

MEDICAL INVENTORY MANAGEMENT

**College Name : KPR COLLEGE OF ARTS SCIENCE
AND RESEARCH**

College Code : bruaz

TEAM ID :

TEAM MEMBERS :

Team Leader Name : Dhanya P

Email : 23bda012@kprcas.ac.in

Team Member 1 : Dharanish K T

Email : 23bda013@kprcas.ac.in

Team Member 2 : Hareni N

Email : 23bda016@kprcas.ac.in

Team Member 3 : Harish E

Email : 23bda017@kprcas.ac.in

1. INTRODUCTION

1.1 Project overview

This project is a comprehensive Salesforce application to streamline and manage various operational aspects of medical inventory. The system aims to efficiently maintain supplier details, manage purchase orders, track product details and transactions, and monitor the expiry dates of products.

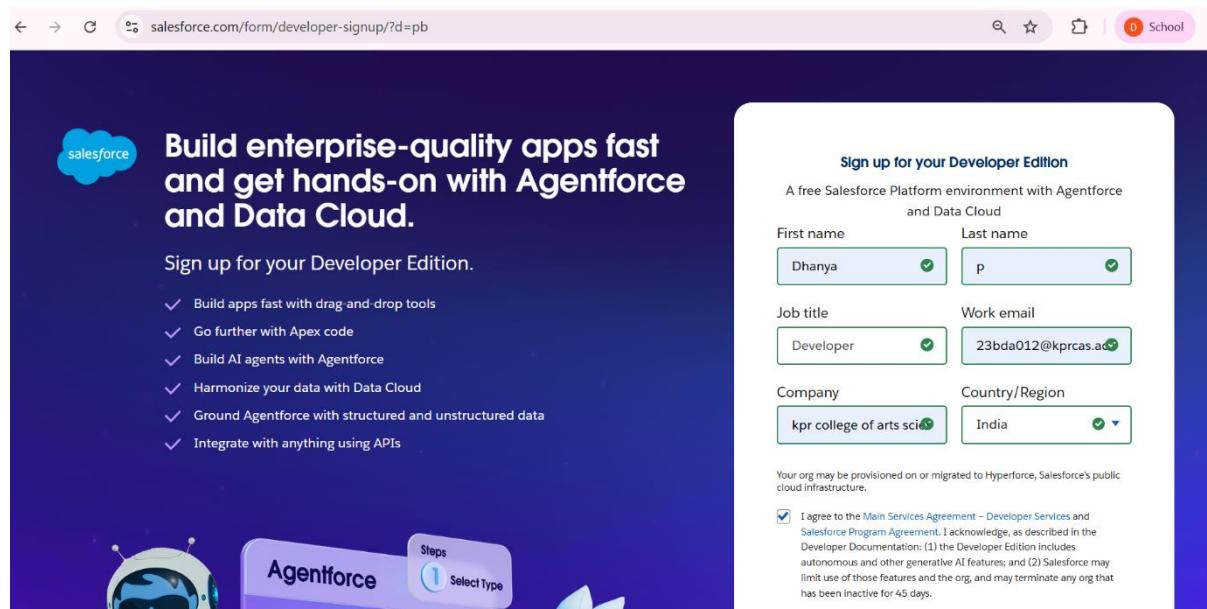
1.2 Purpose

Maintain detailed records of suppliers, including contact information. Catalog product information, including descriptions, stock levels. Monitor and track product expiry dates to avoid using expired items. Comprehensive reports to track supplier performance, and purchase orders.

2. DEVELOPMENT PHASE

• Creating Developer Account

By using this URL - <https://developer.salesforce.com/signup>



- **Creating Objects:** Product, Purchase Order, Order Item, Inventory Transaction and Supplier

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

Header: Search Setup, Setup, Home, Object Manager

Breadcrumbs: SETUP > OBJECT MANAGER

Page Title: Product

Left Sidebar (Details):

- 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

Right Panel (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

Buttons: Edit, Delete

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

Header: Search Setup, Setup, Home, Object Manager

Breadcrumbs: SETUP > OBJECT MANAGER

Page Title: Purchase Order

Left Sidebar (Details):

- 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

Right Panel (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

Buttons: Edit, Delete

SETUP > OBJECT MANAGER

Order Item

Details	
Fields & Relationships	Description
Page Layouts	
Lightning Record Pages	API Name Order_Item__c
Buttons, Links, and Actions	Custom ✓
Compact Layouts	Singular Label Order Item
Field Sets	Plural Label Order Items
Object Limits	
Record Types	
Related Lookup Filters	
Search Layouts	Enable Reports ✓
List View Button Layout	Track Activities
	Track Field History
	Deployment Status Deployed
	Help Settings Standard salesforce.com Help Window

[Edit](#) [Delete](#)

SETUP > OBJECT MANAGER

Inventory Transaction

Details	
Fields & Relationships	Description
Page Layouts	
Lightning Record Pages	API Name Inventory_Transaction__c
Buttons, Links, and Actions	Custom ✓
Compact Layouts	Singular Label Inventory Transaction
Field Sets	Plural Label Inventory Transactions
Object Limits	
Record Types	
Related Lookup Filters	
Search Layouts	Enable Reports ✓
List View Button Layout	Track Activities
	Track Field History
	Deployment Status Deployed
	Help Settings Standard salesforce.com Help Window

[Edit](#) [Delete](#)

The screenshot shows the Salesforce Setup interface with the 'Object Manager' selected. The page title is 'Supplier'. On the left, a sidebar lists various setup categories like Fields & Relationships, Page Layouts, and Buttons, Links, and Actions. The main content area is titled 'Details' and contains fields for Description, API Name (Supplier__c), Singular Label (Supplier), Plural Label (Suppliers), and other settings like Enable Reports and Deployment Status (Deployed). There are 'Edit' and 'Delete' buttons at the top right.

