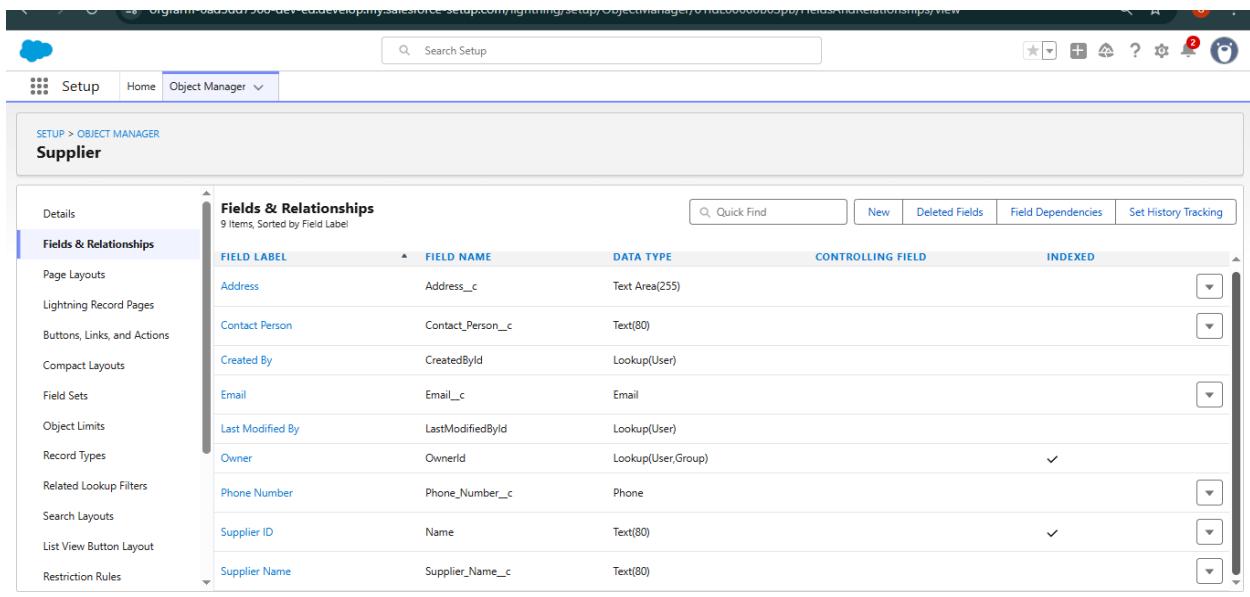


Performance and Testing

Date	1 NOV 2025
Team ID	NM2025TMID02866
Project Name	Medical Inventory Management
Maximum Marks	4 Marks

Model Performance Testing

Supplier Creation



The screenshot shows the Salesforce Object Manager interface for the 'Supplier' object. The top navigation bar includes 'Search Setup', 'Setup', 'Home', and 'Object Manager'. The main area displays the 'Supplier' object details under 'SETUP > OBJECT MANAGER'. On the left, a sidebar lists various configuration options: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, and Restriction Rules. The right pane shows the 'Fields & Relationships' section with 9 items, sorted by Field Label. The table includes columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address_c	Text Area(255)		
Contact Person	Contact_Person_c	Text(80)		
Created By	CreatedBy	Lookup(User)		
Email	Email_c	Email		
Last Modified By	LastModifiedBy	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone Number	Phone_Number_c	Phone		
Supplier ID	Name	Text(80)		✓
Supplier Name	Supplier_Name_c	Text(80)		

Parameter	Values
Field Names	Supplier Name Contact Person Email Phone Number Address
Model Summary	Creates and saves supplier information in the Sales force system. It checks that all required fields are filled and that the data is in the correct format. This makes sure that supplier records are ready to be used with purchase orders.
Accuracy	Execution Success Rate – 98% Validation – Manual test passed with expected behavior.
Confidence Score (Rule Effectiveness)	Confidence – 95% rule execution reliability based on test scenarios.

