

# **MEDICAL INVENTORY MANAGEMENT**

**College Name:** Akshaya College of Arts and Science

**College Code:** brubw

**TEAM ID: NM2025TMID24864**

**TEAM MEMBERS: 4**

**Team LeaderName:** Y.samuel abishai pranay

**Email:** [23cssamuelabishai@acascbe.edu.in](mailto:23cssamuelabishai@acascbe.edu.in)

**Team Member:** vijayaragavan.s

**Email:** [23csvijayragavan@acascbe.edu.in](mailto:23csvijayragavan@acascbe.edu.in)

**Team Member:** SARULATHA K

**Email:** [23cssarulatha@acascbe.edu.in](mailto:23cssarulatha@acascbe.edu.in)

**Team Member:** TAMIL D

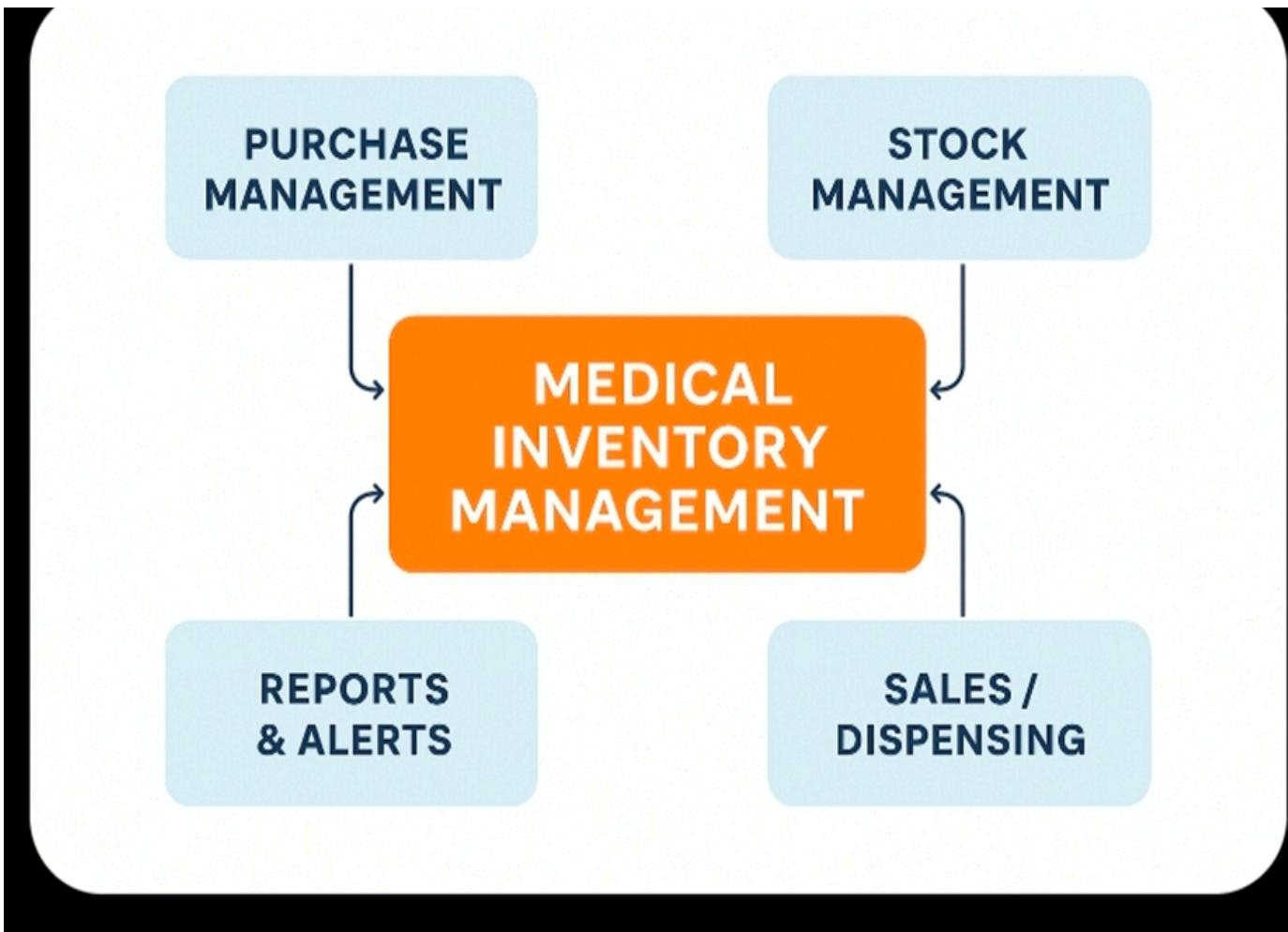
**Email:** [23cstamil@acascbe.edu.in](mailto:23cstamil@acascbe.edu.in)

## **1.INTRODUCTION**

### **1.1 Project Overview**

The Medical Inventory Management is a system to manage medical products and suppliers. It records purchase orders and order items in one place.