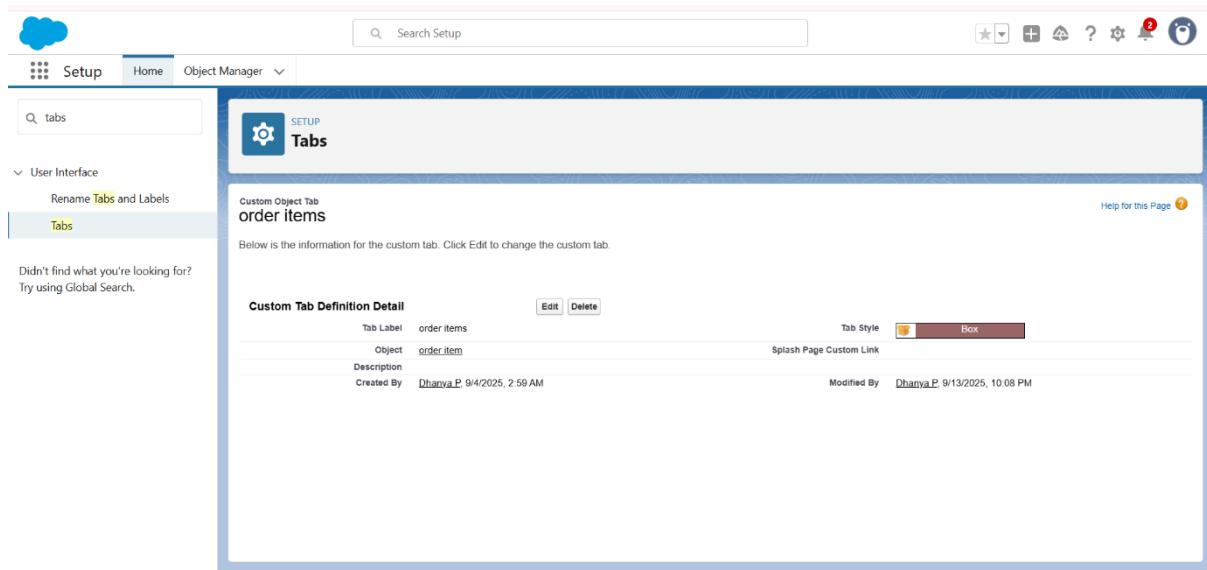
- **Creating a tab for Objects : Product, Purchase Order, Order Item, Inventory Transaction and Supplier.**

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. The page title is 'Products'. It displays a 'Custom Tab Definition Detail' section with fields for Tab Label (Products), Object (Product), and Description. It also shows the 'Tab Style' (Stethoscope) and 'Splash Page Custom Link'. The 'Edit' and 'Delete' buttons are visible at the top right. A sidebar on the left shows a search bar and navigation links for User Interface, Rename Tabs and Labels, and Tabs.

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

- Header:** Includes the Salesforce logo, a search bar labeled "Search Setup", and various navigation icons.
- Left Sidebar:** Shows a tree view under "User Interface" with "Tabs" selected. A message at the bottom says "Didn't find what you're looking for? Try using Global Search."
- Content Area:**
 - Section Header:** "Custom Object Tab" and "Purchase Orders".
 - Text:** "Below is the information for the custom tab. Click Edit to change the custom tab."
 - Table:** "Custom Tab Definition Detail" showing the following data:

Tab Label	Purchase Orders
Object	Purchase Order
Description	
Created By	Dhanya P 9/4/2025, 3:00 AM
Modified By	Dhanya P 9/13/2025, 10:11 PM
 - Buttons:** "Edit" and "Delete" located above the table.
 - Style Options:** "Tab Style" dropdown set to "Form" and "Splash Page Custom Link".



Setup Home Object Manager

tabs

User Interface

Rename **Tabs** and Labels

Tabs

Didn't find what you're looking for? Try using Global Search.

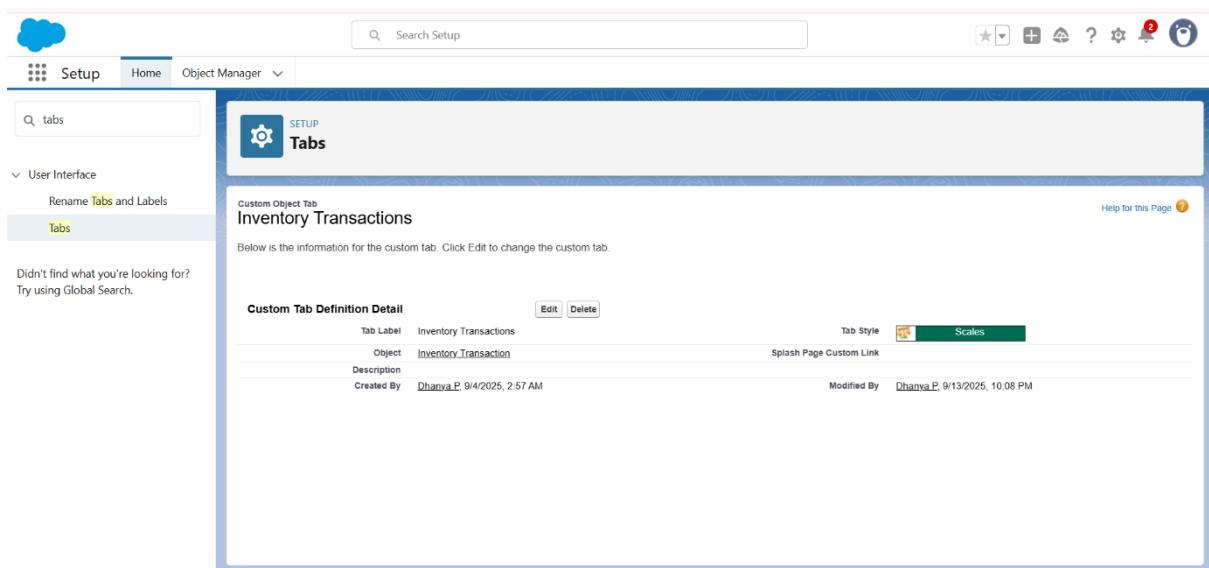
Custom Object Tab **order items**

Below is the information for the custom tab. Click Edit to change the custom tab.

Custom Tab Definition Detail

Tab Label	order items	Edit	Delete
Object	order item	Tab Style	
Description	Dhanya_P 9/4/2025, 2:59 AM	Splash Page Custom Link	Box
Created By	Dhanya_P 9/4/2025, 2:59 AM	Modified By	Dhanya_P 9/13/2025, 10:08 PM

Help for this Page



Setup Home Object Manager

tabs

User Interface

Rename **Tabs** and Labels

Tabs

Didn't find what you're looking for? Try using Global Search.

