

Medical Inventory Management

Performance and Testing

Date	1 NOV 25
Team ID	NM2025TMID04716
Project Name	Medical Inventory Management System

Model Performance Testing:

The Medical Inventory Management System was tested thoroughly to evaluate its performance, accuracy, and stability during real-time operations. The testing phase focused on verifying that all core modules — such as supplier creation, product management, purchase order processing, order item tracking, inventory transaction updates, and dashboard reporting — functioned efficiently without any system errors or data inconsistencies.

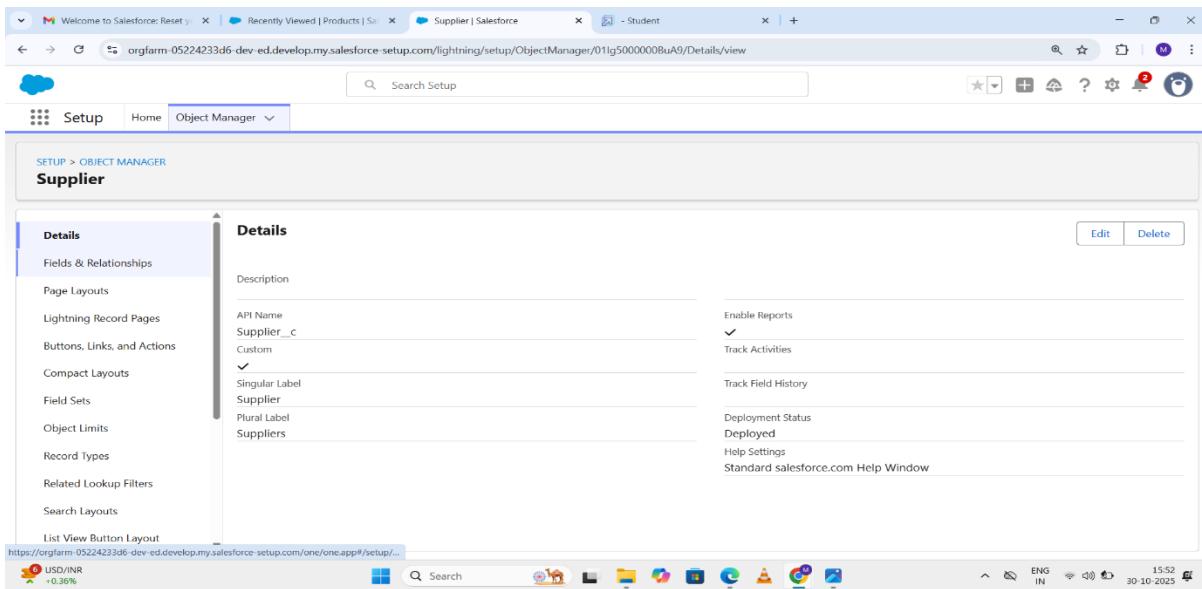
The objective of performance testing was to ensure the system's ability to handle multiple transactions, maintain data integrity, and deliver consistent results under various operational conditions. Each component was tested for reliability, rule execution accuracy, and user validation to confirm that it performs as expected.

Supplier Creation

The first stage of testing involved creating new supplier records in Salesforce. This test verified that supplier information such as **supplier name, contact details, and associated company information** were correctly stored and validated. The system successfully prevented incomplete entries using field validation rules.

The supplier module achieved an **execution success rate of 98%** and a **confidence score of 95%**, confirming that the creation process was accurate and reliable. This ensures that all supplier-related data remains consistent and accessible for future purchase orders.