The system tracks stock using inventory transactions. It helps calculate total costs automatically. Overall, it makes medical stock handling easy and accurate.



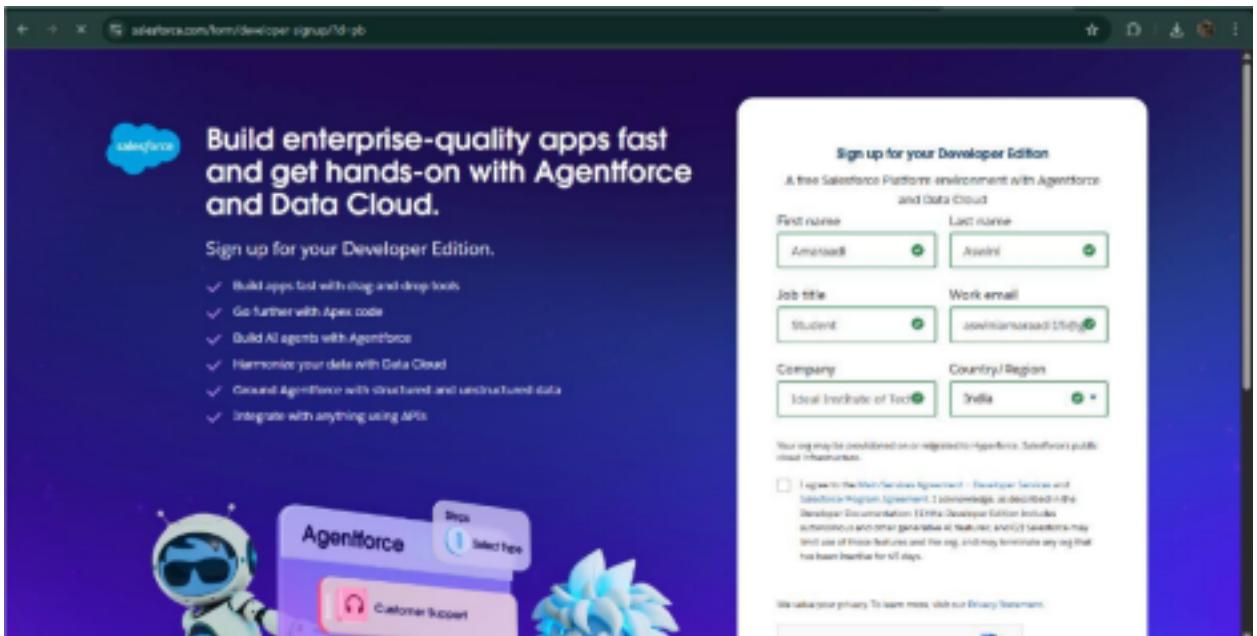
## 1.2 Purpose

The purpose of the Medical Inventory Management project is to maintain accurate records of medical products, suppliers, and stock levels, ensuring smooth purchase order handling and efficient inventory tracking.

## DEVELOPMENT PHASE

### Creating Developer Account:

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



- Created objects: Product, Purchase Order, Order Item, Inventory Transaction and Suppliers

**Product Object Details**

Details	
Description	
API Name	Product_c
Custom	✓
Singular Label	Product
Plural Label	Products
Enable Reports	✓
Track Activities	
Track Field History	
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

**Purchase Order Object Details**

Details	
Description	
API Name	Purchase_Order_c
Custom	✓
Singular Label	Purchase Order
Plural Label	Purchase Orders
Enable Reports	✓
Track Activities	
Track Field History	
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

The image displays two screenshots of the Salesforce Object Manager interface, illustrating the configuration of custom objects.