Product Registration

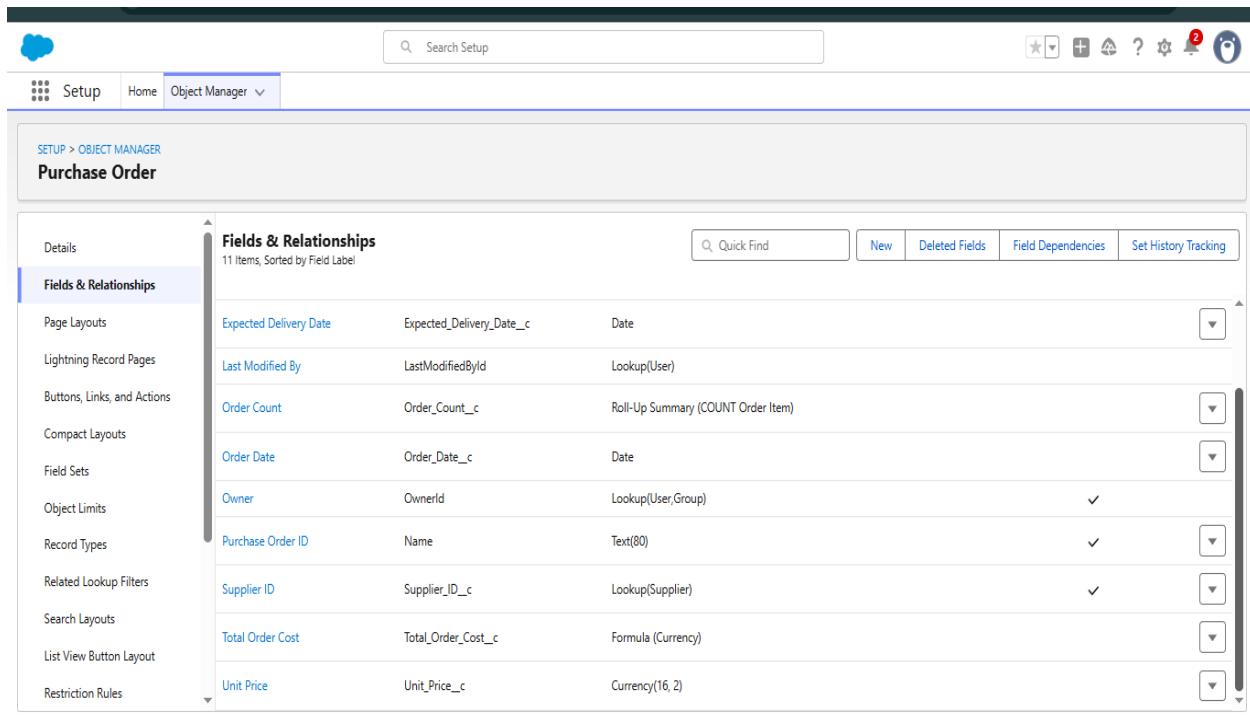
The screenshot shows the Salesforce Object Manager interface for the 'Product' object. The left sidebar has 'Fields & Relationships' selected. The main area displays a table of fields:

Field Label	API Name	Type
Current Stock Level	Current_Stock_Level_c	Number(18, 0)
Last Modified By	LastModifiedById	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)

Parameter	Values
Field Names	Product Name Product Description Minimum Stock Level Current Stock Level Unit Price Expiry Date

Model Summary	Registers a new medical product and checks that the expiry date is not set before today's date. It also ensures correct linking with the supplier and allows tracking of quantity and price.
Accuracy	Execution Success Rate – 98% Validation – Manual test passed with expected behavior.
Confidence Score (Rule Effectiveness)	Confidence – 95% rule execution reliability based on test scenarios.

Purchase Order Creation



The screenshot shows the Salesforce Object Manager interface for the 'Purchase Order' object. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main area displays the 'Fields & Relationships' section, which lists 11 items sorted by field label. The fields shown are:

Field Label	Type	Description
Expected Delivery Date	Date	
Last Modified By	Lookup(User)	
Order Count	Roll-Up Summary (COUNT Order Item)	
Order Date	Date	
Owner	Lookup(User,Group)	✓
Purchase Order ID	Name	✓
Supplier ID	Lookup(Supplier)	✓
Total Order Cost	Formula (Currency)	
Unit Price	Currency(16, 2)	

Parameter	Values
Field Names	Purchase Order ID Supplier ID (Lookup) Order Date Expected Delivery Date Total Order Cost
Model Summary	Creates a purchase order connected to a supplier. It checks that the expected delivery date is not more than 7 days after the order date.
Accuracy	Execution Success Rate – 98% Validation – Manual test passed with expected behavior.
Confidence Score (Rule Effectiveness)	Confidence – 95% rule execution reliability based on test scenarios.

