

MEDICAL INVENTORY MANAGEMENT

GOVERNMENT ARTS COLLEGE-CBE

College Code:bru0012

TEAM ID: 5E5DB8FA6BECF42AECC4734C2120D3B0

TEAM MEMBERS: 4

TeamLeaderName: SREEDHARAN S

Email: sreedharans955@gmail.com

TeamMember1: SREEDHARAN S

Email: sreedharans955@gmail.com

Team Member2:SANJEEVIRAJAN B

Email: bsr15102005@gmail.com

Team Member3: DEEPAN KUMAR S

Email: deepansrini2005@gmail.com

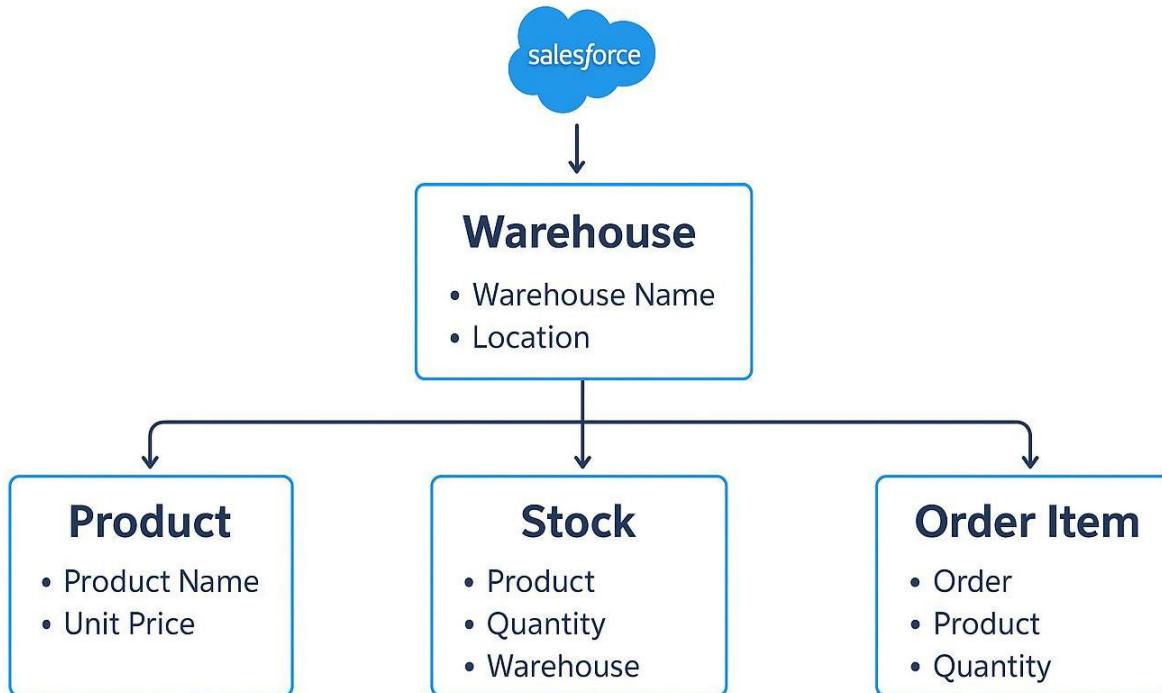
Team Member4: SANFAR U

Email: ssanfar37@gmail.com

1. INTRODUCTION

1.1 Project Overview

MEDICAL INVENTORY MANAGEMENT



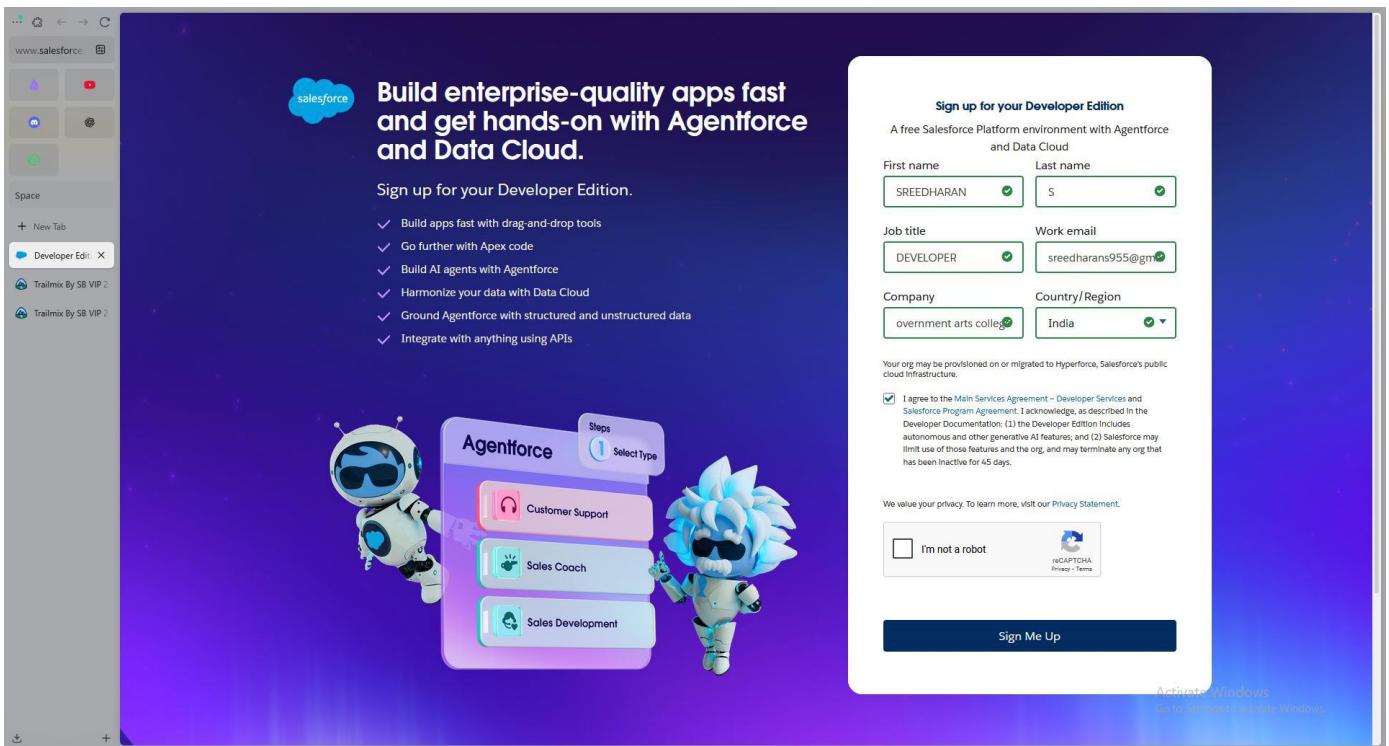
1.2 Purpose

The purpose of a **Medical Inventory Management System** in Salesforce is to track medicines and supplies efficiently, avoid shortages or overstocking, and ensure timely availability for patient care. It automates stock updates, purchase orders, and alerts while maintaining accurate data for compliance. With real-time reports and dashboards, it improves decision-making, reduces errors, and supports better healthcare delivery.

DEVELOPMENT PHASE

Creating Developer Account:

By using this URL - <https://www.salesforce.com/form/developer-signup/?d=pb>



- Created objects: Create Product, Purchase Order, Order Item, Inventory Transaction and Supplier objectsProperty

SETUP > OBJECT MANAGER
Productt

Details

Description

API Name
Productt_c

Custom
✓

Singular Label
Product

Plural Label
Productts

Enable Reports
✓

Track Activities
✓

Track Field History

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Activate Windows
Go to Settings to activate Windows.