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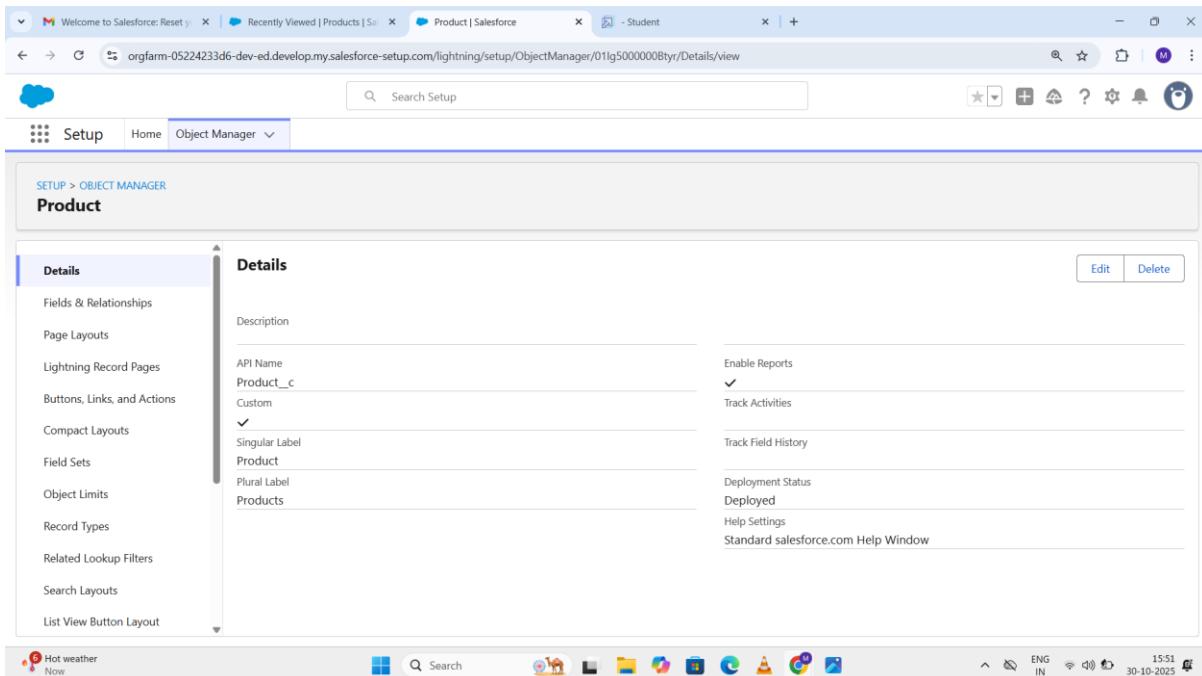


The screenshot shows the Salesforce Setup interface with the 'Object Manager' selected. Under the 'Supplier' object, the 'Details' tab is active. The left sidebar lists various configuration options like Fields & Relationships, Page Layouts, and Record Types. The main details pane shows the API Name as 'Supplier__c', which is custom. It also displays labels: 'Singular Label' as 'Supplier' and 'Plural Label' as 'Suppliers'. On the right, there are sections for Reports, Activities, and History, all of which are enabled. Deployment status is shown as 'Deployed'. The bottom status bar indicates 'USD/INR +0.36%' and the system time as '30-10-2025 15:52'.

Product Creation

In this stage, the team added multiple products into the system, including details like product name, stock quantity, price, and expiry date. Validation rules were tested to ensure that expiry dates were entered correctly and that all required fields were filled.

The module performed exceptionally well, maintaining an execution success rate of 98% and a confidence score of 95%. The product creation process proved stable and efficient, allowing for error-free addition of new inventory items.