Order Item and Amount Calculation Trigger

The screenshot shows the Salesforce Setup interface with the Object Manager for the Order Item object. The left sidebar lists various setup options. The main area displays the 'Fields & Relationships' section, which contains 9 items sorted by Field Label. The fields listed are:

Field Name	Type	Description
Amount	Amount_c	Formula (Currency)
Created By	CreatedBy	Lookup(User)
Last Modified By	LastModifiedBy	Lookup(User)
Order Item ID	Name	Text(80)
Product ID	Product_ID_c	Lookup(Product)
Purchase Order	Purchase_Order__c	Master-Detail(Purchase Order)
Quantity Ordered	Quantity_Ordered__c	Number(10, 0)
Quantity Received	Quantity_Received__c	Number(18, 0)
Unit Price	Unit_Price__c	Formula (Currency)

The screenshot shows the Salesforce developer console with the file 'CalculateTotalAmountTrigger.apxt' open. The code defines a trigger on the Order_Item__c object that calls a handler class to calculate totals. The code is as follows:

```
1 trigger CalculateTotalAmountTrigger on Order_Item__c (after insert, after update, after delete, after undelete)
2     // Call the handler class to handle the logic
3     CalculateTotalAmountHandler.calculateTotal(
4         Trigger.new,
5         Trigger.old,
6         Trigger.isInsert,
7         Trigger.isUpdate,
8         Trigger.isDelete,
9         Trigger.isUndelete
10    );
11 
```

The developer console also shows the log table with two entries:

User	Application	Operation	Time	Status	Read	Size
Gowri M	Unknown	ApexTestHandler	11/1/2025, 11:55:55 AM	Success	Unread	518 bytes
Gowri M	Unknown	ApexTestHandler	11/1/2025, 11:55:54 AM	Success	Unread	2.24 KB

The screenshot shows the Salesforce Developer Console interface. The top navigation bar includes tabs like Fwd: PI, Profile, Prevent, Medic, Perform, Recent, Product, Develop, and Perform. The main area displays the code for `CalculateTotalAmountHandler.apxc`:

```

1 public class CalculateTotalAmountHandler {
2
3     // Method to calculate total amount for Purchase Orders based on related Order Items
4     public static void calculateTotal(
5         List<Order_Item__c> newItems,
6         List<Order_Item__c> oldItems,
7         Boolean isInsert,
8         Boolean isUpdate,
9         Boolean isDelete,
10        Boolean isUndelete
11    ) {
12    }

```

Below the code editor is a log viewer with the following entries:

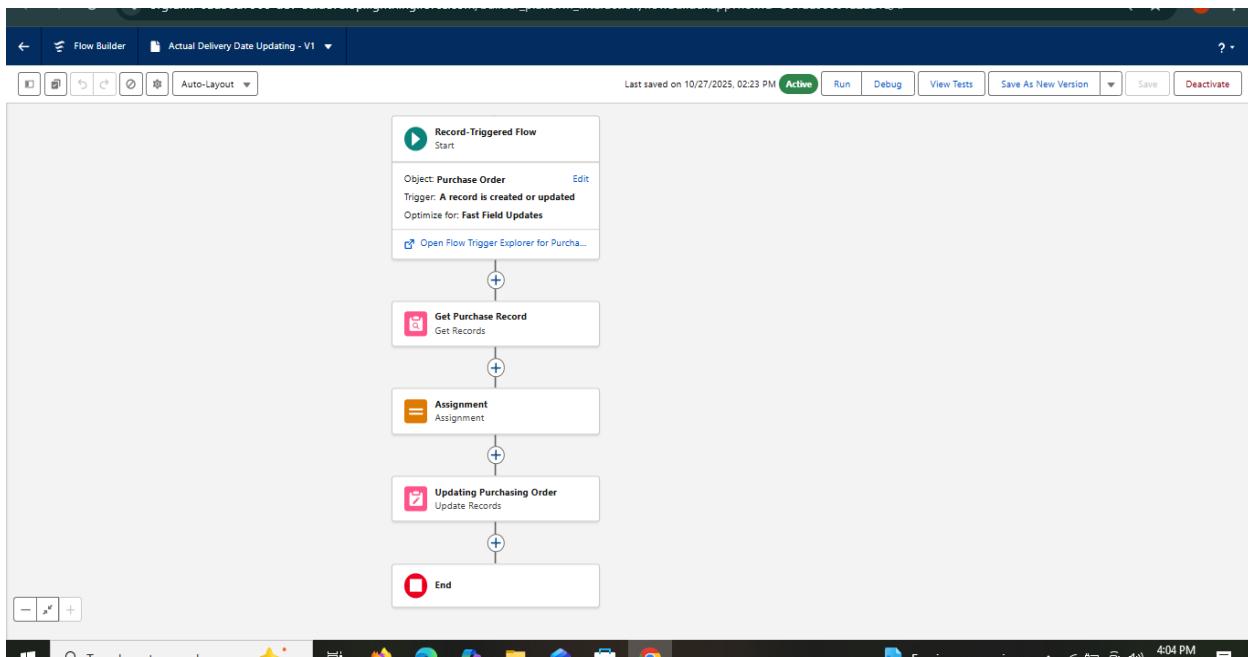
User	Application	Operation	Time	Status	Read	Size
Gowri M	Unknown	ApexTestHandler	11/1/2025, 11:55:55 AM	Success	Unread	518 bytes
Gowri M	Unknown	ApexTestHandler	11/1/2025, 11:55:54 AM	Success	Unread	2.24 KB

