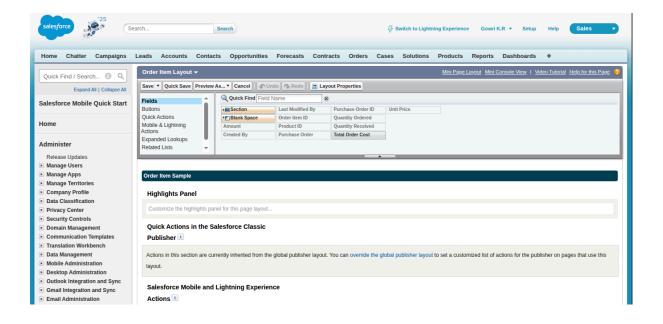
Setup of the Page Layout:- We edited the Page Layout for the custom objects.



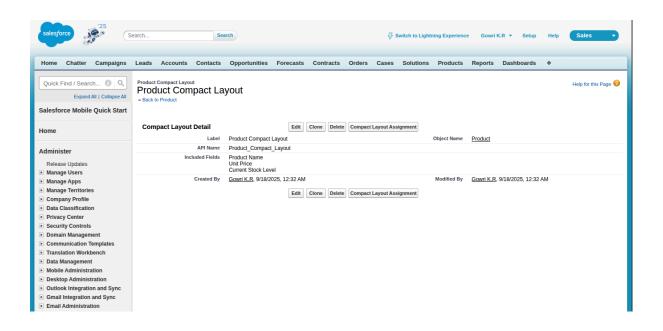


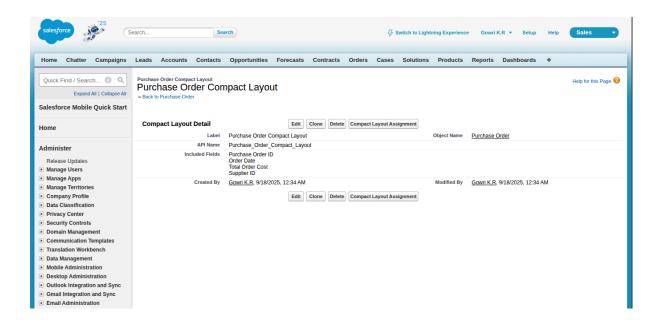




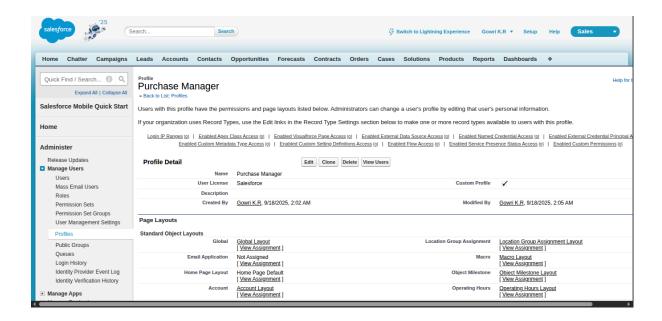


**Compact Layout:-** We created Compact Layout for the Custom object Product and Purchase Order.

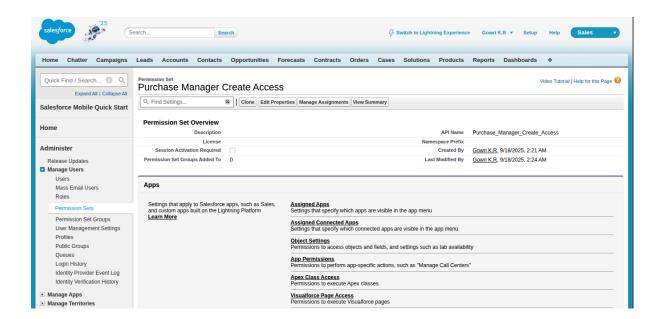




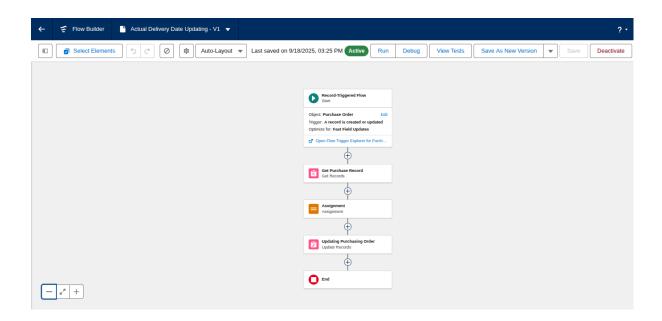
**Profiles:-** We created Profiles named Inventory Manager and Purchase Manager.