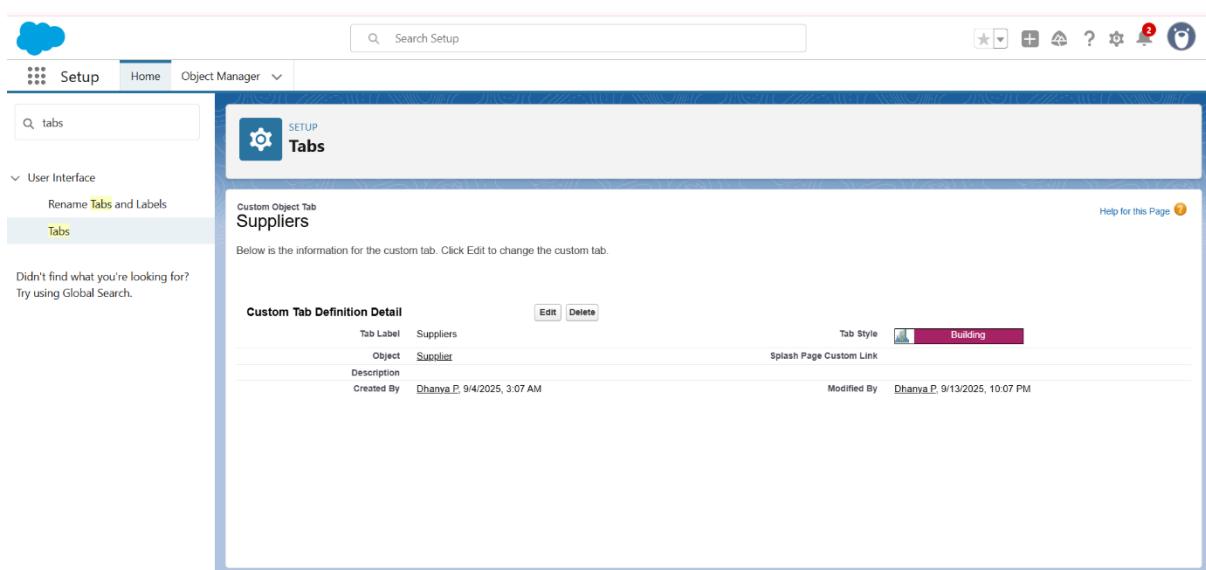
Custom Object Tab **Inventory Transactions**

Below is the information for the custom tab. Click Edit to change the custom tab.

Custom Tab Definition Detail

Tab Label	Inventory Transactions	Edit	Delete
Object	Inventory Transaction	Tab Style	
Description	Dhanya_P 9/4/2025, 2:57 AM	Splash Page Custom Link	Scales
Created By	Dhanya_P 9/4/2025, 2:57 AM	Modified By	Dhanya_P 9/13/2025, 10:08 PM

Help for this Page



Setup Home Object Manager

tabs

User Interface

Rename **Tabs** and Labels

Tabs

Didn't find what you're looking for? Try using Global Search.

Custom Object Tab **Suppliers**

Below is the information for the custom tab. Click Edit to change the custom tab.

Custom Tab Definition Detail

Tab Label	Suppliers	Edit	Delete
Object	Supplier	Tab Style	
Description	Dhanya_P 9/4/2025, 3:07 AM	Splash Page Custom Link	Building
Created By	Dhanya_P 9/4/2025, 3:07 AM	Modified By	Dhanya_P 9/13/2025, 10:07 PM

- **Create a Lightning App for Medical Inventory Management**

App Settings

App Details & Branding

App Details & Branding

Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.

App Details

* App Name

* Developer Name

Description

App Branding

Image

Primary Color Hex Value

Clear

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

App Launcher Preview

 Medical Inventory Manage...

App Settings

App Details & Branding

App Options

Utility Items (Desktop Only)

Navigation Items

User Profiles

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 Sites

Alternative Payment Methods

Analytics

App Launcher

Appointment Categories

Create ▾

Selected Items

Products

Purchase Orders

Order Items

Inventory Transactions

Suppliers

Reports

Dashboards

▲

▼

The screenshot shows the 'User Profiles' section of the Lightning App Builder. On the left, a sidebar lists 'App Settings' options: App Details & Branding, App Options, Utility Items (Desktop Only), Navigation Items, and User Profiles (which is selected). The main area is titled 'User Profiles' and contains a sub-instruction: 'Choose the user profiles that can access this app.' Below this is a 'Available Profiles' list with a search bar and a scrollable list of profiles. To the right is a 'Selected Profiles' list containing three profiles: System Administrator, Inventory Manager, and Purchase Manager. Navigation arrows between the two lists indicate they are linked.

• Creating Fields and Relationships

The screenshot shows the 'Fields & Relationships' section of the Object Manager for the 'Product' object. On the left, a sidebar lists various setup categories like Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, etc. The main area is titled 'Fields & Relationships' and shows a table of fields. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: 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(18, 0)), Order Date (Order_Date__c, Date), 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)), Supplier ID (Supplier__c, Lookup(Supplier)), and Unit Price (Unit_Price__c, Currency(16, 2)). Each row also has a small dropdown arrow icon at the end.

SETUP > OBJECT MANAGER

Purchase Order

Fields & Relationships					
FIELD LABEL		FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Actual Delivery Date		Actual_Delivery_Date__c	Date		
Created By		CreatedBy	Lookup(User)		
Expected Delivery Date		Expected_Delivery_Date__c	Date		
Last Modified By		LastModifiedBy	Lookup(User)		
Order Count		Order_Count__c	Roll-Up Summary (COUNT Order Item)		
Order Date		Order_Date__c	Date		
Product Name		Product_Name__c	Master-Detail(Product)	✓	
Purchase Order ID		Name	Text(80)	✓	
Supplier ID		Supplier_ID__c	Lookup(Supplier)	✓	
Total Order Cost		Total_Order_Cost__c	Roll-Up Summary (SUM Order Item)		

SETUP > OBJECT MANAGER

Order Item

Fields & Relationships					
FIELD LABEL		FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount		Amount__c	Formula (Currency)		
Amount (for Roll-up)		Amount_for_Roll_up__c	Number(18, 0)		
Created By		CreatedBy	Lookup(User)		
Last Modified By		LastModifiedBy	Lookup(User)		
Order Item		Order_Item__c	Master-Detail(Purchase Order)	✓	
Order Item ID		Name	Text(80)	✓	
Product		Product__c	Lookup(Product)	✓	
Product ID		Product_ID__c	Lookup(Product)	✓	
Purchase Order ID		Purchase_Order_ID__c	Text(255)		
Quantity Ordered		Quantity_Ordered__c	Number(18, 0)		
Quantity Received		Quantity_Received__c	Number(18, 0)		
Unit Price		Unit_Price__c	Formula (Currency)		

Setup Home Object Manager

SETUP > OBJECT MANAGER
Inventory Transaction

Fields & Relationships
9 items, Sorted by Field Label

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	Purchase_Order__c	Lookup(Purchase Order)		✓
Purchase Order ID	Purchase_Order_ID__c	Text(30)		
Total Order Cost	Total_Order_Cost__c	Formula (Currency)		
Transaction Date	Transaction_Date__c	Date		
Transaction Type	Transaction_Type__c	Picklist		