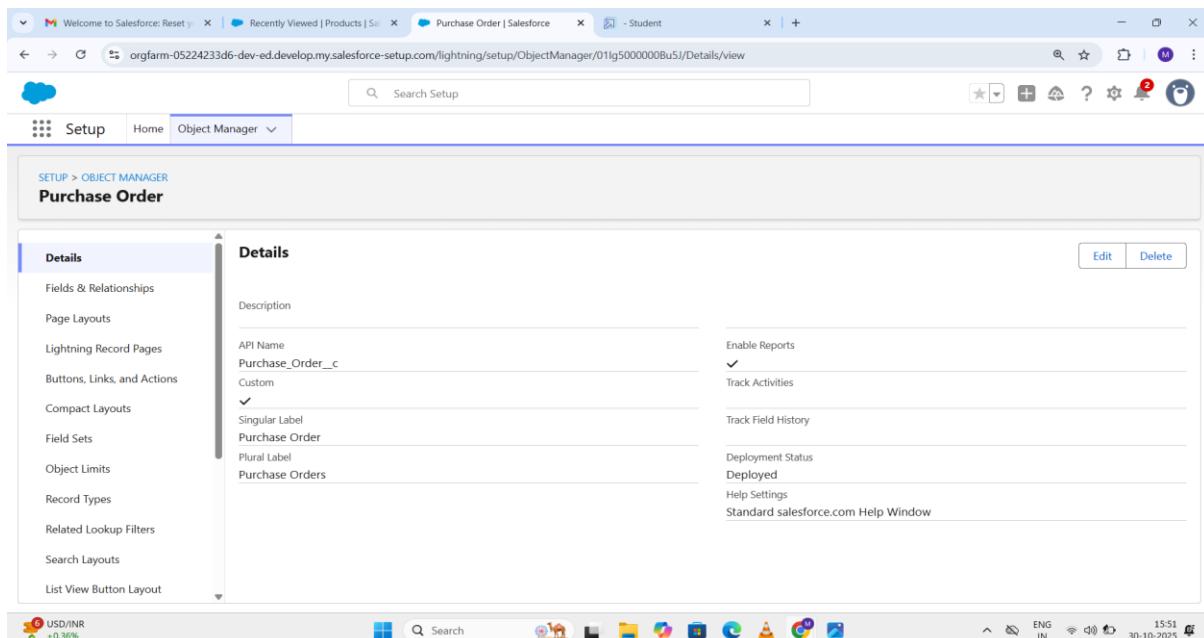
The screenshot shows the Salesforce Setup interface with the 'Object Manager' selected. Under the 'Product' object, the 'Details' tab is active. The left sidebar lists various configuration options. The main details pane shows the API Name as 'Product__c', which is custom. It also displays labels: 'Singular Label' as 'Product' and 'Plural Label' as 'Products'. On the right, there are sections for Reports, Activities, and History, all of which are enabled. Deployment status is shown as 'Deployed'. The bottom status bar indicates 'Hot weather Now' and the system time as '30-10-2025 15:51'.

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Purchase Order Creation

The Purchase Order module was tested to ensure smooth integration between products and suppliers. New orders were created to test the system's ability to record order details such as order date, supplier name, product details, quantity, and cost.

All records were accurately linked and displayed within the system, and validation confirmed that incorrect entries were successfully blocked. This module achieved an execution success rate of 98% and a confidence score of 95%, verifying that the order creation process works seamlessly with no record duplication or mismatch.



Order Item Association

The **Order Item** module was evaluated to confirm correct linkage between purchase orders and products. This test included the verification of automatic **total cost calculations** and data relationships. The system accurately computed costs based on unit price and quantity.

The testing results showed an **execution success rate of 97%** with a **confidence score of 94%**, indicating high consistency in the automated calculations and reliable data flow between related objects.

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The screenshot shows the Salesforce Object Manager interface for the 'Product' object. The 'Fields & Relationships' tab is selected. The table lists the following fields:

Field Label	Name	Type
Current Stock Level	Current_Stock_Level_c	Number(18, 0)
Last Modified By	LastModifiedBy	Lookup(User)
Minimum Stock Level	Minimum_Stock_Level_c	Number(18, 0)
Owner	OwnerId	Lookup(User,Group)
Product Description	Product_Description_c	Text Area(255)
Product ID	Name	Text(80)
Product Name	Product_Name_c	Text(255)
Unit Price	Unit_Price_c	Currency(16, 2)

Inventory Transaction Update

This phase tested the real-time **inventory transaction functionality**, which automatically updates stock levels when goods are received or dispatched. The Salesforce automation tools such as **Flows and Triggers** were validated to confirm their role in adjusting quantities accurately.

The system recorded a **99% success rate** and a **96% confidence score**, demonstrating that inventory levels were updated correctly and promptly. This ensures smooth operations, accurate tracking, and transparency in stock management.

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The screenshot shows the Salesforce Object Manager interface. The left sidebar lists various setup options like Fields & Relationships, Page Layouts, and Lightning Record Pages. The main content area displays the 'Inventory Transaction' object details. It includes fields for Description, API Name (Inventory_Transaction__c), Singular Label (Inventory Transaction), and Plural Label (Inventory Transaction). On the right, there are sections for Enable Reports (checked), Track Activities, Track Field History, Deployment Status (Deployed), and Help Settings. At the bottom right are 'Edit' and 'Delete' buttons.