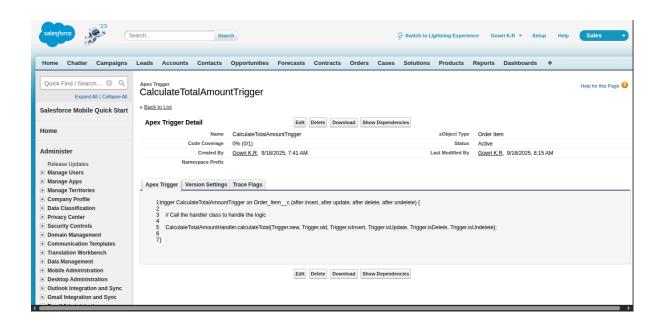
#### Permission Sets:- We created Permission set for the Medical Inventory



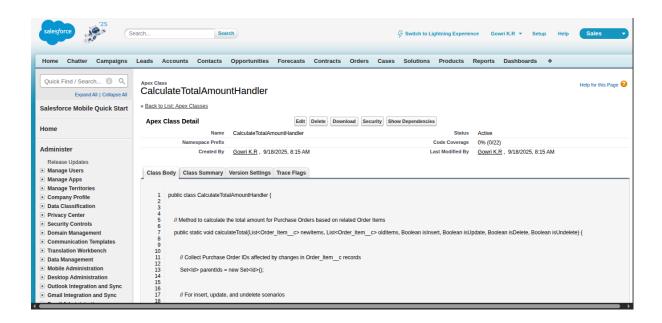
**Flows:-** We created flow named Actual Delivery Date Update to update the actual delivery date.



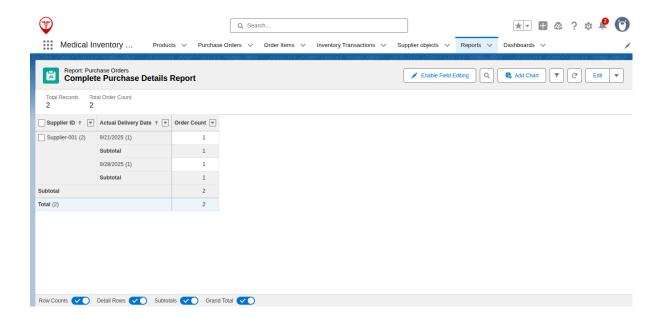
Apex Triggers:- We created the trigger to calculate the Total amount on Order item.

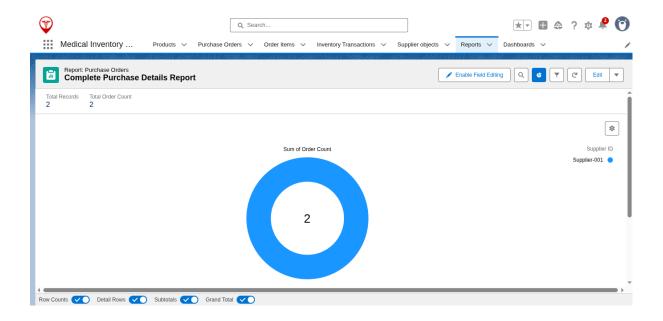


Apex Classes:- We created Apex Handler class.

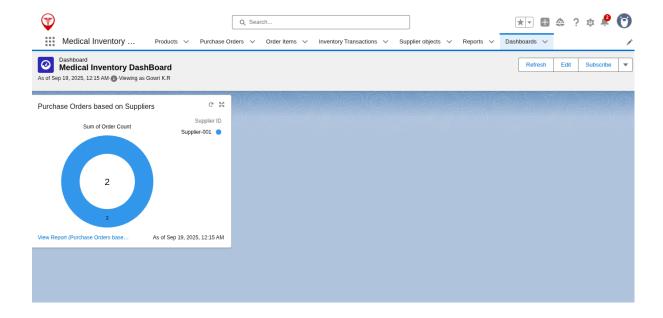


**Reports:-** Creating Reports named Purchase Orders Click Start report and Complete Purchase Details Report.





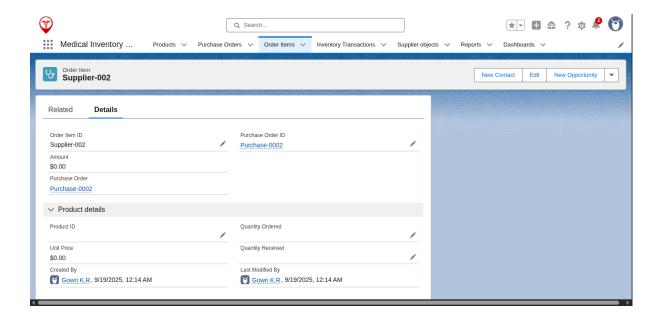
Dashboards:- We created the Dashboard for the Medical Inventory Management.