Setup Home Object Manager

SETUP > OBJECT MANAGER
Supplier

Fields & Relationships
9 items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Long Text Area(32768)		
Contact Person	Contact_Person__c	Text(50)		
Created By	CreatedById	Lookup(User)		
Email	Email__c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone Number	Phone_Number__c	Phone		
Supplier ID	Name	Text(80)		✓
Supplier Name	Supplier_Name__c	Text(100)		

- **To edit a Page Layout in Product Object**

Setup Home Object Manager

SETUP > OBJECT MANAGER
Product

Page Layouts

Buttons	Last Modified By	Product Description	Unit Price
Quick Actions		Minimum Stock Level	Product ID
Mobile & Lightning Actions		Order Date	Product Name
Expanded Lookups			Supplier ID
Related Lists			Owner

Report Chef Edit Page Layout: Product Layout ~ Salesforce - Developer Edition

Product Detail

Standard Buttons	
Edit	Delete
Clone	Change Owner
Change Record Type	Printable View
Sharing	Sharing Hierarchy
Edit Labels	

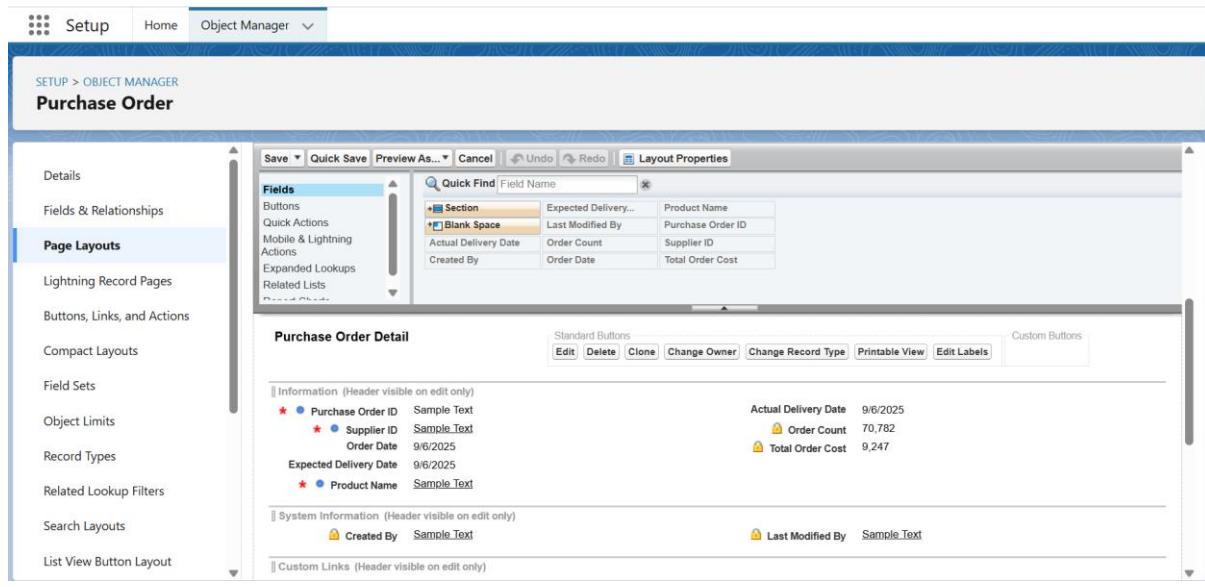
Information (Header visible on edit only)

Product ID	Sample Text	Unit Price	\$123.45
Product Name	Sample Text	Current Stock Level	92,767
Product Description	Sample Text	Minimum Stock Level	8,012
		Owner	Sample Text

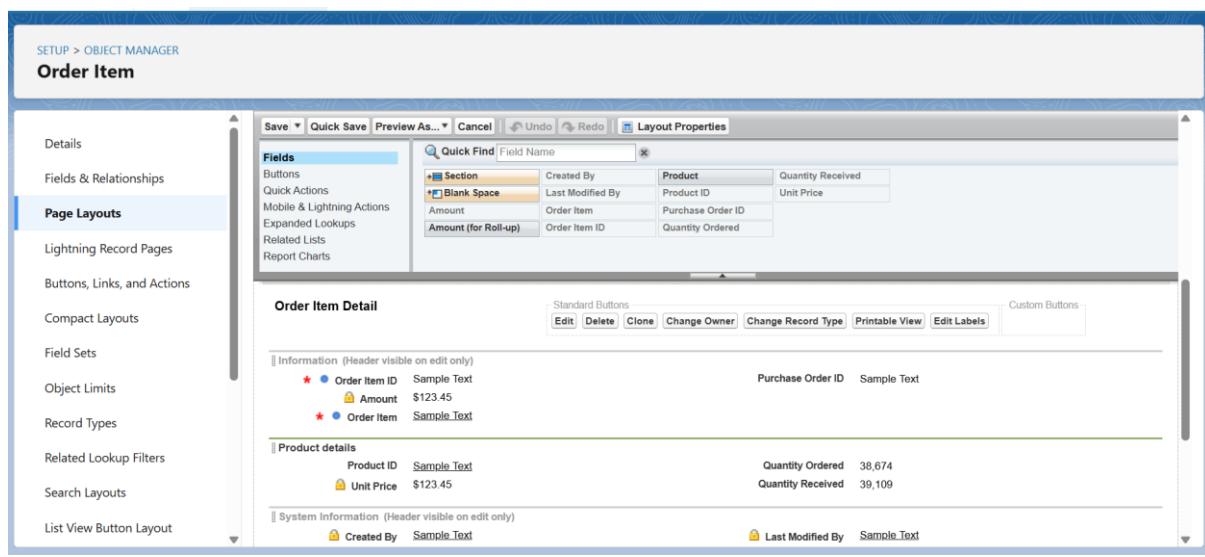
System Information (Header visible on edit only)