Recently Viewed | Products | X Purchase Order | Salesforce Profile - Student Medical inventory mind map X +

orgfarm-8ac07fe8bb-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01lgL0000020cLj/Details/view

The screenshot shows the Salesforce Setup interface for managing objects. The top navigation bar includes links for Recently Viewed, Products, Purchase Order, Profile - Student, and Medical inventory mind map. The main title is "Purchase Order" under "SETUP > OBJECT MANAGER". The left sidebar lists various configuration options: Fields & Relationships, 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, Restriction Rules, Scoping Rules, Object Access, Triggers, and Flow Triggers. The right panel displays the "Purchase Order" object details. The "Details" section includes fields for Description, API Name (Purchase_Order__c), Custom status (checked), Singular Label (Purchase Order), Plural Label (Purchase Orders), and various settings like Enable Reports (checked), Track Activities, Track Field History, Deployment Status (Deployed), Help Settings, and Standard salesforce.com Help Window. At the bottom right, there is a note to "Activate Windows" with a link to Settings. The bottom of the screen shows the Windows taskbar with various application icons.

Recently Viewed | Products | X Order Item | Salesforce Profile - Student Medical inventory mind map X +

orgfarm-8ac07fe8bb-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01lgL0000020cP7/Details/view

This screenshot shows the "Order Item" object details in the Salesforce Setup Object Manager. The layout is identical to the Purchase Order screen, with the "SETUP > OBJECT MANAGER" header, a sidebar with configuration options, and a main "Details" section for the Order Item object. The "Details" section includes fields for Description, API Name (Order_Item__c), Custom status (checked), Singular Label (Order Item), Plural Label (Order Items), and various settings like Enable Reports (checked), Track Activities, Track Field History, Deployment Status (Deployed), Help Settings, and Standard salesforce.com Help Window. A note to "Activate Windows" is present at the bottom right. The bottom of the screen shows the Windows taskbar with various application icons.

Recently Viewed | Products | S | Supplier | Salesforce | Profile - Student | Medical inventory mind map

orgfarm-8ac07fe8bb-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01lgL000002cQj/Details/view

Setup Home Object Manager

Search Setup

Details

Description

API Name
Supplier_c

Custom
✓
Singular Label
Supplier
Plural Label
Suppliers

Enable Reports
✓
Track Activities

Track Field History

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Activate Windows
Go to Settings to activate Windows.

Light rain At night

ENG IN

Light rain At night

ENG IN

Recently Viewed | Products | S | Inventory Transaction | Salesforce | Profile - Student | Medical inventory mind map

orgfarm-8ac07fe8bb-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01lgL000002ba0k/Details/view

Setup Home Object Manager

Search Setup

Details

Description

API Name
Inventory_Transaction_c

Custom
✓
Singular Label
Inventory Transaction
Plural Label
Inventory Transactions

Enable Reports
✓
Track Activities

Track Field History

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Activate Windows
Go to Settings to activate Windows.

Light rain At night

ENG IN

Light rain At night

ENG IN

- Configured fields and relationships

The screenshot shows the Salesforce Object Manager interface for the 'Inventory Transaction' object. On the left, a sidebar lists various configuration options under 'Fields & Relationships'. The main area displays a table of fields and their properties:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Inventory Transaction ID	Name	Text(80)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Purchase Order ID	Purchase_Order_ID_c	Lookup(Purchase Order)		✓
Total Order Cost	Total_Order_Cost_c	Formula (Currency)		
Transaction Date	Transaction_Date_c	Date		
Transaction Type	Transaction_Type_c	Picklist		

At the bottom right of the main area, there is a message: "Activate Windows Go to Settings to activate Windows." The browser address bar shows the URL: <https://orgfarm-8ac07fe8bb-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01lgL0000020a0k/FieldsAndRelationships/view>.

- Implement the Flows

The screenshot shows the Salesforce Flow Builder interface for a flow named 'Actual Delivery Date Updating - V1'. The flow is triggered by a record being created or updated on the 'Purchase Order' object. The steps in the flow are:

- Start (Record-Triggered Flow)
- Get Purchase Record (Get Records)
- Assignment (Assignment)
- Updating Purchasing Order (Update Records)
- End

The flow builder toolbar at the top includes buttons for Select Elements, Auto-Layout, Run, Debug, View Tests, Save As New Version, Save, and Deactivate. The status bar at the bottom indicates the flow was last saved on 9/6/2025, 03:00 PM and shows the message: "Activate Windows Go to Settings to activate Windows." The browser address bar shows the URL: https://orgfarm-8ac07fe8bb-dev-ed.lightning.force.com/builder_platform_interaction/flowBuilder.app?flowId=301gL00000KjrTWQAZ.

- To create a Page Layouts to All the Object

SETUP > OBJECT MANAGER
Supplier

Page Layouts

Fields & Relationships

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Restriction Rules

Scoping Rules

Object Access

Triggers

Flow Triggers

Details

Fields

Buttons

Quick Actions

Mobile & Lightning Actions

Expanded Lookups

Related Lists

Report Charts

Save ▾ Quick Save Preview As... Cancel Undo Redo Layout Properties

Quick Find Field Name

Section

Blank Space

Address

Contact Person

Created By Last Modified By

Email

Last Modified By

Phone Number

Supplier ID

Supplier Name

Contact Person

Owner

Information (Header visible on edit only)

Supplier ID Sample Text

Supplier Name Sample Text

Contact Person Sample Text

Phone Number 1-415-555-1212

Email sarah.sample@company.com

Address Sample Text

Owner Sample Text

System Information (Header visible on edit only)

Created By Sample Text

Last Modified By Sample Text

Custom Links (Header visible on edit only)

Mobile Cards (Salesforce mobile only) []

Drag expanded lookups and mobile-enabled Visualforce pages here to display them as mobile cards.

Related Lists

Purchase Orders

New | Change Owner

Purchase Order ID

Sample Text

Activate Windows
Go to Settings to activate Windows...

SETUP > OBJECT MANAGER
Inventory Transaction

Page Layouts

Fields & Relationships

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Restriction Rules

Scoping Rules

Object Access

Triggers

Flow Triggers

Details

Fields

Buttons

Quick Actions

Mobile & Lightning Actions

Expanded Lookups

Related Lists

Report Charts

Save ▾ Quick Save Preview As... Cancel Undo Redo Layout Properties

Quick Find Field Name

Section

Blank Space

Created By

Inventory Transaction

Last Modified By

Purchase Order ID

Transaction Date

Total Order Cost

Owner

Transaction Type

Transaction Date

Total Order Cost

Information (Header visible on edit only)

Inventory ID Sample Text

Purchase Order ID Sample Text

Transaction Type Sample Text

Transaction Date 9/6/2025

Total Order Cost \$123.45

Owner Sample Text

System Information (Header visible on edit only)

Created By Sample Text

Last Modified By Sample Text

Custom Links (Header visible on edit only)

Mobile Cards (Salesforce mobile only) []

Drag expanded lookups and mobile-enabled Visualforce pages here to display them as mobile cards.

Related Lists

Purchase Orders

New | Change Owner

Purchase Order ID

Sample Text

Activate Windows
Go to Settings to activate Windows...