**Screenshot 1: Order Item Configuration**

**Object Details:**

- Description:** Order Item
- API Name:** Order\_Item\_\_c
- Custom:** ✓
- Singular Label:** Order Item
- Plural Label:** Order Items

**Object Settings:**

- Enable Reports:** ✓
- Track Activities:** ✓
- Track Field History:** ✓
- Deployment Status:** Deployed
- Help Settings:** Standard salesforce.com Help Window

**Screenshot 2: Inventory Transaction Configuration**

**Object Details:**

- Description:** Inventory Transaction
- API Name:** Inventory\_Transaction\_\_c
- Custom:** ✓
- Singular Label:** Inventory Transaction
- Plural Label:** Inventory Transactions

**Object Settings:**

- Enable Reports:** ✓
- Track Activities:** ✓
- Track Field History:** ✓
- Deployment Status:** Deployed
- Help Settings:** Standard salesforce.com Help Window

- Configured fields and relationships

Setup | Home | Object Manager

SETUP > OBJECT MANAGER  
Product

**Fields & Relationships**  
9 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Current Stock Level	Current_Stock_Level__c	Number(18, 0)		
Last Modified By	LastModifiedById	Lookup(User)		
Minimum Stock Level	Minimum_Stock_Level__c	Number(5, 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)		

Setup | Home | Object Manager

SETUP > OBJECT MANAGER  
Purchase Order

**Fields & Relationships**  
10 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Actual Delivery Date	Actual_Delivery_Date__c	Roll-Up Summary (COUNT Order Item)		
Created By	CreatedById	Lookup(User)		
Expected Delivery Date	Expected_Delivery_Date__c	Date		
Last Modified By	LastModifiedById	Lookup(User)		
Order Count	Order_Count__c	Roll-Up Summary (COUNT Order Item)		
Order Date	Order_Date__c	Date		
Owner	OwnerId	Lookup(User,Group)		✓
Purchase Order ID	Name	Text(80)		✓
Supplier ID	Supplier_ID__c	Lookup(Supplier)		✓

**Order Item**

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount	Amount_c	Formula (Currency)		
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Order Item ID	Name	Text(80)		✓
Product	Product_c	Lookup(Product)		✓
Product ID	Product_ID_c	Lookup(Product)		✓
Purchase Order	Purchase_Order_c	Master-Detail(Purchase Order)		✓
Quantity Ordered	Quantity_Ordered_c	Date		
Quantity Received	Quantity_Received_c	Currency(16, 2)		

**Inventory Transaction**

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		

- Create a required fields in the above following objects like Product, Purchase Order, Order item, Inventory Transaction, Supplier

<https://orgfarm-5c8c14c9b1-dev-ed.lightning.force.com/visualEditor/appBuilder.app?id=02ugL000005puIDQAY&retUrl=https%3A%2F%2Forgfarm-5c8c14c9b1-dev-ed.lightning.force.com/visualEditor/appBuilder.app>

**App Settings**

**App Details & Branding**

App Options  
Utility Items (Desktop Only)  
Navigation Items  
User Profiles

**App Details**

\* App Name: Medical Inventory Management

\* Developer Name: Medical\_Inventory\_Management

Description: Enter a description...

**App Branding**

Image:  Primary Color Hex Value: #0070D2

Org Theme Options:  Use the app's image and color instead of the org's custom theme

**App Launcher Preview**



<https://orgfarm-5c8c14c9b1-dev-ed.lightning.force.com/visualEditor/appBuilder.app?id=02ugL000005puIDQAY&retUrl=https%3A%2F%2Forgfarm-5c8c14c9b1-dev-ed.lightning.force.com/visualEditor/appBuilder.app>

**App Settings**

App Details & Branding  
App Options  
Utility Items (Desktop Only)

**Navigation Items**

Choose the items to include in the app, and arrange the order in which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you add. Some navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.

**Available Items**

Type to filter list...

- Accounts
- Activation Targets
- Activations
- All Skills
- Alternative Payment Methods
- Analytics
- App Launcher
- Appointment Categories
- Appointment Invitations
- Approval Requests
- Approvals
- Attachment
- Case
- Chatter News
- Comments
- Contract
- Contract Manager
- Custom: Marketing Profile
- Custom: Sales Profile
- Custom: Support Profile
- Customer Community Login User
- Dashboard
- Document
- File
- File Cabinet
- Home
- Lead
- Lead Scoring
- Marketing Automation
- Opportunity
- Opportunity Stage
- Order
- Order Item
- Order Line Item
- Order Status
- Order Type
- Product
- Property
- Quotation
- Quotation Line Item
- Quotation Status
- Quotation Type
- Task
- User
- Work Order

**Selected Items**

- Payment
- Results
- property
- Team

<https://orgfarm-5c8c14c9b1-dev-ed.lightning.force.com/visualEditor/appBuilder.app?id=02ugL000005puIDQAY&retUrl=https%3A%2F%2Forgfarm-5c8c14c9b1-dev-ed.lightning.force.com/visualEditor/appBuilder.app>

**App Settings**

App Details & Branding  
App Options  
Utility Items (Desktop Only)  
Navigation Items

