MEDICAL INVENTORY MANAGEMENT

College Name: SRI KRISHNA ADITHYA COLLEGE OF ARTS AND SCIENCE

College Code: ASBRUAG

TEAM ID: NM2025TMID22215

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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. 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.

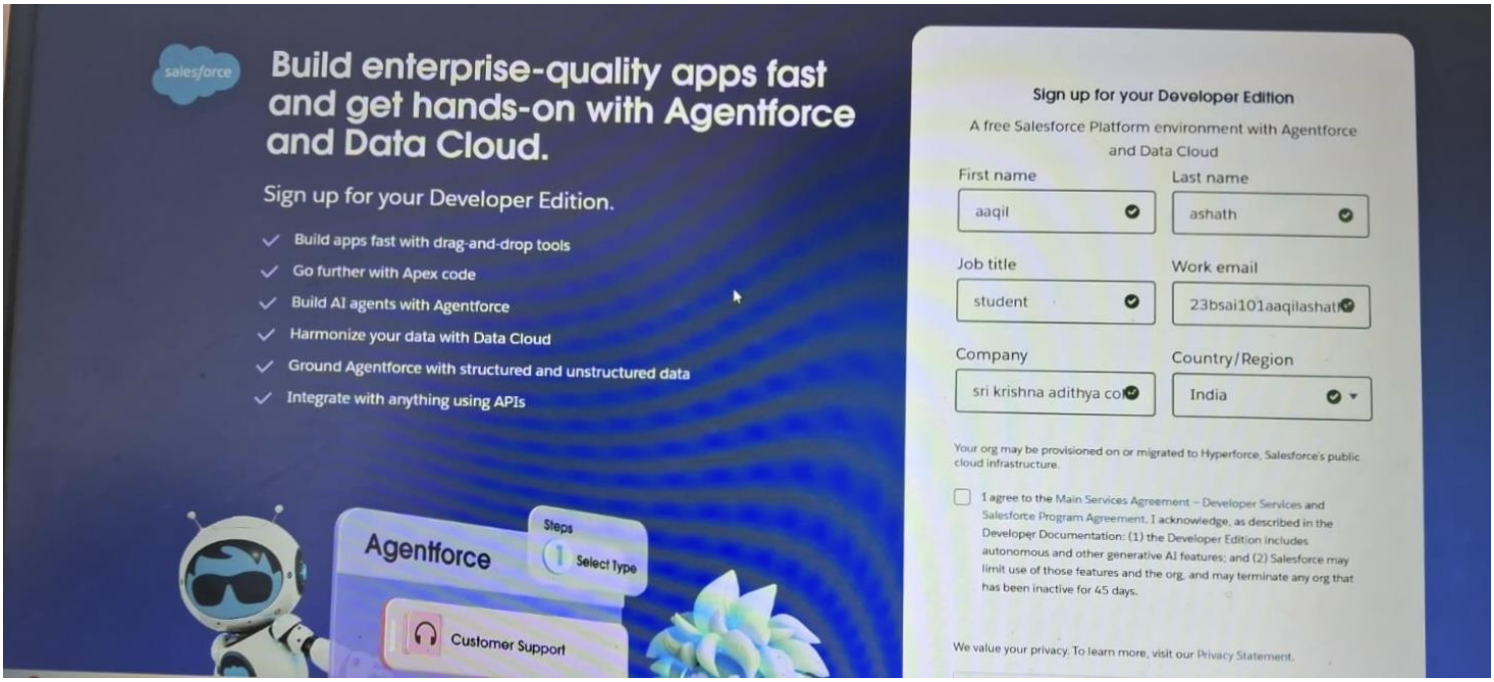
1.2 Purpose

The main objective of the Medical Inventory Management System is to enable medical organizations to efficiently manage suppliers, purchase orders, product inventory, and expiry monitoring. It reduces manual effort, improves data accuracy, enhances operational efficiency, and ensures better tracking of inventory and supplier performance.

2. DEVELOPMENT PHASE

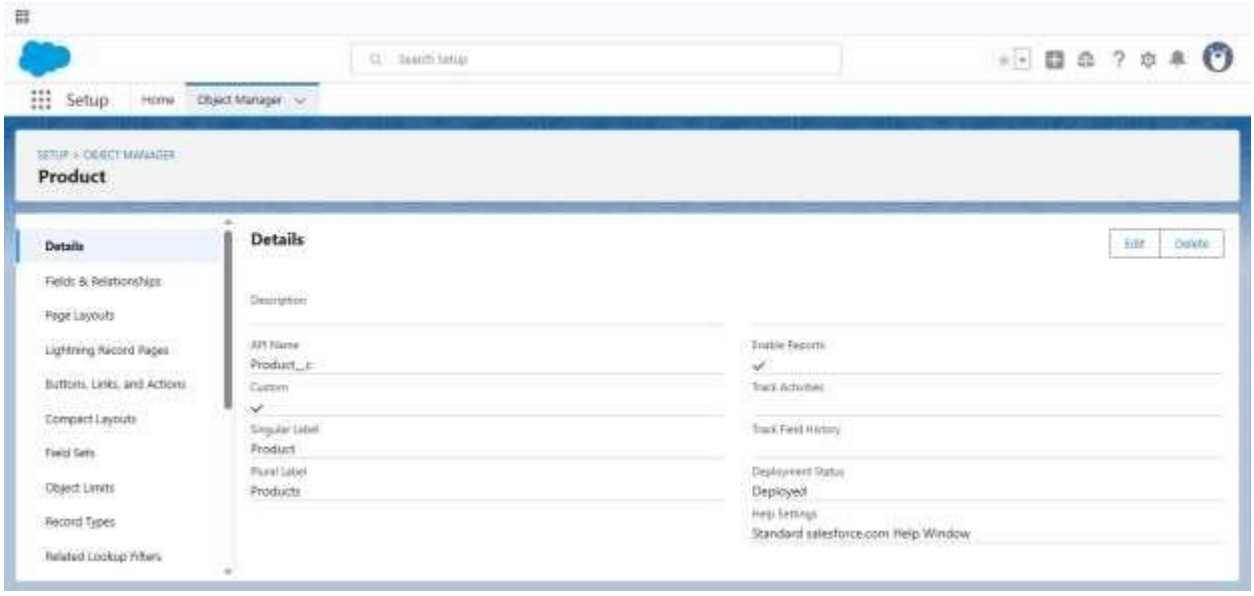
Creating Developer Account:

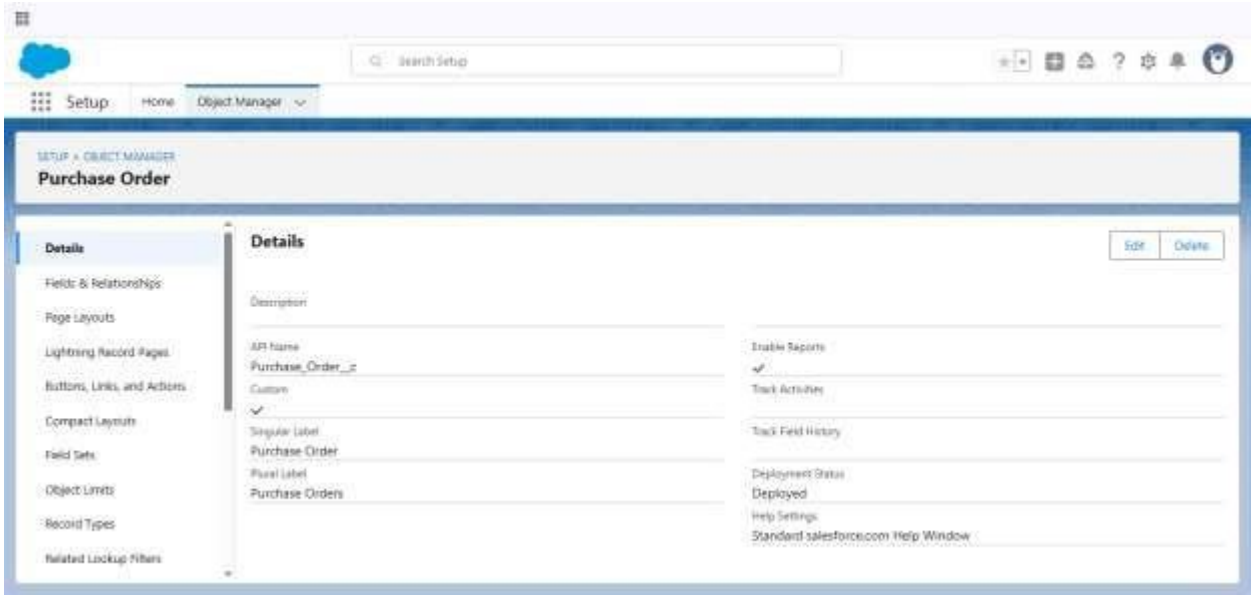
By using this URL - **https://www.salesforce.com/form/developer-signup/?d=pb**

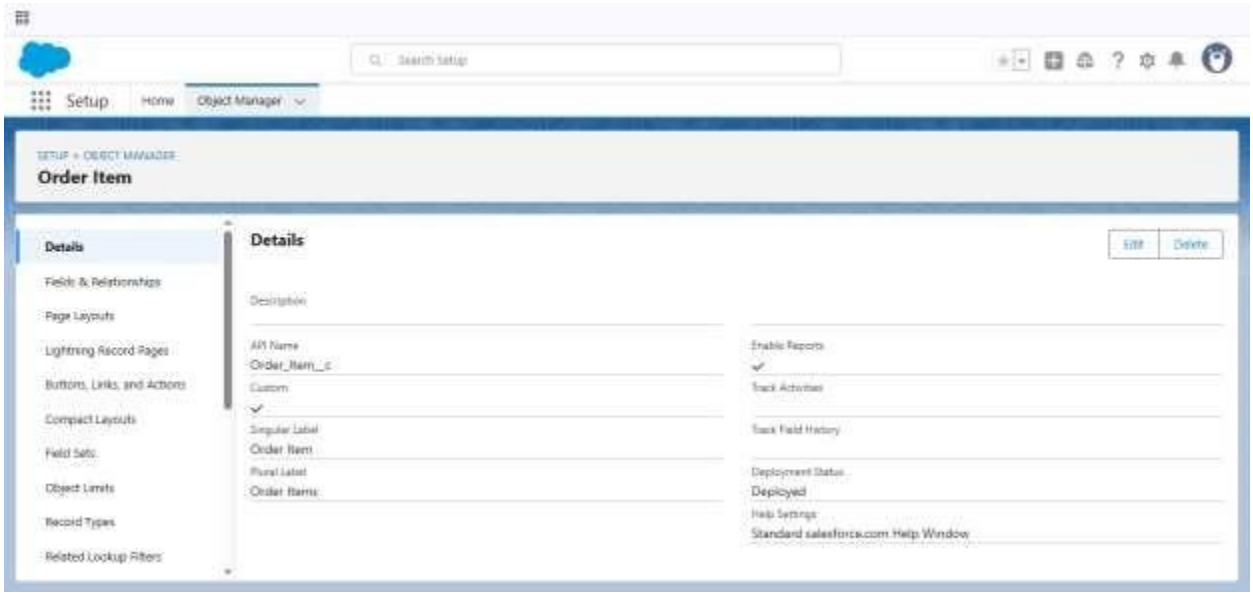


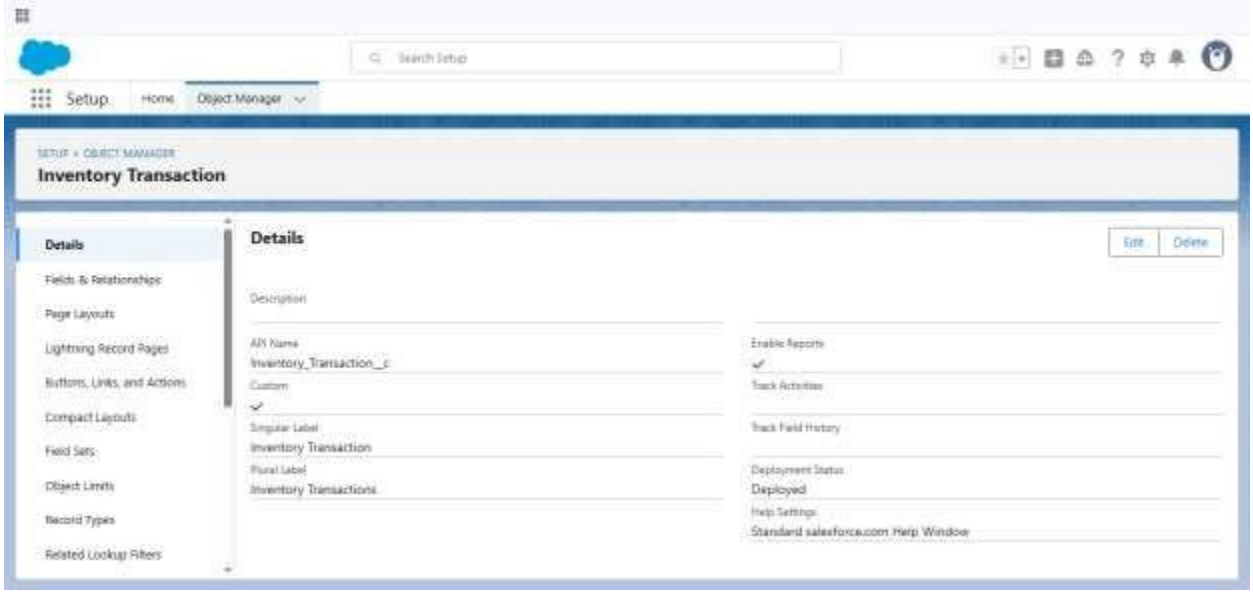
2.1 Objects:

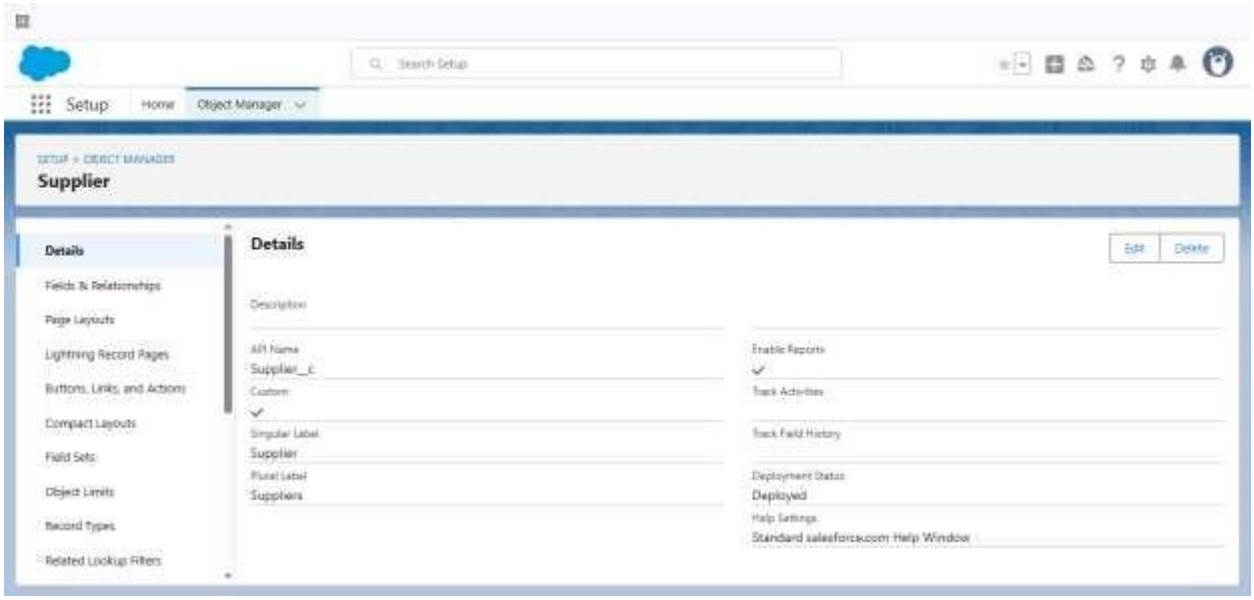
- Created objects: Product, Purchase Order, Order Item, Inventory Transaction and Supplier





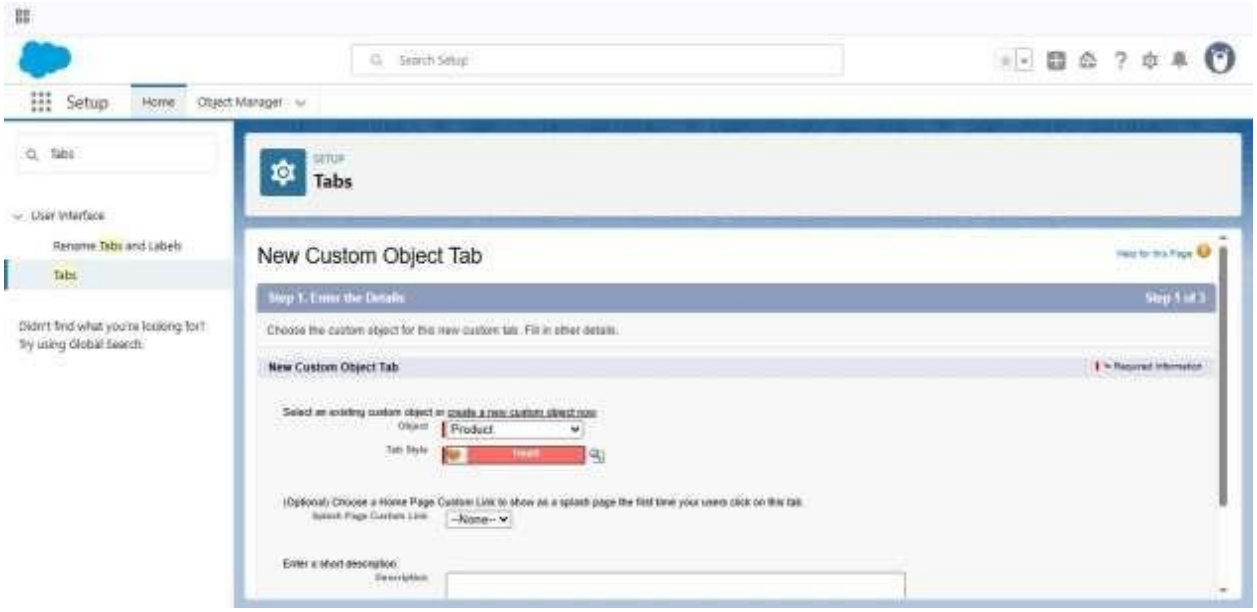

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Order Item
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Details
Edit
Delete
Description
API Name
Order_Item__c
Custom
Singular Label
Order Item
Plural Label
Order Items
Enable Reports
Track Activities
Track Field History
Deployment Status
Deployed
Help Settings
Standard salesforce.com Help Window

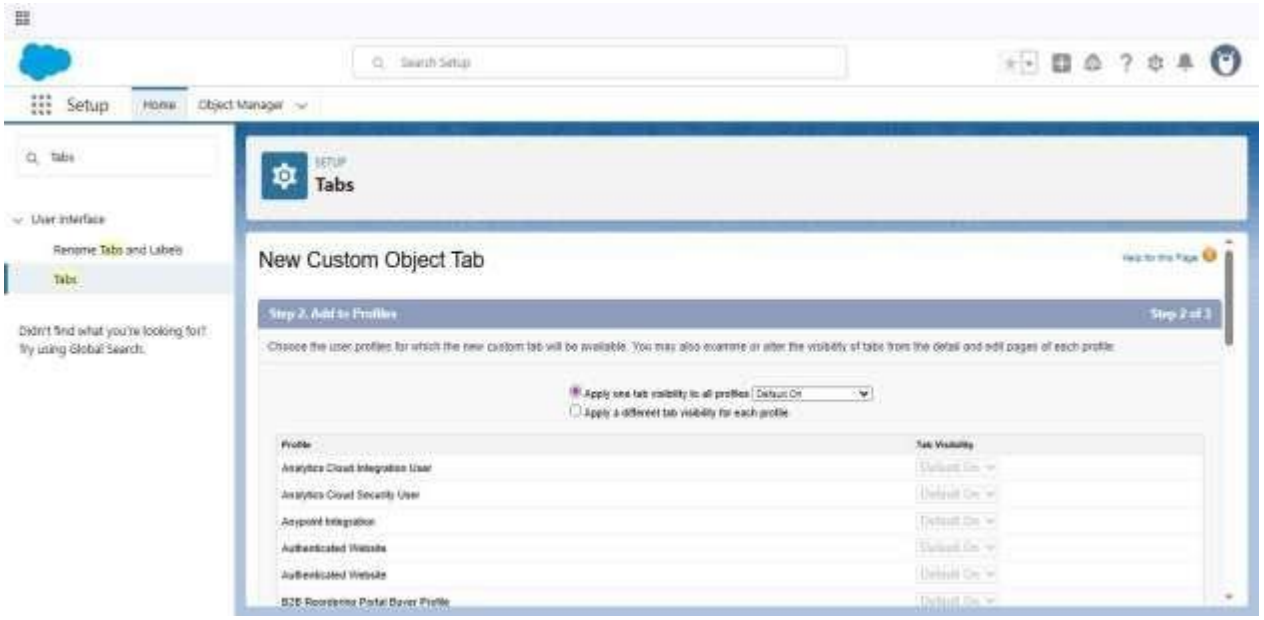

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Inventory Transaction
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Details
Edit
Delete
Description
API Name
Inventory_Transaction__c
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

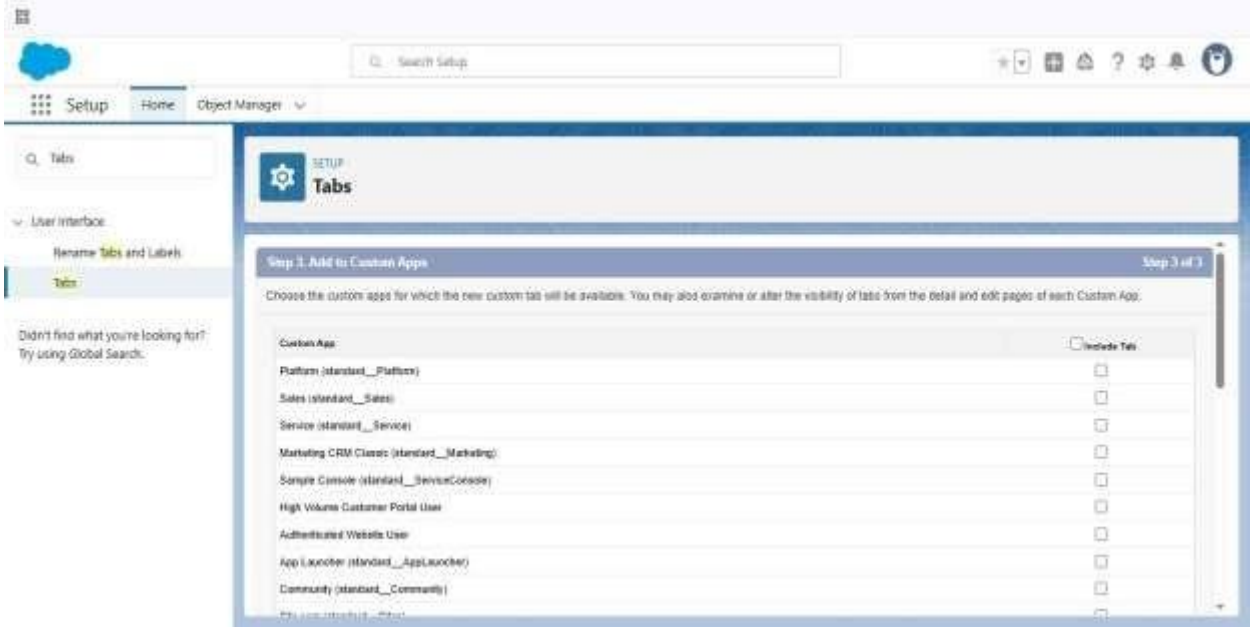


2.2 Tabs:

- Creating Tabs for created objects:



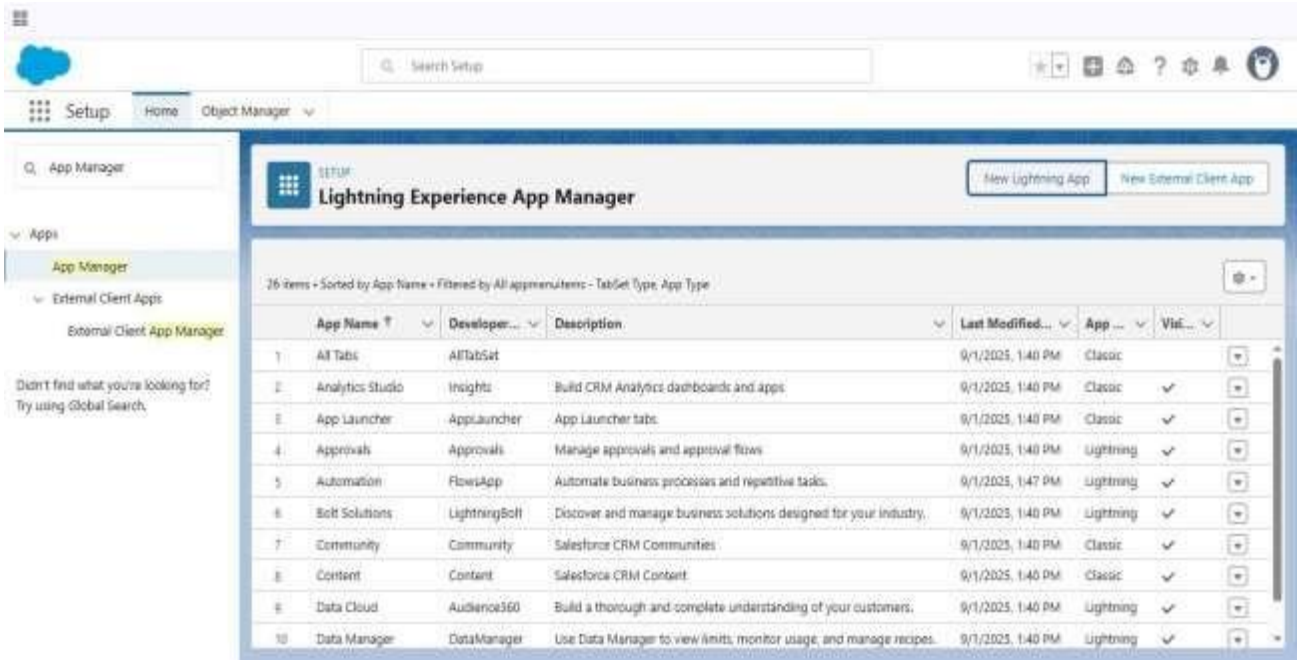

Setup
Home
Object Manager
Tabs
User Interface
Rename Tabs and Labels
Tabs
Didn't find what you're looking for?
Try using Global Search.
SETUP
Tabs
New Custom Object Tab
Step 2. Add to Profiles
Step 2 of 3
Choose the user profiles for which the new custom tab will be available. You may also examine or alter the visibility of tabs from the detail and edit pages of each profile.
Apply one tab visibility to all profiles
Apply a different tab visibility for each profile
Profile
Tab Visibility
Analytics Cloud Integration User
Analytics Cloud Security User
Anypoint Integration
Authenticated Website
Authenticated Website

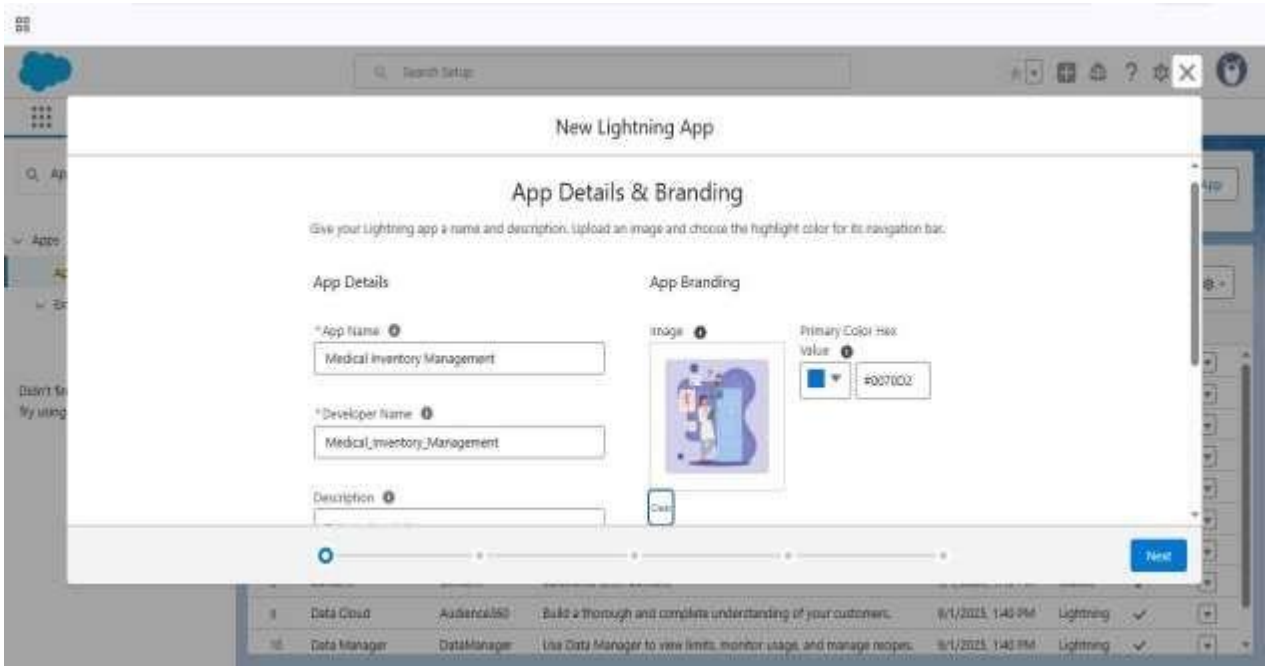

Setup
Home
Object Manager
Tabs
User Interface
Rename Tabs and Labels
Tabs
Didn't find what you're looking for?
Try using Global Search.
SETUP
Tabs
Step 3. Add to Custom Apps
Step 3 of 3
Choose the custom apps for which the new custom tab will be available. You may also examine or alter the visibility of tabs from the detail and edit pages of each Custom App.
Custom App
Include Tab
Platform (standard__Platform)
Sales (standard__Sales)
Service (standard__Service)
Marketing CRM Classic (standard__Marketing)
Sample Console (standard__ServiceConsole)
High Volume Customer Portal User
Authenticated Website User
App Launcher (standard__AppLauncher)
Community (standard__Community)

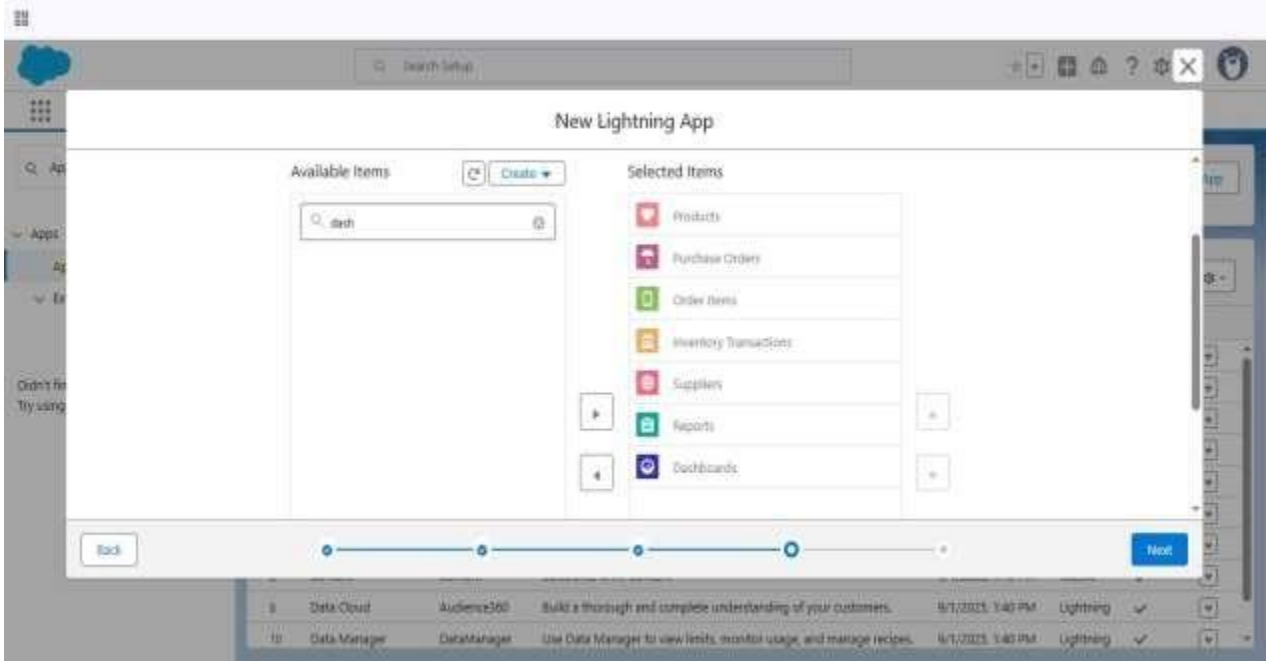
Creating the Tabs for the remaining Objects same like this process, they are "Purchase Order, Order Item, Inventory Transaction, and Supplier".

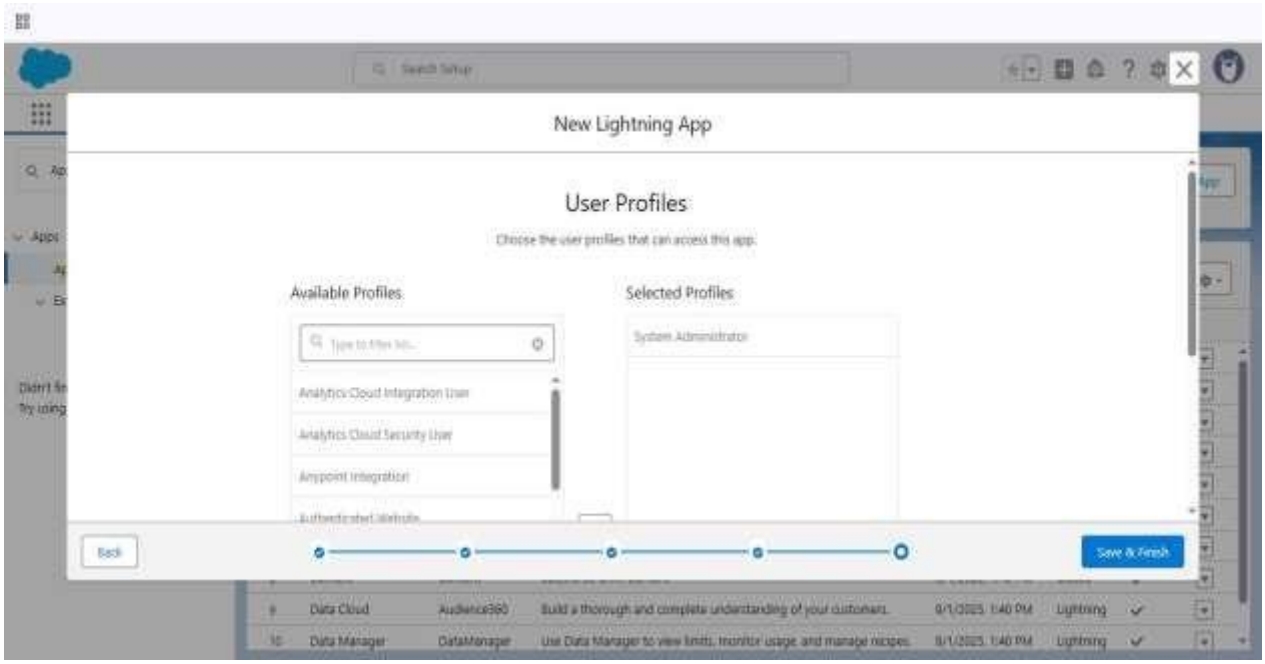
2.3 The Lightning App:

- Create a Lightning App for Medical Inventory Management:



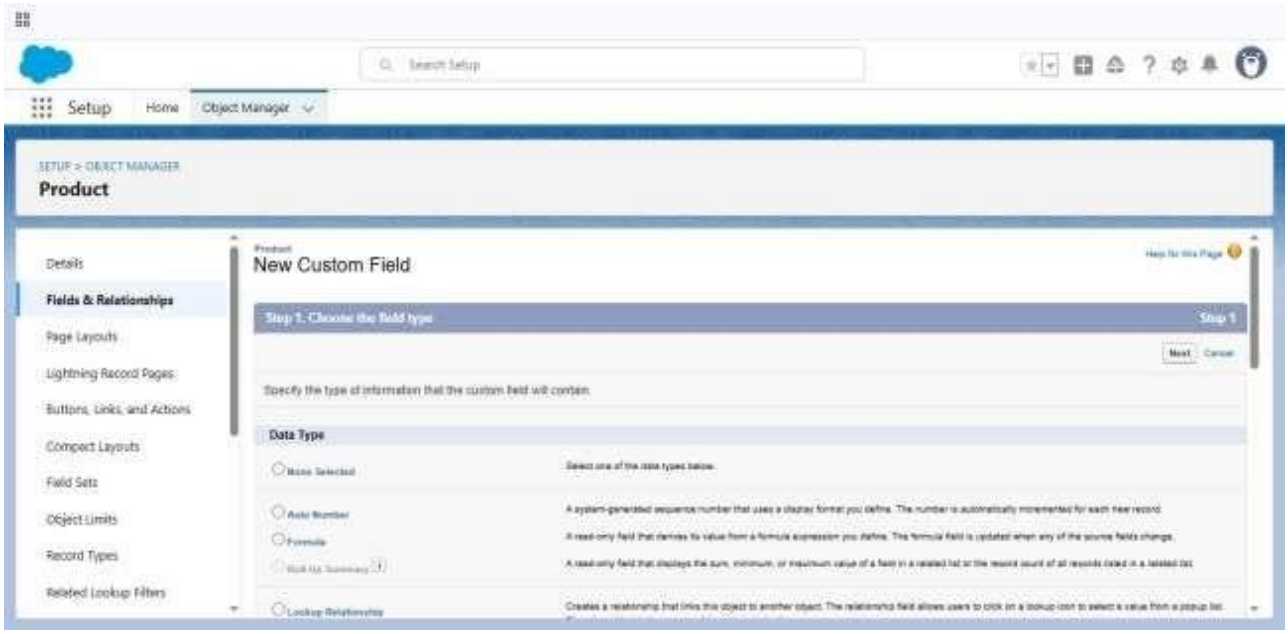

New Lightning App
App Details & Branding
Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.
App Details
App Branding
*App Name
Medical Inventory Management
*Developer Name
Medical_Inventory_Management
Description
Image
Primary Color Hex Value
#007D02
Next

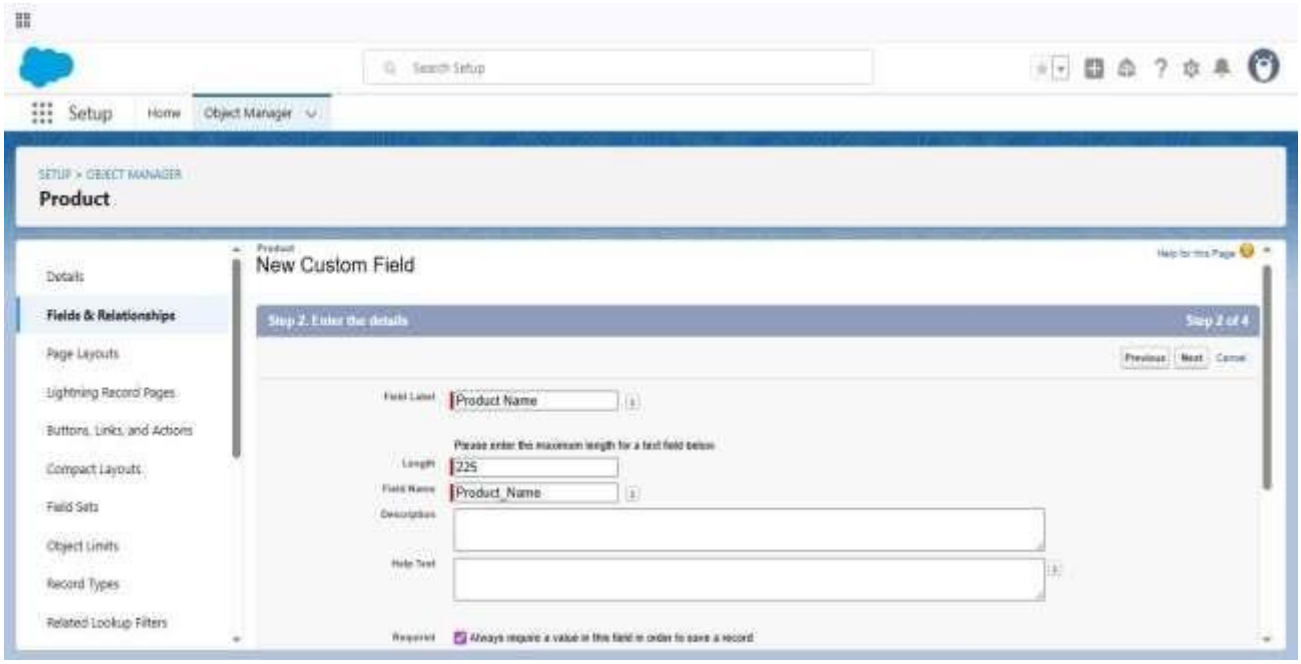

New Lightning App
Available Items
Create
dash
Selected Items
Products
Purchase Orders
Order Items
Inventory Transactions
Suppliers
Reports
Dashboards
Back
Next

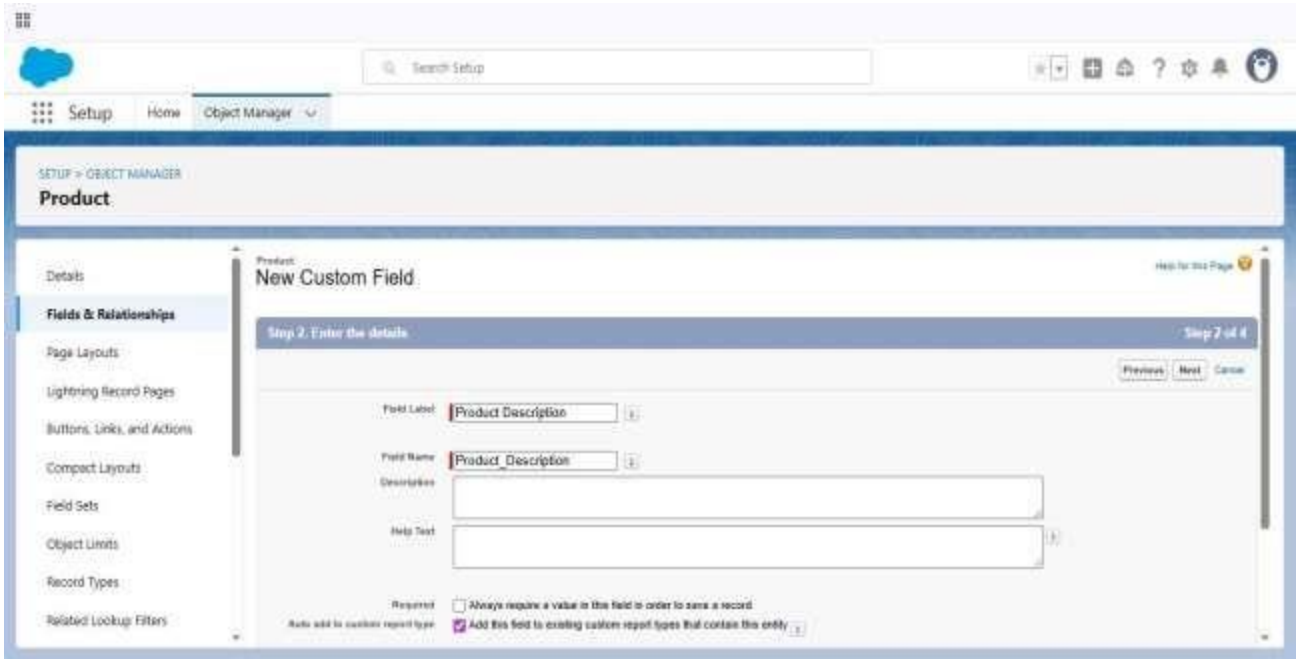


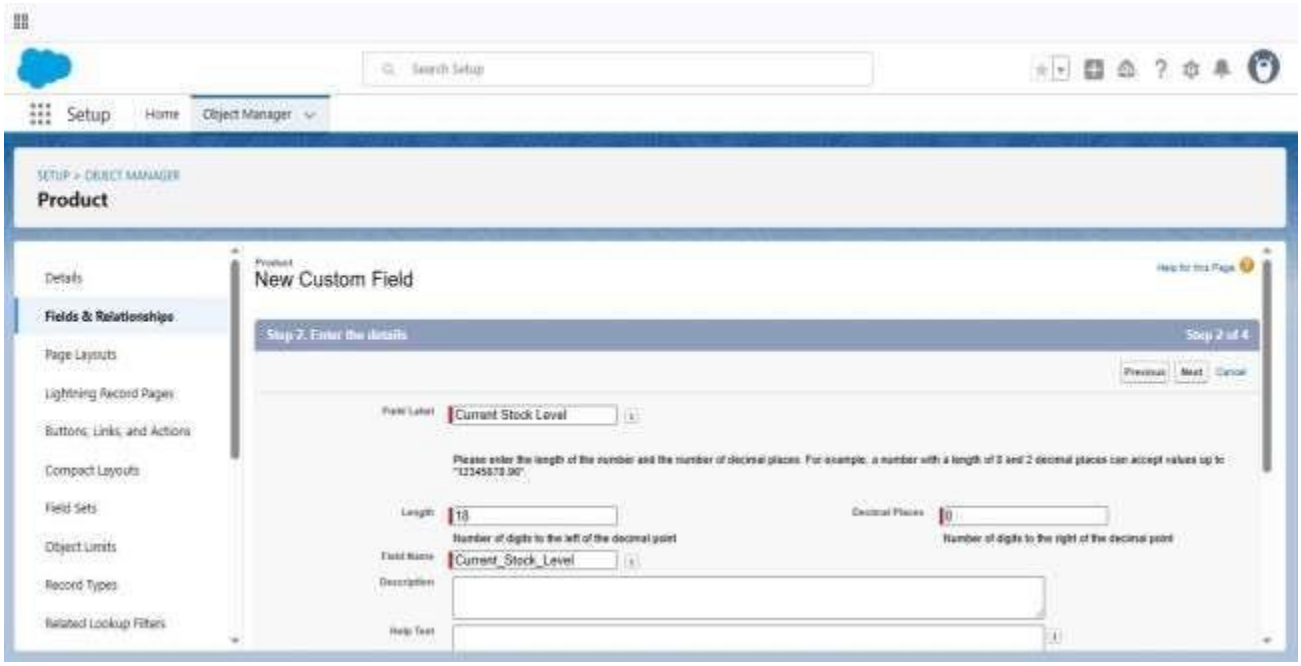
2.4 Fields:

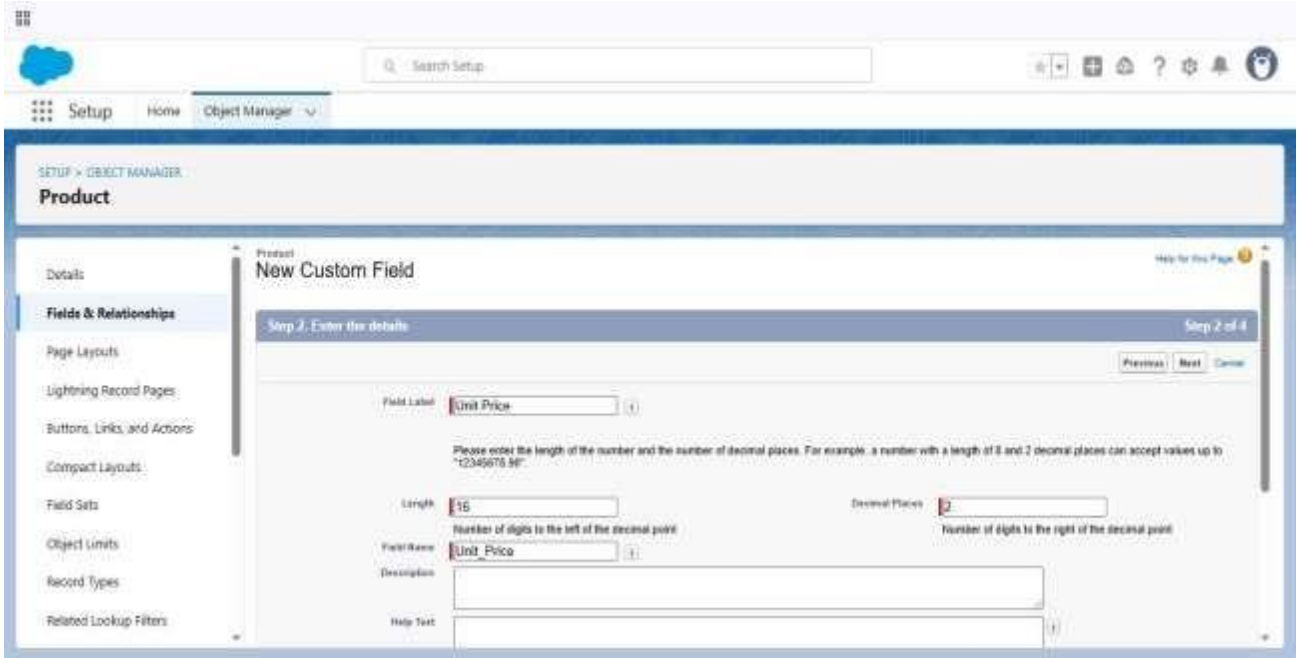
- Creating a Text ("Product Name"), Text Area ("Product Description"), Number ("Current Stock Level"), Currency ("Unit Price") Fields in Product Object:



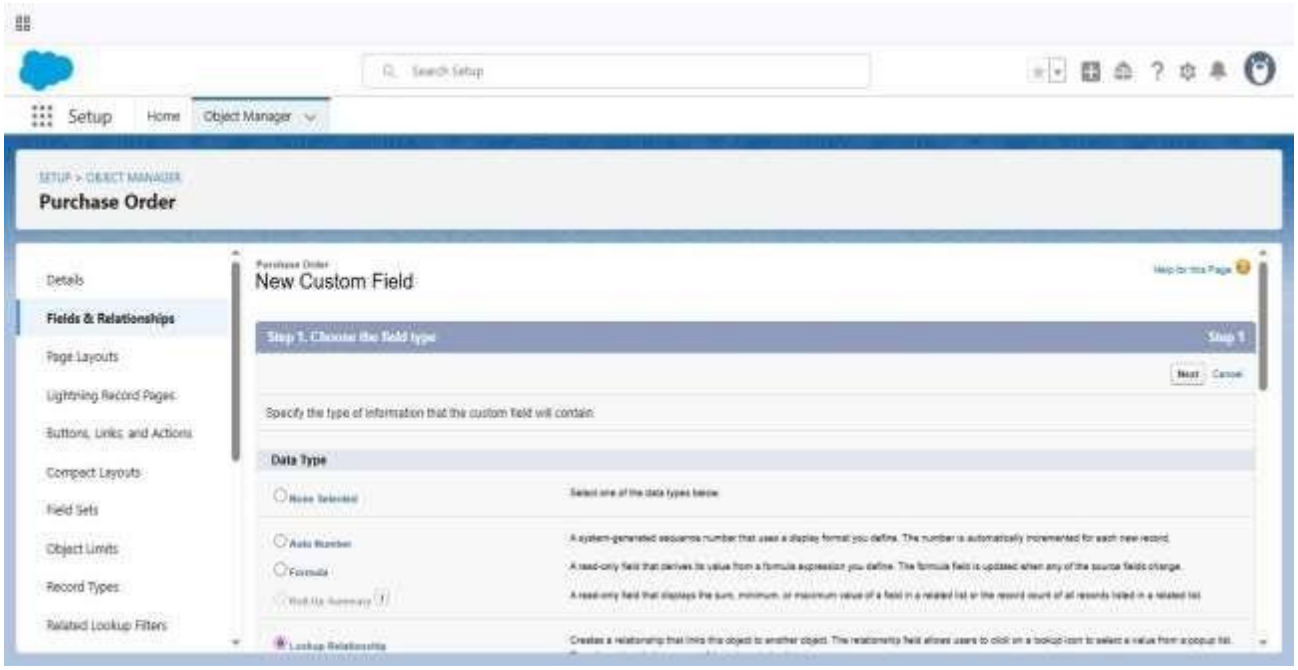

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Product
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Product
New Custom Field
Help for this Page
Step 2. Enter the details
Step 2 of 4
Previous
Next
Cancel
Field Label
Product Name
Please enter the maximum length for a text field below.
Length
225
Field Name
Product_Name
Description
Help Text
Required
Always require a value in this field in order to save a record

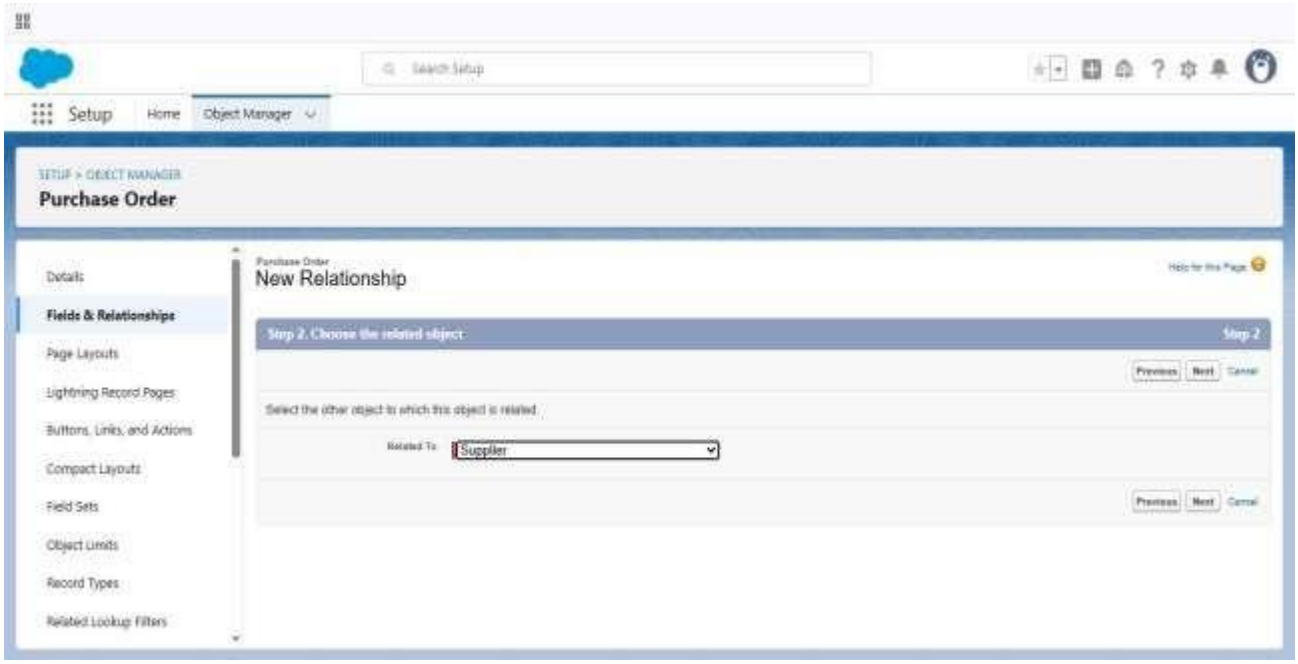

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Product
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Product
New Custom Field
Help for this Page
Step 2. Enter the details
Step 2 of 4
Previous
Next
Cancel
Field Label
Product Description
Field Name
Product_Description
Description
Help Text
Required
Always require a value in this field in order to save a record
Add this field to existing custom report types that contain this entity

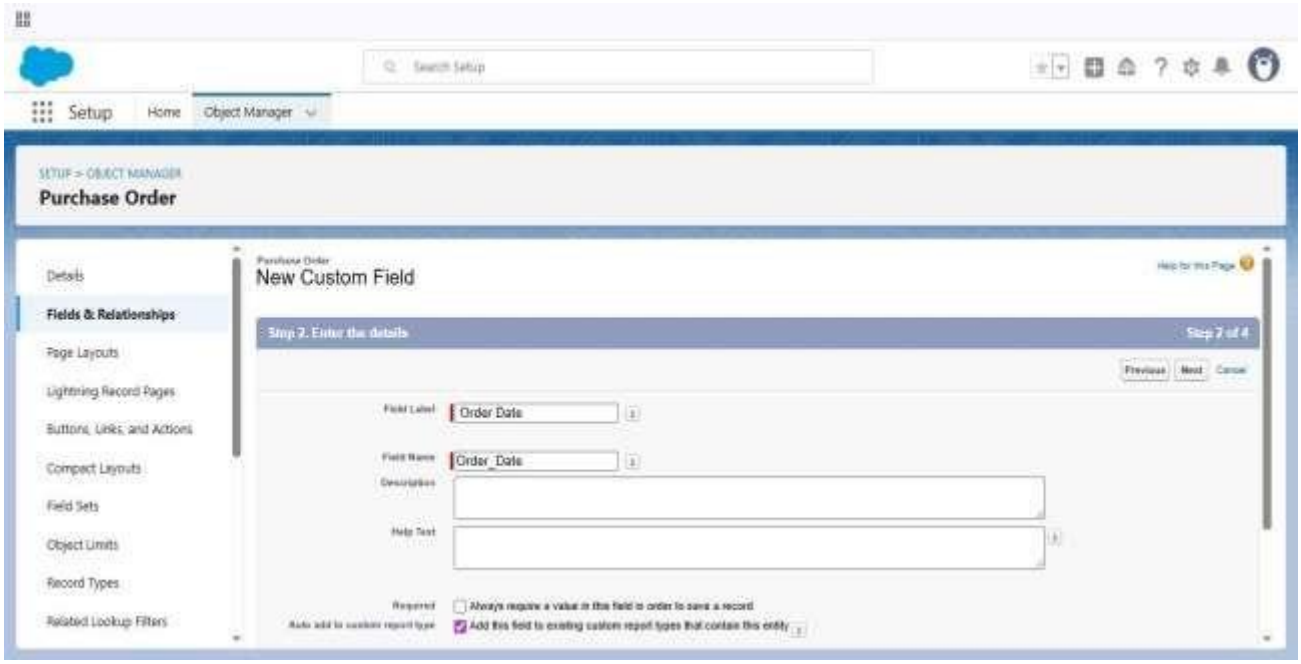

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Product
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Product
New Custom Field
Step 2. Enter the details
Step 2 of 4
Previous
Next
Cancel
Field Label
Current Stock Level
Please enter the length of the number and the number of decimal places. For example, a number with a length of 8 and 2 decimal places can accept values up to "12345678.90".
Length
18
Number of digits to the left of the decimal point
Decimal Places
0
Number of digits to the right of the decimal point
Field Name
Current_Stock_Level
Description
Help Text

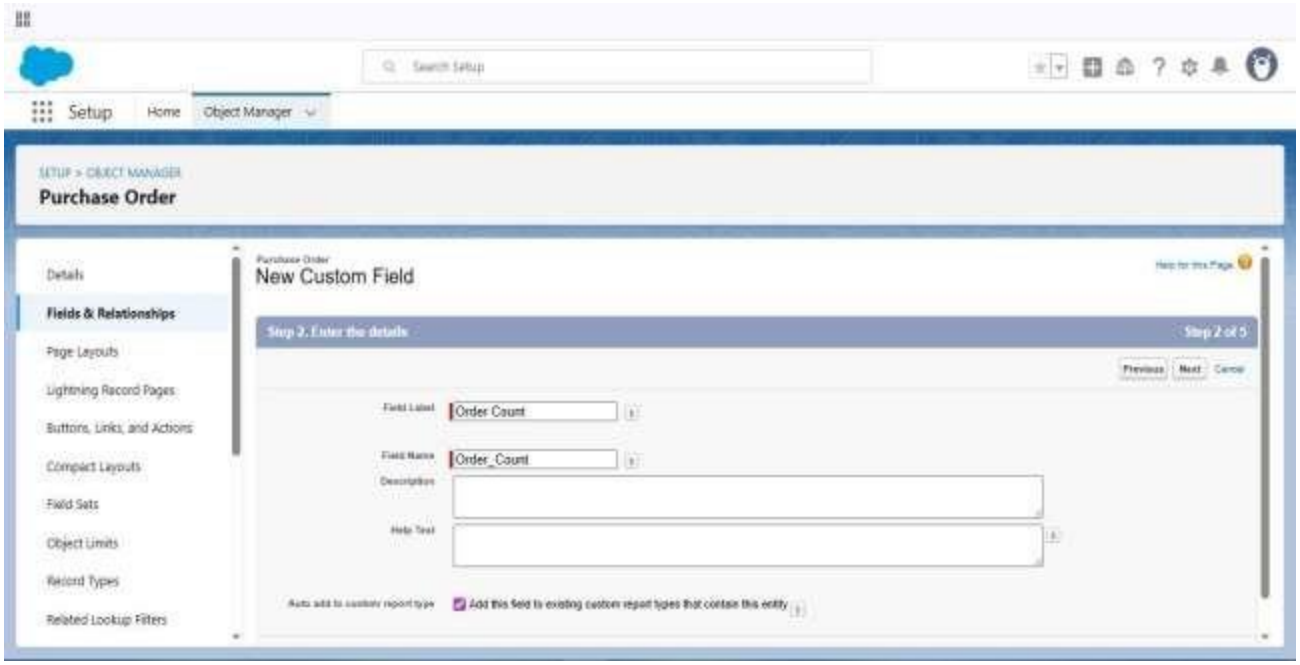

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Product
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Product
New Custom Field
Step 2. Enter the details
Step 2 of 4
Previous
Next
Cancel
Field Label
Unit Price
Please enter the length of the number and the number of decimal places. For example, a number with a length of 8 and 2 decimal places can accept values up to "12345678.90".
Length
16
Number of digits to the left of the decimal point
Decimal Places
2
Number of digits to the right of the decimal point
Field Name
Unit_Price
Description
Help Text

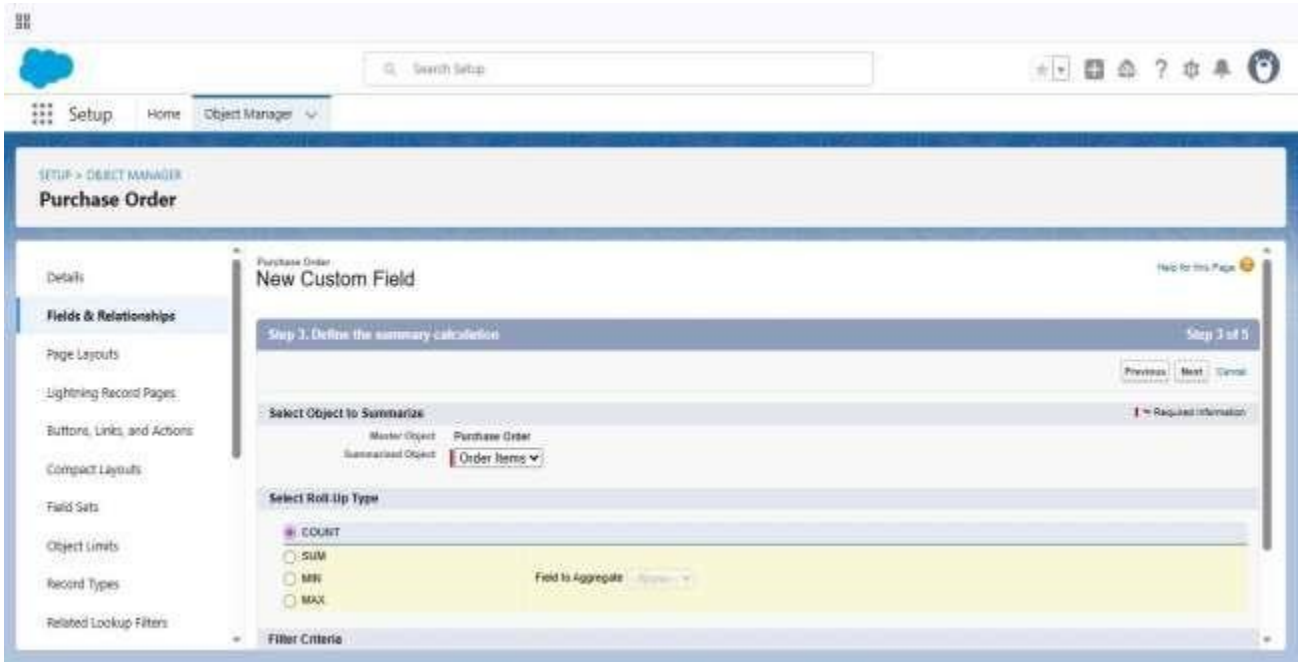
- Creating a Lookup Relationship (“Supplier ID”), Date Field (“ Order Date”), Roll-up Summary Field (“Order Count”) in Purchase Order Object:



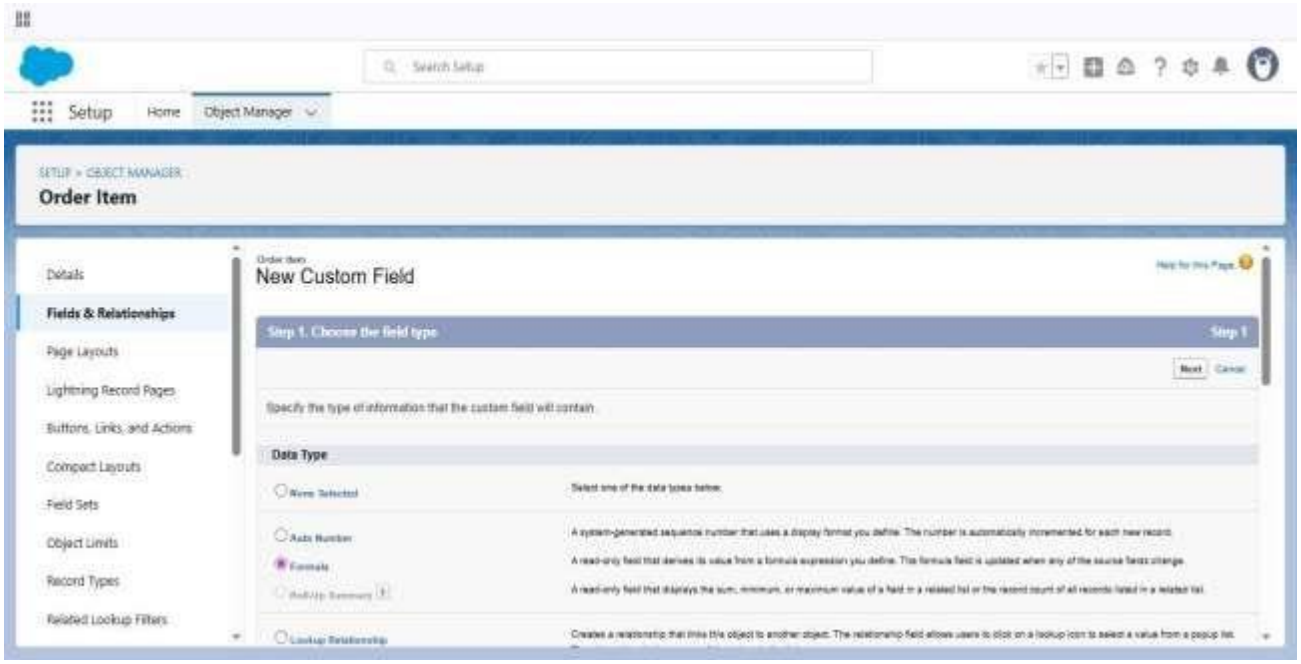


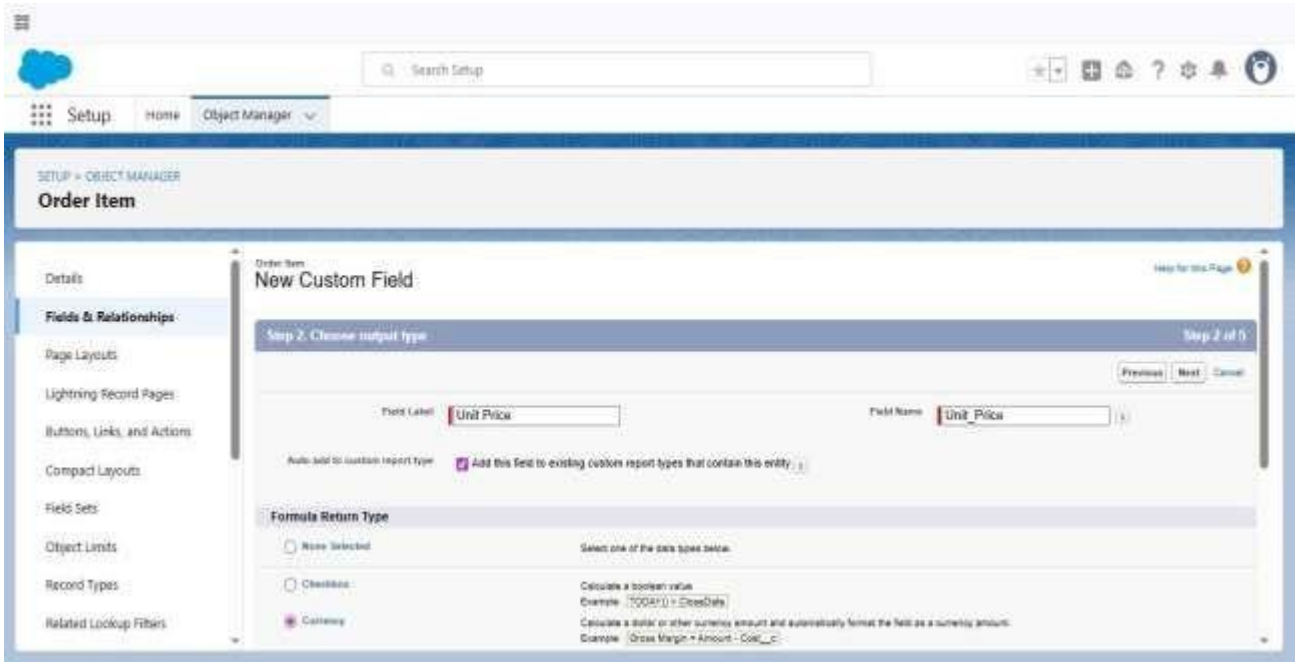

Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Purchase Order
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Purchase Order
New Custom Field
Step 2. Enter the details
Step 2 of 4
Previous
Next
Cancel
Field Label
Order Date
Field Name
Order_Date
Description
Help Text
Required
Always require a value in this field in order to save a record
Add this field to existing custom report types that contain this entity

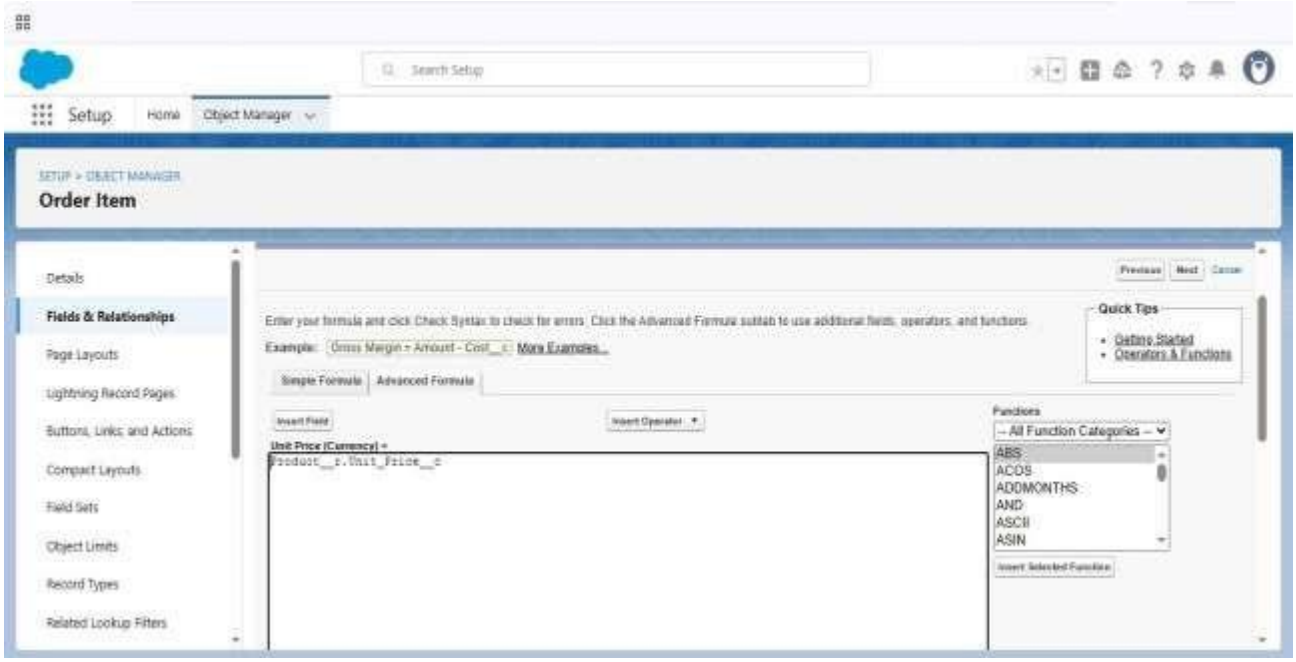

Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Purchase Order
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Purchase Order
New Custom Field
Step 2. Enter the details
Step 2 of 5
Previous
Next
Cancel
Field Label
Order Count
Field Name
Order_Count
Description
Help Text
Add this field to existing custom report types that contain this entity