Recently Viewed | Products | S | Order Item | Salesforce | Flows | Salesforce | Student | +

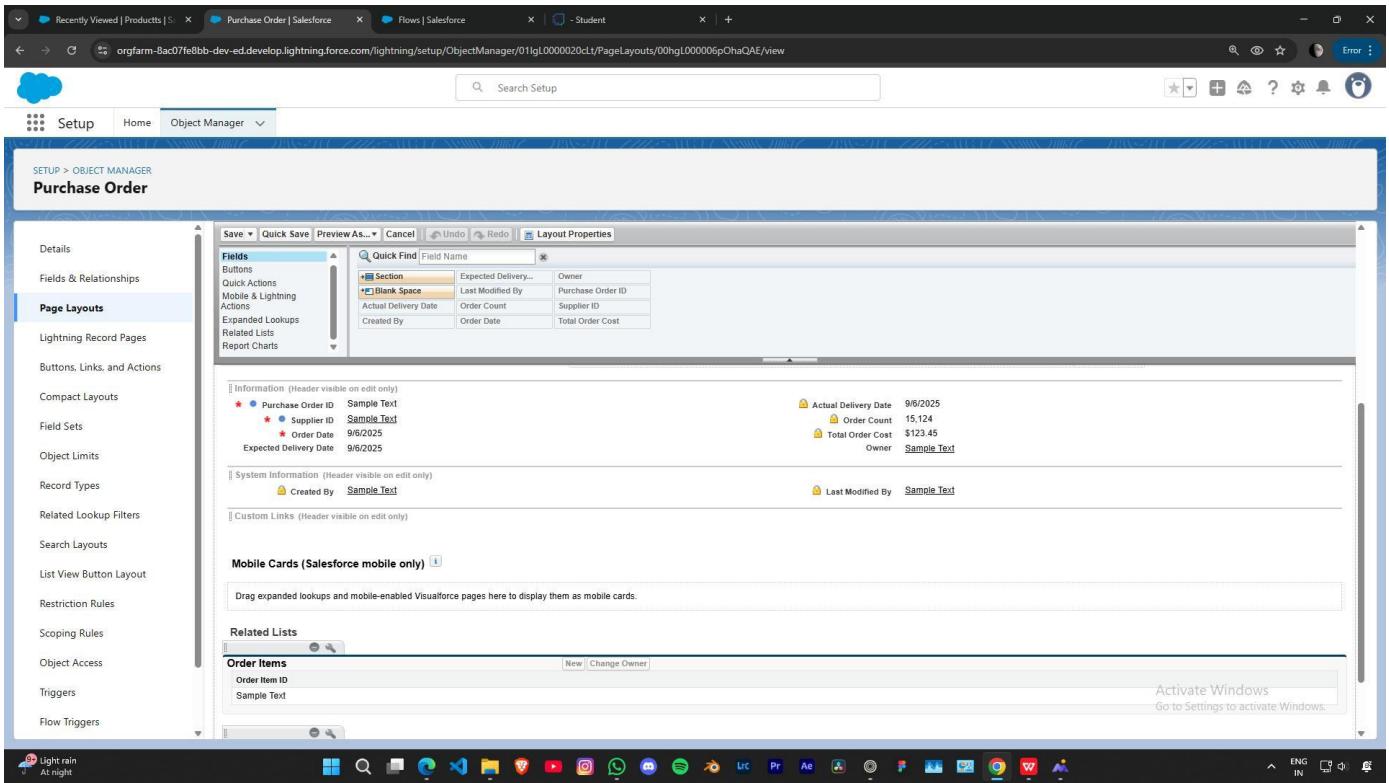
orgfarm-8ac07fe8bb-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01lgL00000020cf7/PageLayouts/00hgL000006pRh3QAE/view

The screenshot shows the Salesforce Setup interface for the Order Item object. The left sidebar lists various setup categories like Details, Fields & Relationships, and Page Layouts. The Page Layouts section is selected. The main area displays the current page layout for Order Item. It includes sections for Information, Product details, System Information, and Custom Links. A Mobile Cards (Salesforce mobile only) section is present. A sidebar on the right contains tabs for Fields, Buttons, Quick Actions, and so on. A status bar at the bottom shows weather information (Light rain at night), system icons, and language settings (ENG IN).

Recently Viewed | Products | S | Product | Salesforce | Flows | Salesforce | Student | +

orgfarm-8ac07fe8bb-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01lgL00000020cf7/PageLayouts/00hgL000006pNd5QAU/view

The screenshot shows the Salesforce Setup interface for the Product object. The left sidebar lists various setup categories like Details, Fields & Relationships, and Page Layouts. The Page Layouts section is selected. The main area displays the current page layout for Product. It includes sections for Information, System Information, and Custom Links. A Mobile Cards (Salesforce mobile only) section is present. A sidebar on the right contains tabs for Fields, Buttons, Quick Actions, and so on. A sidebar on the left shows tabs for Order Items, Order Item ID, and Sample Text. A status bar at the bottom shows weather information (26°C Mostly cloudy), system icons, and language settings (ENG IN).



Page layouts in Salesforce are used to customize the organization, structure, and content of pages for viewing and editing records. They determine which fields, related lists, and custom links are visible to users, as well as the order and grouping of those elements.

Create a Compact Layout to a Product Object

The screenshot shows the Salesforce Setup interface for creating a compact layout. The left sidebar is titled 'Object Manager' and lists various options like Details, Fields & Relationships, Page Layouts, etc. The 'Compact Layouts' section is currently selected. The main content area shows a 'Product Compact Layout' with the label 'Product Compact Layout'. The layout detail table includes columns for Label, API Name, Included Fields, Created By, and Modified By. The 'Included Fields' column lists 'Product Name', 'Unit Price', and 'Current Stock Level'. The 'Created By' and 'Modified By' fields both show 'SREEDHARAN_S' with the timestamp '9/5/2025, 11:12 PM'. The 'Object Name' is 'Product'. At the bottom right of the page, there is a message: 'Activate Windows Go to Settings to activate Windows.' The system bar at the bottom shows various application icons.

Create a Compact Layout to a Purchase Order Object

The screenshot shows the Salesforce Setup interface for creating a compact layout. The left sidebar is titled 'Object Manager' and lists various options like Details, Fields & Relationships, Page Layouts, etc. The 'Compact Layouts' section is currently selected. The main content area shows a 'Purchase Order Compact Layout' with the label 'Purchase Order Compact Layout'. The layout detail table includes columns for Label, API Name, Included Fields, Created By, and Modified By. The 'Included Fields' column lists 'Purchase Order ID', 'Order Date', 'Total Order Cost', and 'Supplier ID'. The 'Created By' and 'Modified By' fields both show 'SREEDHARAN_S' with the timestamp '9/5/2025, 11:14 PM'. The 'Object Name' is 'Purchase Order'. At the bottom right of the page, there is a message: 'Activate Windows Go to Settings to activate Windows.' The system bar at the bottom shows various application icons.