**User Profiles**

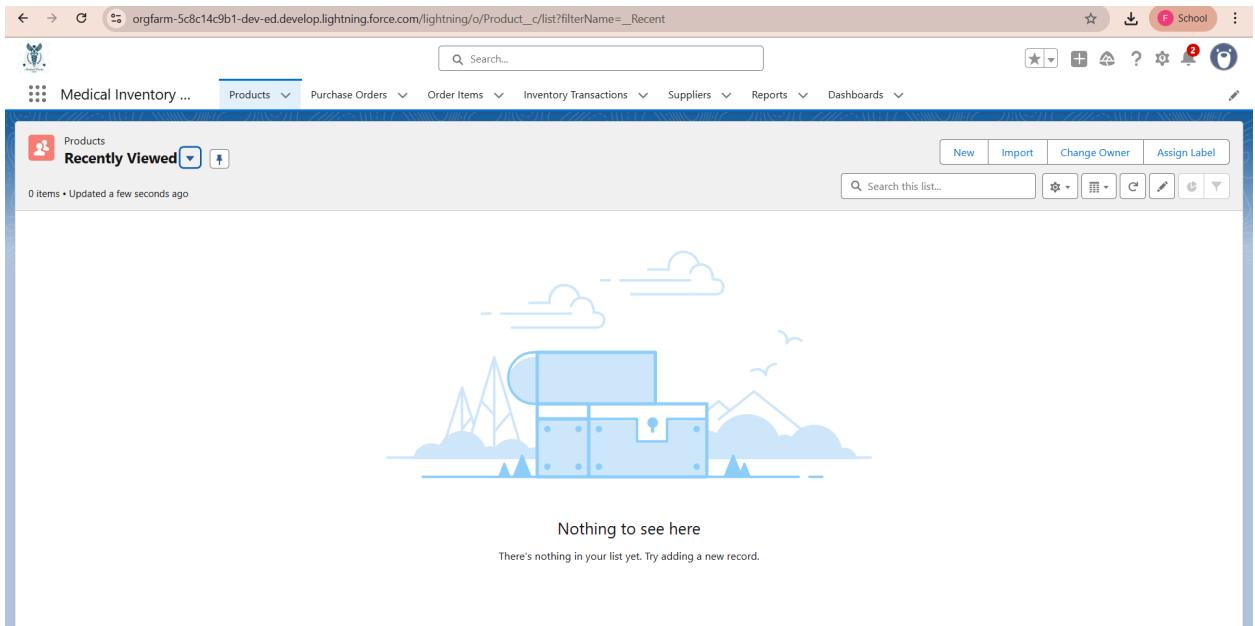
Choose the user profiles that can access this app.

**Available Profiles**

Type to filter list...  
Analytics Cloud Integration User  
Analytics Cloud Security User  
Anypoint Integration  
Authenticated Website  
Authenticated Website  
B2B Reordering Portal Buyer Profile  
Contract Manager  
Custom: Marketing Profile  
Custom: Sales Profile  
Custom: Support Profile  
Customer Community Login User

**Selected Profiles**

- System Administrator
- Inventory Manager
- Purchase Manager



- Edit the page layouts in the created custom objects like product,purchase order,order item,inventory transaction,supplier

Product Detail

Field	Type	Value
Product ID	Text	Sample Text
Product Name	Text	Sample Text
Product Description	Text	Sample Text
Unit Price	Text	\$123.45
Current Stock Level	Text	32,311
Minimum Stock Level	Text	19,491
Owner	Text	Sample Text

**Order Item**

**Order Item Detail**

- Product ID: Sample Text
- Unit Price: \$123.45
- Quantity Ordered: 9/8/2025
- Quantity Received: \$123.45

**Product details**

- Product ID: Sample Text
- Unit Price: \$123.45

**System Information**

- Created By: Sample Text
- Last Modified By: Sample Text

**Custom Links**

**Inventory Transaction**

**Information**

- Inventory Transaction ID: Sample Text
- Transaction Type: Sample Text
- Purchase Order ID: Sample Text
- Transaction Date: 9/8/2025
- Total Order Cost: \$123.45

**System Information**

- Created By: Sample Text
- Last Modified By: Sample Text

**Mobile Cards (Salesforce mobile only)**

- Also edit the page layouts in purchase order and supplier, then create a compact layout to a product and purchase order object

The screenshot shows the Salesforce Setup interface for the Product object. On the left, a sidebar lists various configuration options like Details, Fields & Relationships, Page Layouts, etc. The 'Compact Layouts' option is selected. The main content area displays the 'Product Compact Layout' configuration. It includes fields for Label (Product Compact Layout), API Name (Product\_Compact\_Layout), and Included Fields (Product Name, Unit Price, Current Stock Level). Buttons for Edit, Clone, Delete, and Compact Layout Assignment are available. A note indicates that the Object Name is Product.