Supplier ID	Sample Text	Last Modified By	Sample Text
Created By	Sample Text		

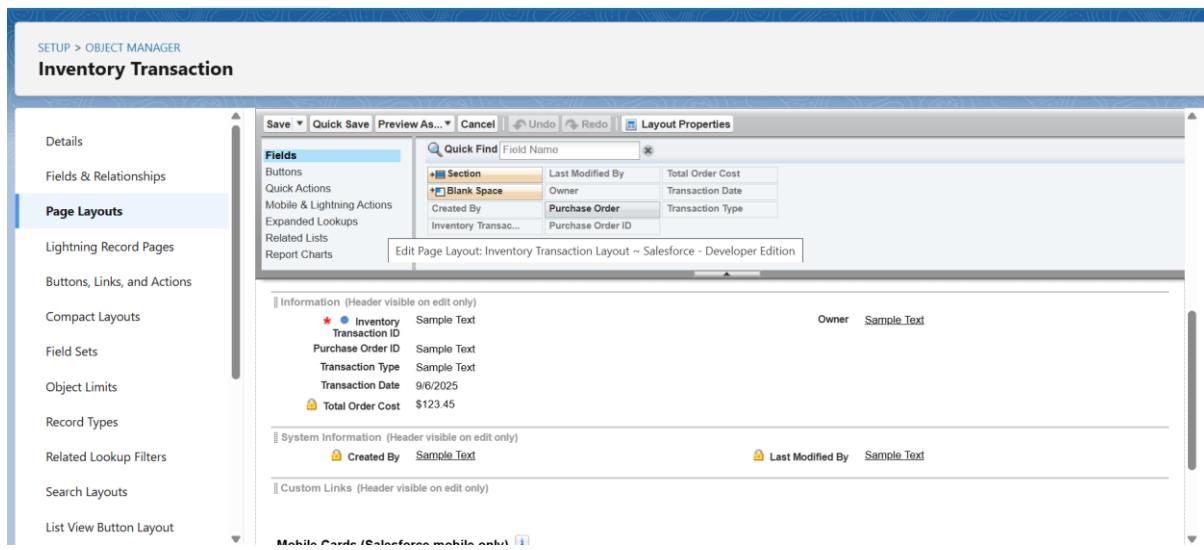
- To edit a Page Layout in Purchase Order Object



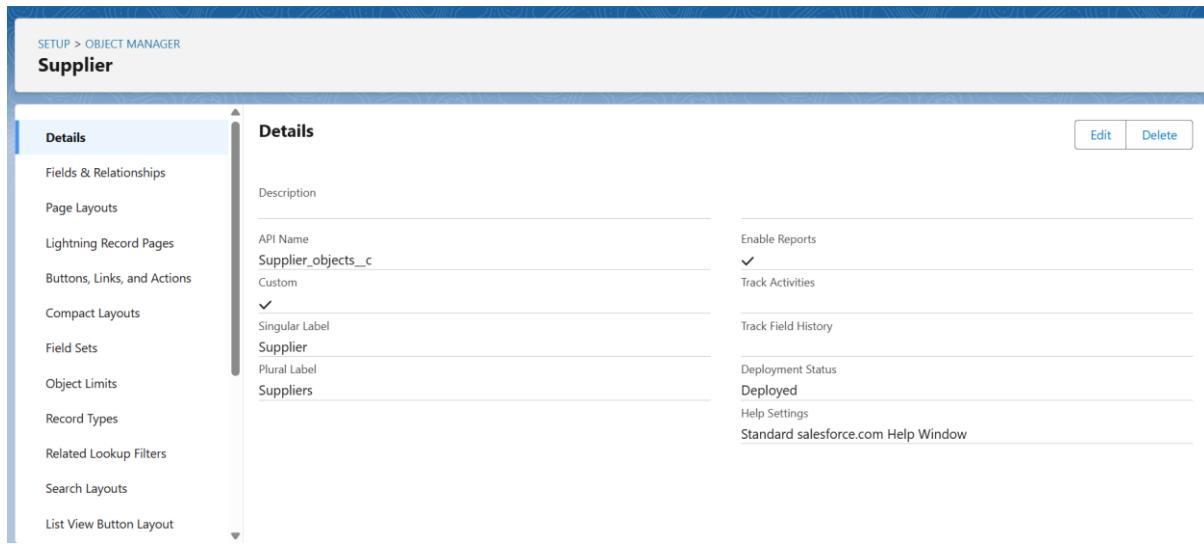
- To edit a Page Layout in Order Item Object



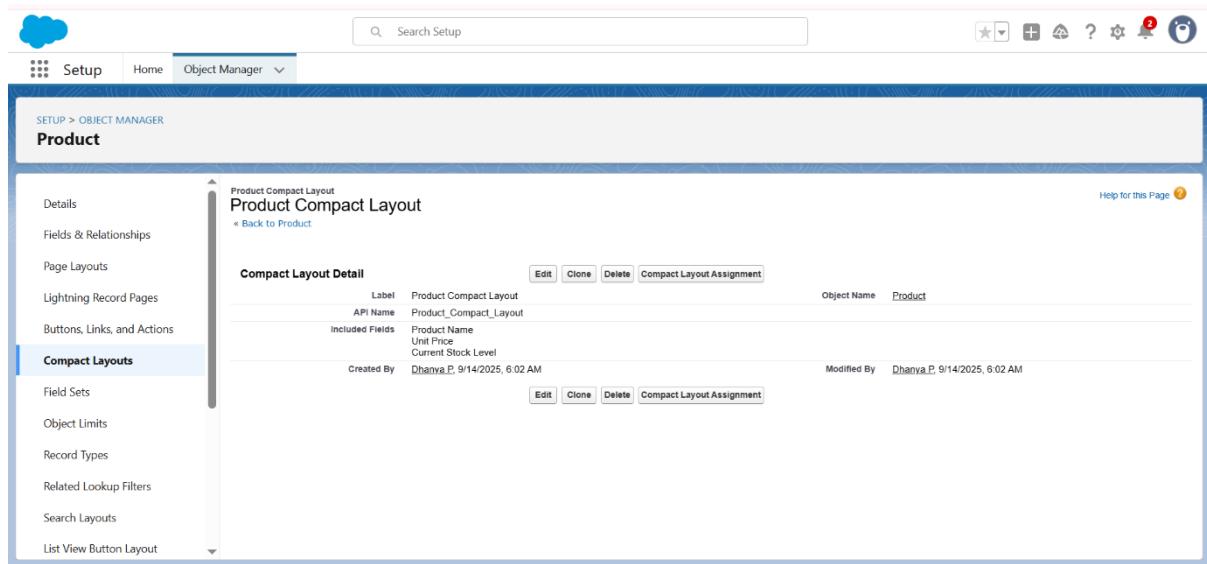
- To edit a Page Layout in Inventory Transaction Object