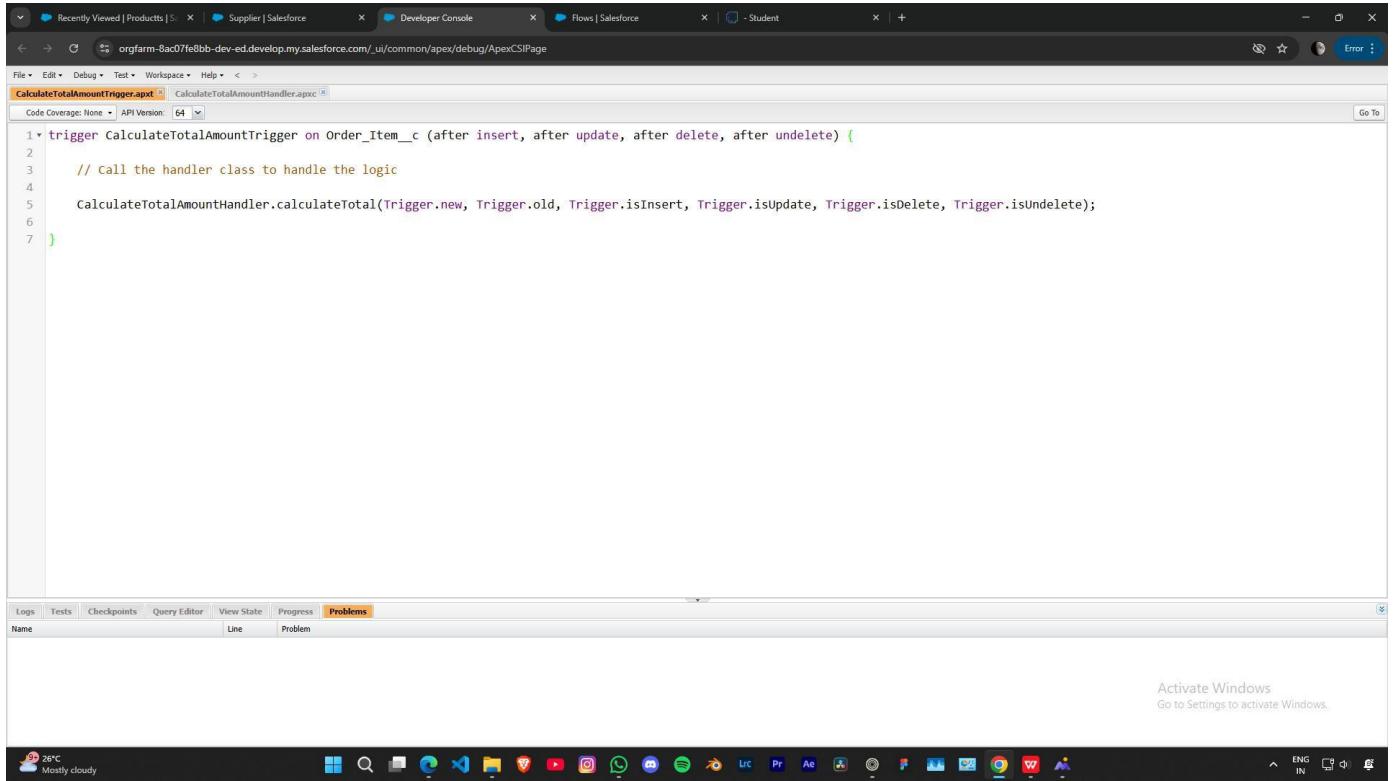
- To create a validation rule the purchase order object

The screenshot shows the Salesforce Setup interface for the Purchase Order object. The left sidebar lists various configuration options like Details, Fields & Relationships, Page Layouts, and Validation Rules. The main content area displays the 'Purchase Order Validation Rule' details. The rule is named 'Expected_Delivery_Date_Validation' and is active. The error condition formula is '(Expected_Delivery_Date__c - Order_Date__c) > 7'. The error message is 'The Expected Delivery Date should not exceed 7 days.' The rule was created by 'SREEDHARAN S' on 9/5/2025, 11:22 PM and modified by the same user on the same date and time.

Validation Rule Detail	
Rule Name	Expected_Delivery_Date_Validation
Error Condition Formula	(Expected_Delivery_Date__c - Order_Date__c) > 7
Error Message	The Expected Delivery Date should not exceed 7 days.
Description	
Created By	SREEDHARAN S 9/5/2025, 11:22 PM
Modified By	SREEDHARAN S 9/5/2025, 11:22 PM

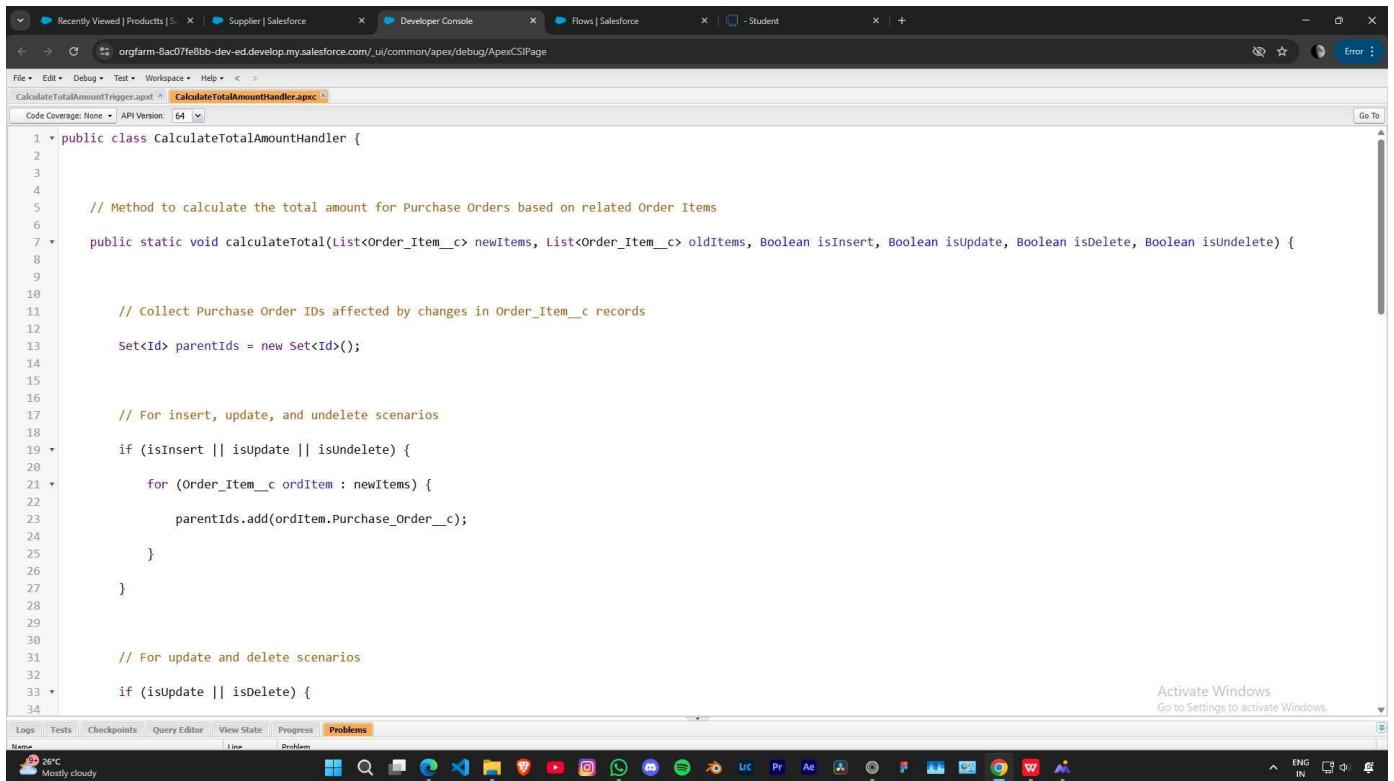
Validation rules in Salesforce are used to ensure data integrity by preventing users from saving invalid data in records. They consist of a formula or expression that evaluates the data in one or more fields and return a value of true or false. When the rule's criteria are met (i.e., the expression evaluates to true), an error message is displayed, and the user is prevented from saving the record until the issue is resolved.