- Likewise create a compact layout also in a purchase order object in name of purchase order compact layout,then create a validation rule for the purchase order object

The screenshot shows the Salesforce Setup interface for the Purchase Order object. The validation rule being edited is named 'Expected\_Delivery\_Date\_Validation'. The formula entered is '(Expected\_Delivery\_Date\_\_c - Order\_Date\_\_c) > 7'. A dropdown menu for functions is open, showing options like ABS, ACOS, ADDMONTHS, AND, ASCII, ASIN, etc. The formula bar also includes buttons for Insert Field and Insert Operator.

- To create a Inventory manager profile and purchase inventory profile in profiles

**Profile Edit**

**Inventory Manager**

Name: Inventory Manager  
User License: Salesforce  
Description:

Custom Profile:

**Custom App Settings**

	Visible	Default		Visible	Default
All Tabs (standard__AllTabSet)	<input checked="" type="checkbox"/>	<input type="radio"/>	My Service Journey (standard__MSJApp)	<input checked="" type="checkbox"/>	<input type="radio"/>
Analytics Studio (standard__Insights)	<input checked="" type="checkbox"/>	<input type="radio"/>	Queue Management (standard__QueueManagement)	<input checked="" type="checkbox"/>	<input type="radio"/>
App Launcher (standard__AppLauncher)	<input checked="" type="checkbox"/>	<input type="radio"/>	Sales (standard__LightningSales)	<input checked="" type="checkbox"/>	<input type="radio"/>
Approvals (standard__Approvals)	<input checked="" type="checkbox"/>	<input type="radio"/>	Sales (standard__Sales)	<input checked="" type="checkbox"/>	<input type="radio"/>
Automation (standard__FlowsApp)	<input checked="" type="checkbox"/>	<input type="radio"/>	Sales Cloud Mobile (standard__SalesCloudMobile)	<input checked="" type="checkbox"/>	<input type="radio"/>
Bolt Solutions (standard__LightningBolt)	<input checked="" type="checkbox"/>	<input type="radio"/>	Sales Console (standard__LightningSalesConsole)	<input checked="" type="checkbox"/>	<input type="radio"/>
Community (standard__Community)	<input checked="" type="checkbox"/>	<input type="radio"/>	Salesforce Chatter (standard__Chatter)	<input checked="" type="checkbox"/>	<input type="radio"/>