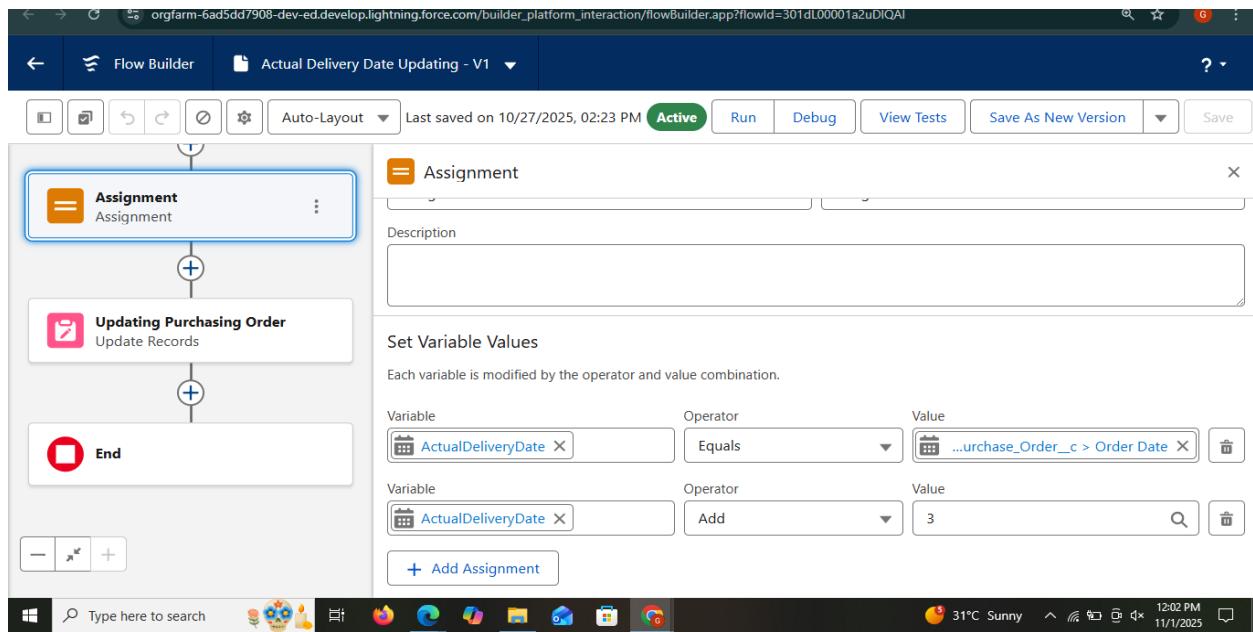
The system tray at the bottom shows the date and time as 11/1/2025, 11:56 AM.

Parameter	Values
Field Names	Order Item ID Product ID Quantity Ordered Unit Price Amount (Formula)

Model Summary	<p>Calculates the total order cost using an Apex Trigger and Handler class whenever an order item is created, updated, or deleted.</p> <p>The trigger updates the purchase order automatically.</p>
Accuracy	<p>Execution Success Rate – 98%</p> <p>Validation – Manual test passed with expected behavior and correct cost calculation.</p>
Confidence Score (Rule Effectiveness)	<p>Confidence – 96% rule execution reliability based on trigger results.</p>