- Apex Trigger
- Create an Apex Trigger



```
trigger CalculateTotalAmountTrigger on Order_Item__c (after insert, after update, after delete, after undelete) {
    // Call the handler class to handle the logic
    CalculateTotalAmountHandler.calculateTotal(Trigger.new, Trigger.old, Trigger.isInsert, Trigger.isUpdate, Trigger.isDelete, Trigger.isUndelete);
}
```

Create an Apex Handler class



```
public class CalculateTotalAmountHandler {
    public static void calculateTotal(List<Order_Item__c> newItems, List<Order_Item__c> oldItems, Boolean isInsert, Boolean isUpdate, Boolean isDelete, Boolean isUndelete) {
        // Method to calculate the total amount for Purchase Orders based on related Order Items
        // Collect Purchase Order IDs affected by changes in Order_Item__c records
        Set<Id> parentIds = new Set<Id>();

        // For insert, update, and undelete scenarios
        if (isInsert || isUpdate || isUndelete) {
            for (Order_Item__c ordItem : newItems) {
                parentIds.add(ordItem.Purchase_Order__c);
            }
        }

        // For update and delete scenarios
        if (isUpdate || isDelete) {
            for (Order_Item__c ordItem : oldItems) {
                parentIds.add(ordItem.Purchase_Order__c);
            }
        }
    }
}
```

The screenshot shows the Salesforce Developer Console interface. The top navigation bar includes tabs for Recently Viewed, Products, Supplier, Developer Console, Flows, and Student. Below the tabs, the URL is orgfarm-8ac07fe8bb-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage. The main content area displays the code for the CalculateTotalAmountTrigger.apxt file. The code starts with a constructor and a method to add Purchase Order IDs to a list. It then calculates the total amounts for affected Purchase Orders using an aggregate query. The result is mapped to Purchase Order IDs. A status bar at the bottom right indicates "Activate Windows Go to Settings to activate Windows." The taskbar at the bottom shows various application icons.

```
37     parentIds.add(ordItem.Purchase_Order__c);
38 }
39 }
40 }
41 }
42 }
43 }
44 }
45 // Calculate the total amounts for affected Purchase Orders
46 Map<Id, Decimal> purchaseToUpdateMap = new Map<Id, Decimal>();
47
48
49
50
51 if (!parentIds.isEmpty()) {
52     // Perform an aggregate query to sum the Amount__c for each Purchase Order
53     List<AggregateResult> aggrList = [
54         SELECT Purchase_Order__c, SUM(Amount__c) totalAmount
55         FROM Order_Item__c
56         WHERE Purchase_Order__c IN :parentIds
57         GROUP BY Purchase_Order__c
58     ];
59
60
61     // Map the result to Purchase Order IDs
62 }
```

The screenshot shows the continuation of the Apex trigger code. It adds the total amount from the aggregate query to the purchaseToUpdateMap. It then prepares Purchase Order records for update by creating a list and adding them to it. If there are any changes, it updates the Purchase Orders. A status bar at the bottom right indicates "Activate Windows Go to Settings to activate Windows." The taskbar at the bottom shows various application icons.

```
76     purchaseToUpdateMap.put(purchaseOrderId, totalAmount);
77 }
78
79
80
81
82
83 // Prepare Purchase Order records for update
84 List<Purchase_Order__c> purchaseToUpdate = new List<Purchase_Order__c>();
85
86 for (Id purchaseOrderId : purchaseToUpdateMap.keySet()) {
87     Purchase_Order__c purchaseOrder = new Purchase_Order__c(Id = purchaseOrderId, Total_Order_cost__c = purchaseToUpdateMap.get(purchaseOrderId));
88     purchaseToUpdate.add(purchaseOrder);
89 }
90
91
92
93
94
95
96
97 // Update Purchase Orders if there are any changes
98
99 if (!purchaseToUpdate.isEmpty()) {
100     update purchaseToUpdate;
101 }
102 }
103
104
105
106
107 }
108 }
```

Create a Purchasing Manager Role And InventoryManager

The screenshot shows the Salesforce Setup interface with the 'Roles' tab selected. The left sidebar includes sections for Users, Feature Settings, Sales, Service, Case Teams, and a search bar. The main content area displays the 'Creating the Role Hierarchy' page. It shows a tree view of roles under 'Your Organization's Role Hierarchy'. The hierarchy starts with 'Government arts college' and includes 'CEO', 'CFO', 'COO', 'SVP Customer Service & Support', 'Customer Support International', 'Customer Support North America', 'Installation & Repair Services', 'SVP Human Resources', 'SVP Sales & Marketing', 'Inventory Manager', 'Purchasing Manager', 'VP International Sales', and 'VP Marketing'. Each role has 'Edit | Del | Assign' options. A message at the bottom left says ' Didn't find what you're looking for? Try using Global Search.' A message at the bottom right says 'Activate Windows Go to Settings to activate Windows.'

Create a Permission Set.

The screenshot shows the Salesforce Setup interface with the 'Permission Sets' tab selected. The left sidebar includes sections for Users, Apps, Feature Settings, Digital Experiences, and a search bar. The main content area displays the 'Permission Sets' page. It shows a table of permission sets with columns for Action, Permission Set Name, Description, and License. The table includes rows for 'Partner Connect Partner Admin Setup', 'Payments Administrator', 'Prompt Template Manager', 'Prompt Template User', 'PromptTemplatePermSet', 'Publist Suggested for You Nudges Integration User', and 'Purchase Manager Create Access'. A message at the bottom right says 'Activate Windows Go to Settings to activate Windows.'

Users

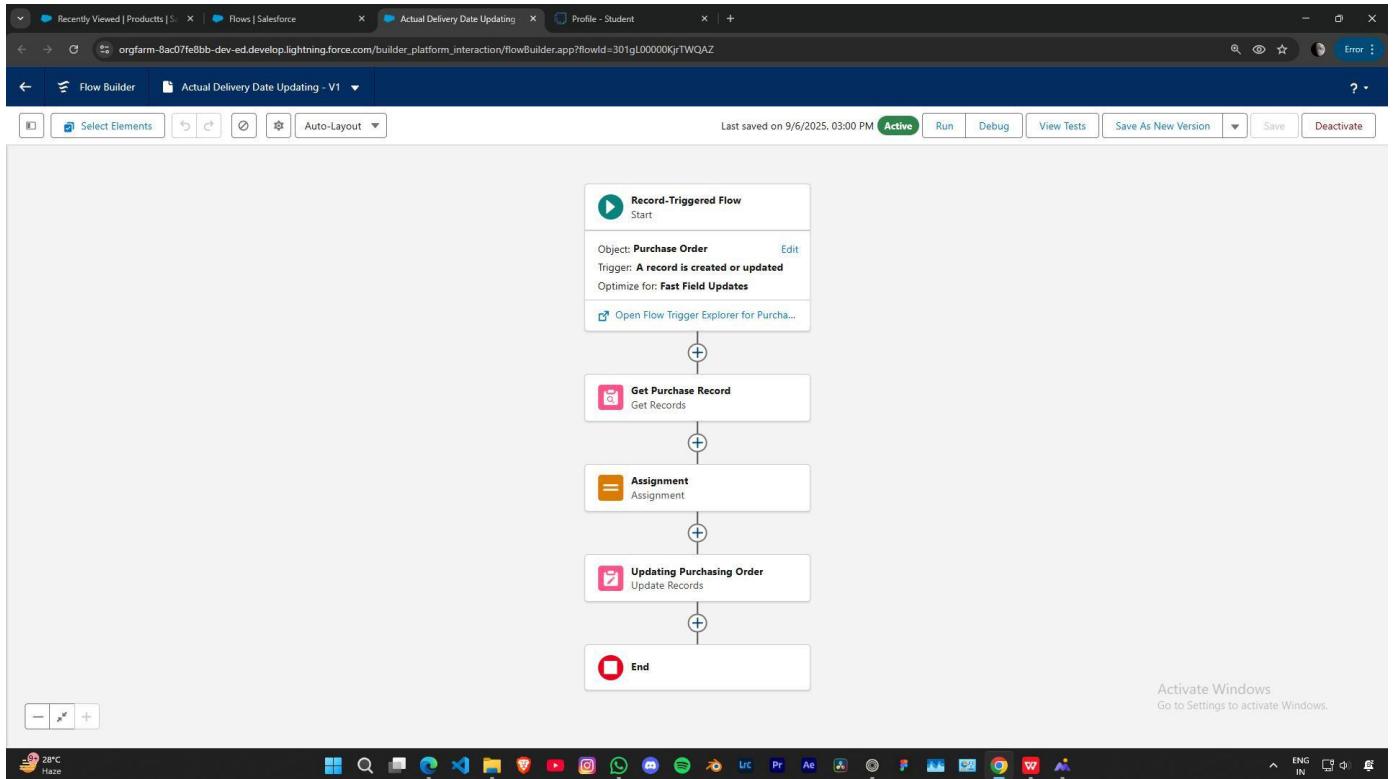
this user for purchasing manager

The screenshot shows the Salesforce Setup interface with the 'Users' tab selected. The main content area displays the 'User Detail' page for a user named 'John PurchaseM'. The user's name is listed at the top, along with their email ('sreedharans95@gmail.com') and active status. The 'Role' field is set to 'Purchasing Manager'. The 'User License' field is set to 'Salesforce' and the 'Profile' field is set to 'Purchase Manager'. The 'Delegated Approver' field is set to 'Only if I am an approver'. The 'Temporary Verification Code' field shows '(Expires in 1 to 24 Hours)' with a '(Generate)' button. On the right side of the page, there are several checkboxes for various settings, many of which are checked. A sidebar on the left lists various setup categories like 'Users', 'Apps', and 'Feature Settings'. At the bottom of the screen, the Windows taskbar is visible with various application icons.