# 3.FUNCTIONAL AND PERFORMANCE TESTING

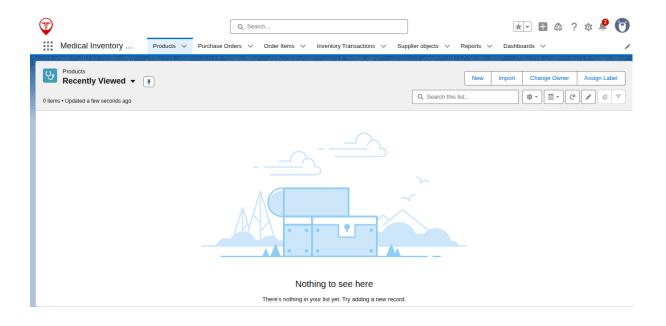
# **Performance Testing**

Testing the Triggers to get the total amount in the Order Item

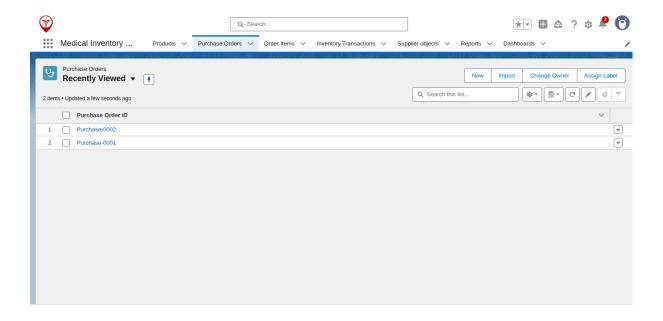


## **RESULTS:-**

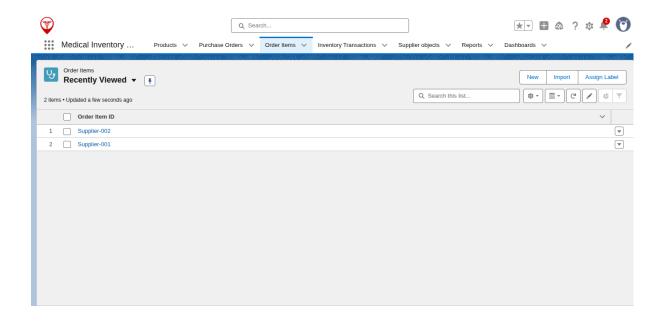
# **Product Page**



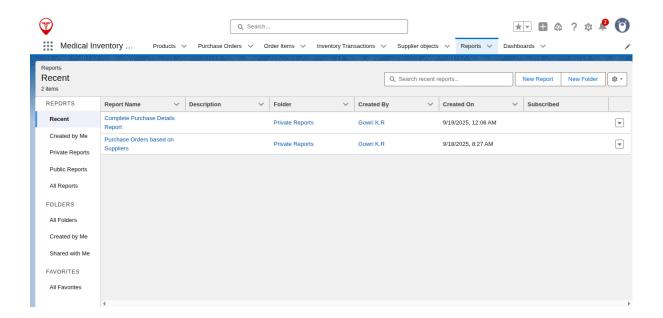
# **Purchase Order Page**



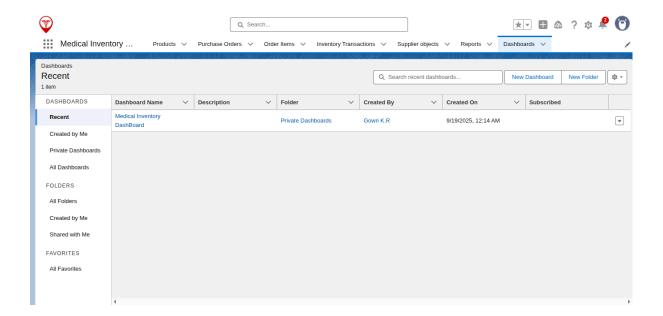
# **Order Item Page**



# **Reports Page**



# **Dashboards Page**



# ADVANTAGES AND DISADVANTAGES OF MEDICAL INVENTORY MANAGEMENT:-

### **Advantages:**

The Salesforce-based Medical Inventory Management System provides a centralized and reliable way to manage medicines, suppliers, and transactions. It ensures real-time tracking of stock, which helps in avoiding shortages or overstocking. Features like expiry and low-stock alerts reduce wastage and make sure critical medicines are always available. Automation through validation rules, flows, and triggers minimizes manual errors, while reports and dashboards give clear insights for better decision-making. Being cloud-based, the system is accessible anytime and offers strong scalability, making it suitable for organizations of different sizes.

## Disadvantages:

Despite its benefits, the system also comes with a few challenges. The initial setup and customization in Salesforce require technical knowledge, which may be difficult for beginners. Since it is cloud-based, the platform is dependent on a stable internet connection. Licensing and storage costs in Salesforce can be high for smaller clinics or pharmacies. In addition, there is a learning curve for users to fully understand and work with reports, dashboards, and automation features, and certain advanced customizations may require coding knowledge or third-party integrations.

#### CONCLUSION

The Salesforce-based Medical Inventory Management System successfully demonstrates how a CRM platform can be customized to address critical needs in the healthcare sector. By integrating medicines, suppliers, purchase orders, and transactions into one centralized system, it ensures accuracy, efficiency, and real-time monitoring of medical stock. Features such as automation, validation rules, and dashboards help reduce manual errors, minimize wastage, and provide valuable insights for better decision-making.

Although there are certain challenges like setup complexity, cost, and the need for user training, the long-term benefits outweigh these limitations. The system can be applied in hospitals, pharmacies, and clinics of various scales, and it can also be extended further to support larger healthcare networks.

Overall, this project highlights the flexibility of Salesforce as a platform and its potential to improve efficiency and reliability in medical inventory management.