**Profile Edit**

**Purchase Manager**

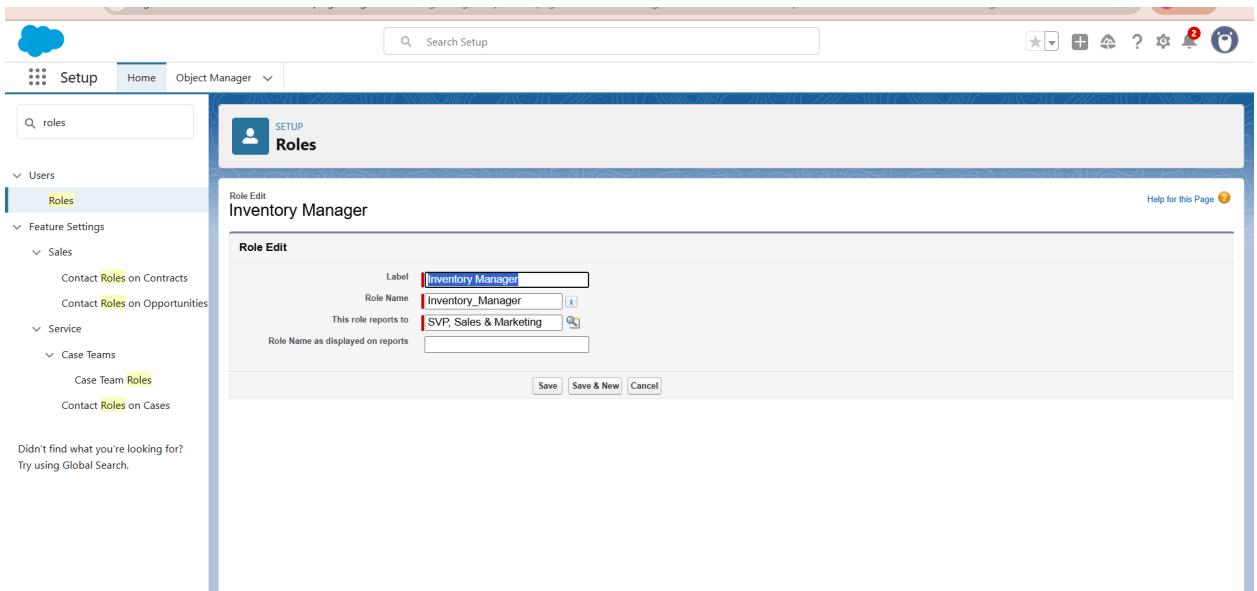
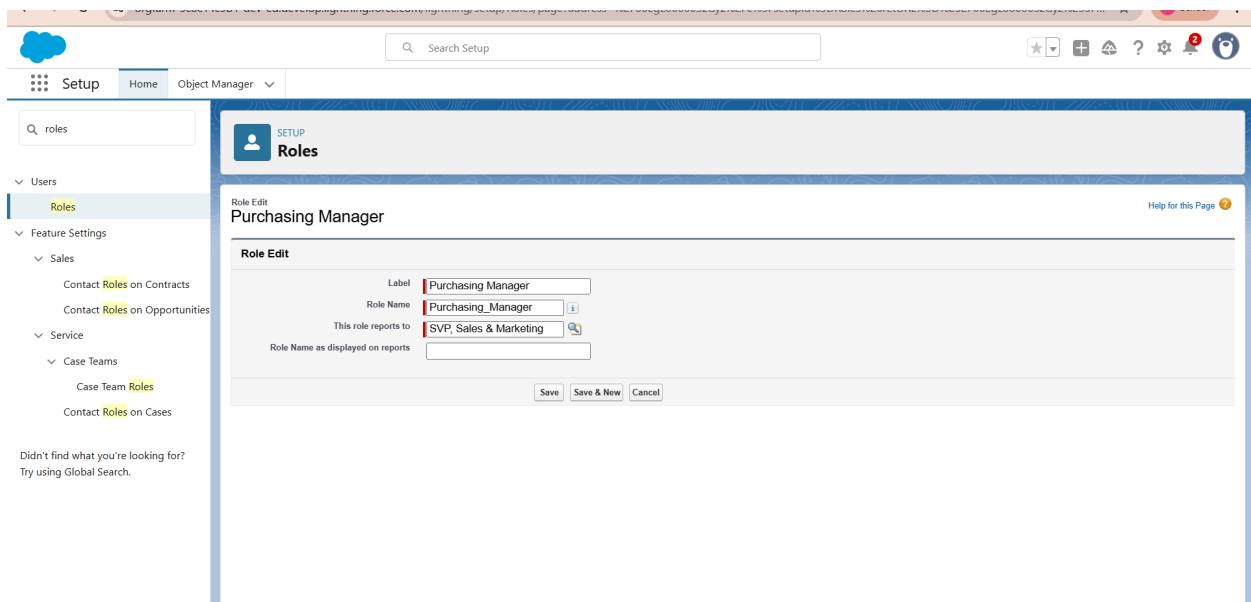
Name: Purchase Manager  
User License: Salesforce  
Description:

Custom Profile:

**Custom App Settings**

	Visible	Default		Visible	Default
All Tabs (standard__AllTabSet)	<input checked="" type="checkbox"/>	<input type="radio"/>	My Service Journey (standard__MSJApp)	<input checked="" type="checkbox"/>	<input type="radio"/>
Analytics Studio (standard__Insights)	<input checked="" type="checkbox"/>	<input type="radio"/>	Queue Management (standard__QueueManagement)	<input checked="" type="checkbox"/>	<input type="radio"/>
App Launcher (standard__AppLauncher)	<input checked="" type="checkbox"/>	<input type="radio"/>	Sales (standard__LightningSales)	<input checked="" type="checkbox"/>	<input type="radio"/>
Approvals (standard__Approvals)	<input checked="" type="checkbox"/>	<input type="radio"/>	Sales (standard__Sales)	<input checked="" type="checkbox"/>	<input type="radio"/>
Automation (standard__FlowsApp)	<input checked="" type="checkbox"/>	<input type="radio"/>	Sales Cloud Mobile (standard__SalesCloudMobile)	<input checked="" type="checkbox"/>	<input type="radio"/>
Bolt Solutions (standard__LightningBolt)	<input checked="" type="checkbox"/>	<input type="radio"/>	Sales Console (standard__LightningSalesConsole)	<input checked="" type="checkbox"/>	<input type="radio"/>
Community (standard__Community)	<input checked="" type="checkbox"/>	<input type="radio"/>	Salesforce Chatter (standard__Chatter)	<input checked="" type="checkbox"/>	<input type="radio"/>

- To create a purchasing manager role under svp,sales and marketing role in roles And to create inventory manager role under svp sales and marketing role in roles tab