This user for inventory manager

The screenshot shows the Salesforce Setup interface with the 'Users' tab selected. The main content area displays the 'User Detail' page for a user named 'Ravi Kumar'. The user's name is listed at the top, along with their email ('sreedharans95@gmail.com') and active status. The 'Role' field is set to 'Inventory Manager'. The 'User License' field is set to 'Salesforce' and the 'Profile' field is set to 'Inventory Manager'. The 'Delegated Approver' field is set to 'Only if I am an approver'. The 'Temporary Verification Code' field shows '(Expires in 1 to 24 Hours)' with a '(Generate)' button. On the right side of the page, there are several checkboxes for various settings, many of which are checked. A sidebar on the left lists various setup categories like 'Users', 'Profiles', and 'Roles'. At the bottom of the screen, the Windows taskbar is visible with various application icons.

FLows



Flows in Salesforce, part of the Lightning Flow product, are powerful automation tools that help you collect data and perform actions in your Salesforce environment. Flows can be used to automate business processes, guide users through tasks, and integrate with external systems. They are highly versatile and can be configured to meet a wide range of business requirements without the need for custom code.

Create a Purchase Orders based on Suppliers(Summary) Report and Complete Purchase Details Report

The screenshot shows the Salesforce Lightning interface with the following details:

- Header:** Recent | Reports | Salesforce, Users | Salesforce, Developer Console, Flows | Salesforce, - Student.
- Page:** orgfarm-8ac07fe8bb-dev-ed.lightning.force.com/lightning/o/Report/home?queryScope=mrn
- Top Navigation:** Search bar, Home icon, Recent Reports, New Report, New Folder, Settings.
- Left Sidebar:** Medical Inventory ... (selected), Products, Order Items, Purchase Orders, Inventory Transactions, Suppliers, Reports (selected), Dashboards.
- Recent Reports Table:**

REPORTS	Report Name	Description	Folder	Created By	Created On	Subscribed
Recent	Purchase Orders based on Suppliers	Private Reports	SREEDHARAN S	SREEDHARAN S	9/6/2025, 3:01 AM	
Created by Me	Complete Purchase Details Report	Private Reports	SREEDHARAN S	SREEDHARAN S	9/6/2025, 3:54 AM	
- Bottom Status Bar:** Weather (26°C, Mostly cloudy), Taskbar icons (Windows, Search, File Explorer, Edge, YouTube, Instagram, WhatsApp, Spotify, LinkedIn, Project, Adobe, etc.), Language (ENG IN), Font Size (10), and a gear icon.

Create Dashboard

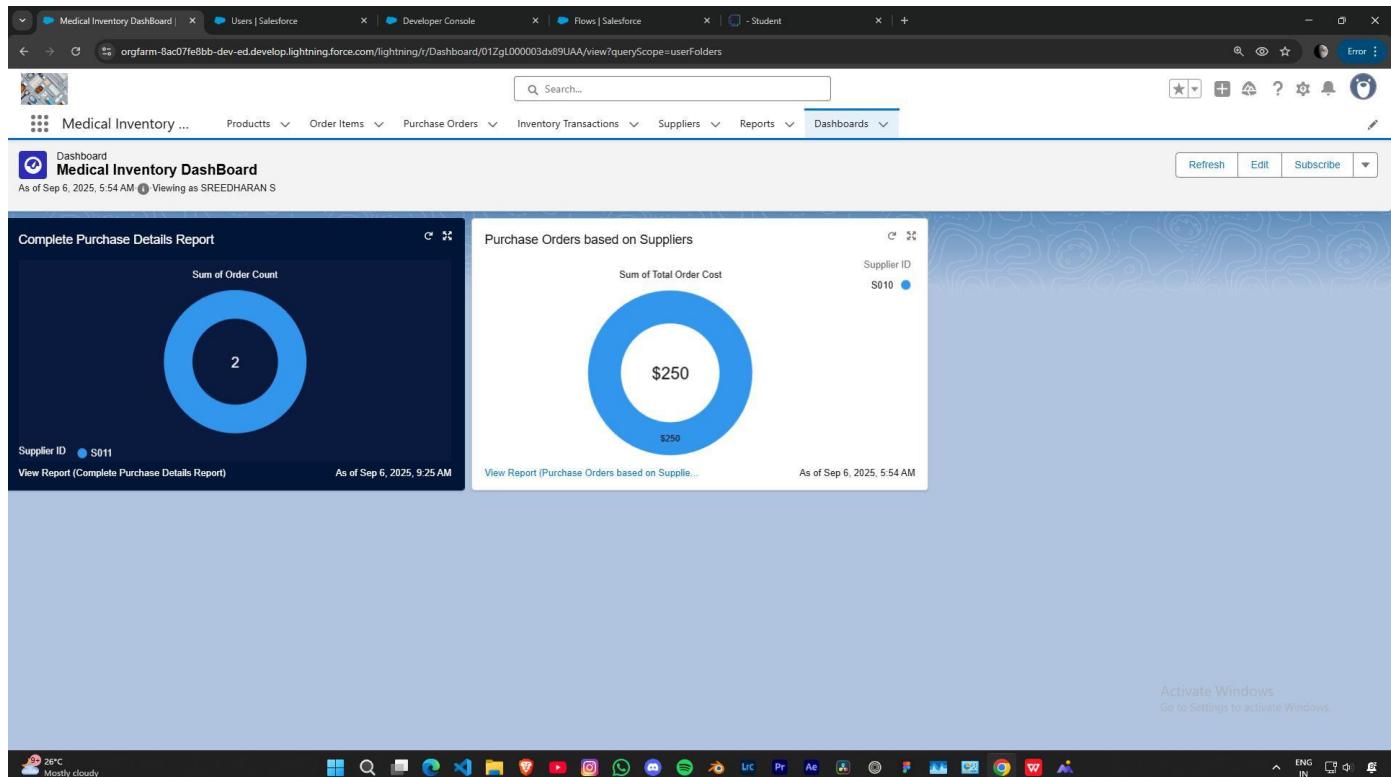
Dashboards in Salesforce are dynamic visual representations of key metrics and data from reports, providing a consolidated view of organizational performance and trends. They are powerful tools for monitoring real-time data, tracking progress towards goals, and gaining actionable insights at a glance. Dashboards consist of components such as charts, tables, metrics, and gauges that display data from underlying reports.