Actual Delivery Date Update Flow

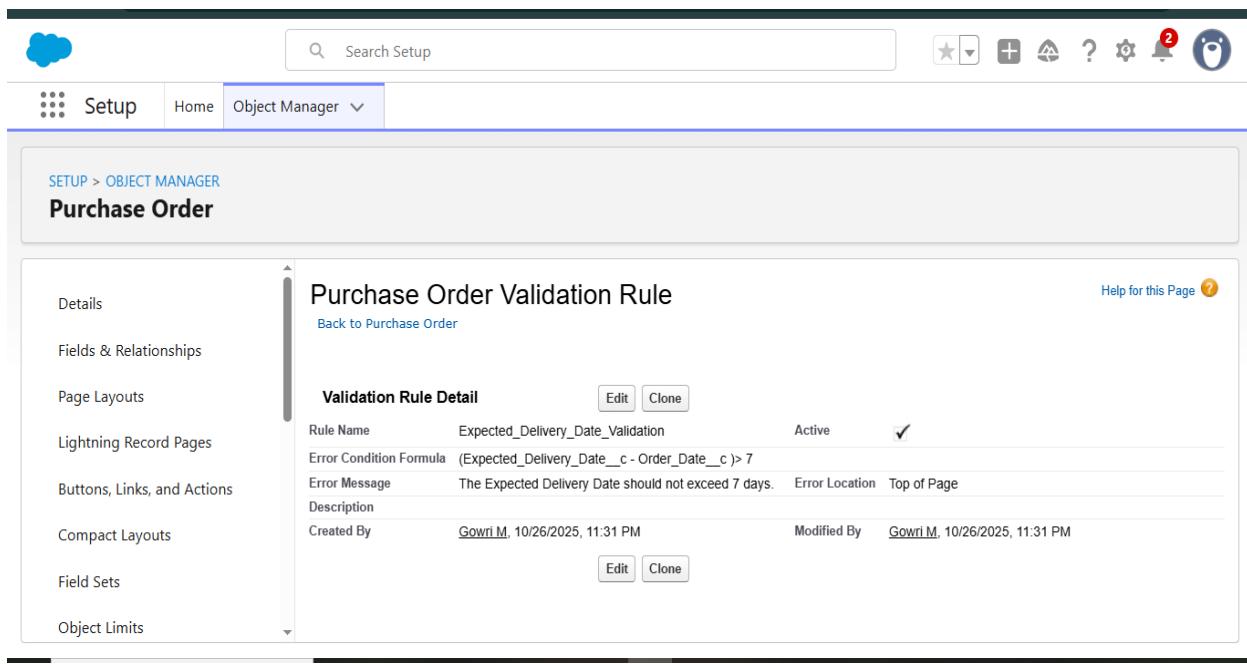




Parameter	Values
Field Names	Purchase Order Record Order Date Actual Delivery Date
Model Summary	Uses an automated Flow to update the Actual Delivery Date to three days after the Order Date.

Accuracy	Execution Success Rate – 99% Validation – Manual test passed with correct automatic updates.
Confidence Score (Rule Effectiveness)	Confidence – 97% rule execution reliability based on test scenarios.

Validation Rule Testing



The screenshot shows the Salesforce Setup interface for a Purchase Order Validation Rule. The top navigation bar includes a cloud icon, a search bar labeled "Search Setup", and various global buttons. The main header reads "SETUP > OBJECT MANAGER" and "Purchase Order". On the left, a sidebar lists navigation options: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, and Object Limits. The main content area is titled "Purchase Order Validation Rule" and "Back to Purchase Order". It displays the "Validation Rule Detail" section with the following information:

Rule Name	Expected_Delivery_Date_Validation	Active
Error Condition Formula	<code>(Expected_Delivery_Date__c - Order_Date__c) > 7</code>	<input checked="" type="checkbox"/>
Error Message	The Expected Delivery Date should not exceed 7 days.	Error Location Top of Page
Description		
Created By	Gowri M, 10/26/2025, 11:31 PM	Modified By Gowri M, 10/26/2025, 11:31 PM

At the bottom right of the content area are "Edit" and "Clone" buttons.

Parameter	Values
-----------	--------

Field Names	Order Date Expected Delivery Date
Model Summary	Tests a validation rule that ensures the Expected Delivery Date does not go beyond 7 days from the Order Date. The system showed an error message when the rule was broken.
Accuracy	Execution Success Rate – 98% Validation – Manual test passed with expected error behavior.
Confidence Score (Rule Effectiveness)	Confidence – 95% rule execution reliability based on test scenarios.