- Create a Permission set in name of

Purchase manager create access

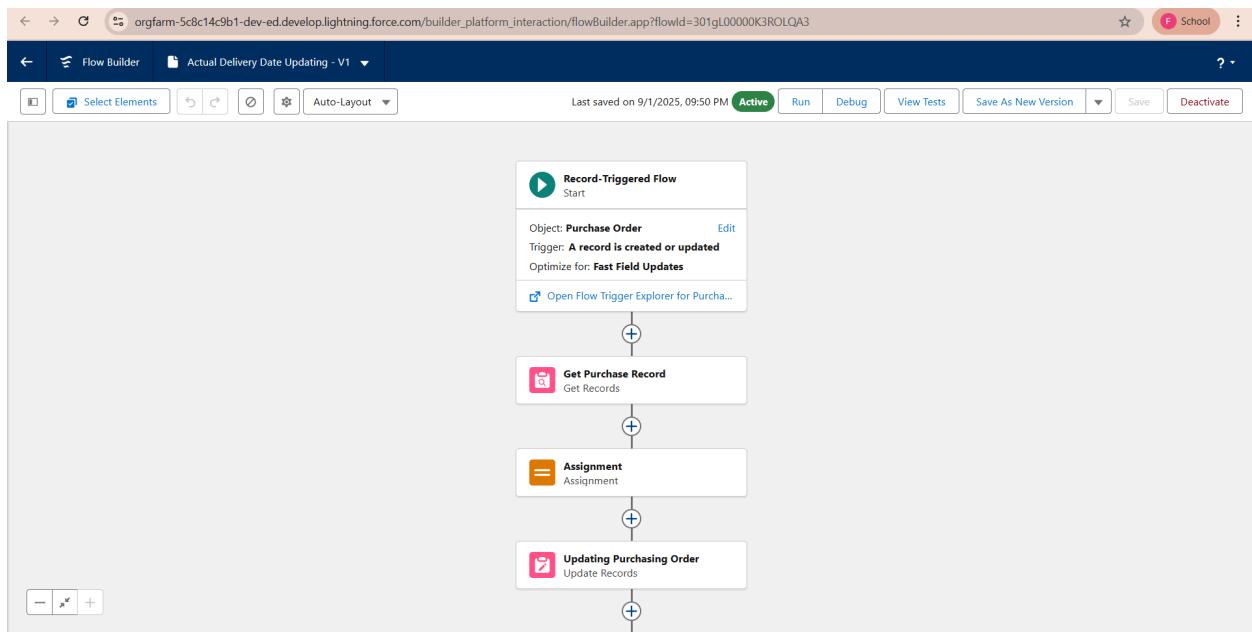
Permission Set Overview

Description	API Name
License	Purchase_Manager_Create_Access
Session Activation Required	
Permission Set Groups Added To	0
Namespace Prefix	Eathima.firthous.J
Created By	Eathima.firthous.J
Last Modified By	Eathima.firthous.J

**Apps**

- Assigned Apps
- Assigned Connected Apps
- Object Settings
- App Permissions
- Apex Class Access
- Visualforce Page Access

- To create a flow to update the Actual delivery date



- To create a trigger to calculate total amount on order item in name of CalculateTotalAmountTrigger

```

1 trigger CalculateTotalAmountTrigger on Order_Item__c (
2     after insert, after update, after delete, after undelete
3 ) {
4     CalculateTotalAmountHandler.calculateTotal(
5         Trigger.isDelete ? null : Trigger.new,
6         Trigger.isInsert || Trigger.isUndelete ? null : Trigger.old,
7         Trigger.isInsert,
8         Trigger.isUpdate,
9         Trigger.isDelete,
10        Trigger.isUndelete
11    );
12 }

```

The screenshot shows the Salesforce developer console interface. The top navigation bar includes File, Edit, Debug, Test, Workspace, Help, and a School icon. The main area displays the Apex code for `CalculateTotalAmountTrigger.apxt`. Below the code editor is a tabs bar with `Logs` selected, followed by Tests, Checkpoints, Query Editor, View State, Progress, and Problems. A detailed log table is present, with columns for User, Application, Operation, Time, Status, Read, and Size. At the bottom is a filter bar labeled "Click here to filter the log list".