- To edit a Page Layout in Supplier Object



- To create a Compact Layout to a Product Object

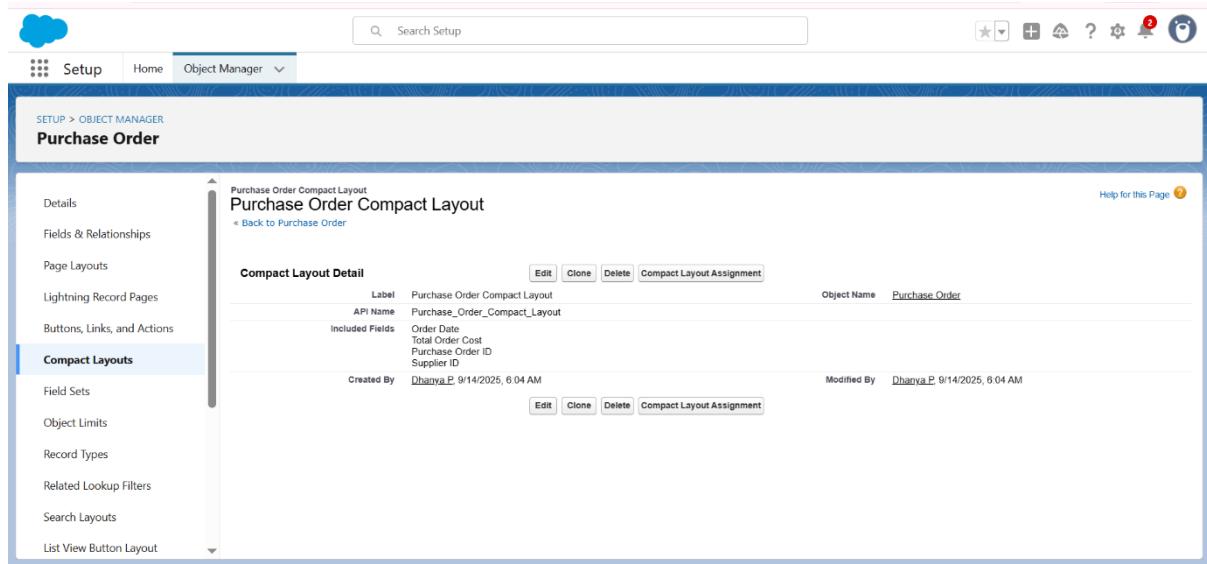


The screenshot shows the Salesforce Setup interface for creating a compact layout for the Product object. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main title is 'Product Compact Layout' under 'Product Compact Layout'. The 'Compact Layout Detail' section shows the following details:

Label	Product Compact Layout	Object Name	Product
API Name	Product_Compact_Layout		
Included Fields	Product Name, Unit Price, Current Stock Level		
Created By	Dhanya_P, 9/14/2025, 6:02 AM	Modified By	Dhanya_P, 9/14/2025, 6:02 AM

The left sidebar lists various setup categories, with 'Compact Layouts' selected. A vertical scrollbar is visible on the right side of the main content area.

- To create a Compact Layout to a Purchase Order Object



The screenshot shows the Salesforce Setup interface for creating a compact layout for the Purchase Order object. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main title is 'Purchase Order Compact Layout' under 'Purchase Order Compact Layout'. The 'Compact Layout Detail' section shows the following details:

Label	Purchase Order Compact Layout	Object Name	Purchase Order
API Name	Purchase_Order_Compact_Layout		
Included Fields	Order Number, Total Order Cost, Purchase Order ID, Supplier ID		
Created By	Dhanya_P, 9/14/2025, 6:04 AM	Modified By	Dhanya_P, 9/14/2025, 6:04 AM

The left sidebar lists various setup categories, with 'Compact Layouts' selected. A vertical scrollbar is visible on the right side of the main content area.

- **To create an Expected Delivery Date Validation rule to a Employee Object**

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

- Page Header:** Search Setup, Setup, Home, Object Manager.
- Section:** SETUP > OBJECT MANAGER > Purchase Order.
- Section Title:** Purchase Order Validation Rule.
- Validation Rule Detail:**
 - Rule Name: Expected_Delivery_Date_Validation
 - Error Condition Formula: $(\text{Expected_Delivery_Date_c} - \text{Order_Date_c}) > 7$
 - Error Message: The Expected Delivery Date should not exceed 7 days.
 - Active: ✓
 - Error Location: Top of Page
 - Created By: Dhanya.P, 9/14/2025, 6:06 AM
 - Modified By: Dhanya.P, 9/14/2025, 6:06 AM
- Left Sidebar:** Details, 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.

- **To create an Inventory Manager Profile**

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

- Page Header:** Search Setup, Setup, Home, Object Manager.
- Section:** SETUP > Profiles.
- Section Title:** Inventory Manager.
- Profile Detail:**
 - Name: Inventory Manager
 - User License: Salesforce
 - Description
 - Created By: Dhanya.P, 9/14/2025, 6:12 AM
 - Modified By: Dhanya.P, 9/14/2025, 8:05 AM
- Page Layouts:**

Standard Object Layouts	Global	Location Group Assignment	Location Group Assignment Layout
Email Application	Not Assigned [View Assignment]	Macro	Macro Layout [View Assignment]
Home Page Layout	Home Page Default [View Assignment]	Object Milestone	Object Milestone Layout [View Assignment]

- To create an Purchase Manager Profile

The screenshot shows the Salesforce Setup interface under the Profiles section. The Purchase Manager profile is selected. The profile detail table includes fields for Name (Purchase Manager), User License (Salesforce), Description, Created By (Dhanya.P.), and Modified By (Dhanya.P.). The Page Layouts section shows assignments for Standard Object Layouts like Global, Email Application, and Home Page Layout across various object types such as Location Group Assignment, Macro, and Object Milestone.

Name	User License	Description	Created By	Modified By
Purchase Manager	Salesforce		Dhanya.P. 9/14/2025, 6:18 AM	Dhanya.P. 9/14/2025, 8:05 AM