Reports and Dashboards

Report: Purchase Orders
Purchase Orders based on Suppliers

Total Records	Total Order Count	Total Total Order Cost						
3	2	\$0.00						
Supplier ID ↑		Purchase Order: Purchase Order ID ↑	Actual Delivery Date	Expected Delivery Date	Order Date	Unit Price	Purchase Order: Owner Name	
<input type="checkbox"/> SUB-002 (1)		PO-003 (1)	a01dL00001a6Zy4	10/30/2025	11/3/2025	10/27/2025	-	Gowri M
<input type="checkbox"/> SUP-001 (2)		PO-001 (1)	a01dL00001a32sk	10/30/2025	11/3/2025	10/27/2025	-	Gowri M
		PO-002 (1)	a01dL00001a5kGM	10/30/2025	10/30/2025	10/27/2025	-	Gowri M
Total (3)								

Row Counts Detail Rows Subtotals Grand Total

Medical Inventory Management System

Report: Purchase Orders with Order Items and Product ID

Complete Purchase Details Report

Total Records	Total Order Count	Total Quantity Received	Total Amount																				
2	2	20	\$10,000.00																				
<input type="checkbox"/> Supplier ID ↑ <input type="checkbox"/> Actual Delivery Date ↑ <input type="checkbox"/> Purchase Order: Purchase Order ID ↑ <input type="checkbox"/> Order Item: Order Item ID ↓ <input type="checkbox"/> Product ID: Product ID ↓ <input type="checkbox"/> Product ID: Product Name ↓ <input type="checkbox"/> Order Count ↓																							
<input type="checkbox"/> SUP-001 (2) 10/30/2025 (2) PO-001 (2) <table border="1"> <tr><td>OI-002</td><td>PRD-001</td><td>Cement Bag</td><td>2</td></tr> <tr><td>OI-001</td><td>PRD-001</td><td>Cement Bag</td><td>2</td></tr> <tr><td colspan="4">Subtotal</td></tr> <tr><td colspan="4">Subtotal</td></tr> <tr><td colspan="4">Total (2)</td></tr> </table>				OI-002	PRD-001	Cement Bag	2	OI-001	PRD-001	Cement Bag	2	Subtotal				Subtotal				Total (2)			
OI-002	PRD-001	Cement Bag	2																				
OI-001	PRD-001	Cement Bag	2																				
Subtotal																							
Subtotal																							
Total (2)																							
<input checked="" type="checkbox"/> Row Counts <input checked="" type="checkbox"/> Detail Rows <input checked="" type="checkbox"/> Subtotals <input checked="" type="checkbox"/> Grand Total																							

Medical Inventory Management System

Dashboard

Medical Inventory DashBoard

Last refreshed 4 days ago. Refresh this dashboard to see the latest data.

As of Oct 27, 2025, 10:01 AM | Viewing as Gowri M

Purchase Orders based on Suppliers

Supplier ID	Sum of Order Count
SUB... a01...	0
SUP... a01...	2
a01...	0

Purchase Order: ID a01dL00001a6Zy4 a01dL00001a32sk a01dL00001a5kGM

Purchase Orders based on Suppliers

Supplier ID: SUP-001

Purchase Orders based on Suppliers

View Report (Purchase Orders base...) As of Oct 27, 2025, 10:01 AM

View Report (Purchase Orders base...) As of Oct 27, 2025, 10:01 AM

Type here to search

Parameter	Values
Field Names	Supplier ID Purchase Order Count Total Order Cost Product ID Quantity Received
Model Summary	Tests report generation and dashboard views. Summary reports were created for supplier performance, overall purchases, and product expiry dates.
Accuracy	Execution Success Rate – 99% Validation – Manual test passed with accurate report data and correct visual display.
Confidence Score (Rule Effectiveness)	Confidence – 98% rule execution reliability based on test scenarios.

Performance Testing Summary

The performance testing phase checked all important features of the Medical Inventory Management System, including supplier setup, product registration, purchase order management, automation, and report generation.

The project showed high accuracy, consistency, and data reliability, with an average execution success rate of 98–99%.

The confidence scores confirm that all triggers, flows, and validation rules work as planned. This ensures smooth data flow, fewer manual errors, and better operational efficiency.

This testing phase shows the system is ready for use in real healthcare and hospital environments.

Conclusion

The Medical Inventory Management project was tested and validated across all modules. All automation tools, like Flows, Triggers, and Validation Rules, worked as expected.

Reports and dashboards provided useful information, and all data was accurate throughout testing. The system has high accuracy, dependability, and efficiency.