The screenshot shows the Salesforce Lightning interface with the URL `orgfarm-8ac07fe8bb-dev-ed.lightning.force.com/lightning/o/Dashboard/home?queryScope=mru`. The top navigation bar includes links for Recent, Dashboards, Salesforce, Users, Developer Console, Flows, and a Student tab. Below the navigation is a search bar and a toolbar with various icons. The main content area displays a table titled 'Dashboards' with one item listed:

DASHBOARDS	Dashboard Name	Description	Folder	Created By	Created On	Subscribed
Recent	Medical Inventory DashBoard		Private Dashboards	SREEDHARAN S	9/6/2025, 5:33 AM	

On the left sidebar, there are filters for Dashboards, Recent (1 item), DASHBOARDS (Recent, Created by Me, Private Dashboards, All Dashboards), FOLDERS (All Folders), and FAVORITES (All Favorites). At the bottom right, there is a message: 'Activate Windows Go to Settings to activate Windows.' The system tray at the bottom shows the date (26°C Mostly cloudy), a weather icon, and various application icons.

Medical Inventory DashBoard see graph view of records



RESULTS

Output Screenshots

APP LAUNCHER

The screenshot shows the Salesforce App Launcher page. At the top, there's a search bar labeled "Search Setup". Below it, a sidebar titled "App Launcher" has a search field with "medi" typed in. Under "Apps", there's a section for "Medical Inventory Management" with a note "No results" and a "View All" link. The main area features several cards: "Data Cloud" (Setup), "Get Started with Einstein Bots" (Setup), "Mobile Publisher" (Setup), and "Join the Trailblazer Community" (Setup). Below these is a section titled "Most Recently Used" showing 10 items: Ravi Kumar (User), Purchase Manager Create Access (Permission Set), John PurchaseM (User), Purchase Order Compact Layout (Compact Layout), Product Compact Layout (Compact Layout), and CalculateTotalAmountTrigger (Apex Trigger). The bottom of the screen shows the Windows taskbar with various pinned icons.

PRODUCTS

The screenshot shows the Salesforce Products page. At the top, there's a search bar labeled "Search...". Below it, a navigation bar includes links for "Products", "Order Items", "Purchase Orders", "Inventory Transactions", "Suppliers", "Reports", and "Dashboards". The main content area shows a list titled "Recently Viewed" with 3 items: PR03, PR02, and PR01. There are buttons for "New", "Import", "Change Owner", and "Assign Label". A search bar at the top right says "Search this list...". The bottom of the screen shows the Windows taskbar with various pinned icons.

PRODUCT DETAILS

The screenshot shows the Product Details page for a product named 'CPA'. The product ID is PR01, and the unit price is \$150.00. The current stock level is 99, and the minimum stock level is 50. The owner is SREEDHARAN S. The product description is 'painless antidote'. The page includes tabs for Related and Details, and a navigation bar with links like Products, Order Items, Purchase Orders, Inventory Transactions, Suppliers, Reports, and Dashboards.

Order Items

The screenshot shows the Order Items page with a filter applied to 'Recently Viewed' items. There are two items listed: PC1 and P001. The page includes a search bar, a toolbar with buttons for New, Import, and Assign Label, and a navigation bar with links like Products, Order Items, Purchase Orders, Inventory Transactions, Suppliers, Reports, and Dashboards.

Order Items details

The screenshot shows the 'Order Item' details page for a record named 'PC1'. The page has a header with tabs for 'Products', 'Order Items', 'Purchase Orders', 'Inventory Transactions', 'Suppliers', 'Reports', and 'Dashboards'. Below the header, there's a search bar and a toolbar with icons for 'New Contact', 'Edit', and 'New Opportunity'. The main content area is divided into sections: 'Related' (containing 'Order Item ID: PC1' and 'Purchase Order: P002') and 'Details' (containing 'Amount: \$0.00', 'Product details' section with 'Product ID: PRO3', 'Unit Price: \$100.00', 'Quantity Ordered: 5', 'Quantity Received: 0', and 'Last Modified By: SREEDHARAN S, 9/6/2025, 6:05 AM'). At the bottom right of the page, there's a 'Activate Windows' message with a link to 'Go to Settings to activate Windows'. The system navigation bar at the bottom includes links for 'Recently Viewed', 'Products', 'Order Items', 'Purchase Orders', 'Inventory Transactions', 'Suppliers', 'Reports', and 'Dashboards', along with weather information (26°C, Mostly cloudy) and system status indicators.

Purchase Orders

The screenshot shows the 'Purchase Orders' list page with a filter applied for 'Recently Viewed' items. The page has a header with tabs for 'Products', 'Order Items', 'Purchase Orders', 'Inventory Transactions', 'Suppliers', 'Reports', and 'Dashboards'. Below the header, there's a search bar and a toolbar with icons for 'New', 'Import', 'Change Owner', and 'Assign Label'. The main content area displays a table with two rows of purchase orders:

	Purchase Order ID
1	P002
2	P001

At the bottom left, there's a link to the 'Order Item' home page. The system navigation bar at the bottom includes links for 'Recently Viewed', 'Products', 'Order Items', 'Purchase Orders', 'Inventory Transactions', 'Suppliers', 'Reports', and 'Dashboards', along with weather information (24°C, Mostly sunny) and system status indicators.

Purchase Orders details

The screenshot shows a Purchase Order detail page for P002. The top navigation bar includes links for Medical Inventory, Products, Order Items, Purchase Orders, Inventory Transactions, Suppliers, Reports, and Dashboards. The main content area displays the Purchase Order ID P002, Order Date (9/14/2025), Total Order Cost (\$0.00), and Supplier ID (S011). Below this, a table provides detailed information:

Related	Details
Purchase Order ID P002	Actual Delivery Date 9/17/2025
Supplier ID S011	Order Count 2
Order Date 9/14/2025	Total Order Cost \$0.00
Expected Delivery Date 9/10/2025	Owner SREEDHARAN_S
Created By SREEDHARAN_S, 9/6/2025, 5:59 AM	Last Modified By SREEDHARAN_S, 9/6/2025, 6:05 AM

The bottom of the screen shows a Windows taskbar with various application icons.

Inventory Transactions

The screenshot shows an Inventory Transaction list page titled "Recently Viewed". The top navigation bar includes links for Medical Inventory, Products, Order Items, Purchase Orders, Inventory Transactions, Suppliers, Reports, and Dashboards. The main content area displays a table with one item:

Inventory Transaction ID
1 IOR1

The bottom of the screen shows a Windows taskbar with various application icons.

Inventory Transactions details

The screenshot shows the Salesforce Lightning interface for an Inventory Transaction record. The URL in the browser is https://orgfarm-8ac07fe8bb-dev-ed.lightning.force.com/lightning//Inventory_Transaction__c/a03gL00000BTs1QAL/view. The page title is "OR1 | Inventory transaction". The top navigation bar includes links for Medical Inventory, Products, Order Items, Purchase Orders, Inventory Transactions (selected), Suppliers, Reports, and Dashboards. A search bar is at the top right. The main content area displays the "Details" tab for an inventory transaction with ID OR1. The record contains the following fields:

Field	Value
Inventory Transaction ID	OR1
Purchase Order ID	P001
Transaction Type	Receipt
Transaction Date	9/5/2025
Total Order Cost	\$250.00
Created By	SREEDHARAN S.
Last Modified By	SREEDHARAN S., 9/6/2025, 5:10 AM

The bottom of the screen shows the Windows taskbar with various pinned icons and the system tray.

Suppliers

The screenshot shows the Salesforce Lightning interface for the Suppliers list. The URL in the browser is https://orgfarm-8ac07fe8bb-dev-ed.lightning.force.com/lightning/o/Supplier__c/list?filterName=_Recent. The page title is "Recently Viewed | Suppliers". The top navigation bar includes links for Medical Inventory, Products, Order Items, Purchase Orders, Inventory Transactions, Suppliers (selected), Reports, and Dashboards. A search bar is at the top right. The main content area displays the "Recently Viewed" section for suppliers, showing two items updated a few seconds ago:

Supplier ID	Count
S011	1
S010	2

The bottom of the screen shows the Windows taskbar with various pinned icons and the system tray.