- Create a new class in developer console in name of CalculateTotalAmountHandler

```

1 public class CalculateTotalAmountHandler {
2
3     public static void calculateTotal(
4         List<Order_Item__c> newItems,
5         List<Order_Item__c> oldItems,
6         Boolean isInsert,
7         Boolean isUpdate,
8         Boolean isDelete,
9         Boolean isUndelete
10    ) {
11        Set<Id> parentIds = new Set<Id>();
12
13        if ((isInsert || isUpdate || isUndelete) && newItems != null) {
14            for (Order_Item__c ordItem : newItems) {
15                if (ordItem.Purchase_Order__c != null) {
16                    parentIds.add(ordItem.Purchase_Order__c);
17                }
18            }
19        }
20    }

```

The screenshot shows the Salesforce developer console interface. The top navigation bar includes File, Edit, Debug, Test, Workspace, Help, and a School icon. The main area displays the Apex code for `CalculateTotalAmountHandler.apxc`. Below the code editor is a tabs bar with `Logs` selected, followed by Tests, Checkpoints, Query Editor, View State, Progress, and Problems. A detailed log table is present, with columns for User, Application, Operation, Time, Status, Read, and Size. At the bottom is a filter bar labeled "Click here to filter the log list".

- Create a purchase order based on Suppliers in report  
And also create complete purchase detail report

The image displays two screenshots of the Salesforce Lightning interface, specifically focusing on report builders.

**Screenshot 1: Purchase Orders based on Suppliers**

- Fields:** Groups (Purchase Order: Purchase Order ID, Supplier ID), Columns (# Order Count, # Total Order Cost).
- Filters:** Purchase Order: Purchase Order ID ↑, Supplier ID ↑, Order Count ↑, Total Order Cost ↑.
- Report Options:** Add Chart, Save & Run, Save, Close, Run.

**Screenshot 2: Complete Purchase Details Report**

- Fields:** Groups (Supplier ID, Actual Delivery Date, Purchase Order: Purchase Order ID), Columns (Order Item: Order Item ID, Product ID: Product Name, Product ID: Product ID, # Order Count, # Quantity Received, # Amount).
- Filters:** Supplier ID ↑, Actual Delivery Date ↑, Purchase Order: Purchase Order ID ↑, Order Item: Order Item ID ↑, Product ID: Product Name ↑, Product ID: Product ID ↑, Order Count ↑, Quantity Recd ↑.
- Report Options:** Add Chart, Save & Run, Save, Close, Run.

To create a new dashboard in the name of

## Medical inventory dashboard

And finally view the dashboard

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

Medical Inventory DashBoard

Purchase Orders based on Suppliers

We can't draw this chart because there is no data.

View Report (Purchase Orders based on Suppliers)

The 'Add Widget' dialog is open, showing the configuration for the 'Complete Purchase Details Report'. The report is selected under 'Report'. Under 'Display As', the '123' icon is selected. Under 'Y-Axis', 'Supplier ID' and 'Actual Delivery Date' are listed. The preview on the right shows the same message: 'We can't draw this chart because there is no data.'

Preview

Complete Purchase Details Report

We can't draw this chart because there is no data.

View Report (Complete Purchase Details Report)

Cancel Add

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

Medical Inventory DashBoard

Purchase Orders based on Suppliers

We can't draw this chart because there is no data.

View Report (Purchase Orders based on Suppliers)

The 'Add Widget' dialog is open, showing the configuration for the 'Purchase Orders based on Suppliers' report. The report is selected under 'Report'. Under 'Display As', the '123' icon is selected. Under 'Y-Axis', 'Purchase Order: Purchase Order ID' and 'Supplier ID' are listed. The preview on the right shows the same message: 'We can't draw this chart because there is no data.'

Preview

Purchase Orders based on Suppliers

We can't draw this chart because there is no data.

View Report (Purchase Orders based on Suppliers)

Cancel Add

Welcome to Salesforce: Reset

Recent | Dashboards | Salesfor...

SF-Sample Project Document -

- Student

orgfarm-5c8c14c9b1-dev-ed.develop.lightning.force.com/lightning/o/Dashboard/home?queryScope=mru

School

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

Search...

Search recent dashboards... New Dashboard New Folder

Dashboard Name Description Folder Created By Created On Subscribed

Recent Medical Inventory DashBoard Private Dashboards Fathima firthous J 9/2/2025, 8:53 AM

Dashboards

Recent

1 item

Created by Me

Private Dashboards

All Dashboards

FOLDERS

All Folders

Created by Me

Shared with Me

FAVORITES

All Favorites

Breaking news Nepal Protest Li...

Search

Cloud, File Explorer, Task View, Edge, File, S, Chrome, Google Sheets, Word

ENG IN 22:42 08-09-2025

DASHBOARD	Dashboard Name	Description	Folder	Created By	Created On	Subscribed
Recent	Medical Inventory DashBoard		Private Dashboards	Fathima firthous J	9/2/2025, 8:53 AM	