- Create a Purchasing Manager and Inventory Manager Role

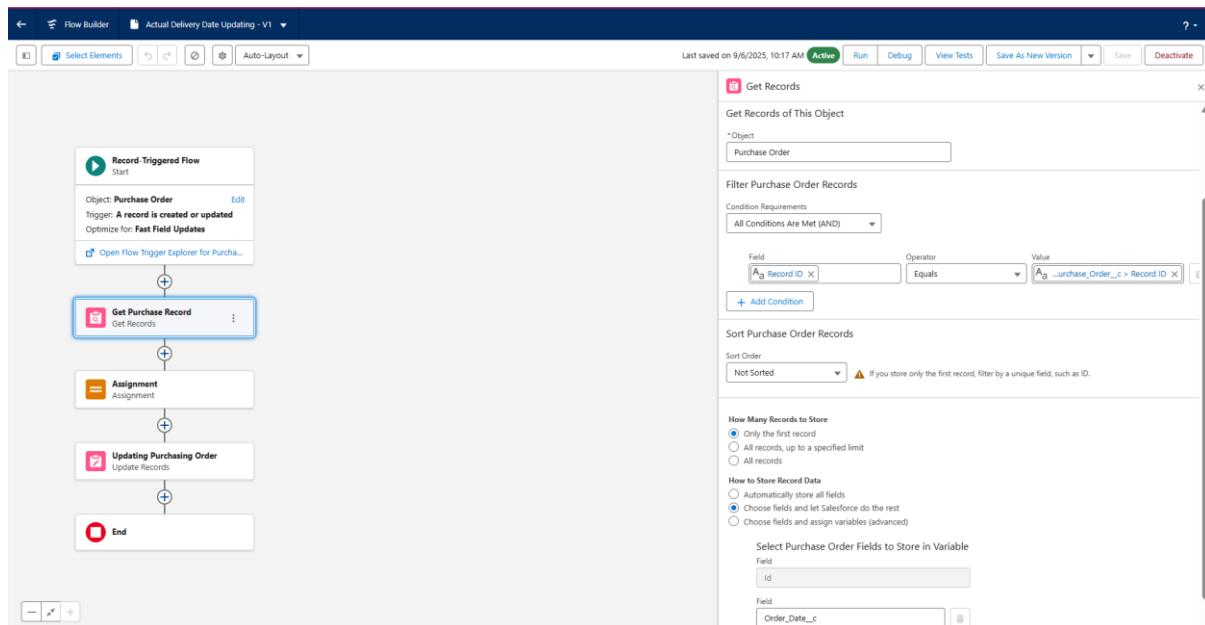
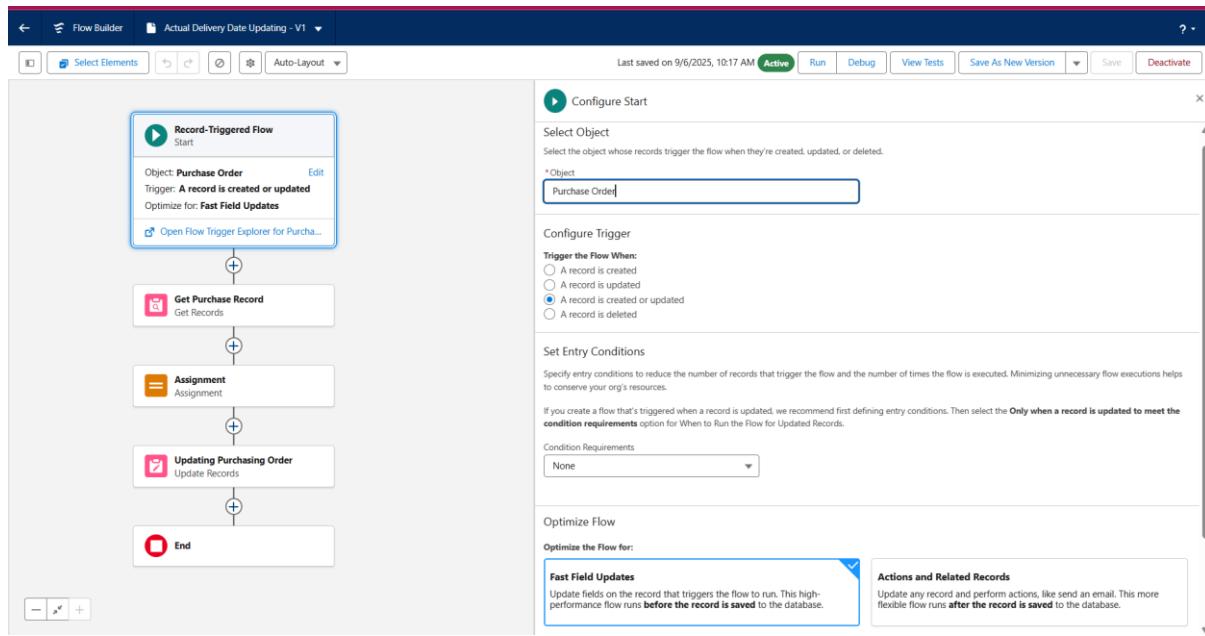
The screenshot shows the Salesforce Setup interface under the Roles section. A tree view displays various organizational roles under KPR College of Arts Science and Research, including CEO, CFO, COO, SVP.Customer Service & Support, Customer Support, International, Customer Support, North America, Installation & Repair Services, SVP.Human Resources, SVP.Sales & Marketing, Inventory Manager, Purchasing Manager, and VP.International Sales.