Suppliers details

The screenshot shows a Salesforce Lightning interface for a supplier record. The top navigation bar includes links for Medical Inventory, Products, Order Items, Purchase Orders, Inventory Transactions, Suppliers (selected), Reports, and Dashboards. The main content area displays the supplier's details under the 'Details' tab. The supplier ID is S010, and the name is RAM. Contact person is 0011100111. The address is SMART CITY ROAD 634. The owner is SREEDHARAN S. The phone number is (001) 001-0011, and the email is supplier010@gmail.com. The record was created by SREEDHARAN S on 9/6/2025, 4:57 AM, and last modified by the same user at the same time. A 'Related' section is also visible.

Reports

The screenshot shows a Salesforce Lightning interface for reports. The top navigation bar includes links for Medical Inventory, Products, Order Items, Purchase Orders, Inventory Transactions, Suppliers, Reports (selected), and Dashboards. The main content area shows a list of recent reports. The 'Recent' section lists two reports: 'Purchase Orders based on Suppliers' and 'Complete Purchase Details Report', both created by SREEDHARAN S on 9/6/2025. The sidebar on the left provides navigation links for Reports, Recent, Created by Me, Private Reports, Public Reports, All Reports, Folders, All Folders, Created by Me, Shared with Me, Favorites, and All Favorites.

Reports details

Report: Purchase Orders with Order Items and Product ID

Complete Purchase Details Report

Medical Inventory ... Products Order Items Purchase Orders Inventory Transactions Suppliers Reports Dashboards

Report: Purchase Orders with Order Items and Product ID
Complete Purchase Details Report

Total Records	Total Order Count	Total Quantity Received	Total Amount
1	2	0	\$0.00

Supplier ID	Actual Delivery Date	Purchase Order: Purchase Order ID	Product ID: Product ID	Order Count	Product ID: Product Name	Quantity Received	Amount
S011 (1)	9/17/2025 (1)	P002 (1)	PR03	2	GPB	0	\$0.00
			Subtotal	2		0	\$0.00
				2		0	\$0.00
			Subtotal	2		0	\$0.00
			Total (1)	2		0	\$0.00

Row Counts Detail Rows Subtotals Grand Total

Report: Purchase Orders

Purchase Orders based on Suppliers

Purchase Orders based on Supplier

orgfarm-8ac07fe8bb-dev-ed.develop.lightning.force.com/lightning/r/Report/000g1L000004qB1tUAE/view?queryScope=userFolders

Medical Inventory ... Products Order Items Purchase Orders Inventory Transactions Suppliers Reports Dashboards

Report: Purchase Orders
Purchase Orders based on Suppliers

Total Records Total Order Count Total Total Order Cost
2 2 \$250.00

Enable Field Editing

Record Count

Supplier ID S010 S011

Supplier ID S010
Record Count 1 (50% of 2)

Supplier ID	Purchase Order: Purchase Order ID	Purchase Order: ID	Actual Delivery Date	Expected Delivery Date	Order Date	Purchase Order: Owner Name	Purchase Order: Owner Alias	Purchase Order: Owner Role	Purchase Order: Created
S010 (1)	P001 (1)	a01gL00000Kkq3M	9/8/2025	9/10/2025	9/5/2025	SREEDHARAN S	sre	-	SREEDHARAN S
Subtotal									
S011 (1)	P002 (1)	a01gL00000KktCX	9/17/2025	9/10/2025	9/14/2025	SREEDHARAN S	sre	-	SREEDHARAN S
Subtotal									

Row Counts Detail Rows Subtotals Grand Total

3 25°C Mostly sunny

ADVANTAGES & DISADVANTAGES

Advantages:

Centralized Tracking – Real-time visibility of medicines, stock levels, and expiry dates.

Automation – Auto-alerts for low stock, reorders, and expiry reminders.

Integration – Easily connects with purchase orders, suppliers, and billing systems.

Accuracy – Reduces manual errors in stock management.

Scalability – Can be customized and scaled as hospital/pharmacy grows.

Reports & Analytics – Easy to generate insights for decision-making.

Cloud-based – Accessible from anywhere with secure data storage.

Disadvantages:

Costly Setup – Licensing, customization, and training can be expensive.

Complexity – Requires technical knowledge to configure properly.

Dependency on Internet – Cloud-based system won't work offline.

Customization Time – Tailoring Salesforce to medical needs may take longer.

Data Migration Issues – Shifting from old systems to Salesforce can be tricky.

Ongoing Maintenance – Needs regular updates and admin support

CONCLUSION

Salesforce-based Medical Inventory Management provides an efficient and reliable way to track medicines, manage stock, and automate processes in healthcare organizations. While it requires investment in setup, customization, and training, the long-term benefits such as accuracy, automation, and scalability outweigh the drawbacks. Overall, it ensures better control over medical resources, reduces errors, and supports improved patient care

APPENDIX

- **Source Code:** Provided in Apex Classes and Triggers
- a Trigger to Calculate total amount on Order Item

```
trigger CalculateTotalAmountTrigger on Order_Item__c (after insert, after update, after delete, after undelete)
{
```

```
    CalculateTotalAmountHandler.calculateTotal(Trigger.new, Trigger.old, Trigger.isInsert, Trigger.isUpdate,
    Trigger.isDelete, Trigger.isUndelete);
}
```

Apex Class: CalculateTotalAmountHandler

```
public class CalculateTotalAmountHandler {
```

```
    // Method to calculate the total amount for Purchase Orders based on related Order Items
```

```
    public static void calculateTotal(List<Order_Item__c> newItems, List<Order_Item__c> oldItems, Boolean
    isInsert, Boolean isUpdate, Boolean isDelete, Boolean isUndelete) {
```

```
        // Collect Purchase Order IDs affected by changes in Order_Item__c records
```

```
        Set<Id> parentIds = new Set<Id>();
```

```
        // For insert, update, and undelete scenarios
```

```
        if (isInsert || isUpdate || isUndelete) {
```

```
            for (Order_Item__c ordItem : newItems) {
```

```

parentIds.add(ordItem.Purchase_Order_Id__c);

}

}

// For update and delete scenarios

if (isUpdate || isDelete) {

    for (Order_Item__c ordItem : oldItems) {

        parentIds.add(ordItem.Purchase_Order_Id__c);

    }

}

// Calculate the total amounts for affected Purchase Orders

Map<Id, Decimal> purchaseToUpdateMap = new Map<Id, Decimal>();

if (!parentIds.isEmpty()) {

    // Perform an aggregate query to sum the Amount__c for each Purchase Order

    List<AggregateResult> aggrList = [
        SELECT Purchase_Order_Id__c, SUM(Amount__c) totalAmount
        FROM Order_Item__c
        WHERE Purchase_Order_Id__c IN :parentIds
        GROUP BY Purchase_Order_Id__c
    ];

    // Map the result to Purchase Order IDs

    for (AggregateResult aggr : aggrList) {

        Id purchaseOrderId = (Id)aggr.get('Purchase_Order_Id__c');


```

```
        Decimal totalAmount = (Decimal)aggr.get('totalAmount');

        purchaseToUpdateMap.put(purchaseOrderId, totalAmount);

    }

// Prepare Purchase Order records for update

List<Purchase_Order__c> purchaseToUpdate = new List<Purchase_Order__c>();

for (Id purchaseOrderId : purchaseToUpdateMap.keySet()) {

    Purchase_Order__c purchaseOrder = new Purchase_Order__c(Id = purchaseOrderId,
Total_Order_cost__c = purchaseToUpdateMap.get(purchaseOrderId));

    purchaseToUpdate.add(purchaseOrder);

}

// Update Purchase Orders if there are any changes

if (!purchaseToUpdate.isEmpty()) {

    update purchaseToUpdate;

}

}

}
```