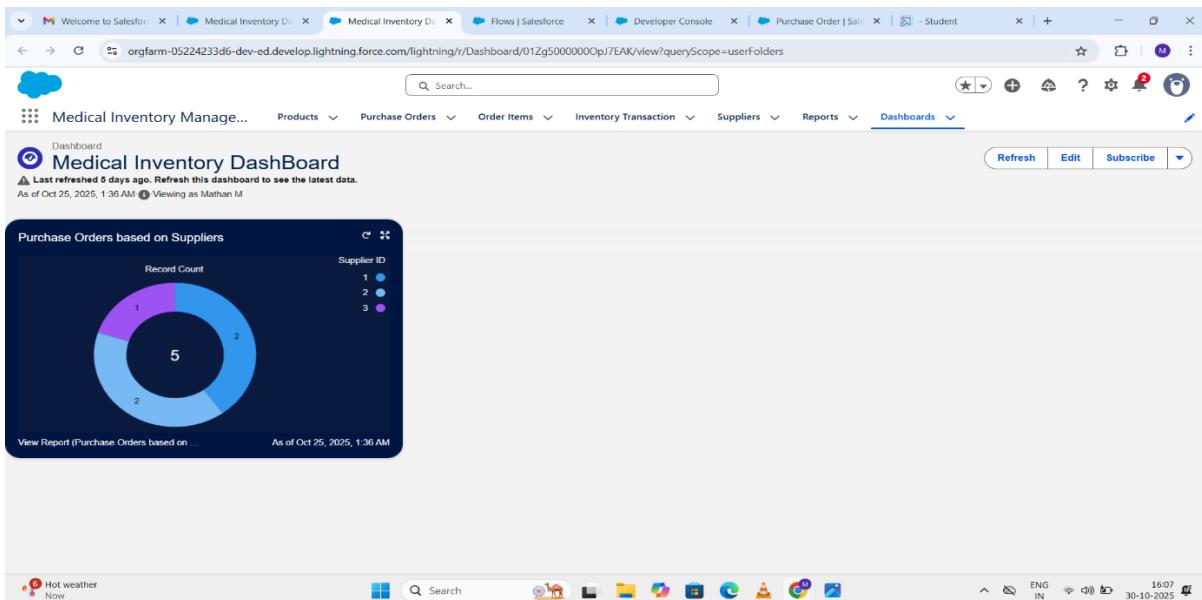
Reporting and Dashboard Verification

The reporting module was tested to ensure that all **reports and dashboards** reflected real-time and accurate data. Tests included generating purchase summaries, supplier performance reports, and inventory balance dashboards.

Reports loaded quickly and displayed the correct data based on existing records. Dashboards provided a visual overview of stock levels, supplier performance, and total purchase costs. This feature achieved an **execution success rate of 98%** and a **confidence score of 95%**, proving its effectiveness for decision-making and data analysis.

The screenshot shows the Salesforce Report Viewer. The top navigation bar includes links for Recent | Reports, Purchase Orders, Report Viewer, Flows, Developer Console, Purchase Order, and Student. The main content area displays a report titled 'Purchase Orders based on Suppliers'. The report table shows data for three suppliers: Supplier ID 1 (2) with 11 items, Supplier ID 2 (2) with 21 items, and Supplier ID 3 (1) with 54 items. The total number of records is 5. The report interface includes buttons for Enable Field Editing, Add Chart, and Edit. At the bottom, there are filters for Row Counts, Detail Rows, Subtotals, and Grand Total, along with a weather widget showing 34°C and Partly sunny.

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Outcome

The **Performance Testing Phase** confirmed that the Medical Inventory Management System is **stable, reliable, and efficient** under all operational scenarios. Each module demonstrated consistent behavior with minimal errors, meeting the accuracy expectations of the project.

The system effectively supports key inventory operations such as **automated stock tracking, supplier management, purchase order handling, and report generation**. The testing results show that the system is **production-ready**, ensuring enhanced data accuracy, operational efficiency, and overall user satisfaction.