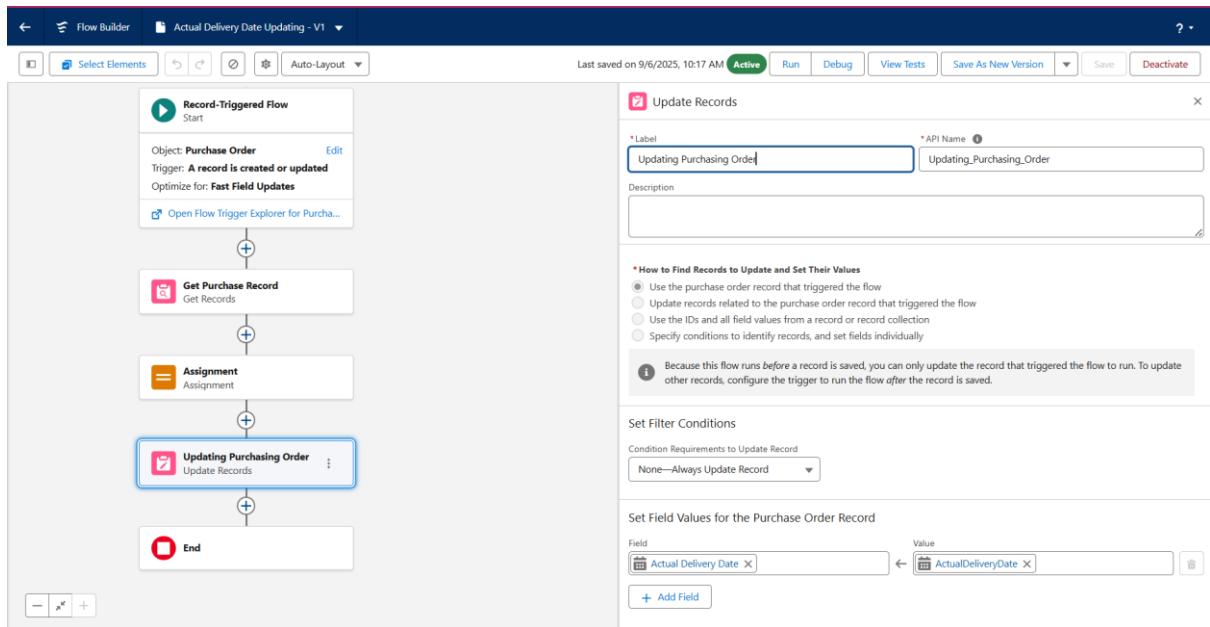
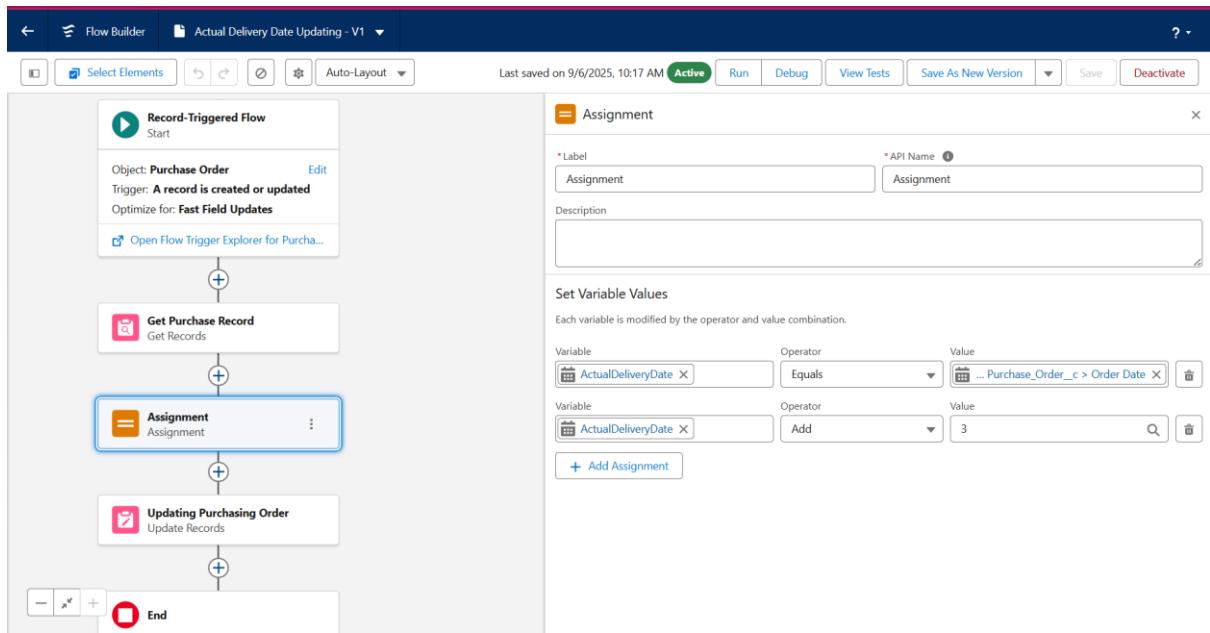
• Create a Permission Set

The screenshot shows the Salesforce Setup interface. The left sidebar has a search bar and navigation sections for Users, Permission Set Groups, and Permission Sets. A message at the bottom says " Didn't find what you're looking for? Try using Global Search." The main content area is titled "Permission Sets" and shows a "Purchase Manager Create Access" permission set. It includes tabs for "Order Items", "Tab Settings", and "Object Permissions". The "Object Permissions" section lists various permissions like Read, Create, Edit, Delete, etc., with checkboxes for "Available" and "Enabled".

The screenshot shows the "Purchase Manager Create Access" permission set in the Salesforce Setup interface. The left sidebar is identical to the previous screenshot. The main content area is titled "Purchase Manager Create Access" and shows a "Current Assignments" table. The table has columns for Full Name, Active, Role, Profile, User License, and Expires On. One assignment is listed: "John PurchaseM" with Active checked, Role as "Purchase Manager", Profile as "Salesforce", and no expiration date specified.

• Create Flow to update the Actual Delivery Date





- Create a Trigger to Calculate total amount on Order Item

The screenshot shows the Salesforce Setup interface with the 'Apex Triggers' tab selected. The trigger 'CalculateTotalAmountTrigger' is displayed, which is a before insert trigger on the 'OrderItem' object. The trigger code is as follows:

```

1trigger CalculateTotalAmountTrigger on OrderItem (before insert) {
2
3}

```

- Create a Purchase Orders based on Suppliers(Summary) Report

The screenshot shows the Salesforce Reports interface with the report 'Purchase Orders based on Suppliers' selected. The report summary table shows:

Total Records	Total Order Count	Total Total Order Cost
0	0	0

The main area displays a decorative illustration of a cactus, sun, and clouds. Below the illustration, the text 'No Results' is displayed, followed by the message 'No records returned. Try editing report filters.' At the bottom, there are checkboxes for Row Counts, Detail Rows, Subtotals, and Grand Total.

- **Create a Complete Purchase Details Report**

The screenshot shows a software interface for managing medical inventory. At the top, there's a navigation bar with links for 'Products', 'Purchase Orders', 'Order Items', 'Inventory Transactions', 'Suppliers', 'Reports' (which is currently selected), and 'Dashboards'. Below the navigation is a search bar and a toolbar with various icons.

The main content area displays a report titled "Report: Purchase Orders with Order Items and Product ID" and "Complete Purchase Details Report". It includes summary statistics: Total Records (0), Total Order Count (0), Total Quantity Received (0), and Total Amount (\$0.00). Below these stats is a decorative illustration of a cactus in a desert landscape.

A central message says "No Results" with the subtext "No records returned. Try editing report filters." At the bottom of the report area, there are checkboxes for "Row Counts", "Detail Rows", "Subtotals", and "Grand Total".

- **Create and View Medical Inventory Dashboard**

This screenshot shows a dashboard titled "Medical Inventory DashBoard". The top navigation bar includes links for 'Reports', 'Purchase Orders', 'order items', 'Inventory Transactions', 'Suppliers', 'Dashboards' (selected), and 'Products'. The dashboard header also displays the date "As of Sep 14, 2025, 10:12 PM" and the user "Viewing as Dhanya P".

The main content features a donut chart titled "Purchase Orders based on Suppliers" showing the sum of total order cost. The chart indicates two suppliers: Supplier-001 and Supplier-002. The total value shown is \$26k.

Below the chart, there's a link "View Report (Purchase Orders ba...)" and the timestamp "As of Sep 14, 2025, 10:12 PM".