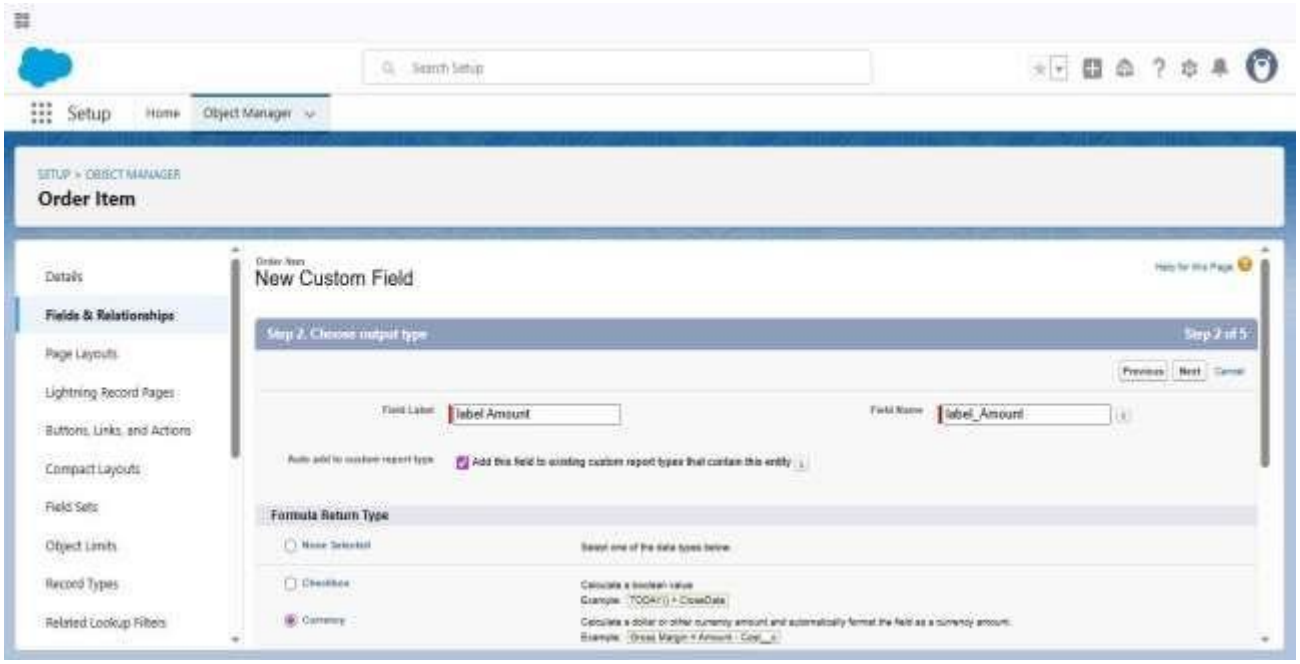


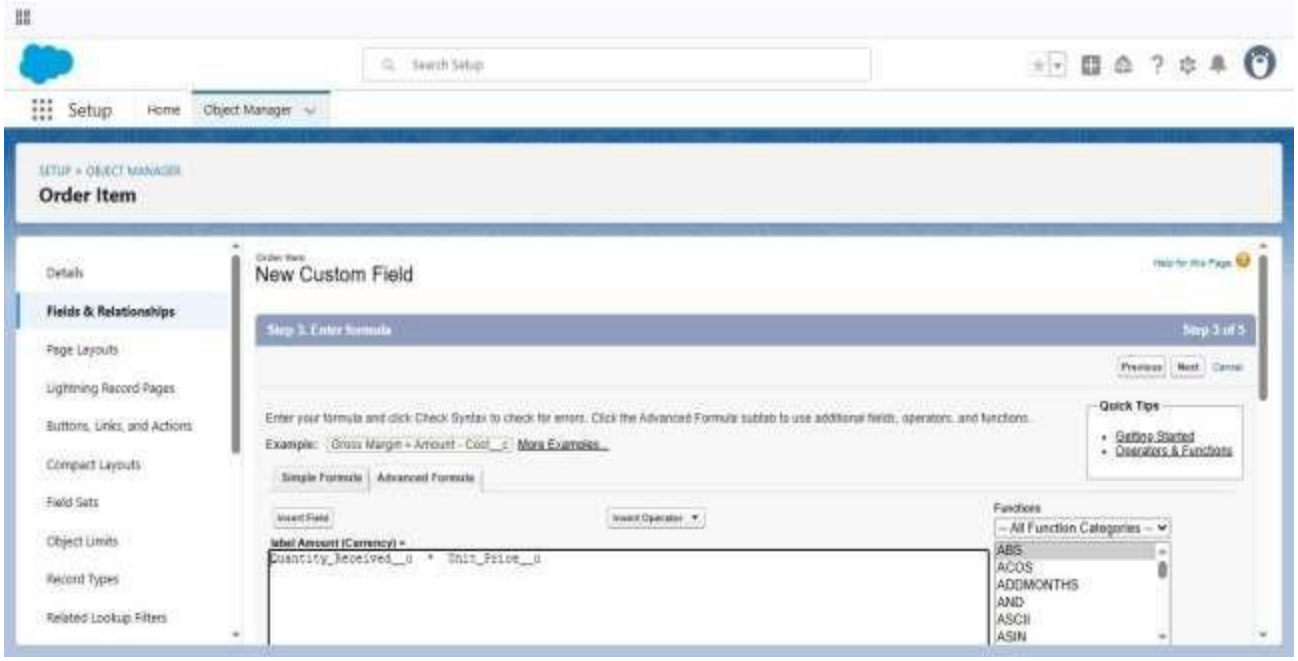
- Creating a Unit Price Formula ("Unit Price"), Amount Formula ("Amount")Fields in Order Item Object:



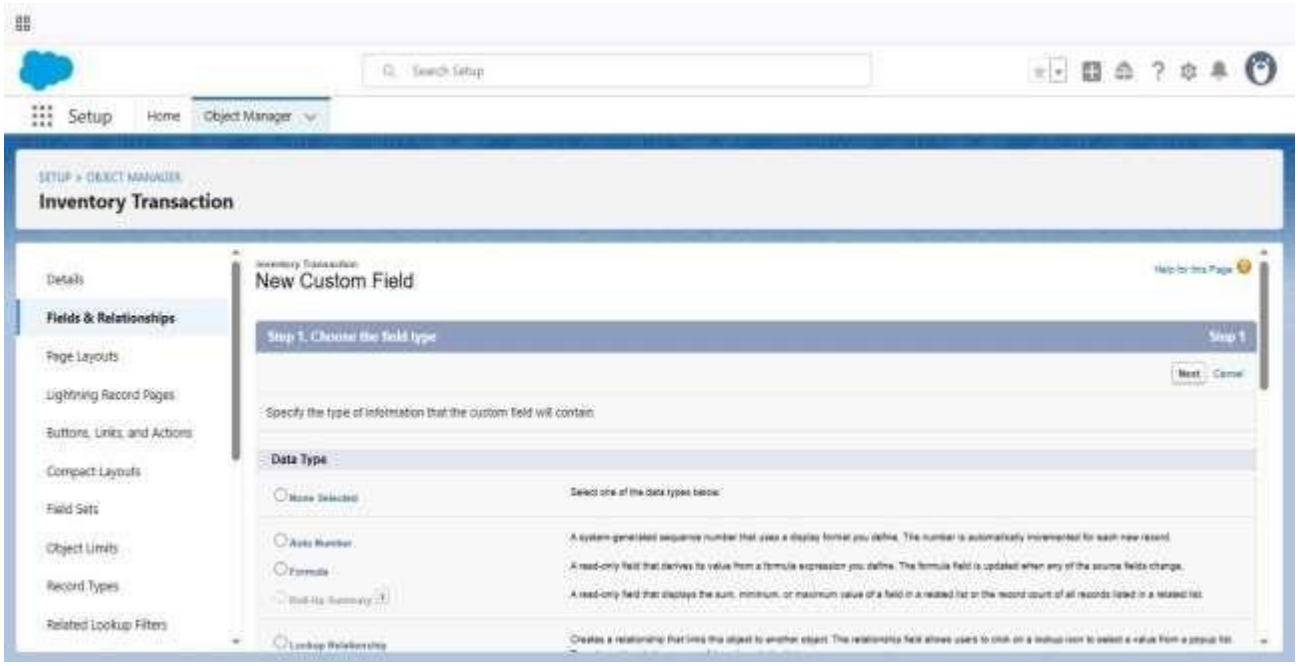

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Order Item
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Order Item
New Custom Field
Step 2. Choose output type
Step 2 of 5
Previous
Next
Cancel
Field Label
Unit Price
Field Name
Unit_Price
Add this field to existing custom report types that contain this entity
Formula Return Type
None Selected
Select one of the data types below.
Checkbox
Calculate a boolean value.
Example: TODAY() > CloseDate
Currency
Calculate a dollar or other currency amount and automatically format the field as a currency amount.
Example: Gross Margin + Amount - Cost__c

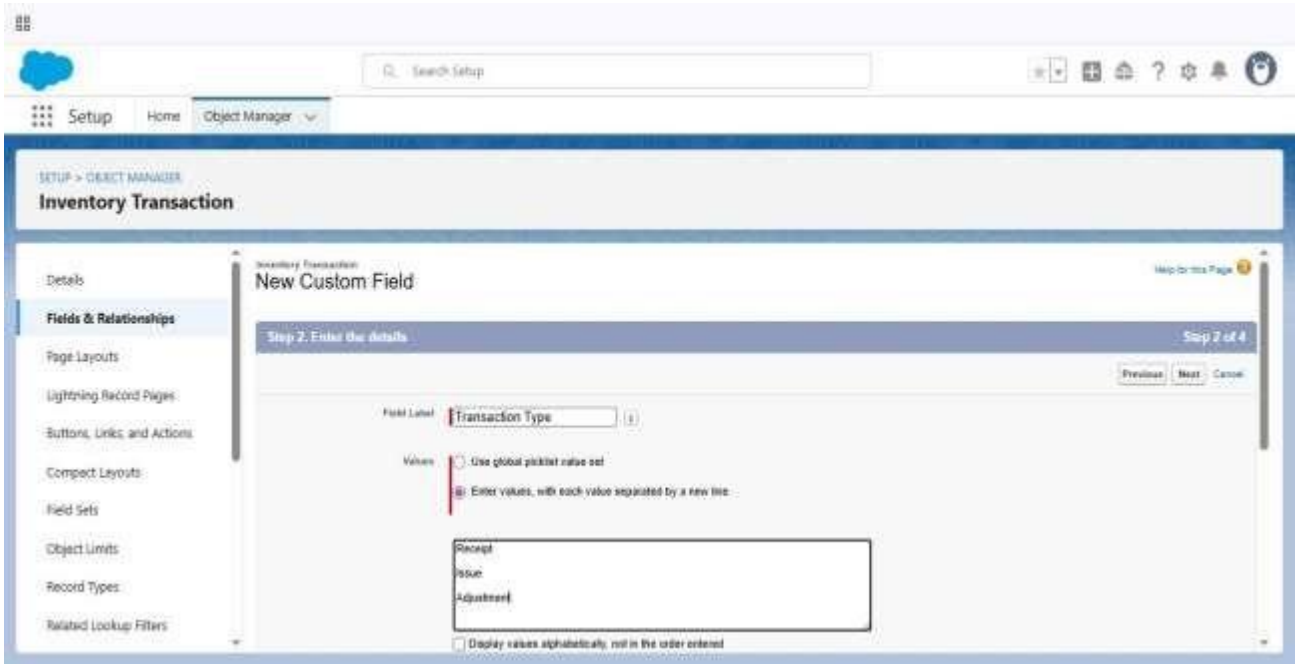

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Order Item
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Previous
Next
Cancel
Enter your formula and click Check Syntax to check for errors. Click the Advanced Formula subtab to use additional fields, operators, and functions.
Example: Gross Margin + Amount - Cost__c More Examples...
Quick Tips
Getting Started
Operators & Functions
Simple Formula
Advanced Formula
Insert Field
Insert Operator
Unit Price [Currency] =
Product__r.Unit_Price__c
Functions
-- All Function Categories --
ABS
ACOS
ADDMONTHS
AND
ASCII
ASIN
Insert Selected Function

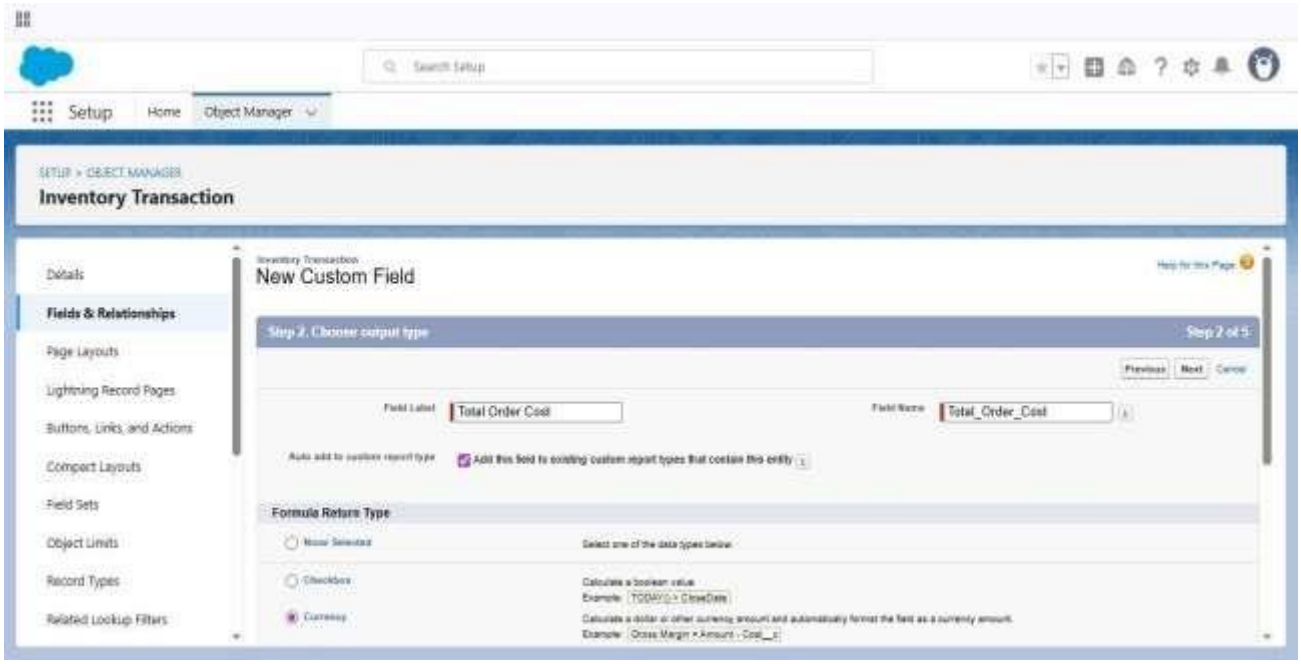

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Order Item
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
New Custom Field
Step 2. Choose output type
Step 2 of 5
Previous
Next
Cancel
Field Label
label Amount
Field Name
label_Amount
Add this field to existing custom report types that contain this entity
Formula Return Type
None Selected
Select one of the data types below.
Checkbox
Calculate a boolean value
Example: TODAY() + CloseDate
Currency
Calculate a dollar or other currency amount and automatically format the field as a currency amount.
Example: Gross Margin + Amount - Cost__c

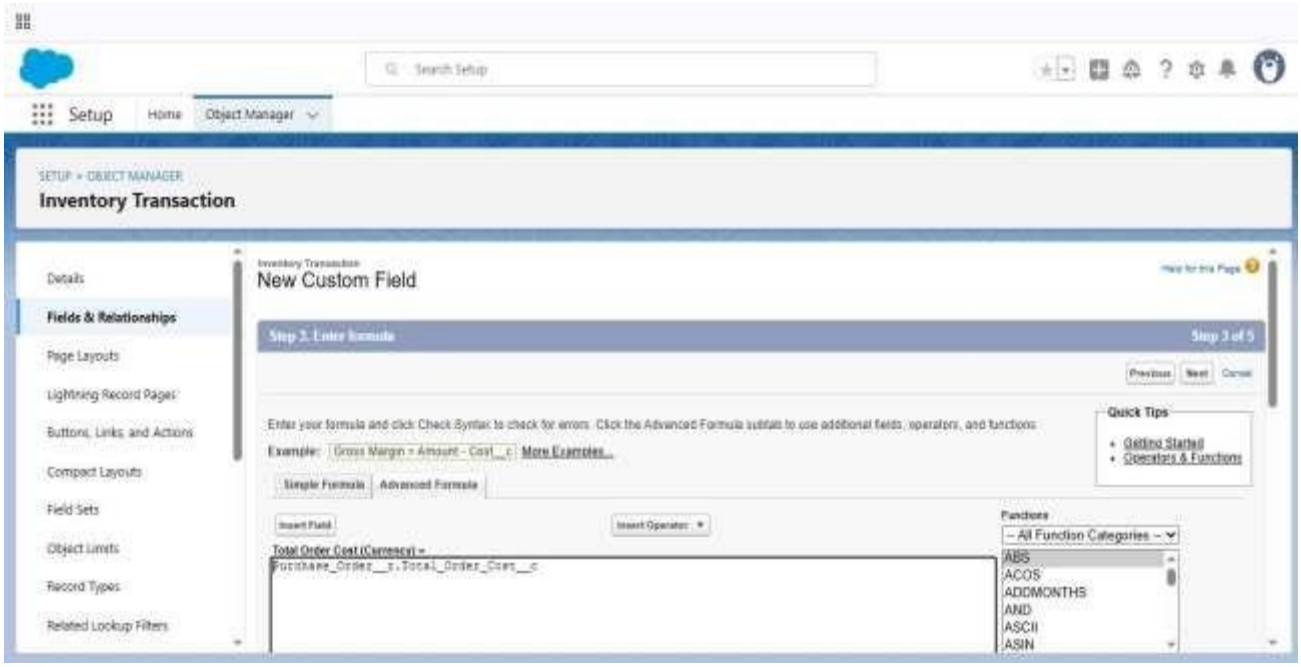

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Order Item
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
New Custom Field
Step 3. Enter formula
Step 3 of 5
Previous
Next
Cancel
Enter your formula and click Check Syntax to check for errors. Click the Advanced Formula subtab to use additional fields, operators, and functions.
Example: Gross Margin + Amount - Cost__c More Examples...
Quick Tips
Getting Started
Operators & Functions
Simple Formula
Advanced Formula
Insert Field
Insert Operator
Functions
-- All Function Categories --
label Amount (Currency) =
Quantity_Received__c * Unit_Price__c
ABS
ACOS
ADDMONTHS
AND
ASCII
ASIN

- Creating a Picklist Field (“Transaction Type”), Total Order Cost Formula Field (“Total Order Cost”) in Inventory Transaction Object:

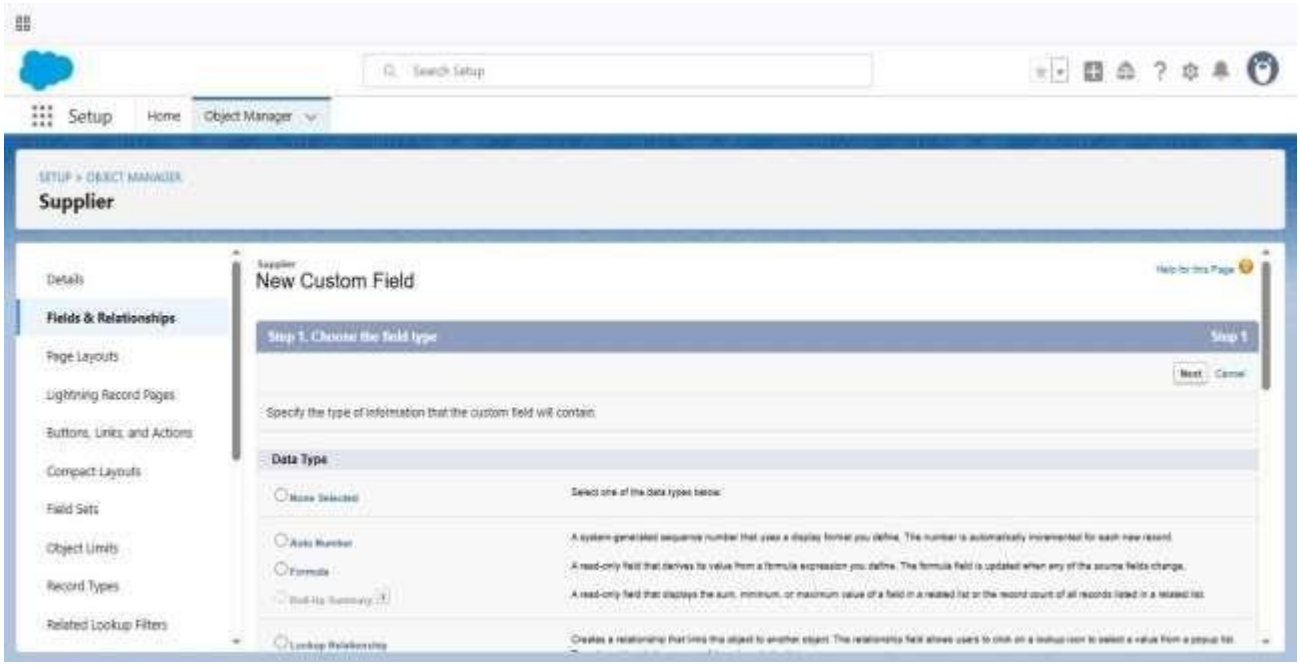


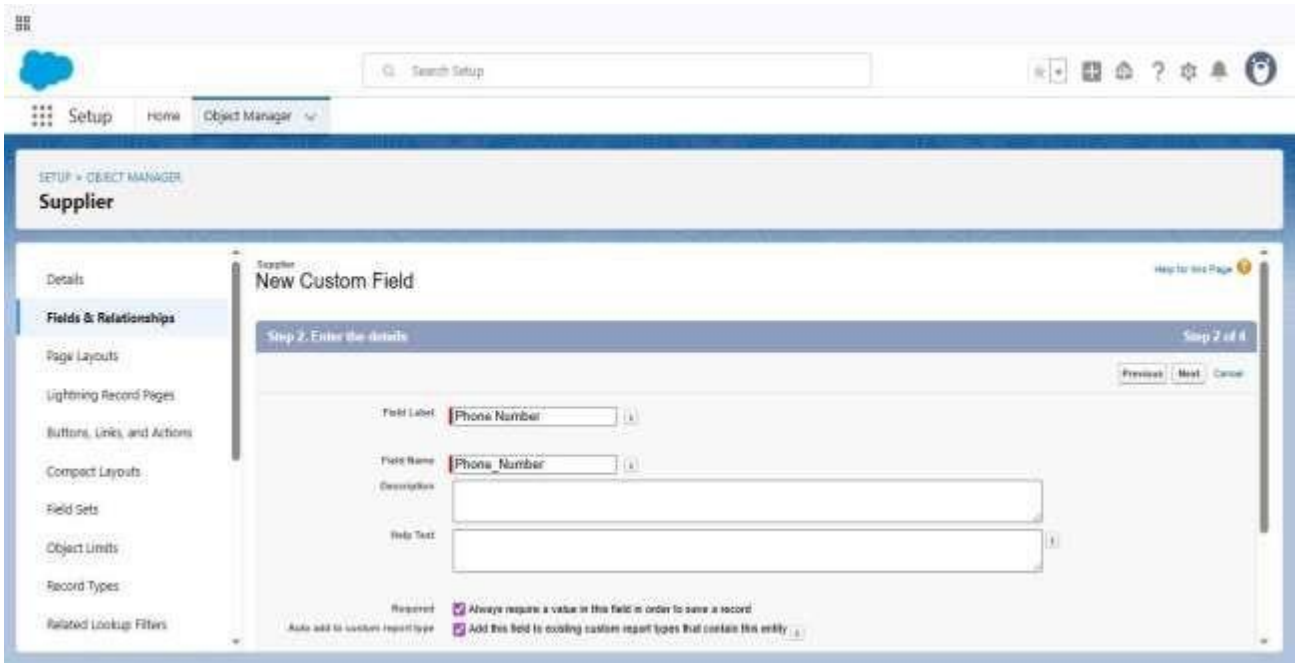


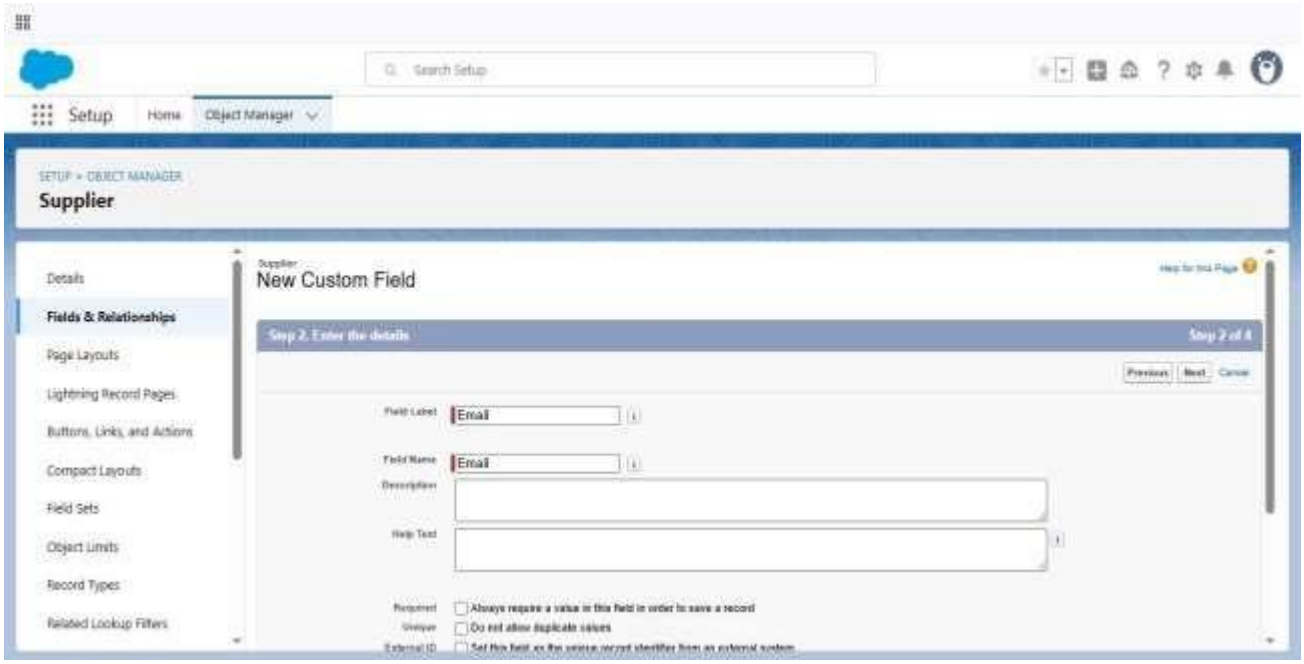

Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Inventory Transaction
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
New Custom Field
Step 2. Choose output type
Step 2 of 5
Previous
Next
Cancel
Field Label
Total Order Cost
Field Name
Total_Order_Cost
Add this field to existing custom report types that contain this entity
Formula Return Type
Select one of the data types below.
Checkbox
Calculates a boolean value.
Example: TODAY() > CloseDate
Currency
Calculates a dollar or other currency amount and automatically formats the field as a currency amount.
Example: Gross Margin * Amount - Cost__c


Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Inventory Transaction
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
New Custom Field
Step 3. Enter formula
Step 3 of 5
Previous
Next
Cancel
Enter your formula and click Check Syntax to check for errors. Click the Advanced Formula subtab to use additional fields, operators, and functions.
Example: Gross Margin + Amount - Cost__c More Examples...
Quick Tips
Getting Started
Operators & Functions
Simple Formula
Advanced Formula
Insert Field
Insert Operator
Functions
-- All Function Categories --
Total Order Cost (Currency) =
Purchase_Order__r.Total_Order_Cost__c
ABS
ACOS
ADDMONTHS
AND
ASCII
ASIN

- Creating a Phone (“ Phone Number”), Email (“Email”) Fields in Supplier Object:

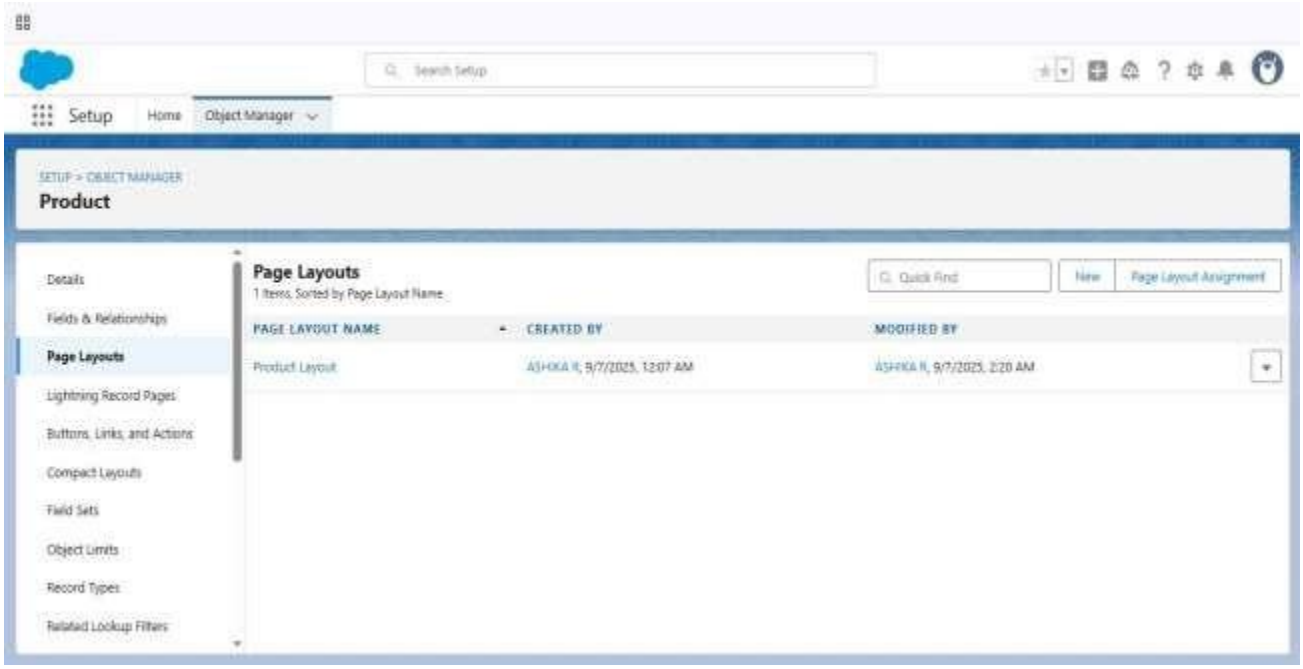


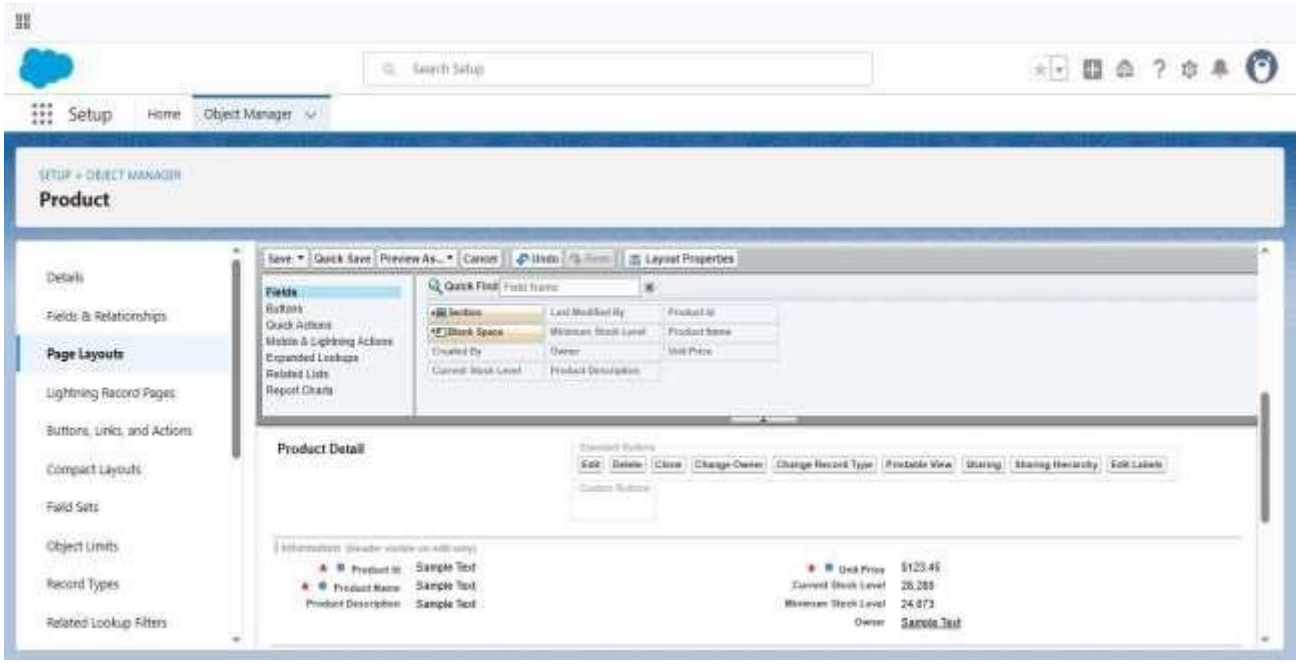




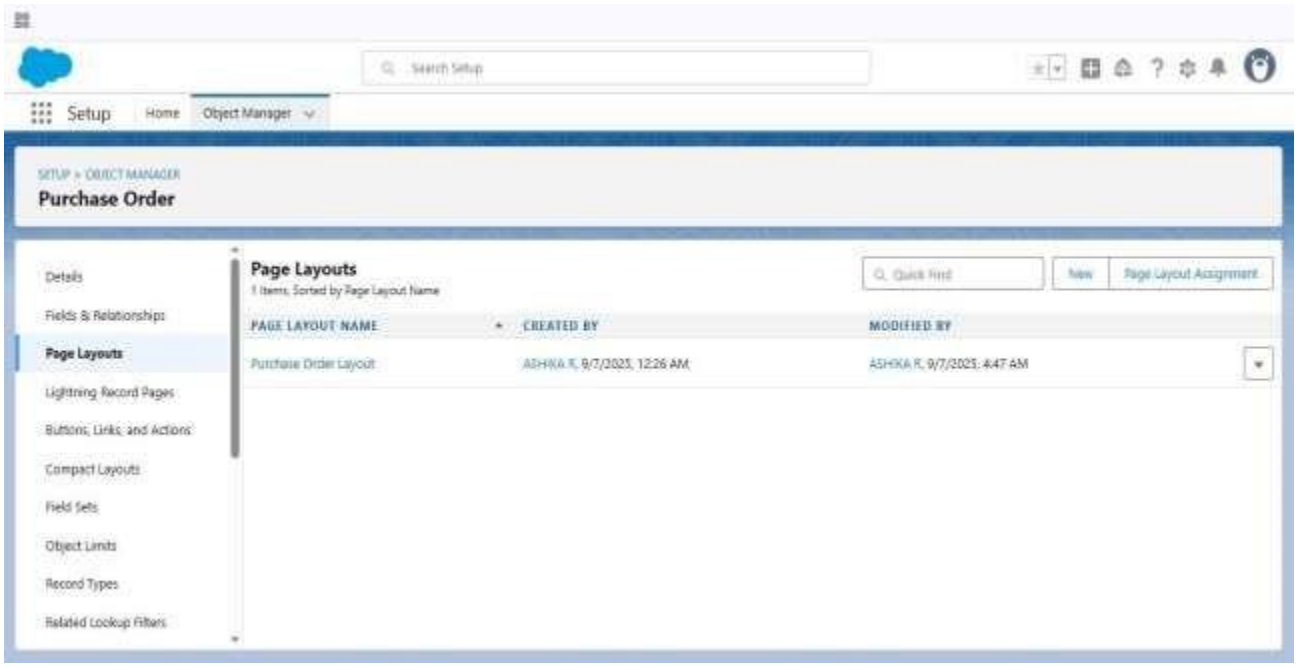
2.5 Editing of Page Layouts:

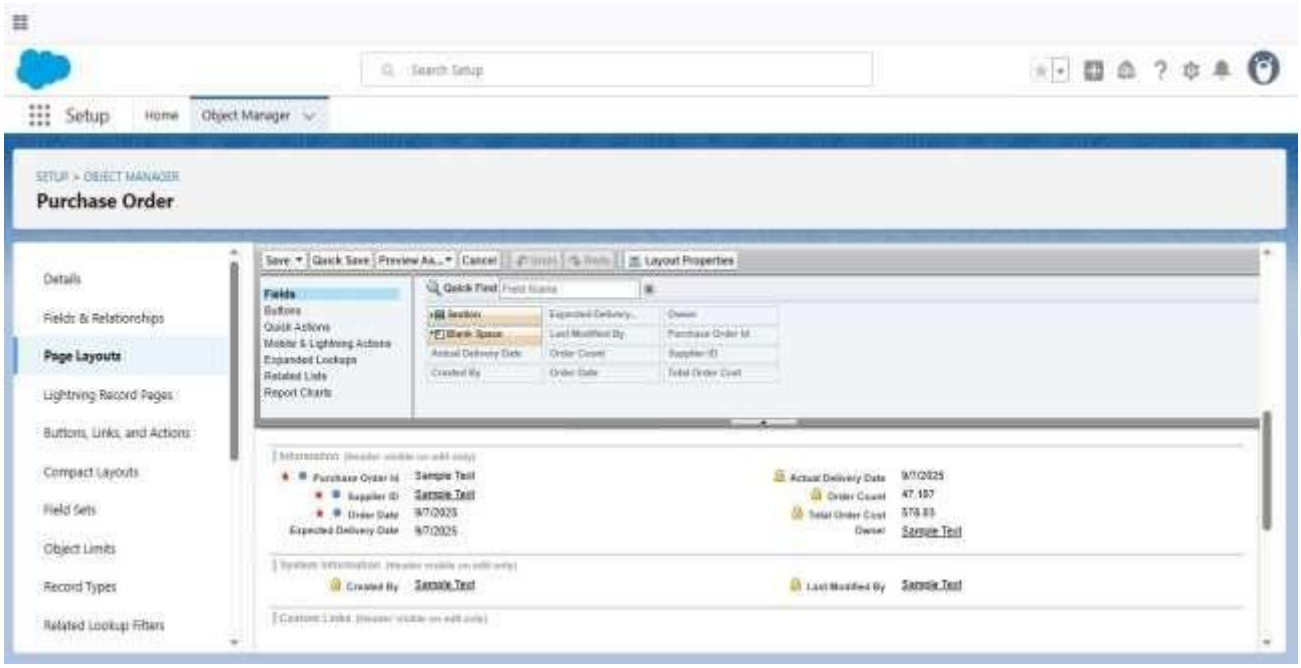
- To edit a page Layout in Product object:



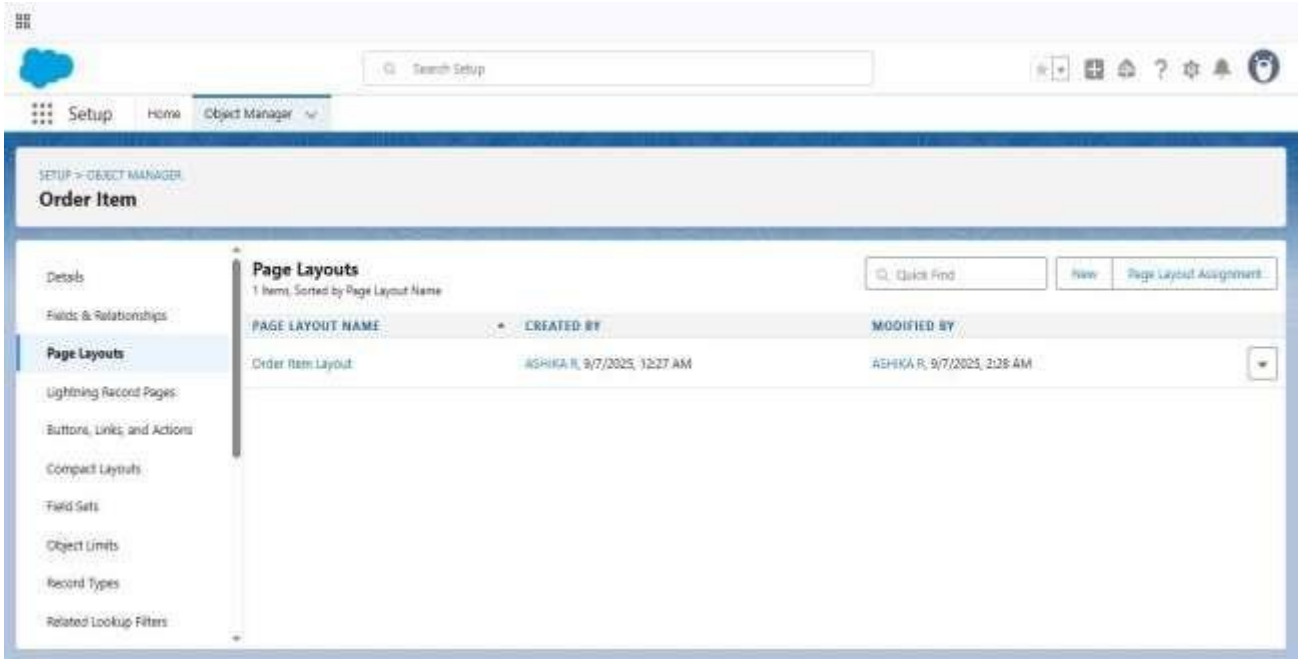


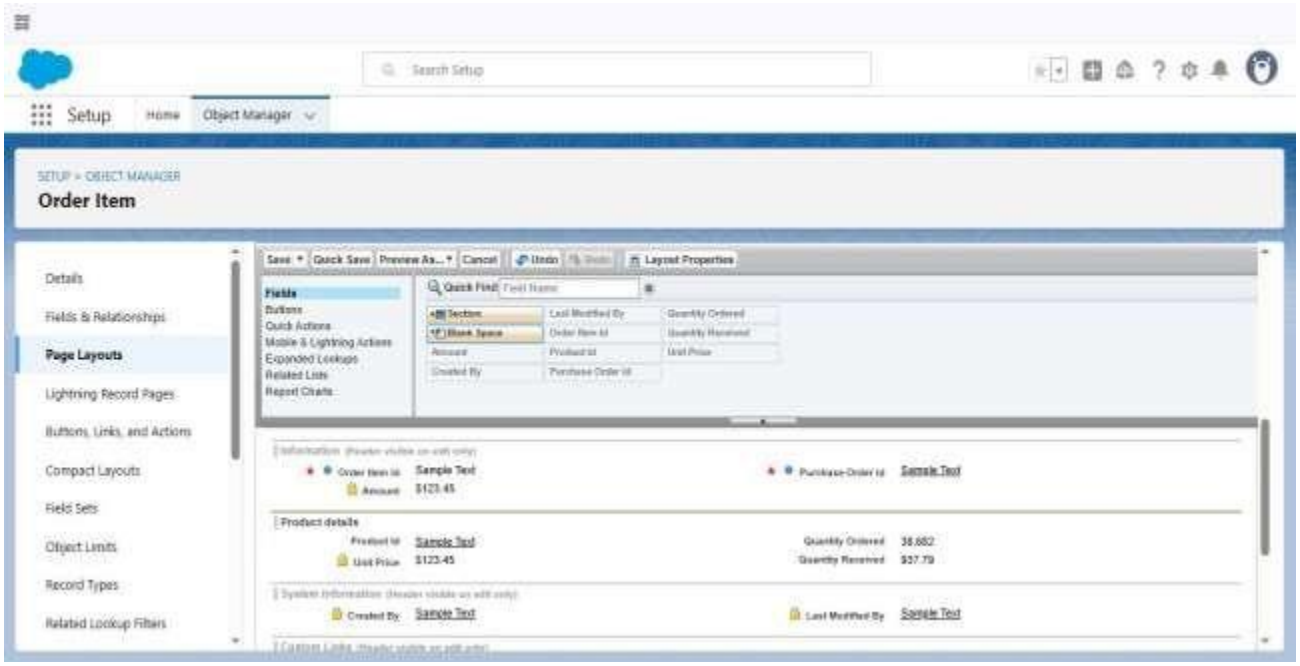
- To edit a page Layout in Purchase Order object:



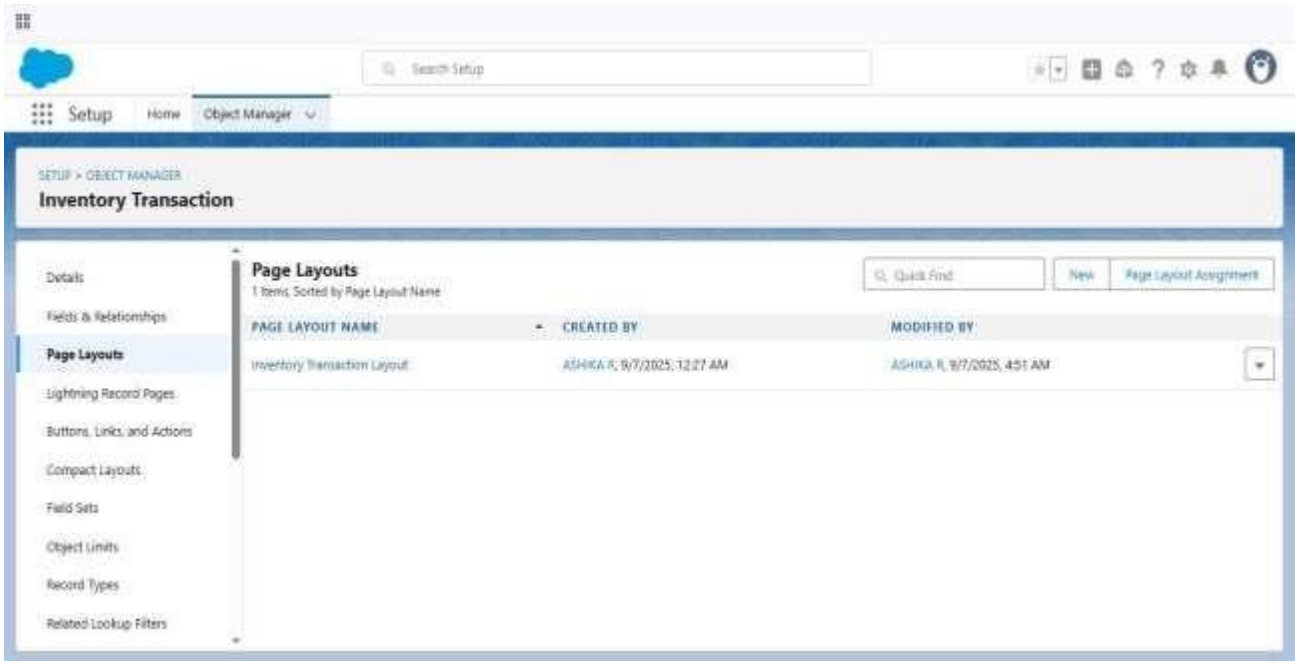


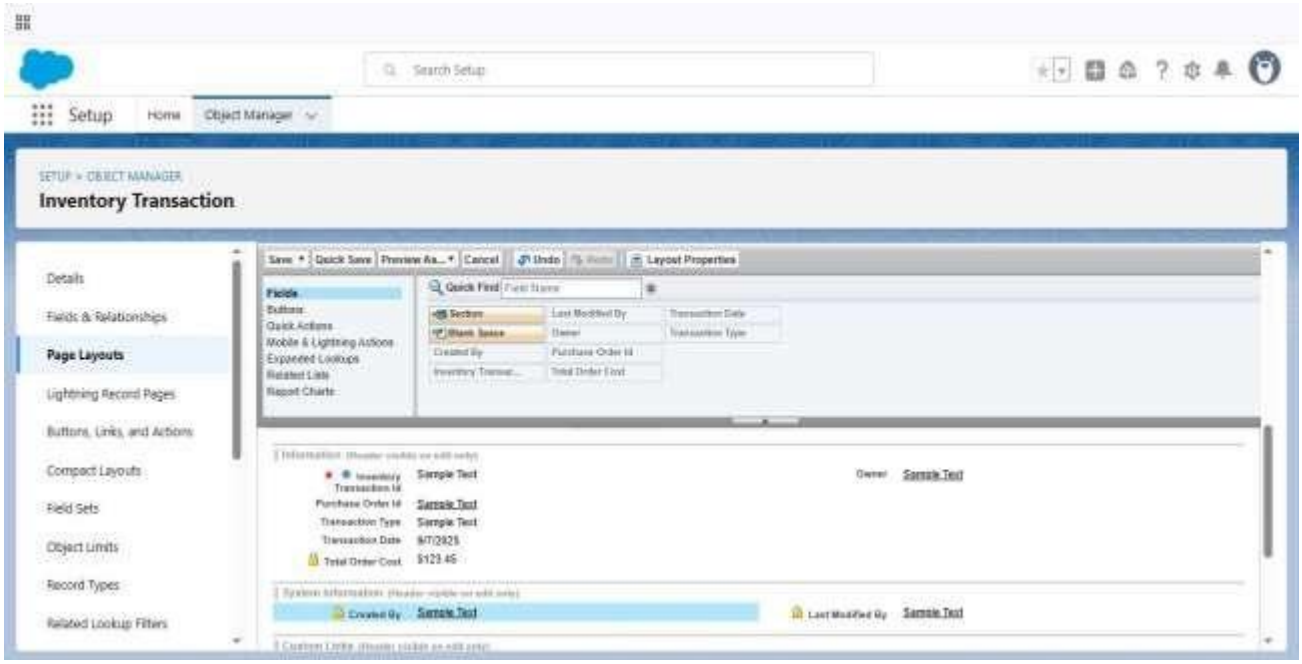
- To edit a page Layout in Order Item object:



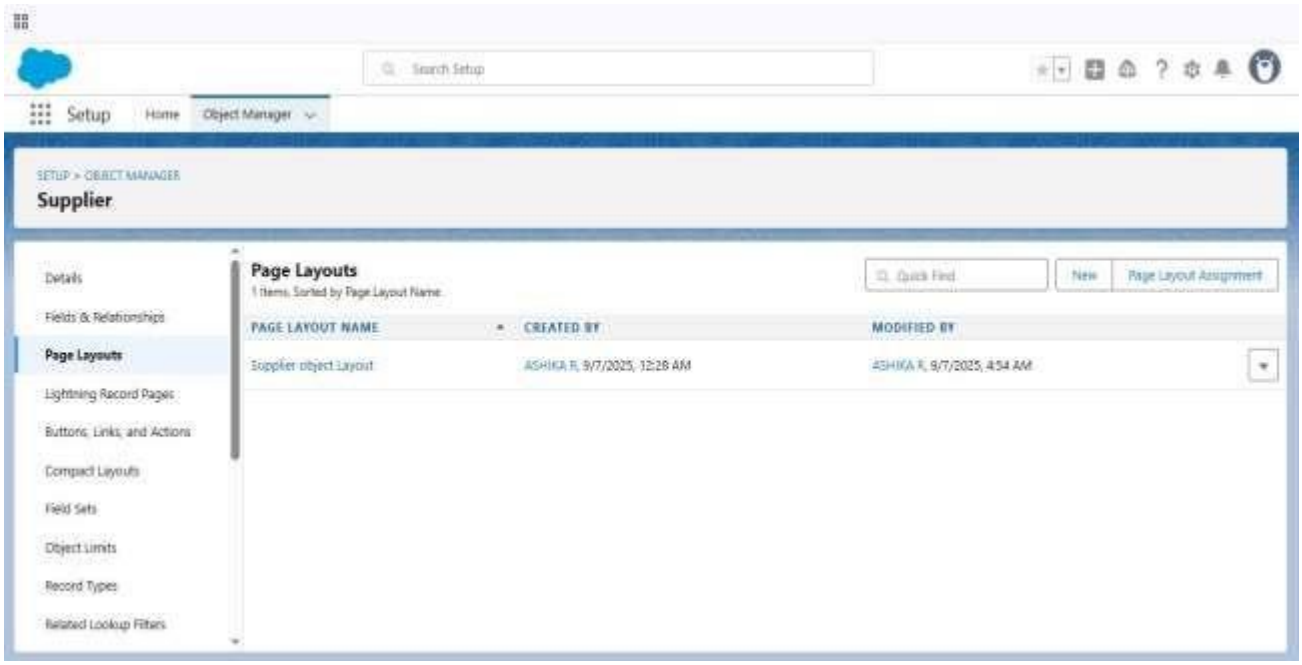


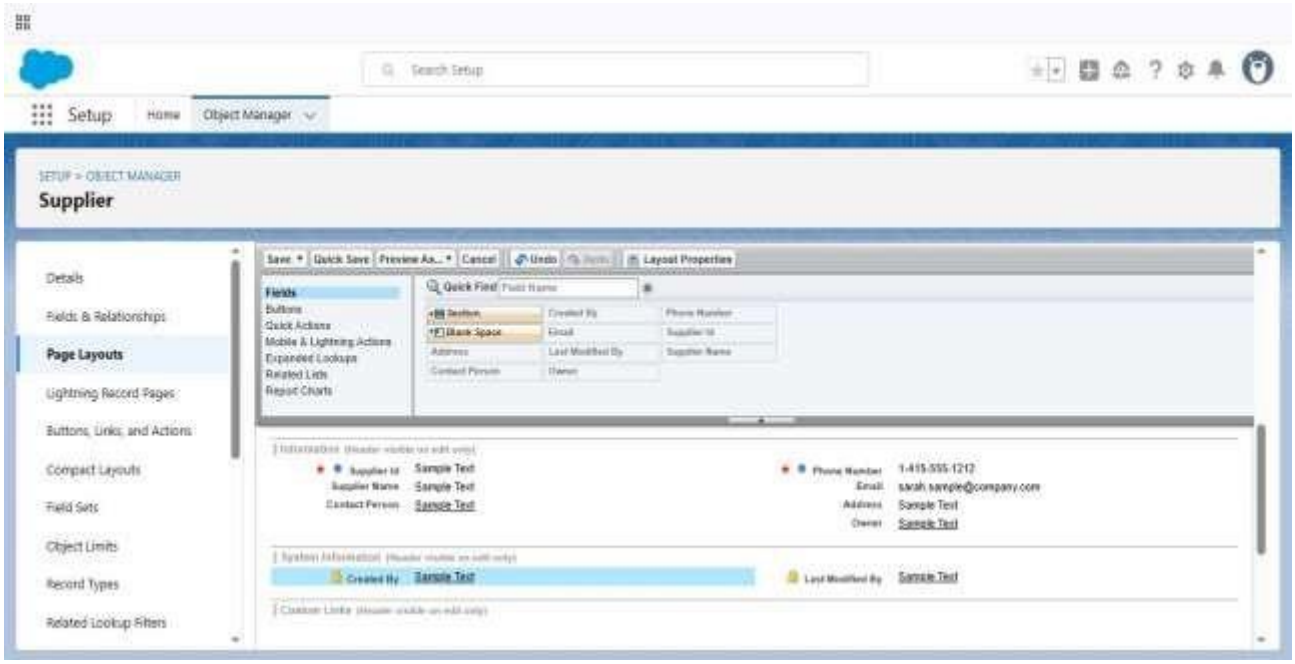
- To edit a page Layout in Inventory Transaction object:





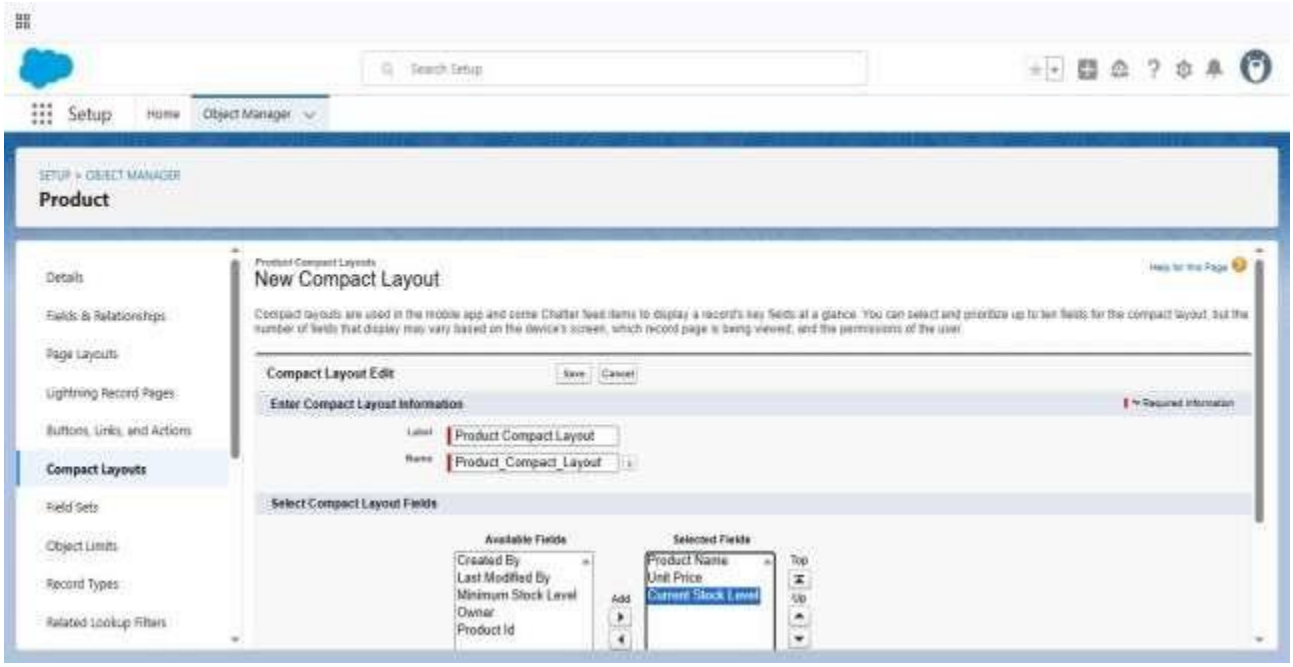
- To edit a page Layout in Supplier object:

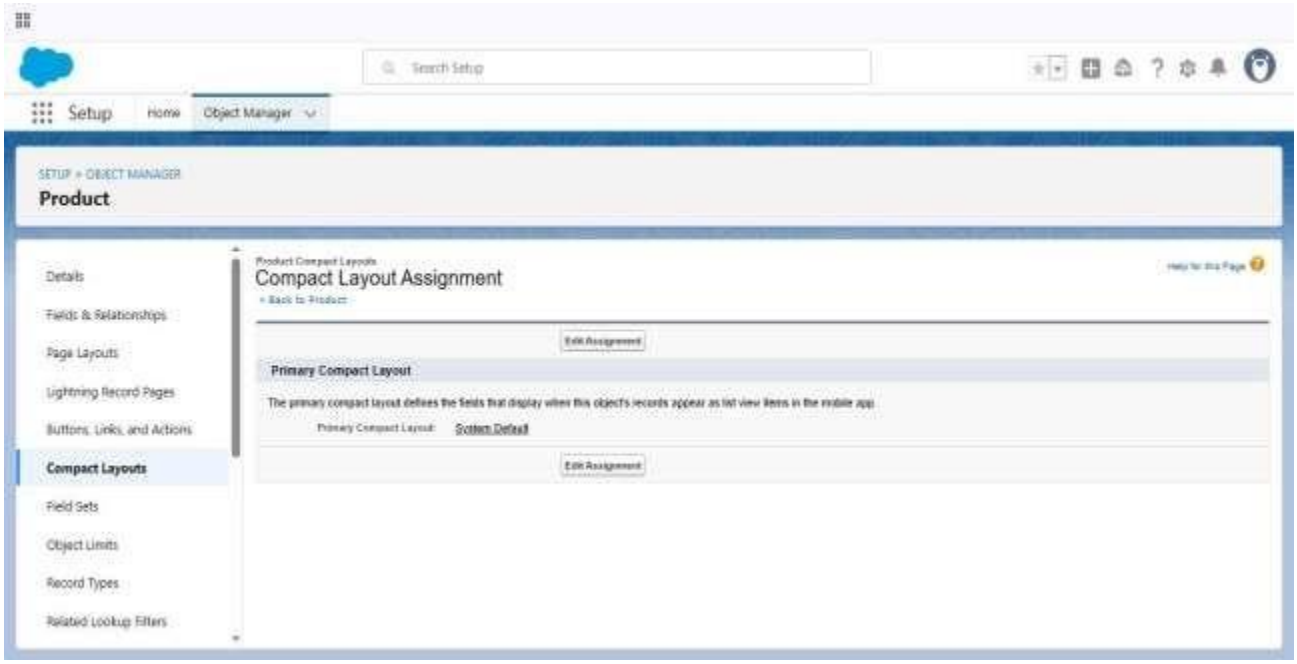


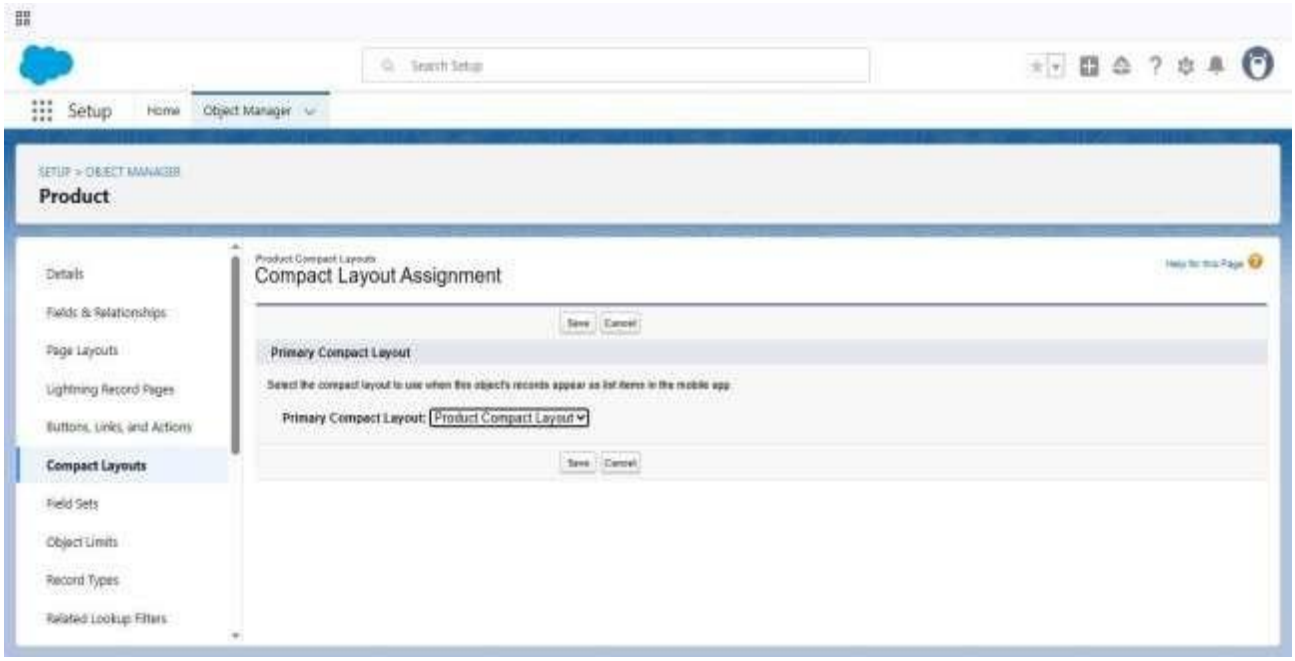


2.6 Compact Layouts:

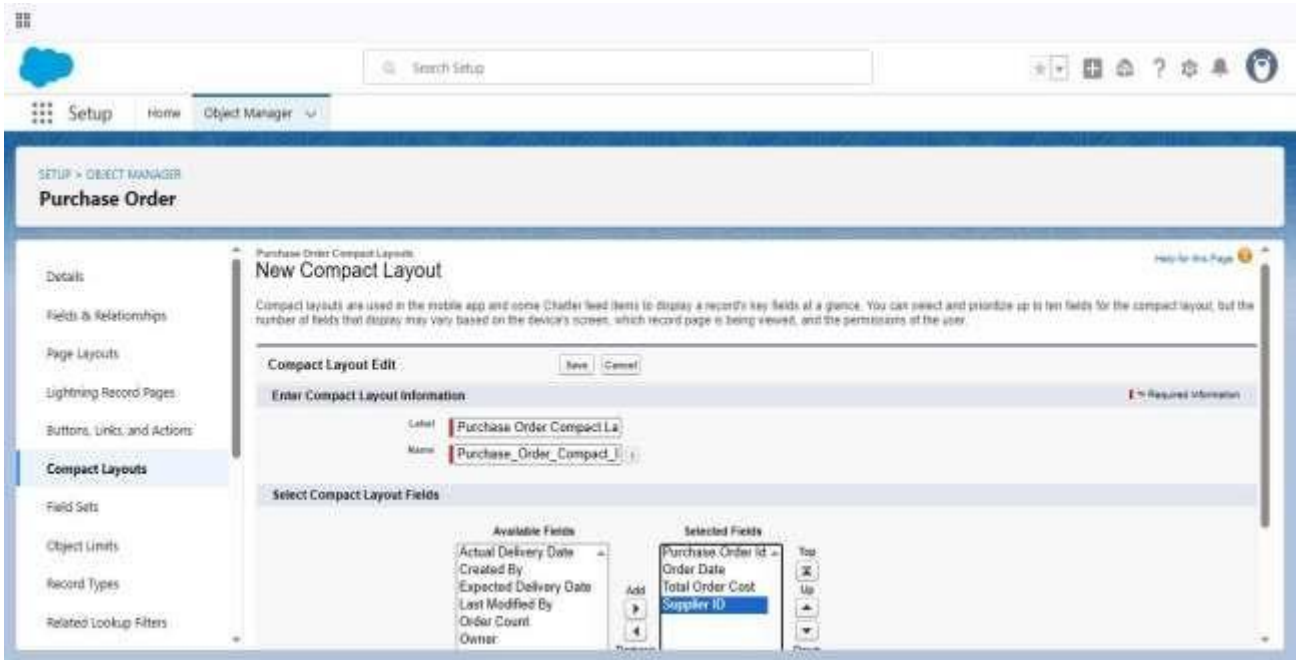
- To Create a Compact Layout to a Product Object:

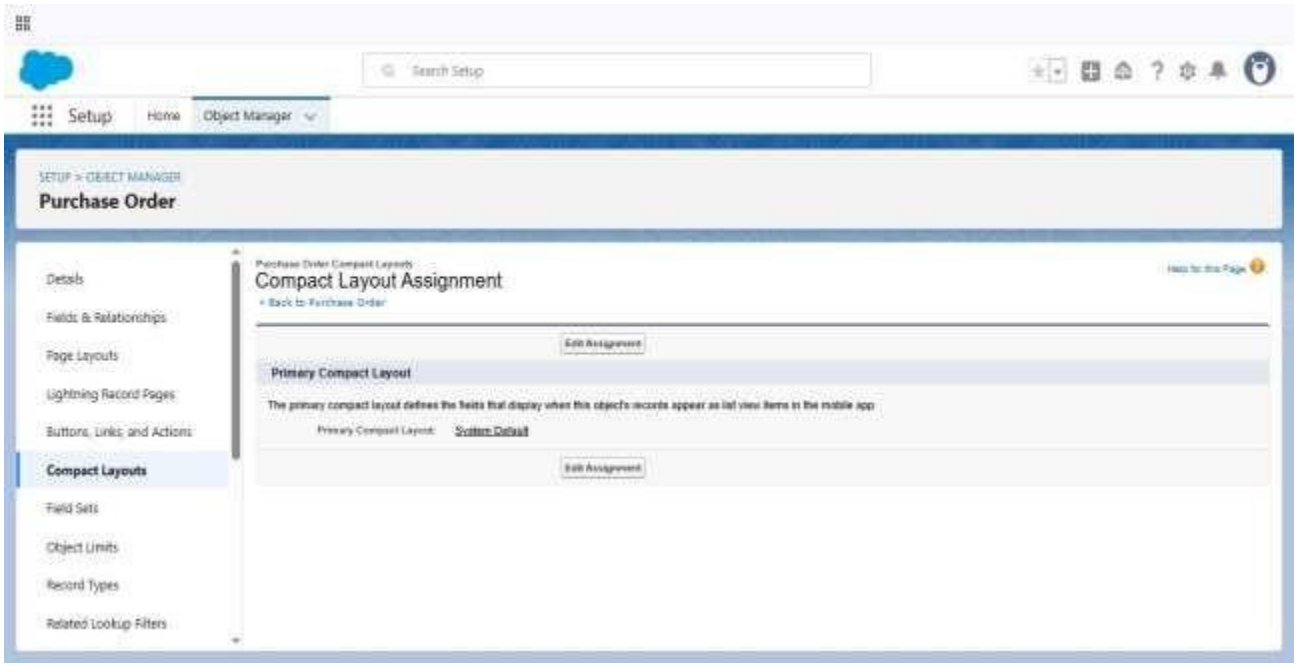


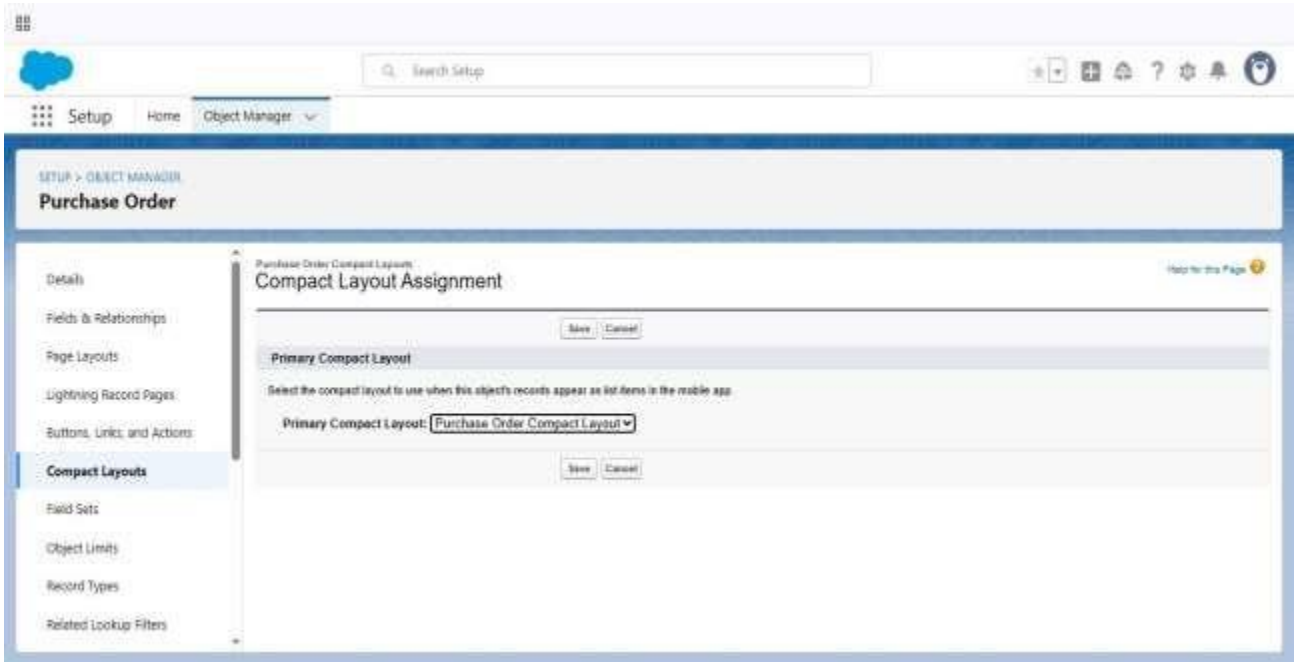

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Product
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Product Compact Layouts
Compact Layout Assignment
« Back to Product
Edit Assignment
Primary Compact Layout
The primary compact layout defines the fields that display when this object's records appear as list view items in the mobile app.
Primary Compact Layout: System Default
Edit Assignment


Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Product
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Product Compact Layouts
Compact Layout Assignment
Save
Cancel
Primary Compact Layout
Select the compact layout to use when this object's records appear as list items in the mobile app.
Primary Compact Layout: Product Compact Layout
Save
Cancel

- To Create a Compact Layout to a Purchase Order Object:

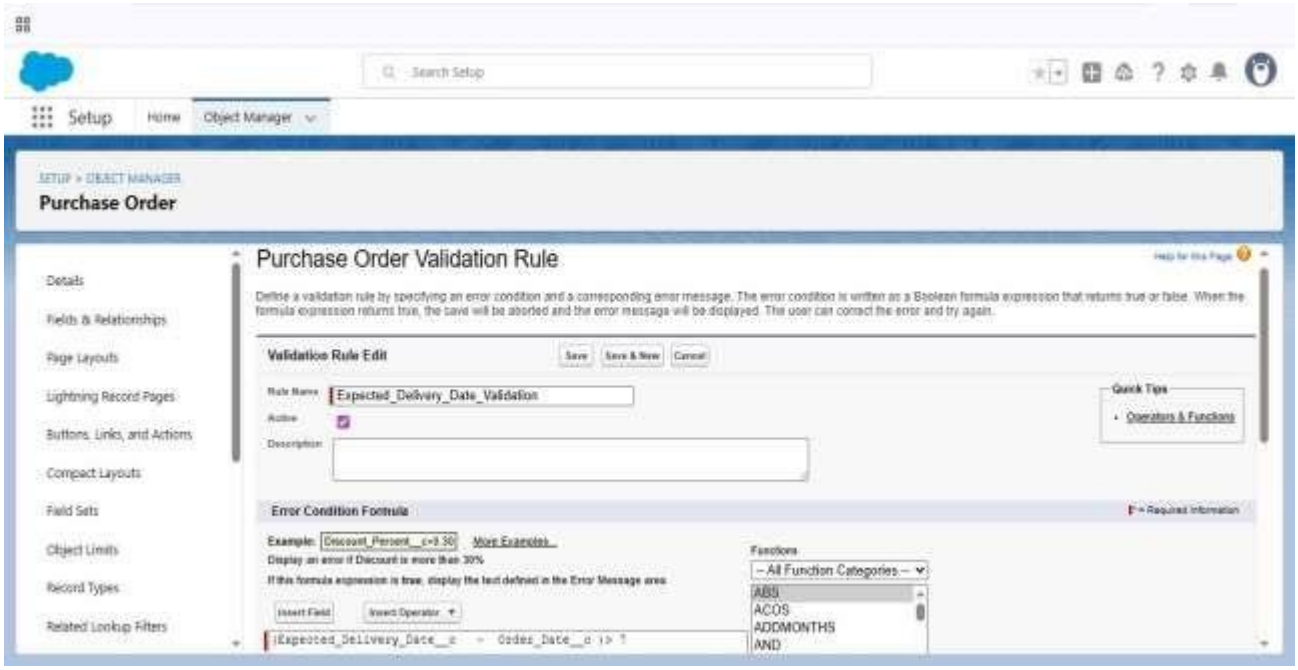


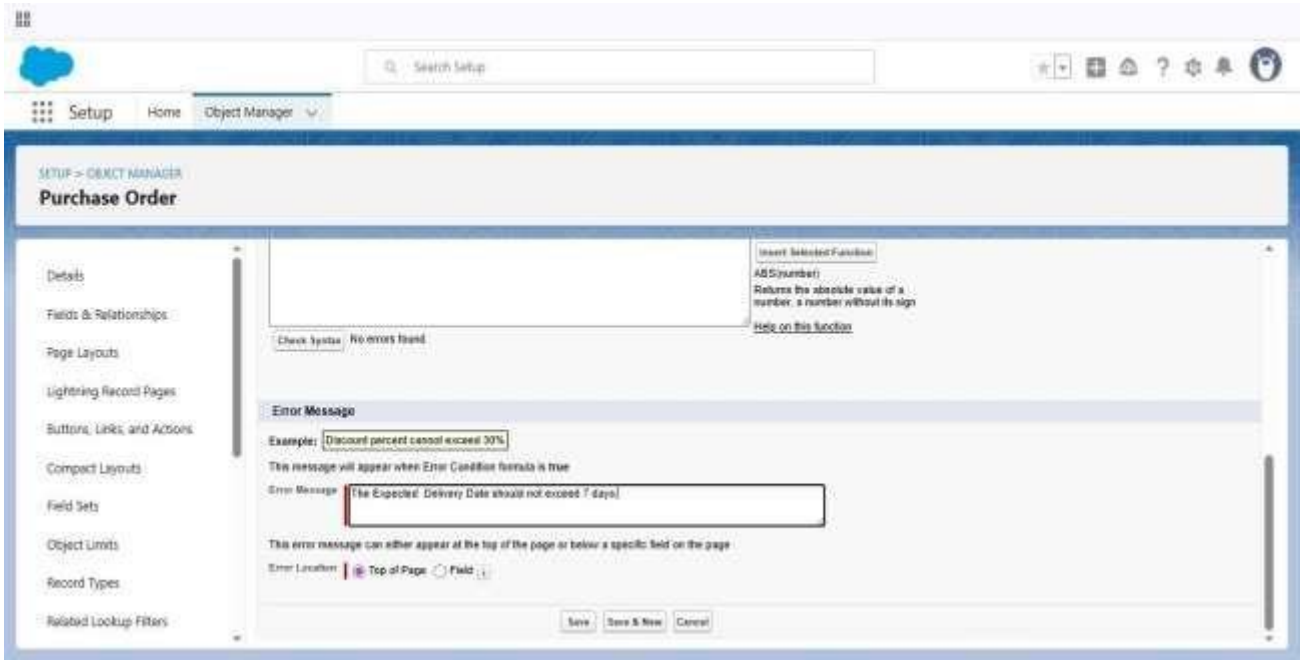




2.7 Validation Rules:

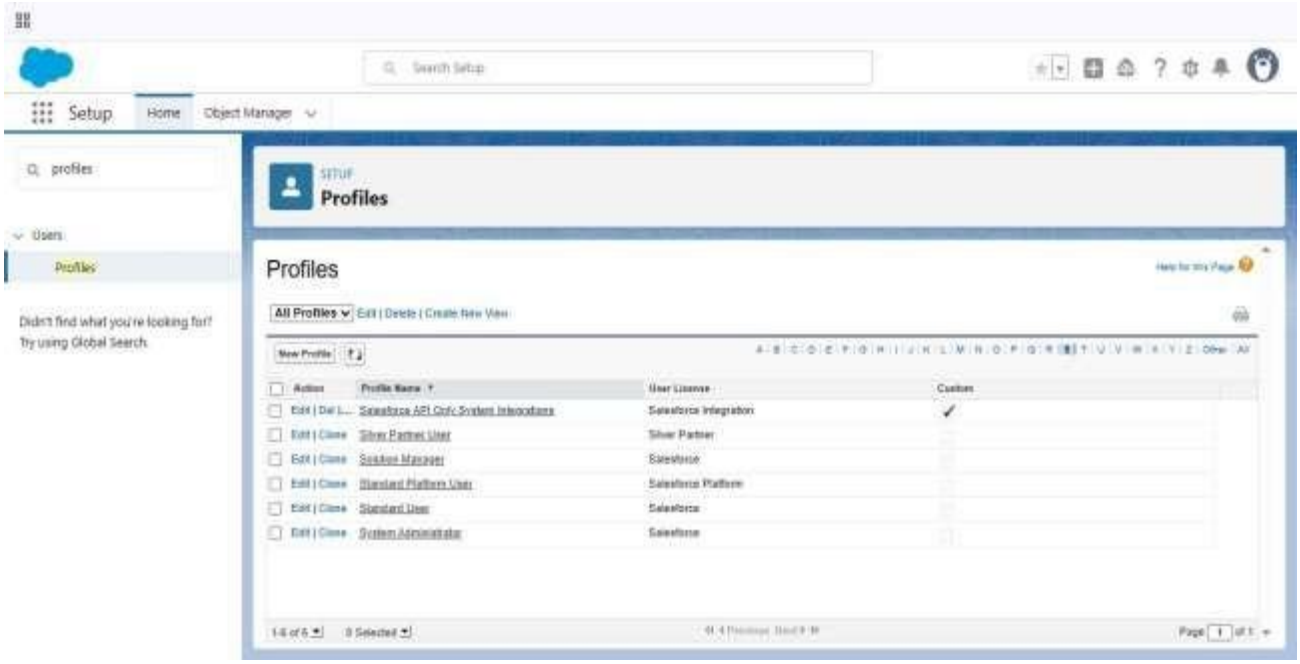
- To Create an Expected Delivery Date Validation Rule to a Employee Object:

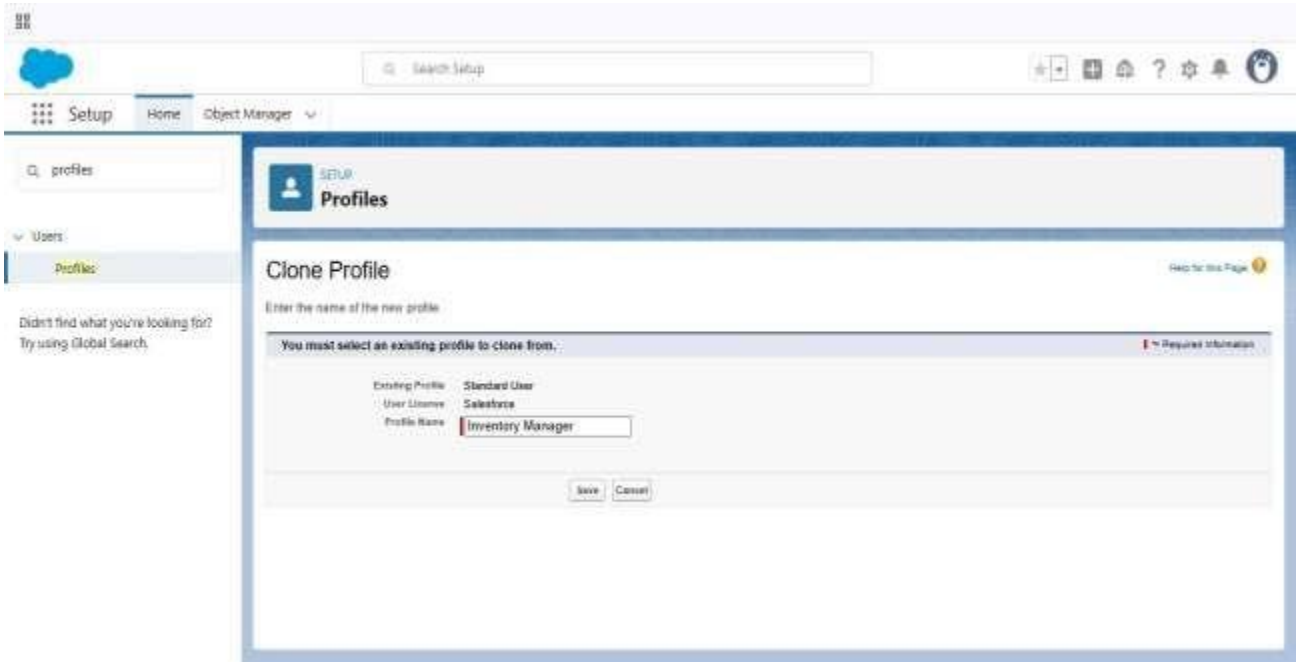


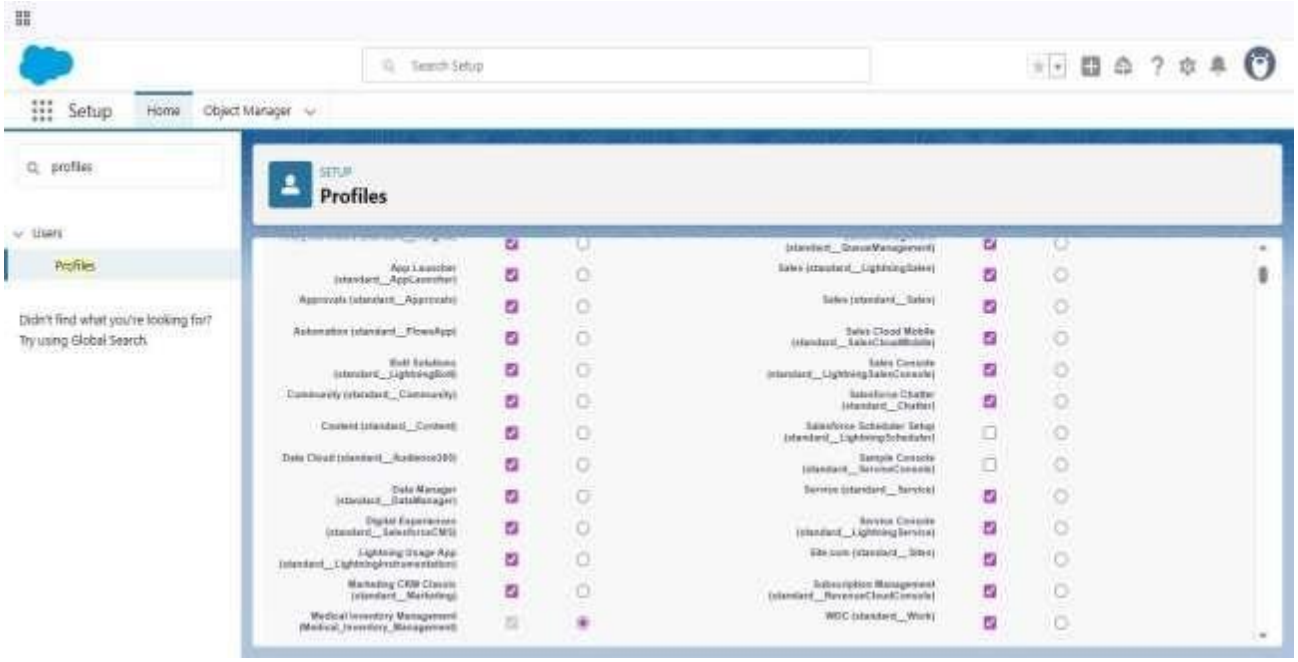


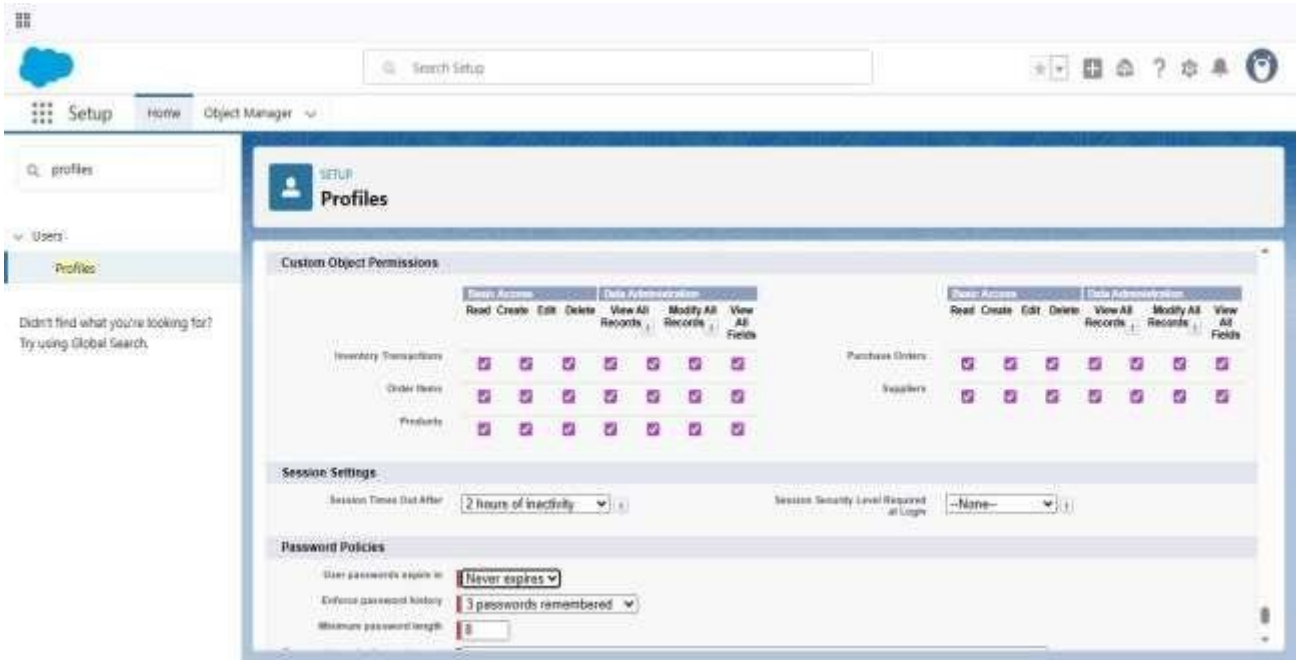
2.8 Profiles:

- To Create an Inventory Manager Profile:

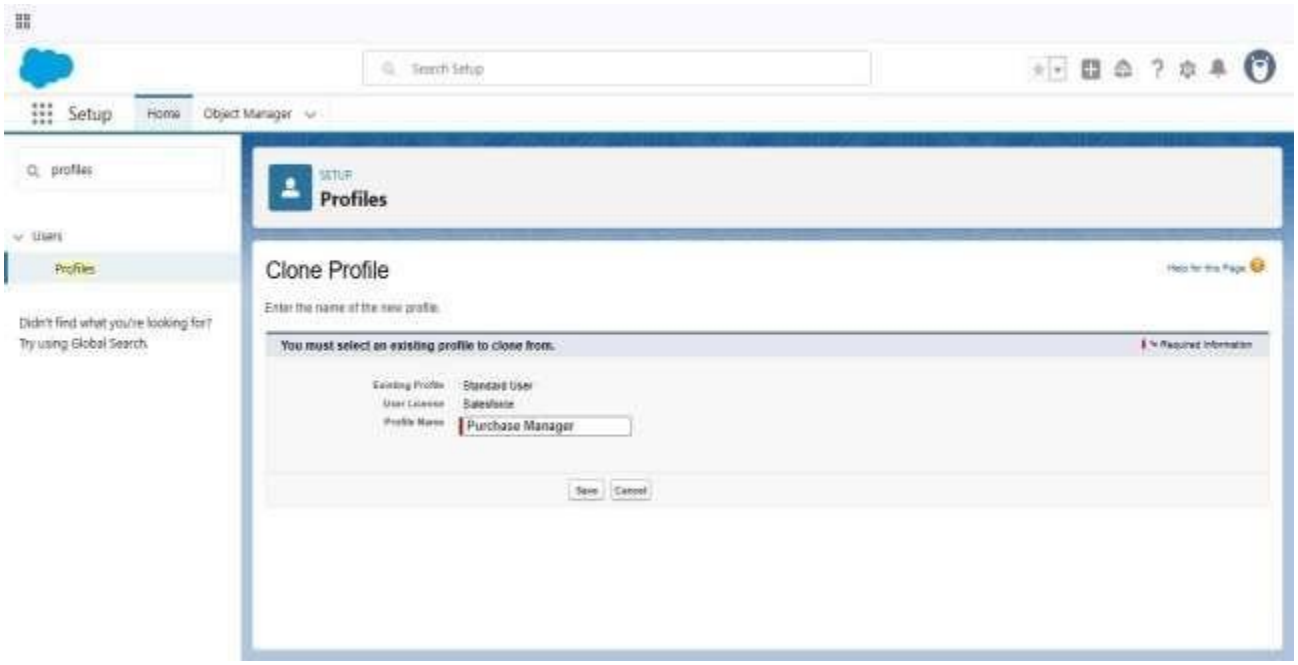


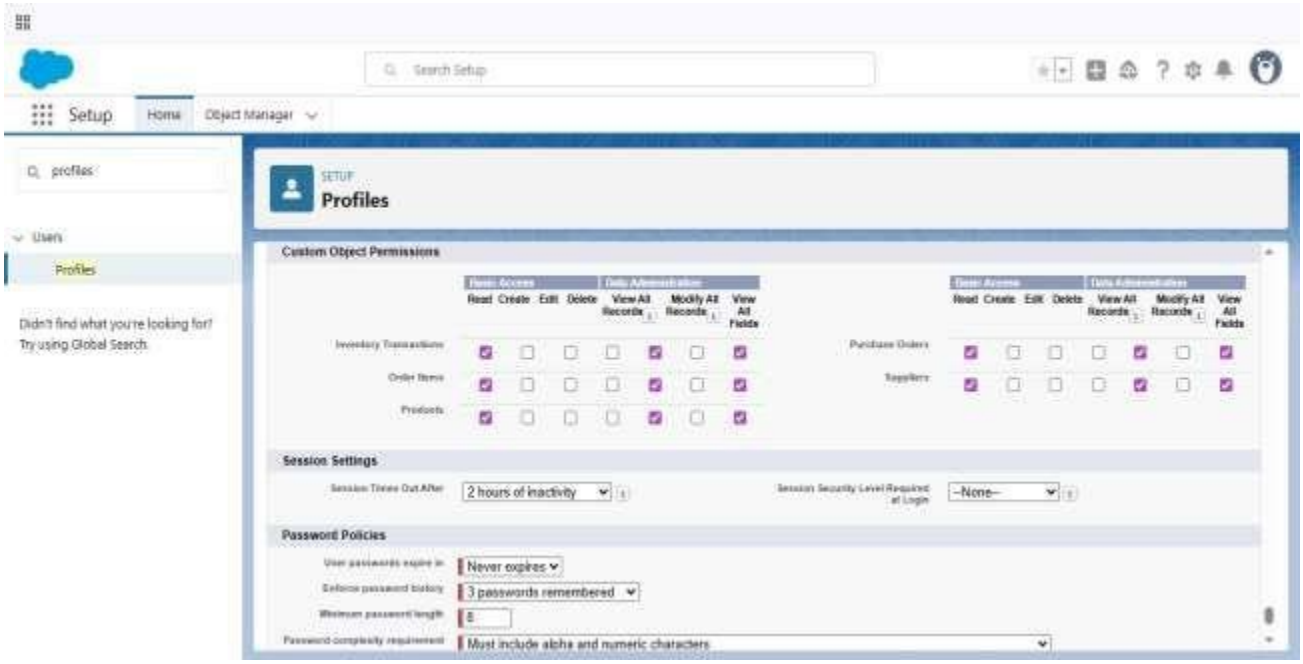

Search Setup
Setup
Home
Object Manager
profiles
Users
Profiles
Didn't find what you're looking for?
Try using Global Search.
SETUP
Profiles
Clone Profile
Enter the name of the new profile
You must select an existing profile to clone from.
Existing Profile
Standard User
User License
Salesforce
Profile Name
Inventory Manager
Save
Cancel


Search Setup
Setup
Home
Object Manager
profiles
Users
Profiles
Didn't find what you're looking for?
Try using Global Search.
SETUP
Profiles



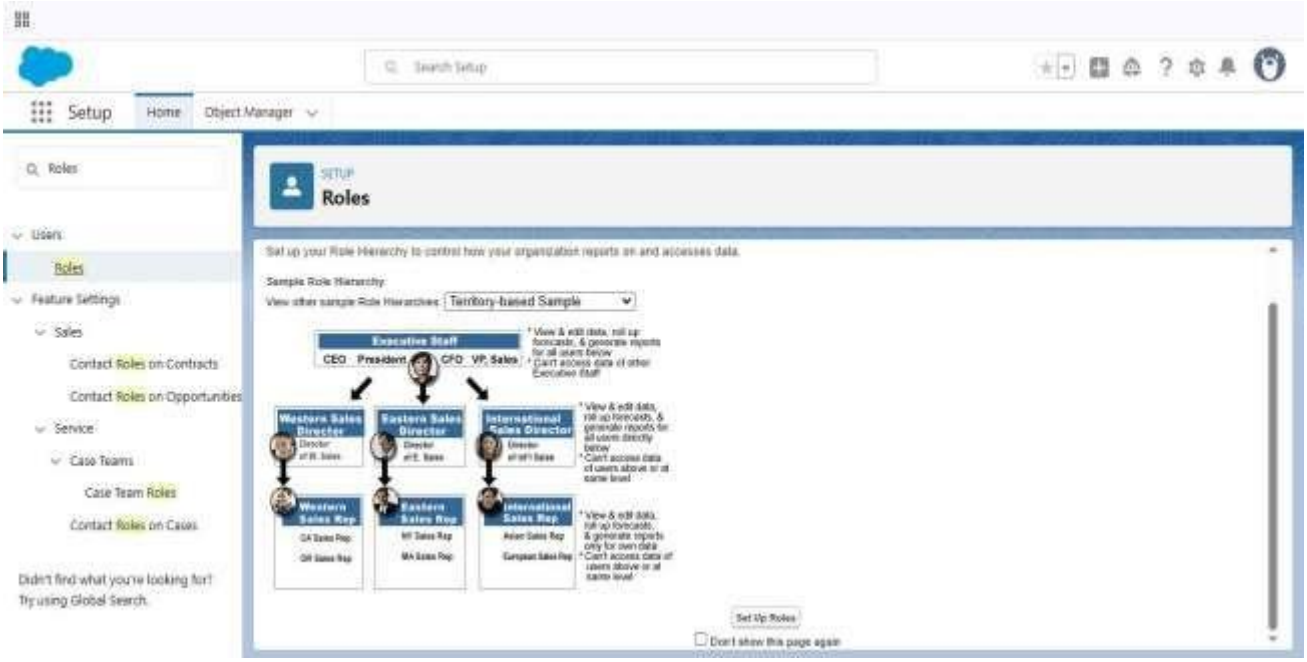
- To Create an Purchase Manager Profile:

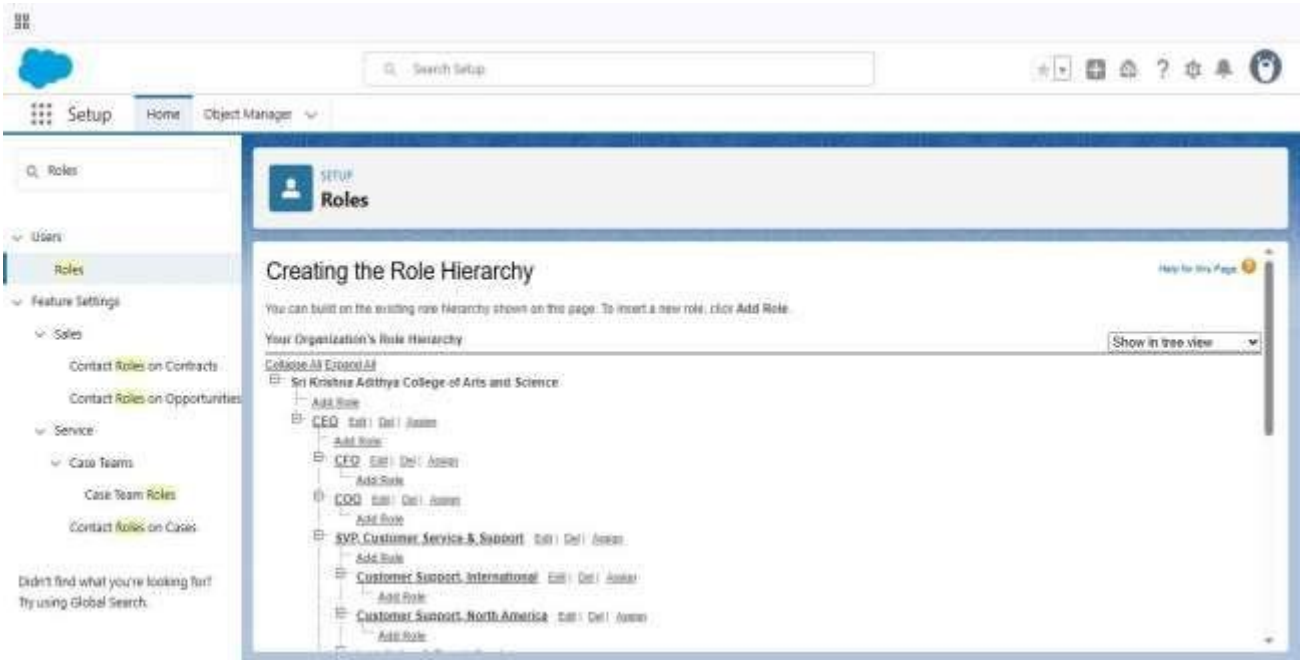


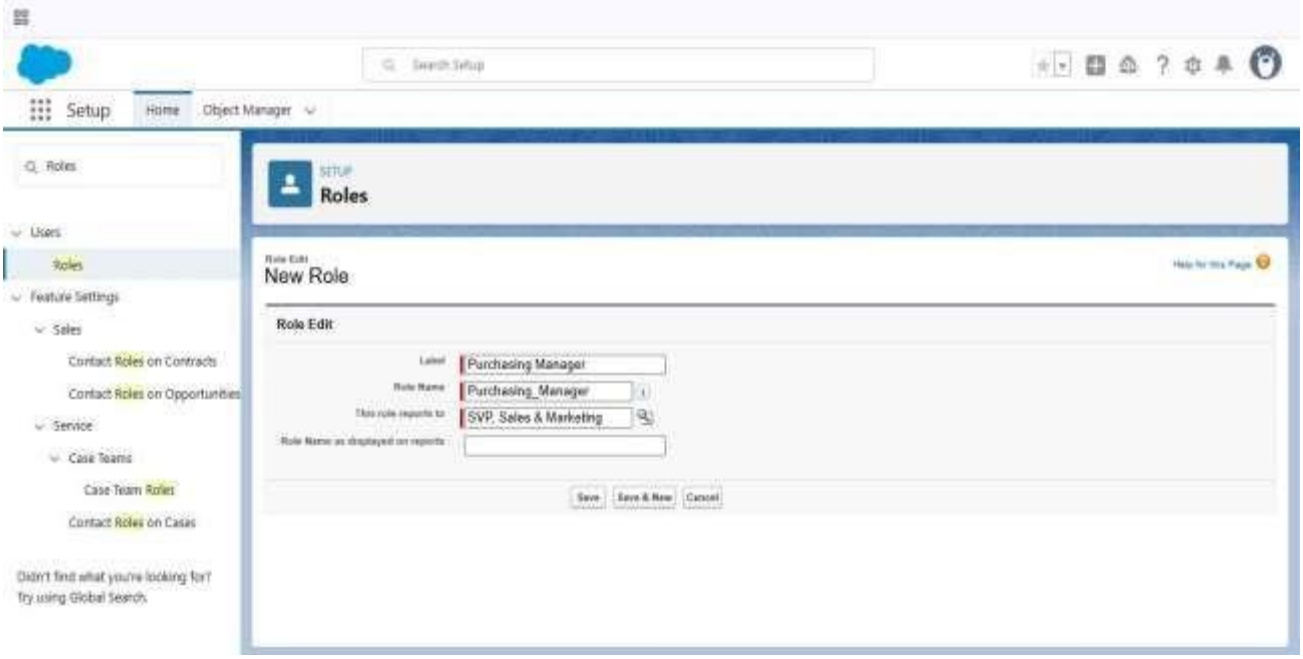


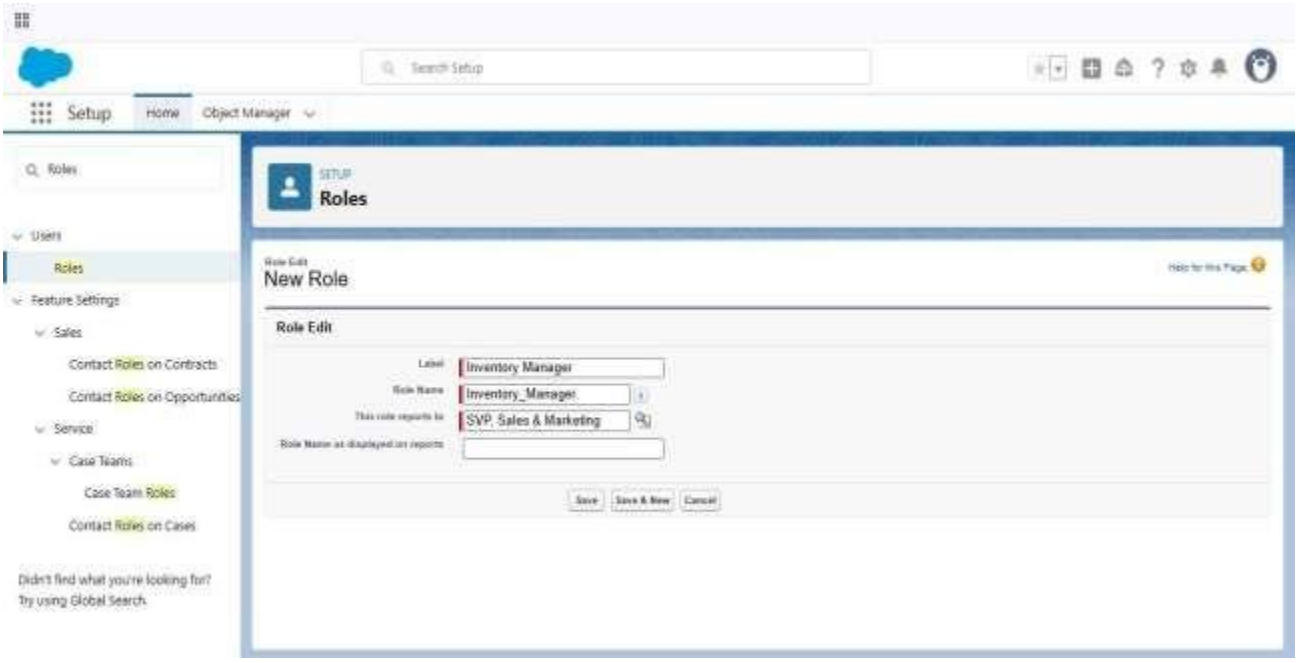
2.9 Roles:

- Create a Purchasing Manager Role:



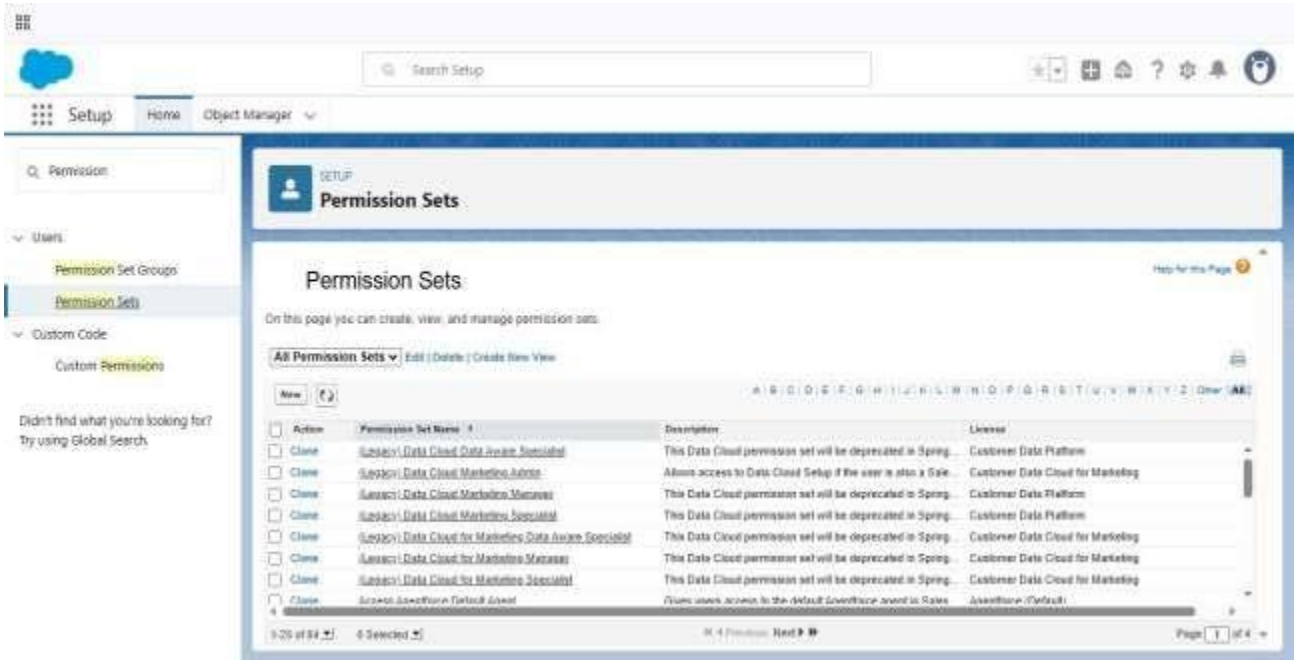

Search Setup
Setup
Home
Object Manager
Roles
Users
Roles
Feature Settings
Sales
Contact Roles on Contracts
Contact Roles on Opportunities
Service
Case Teams
Case Team Roles
Contact Roles on Cases
Didn't find what you're looking for?
Try using Global Search.
SETUP
Roles
Creating the Role Hierarchy
You can build on the existing role hierarchy shown on this page. To insert a new role, click Add Role.
Your Organization's Role Hierarchy
Show in tree view
Collapse All Expand All
Sri Krishna Adithya College of Arts and Science
Add Role
CEO Edit | Del | Assign
CFO Edit | Del | Assign
COO Edit | Del | Assign
SVP, Customer Service & Support Edit | Del | Assign
Customer Support, International Edit | Del | Assign
Customer Support, North America Edit | Del | Assign

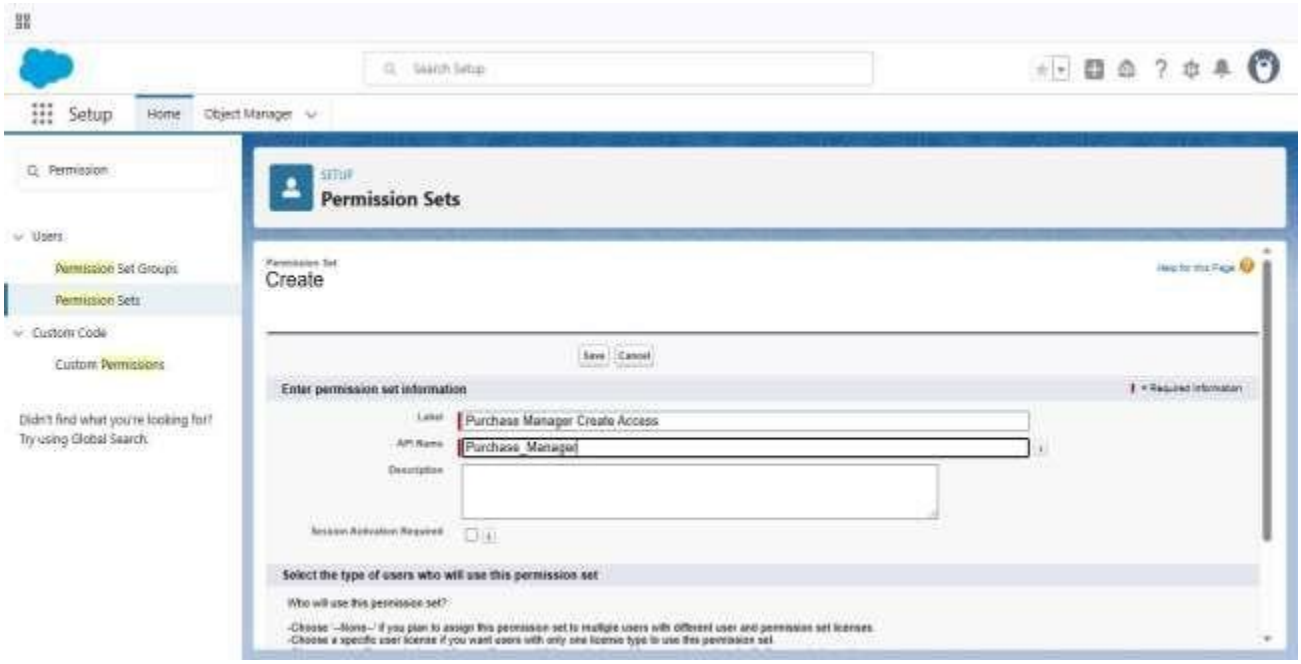

Search Setup
Setup
Home
Object Manager
Roles
Users
Roles
Feature Settings
Sales
Contact Roles on Contracts
Contact Roles on Opportunities
Service
Case Teams
Case Team Roles
Contact Roles on Cases
Didn't find what you're looking for?
Try using Global Search.
SETUP
Roles
New Role
Role Edit
Label
Purchasing Manager
Role Name
Purchasing_Manager
This role reports to
SVP, Sales & Marketing
Role Name as displayed on reports
Save
Save & New
Cancel

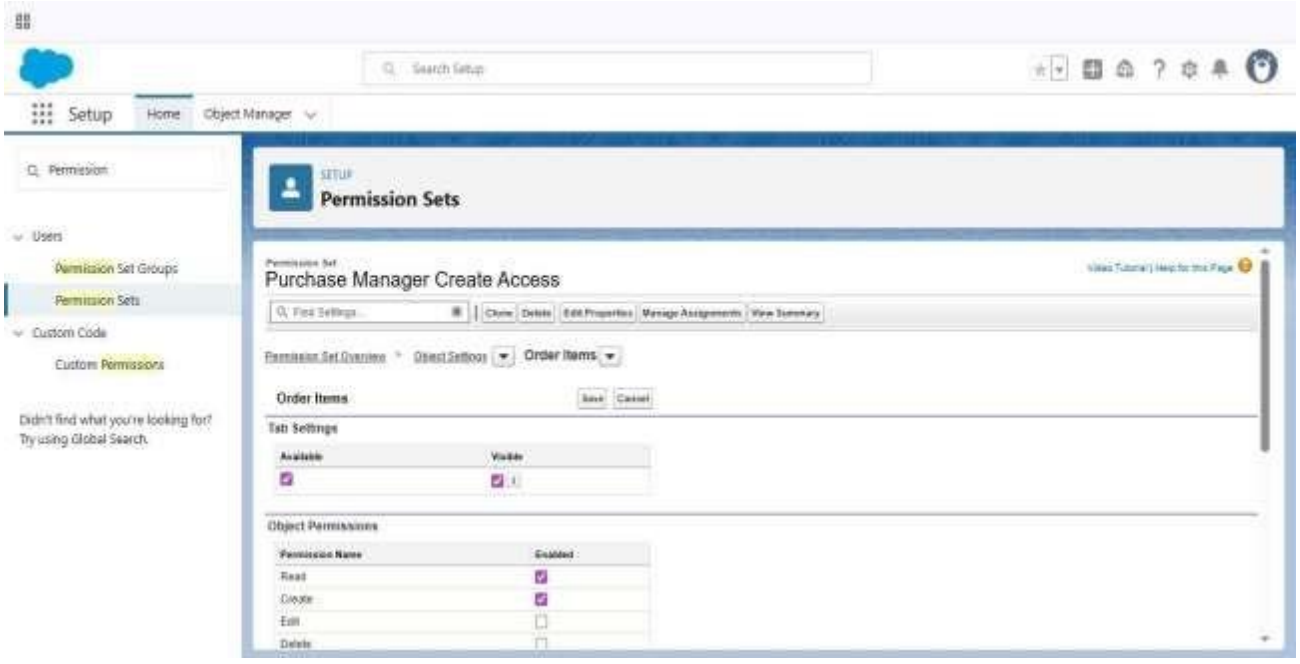


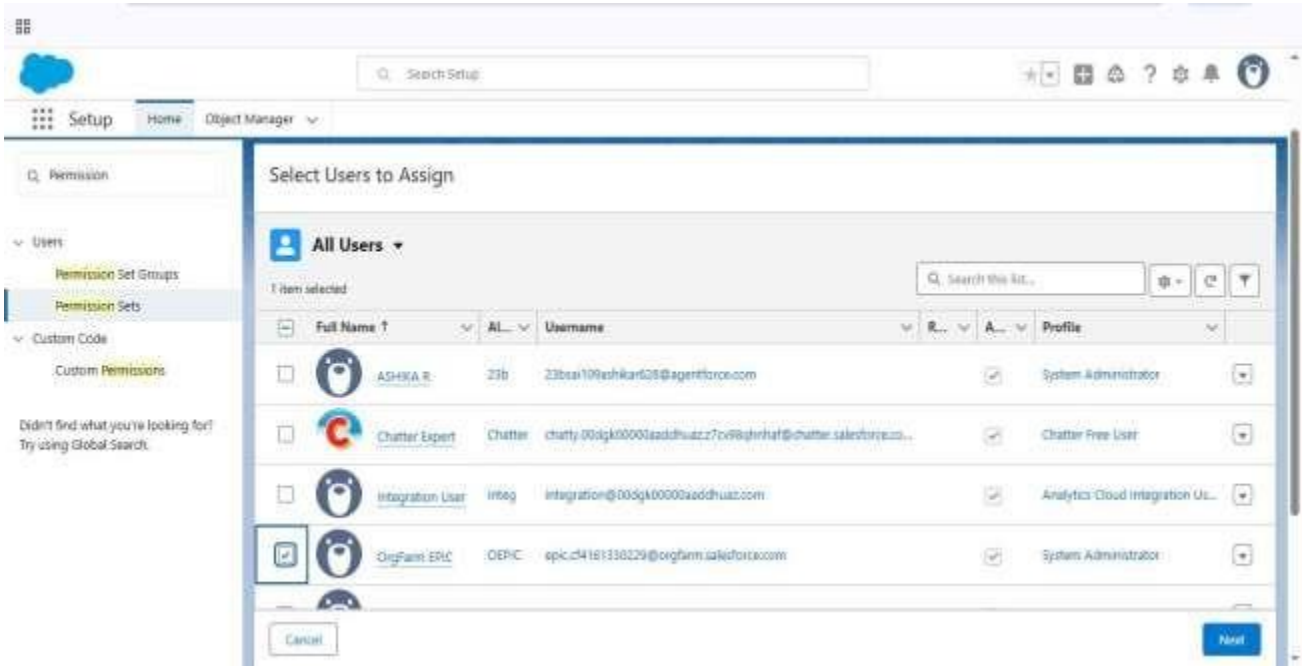
2.10 Permission Sets:

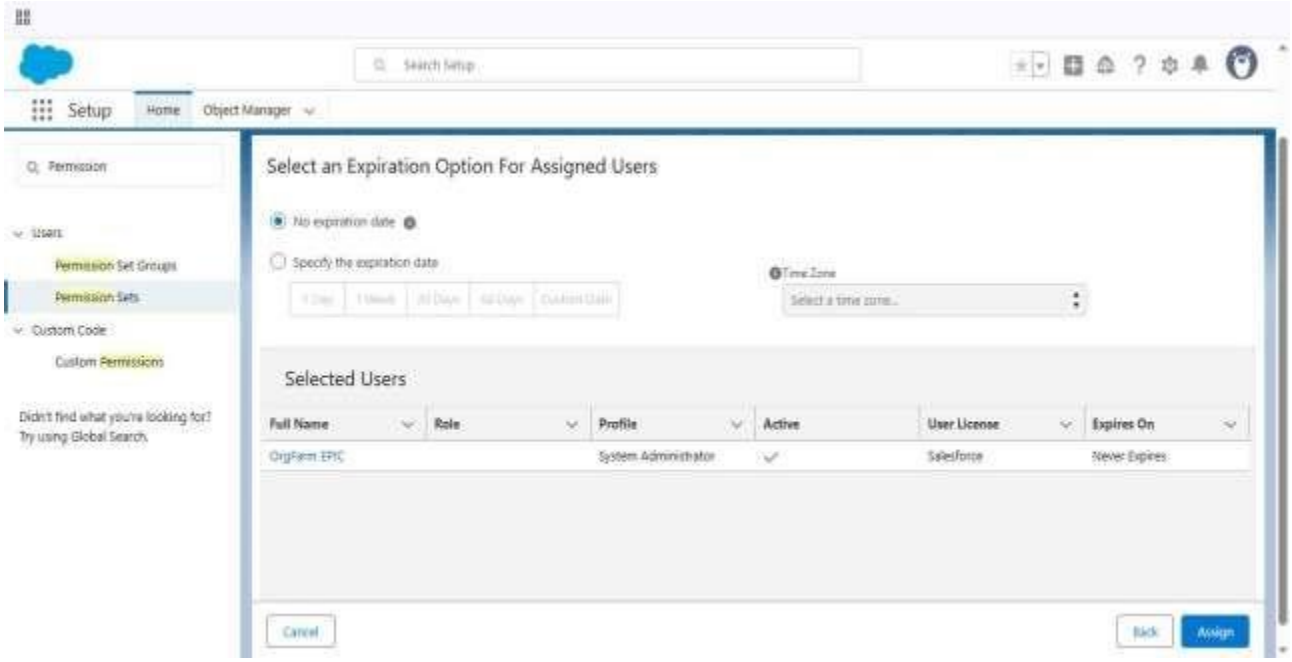
- Create a Permission Set:




Setup
Home
Object Manager
Permission
Users
Permission Set Groups
Permission Sets
Custom Code
Custom Permissions
Didn't find what you're looking for?
Try using Global Search.
SETUP
Permission Sets
Create
Save
Cancel
Enter permission set information
Purchase Manager Create Access
Purchase_Manager
Select the type of users who will use this permission set

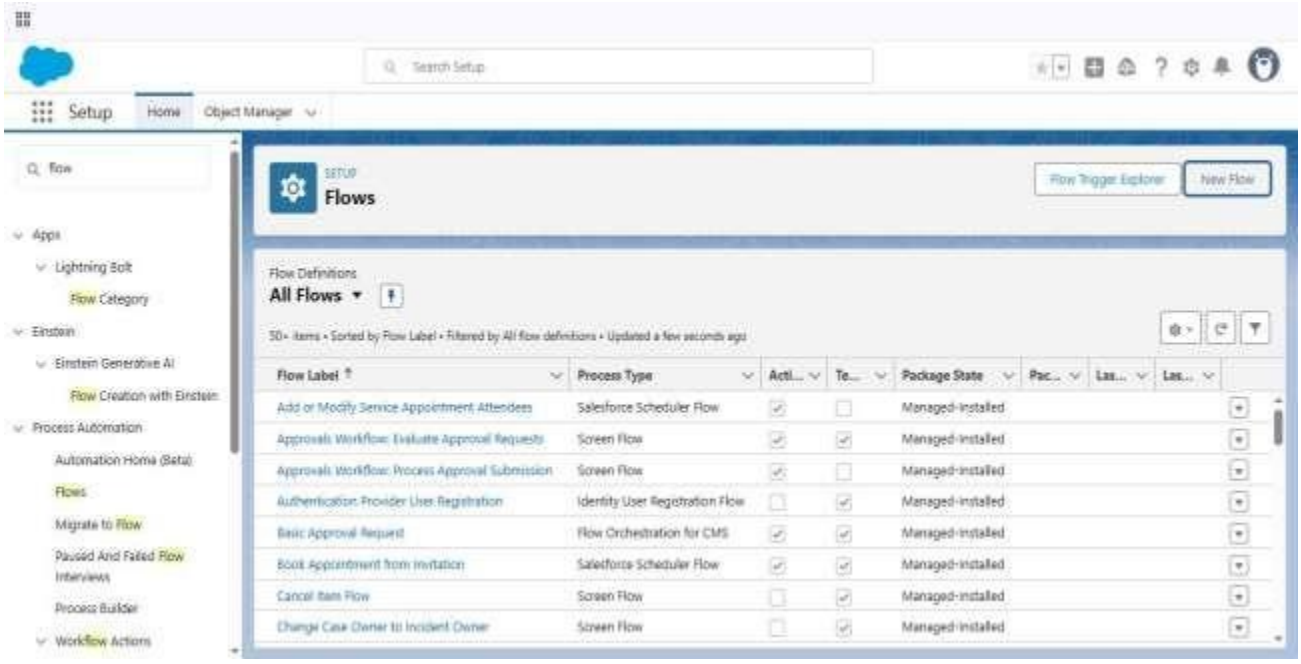

Setup
Home
Object Manager
Permission
Users
Permission Set Groups
Permission Sets
Custom Code
Custom Permissions
Didn't find what you're looking for?
Try using Global Search.
SETUP
Permission Sets
Purchase Manager Create Access
Order Items
Tab Settings
Available
Visible
Object Permissions
Permission Name
Enabled
Read
Create
Edit
Delete

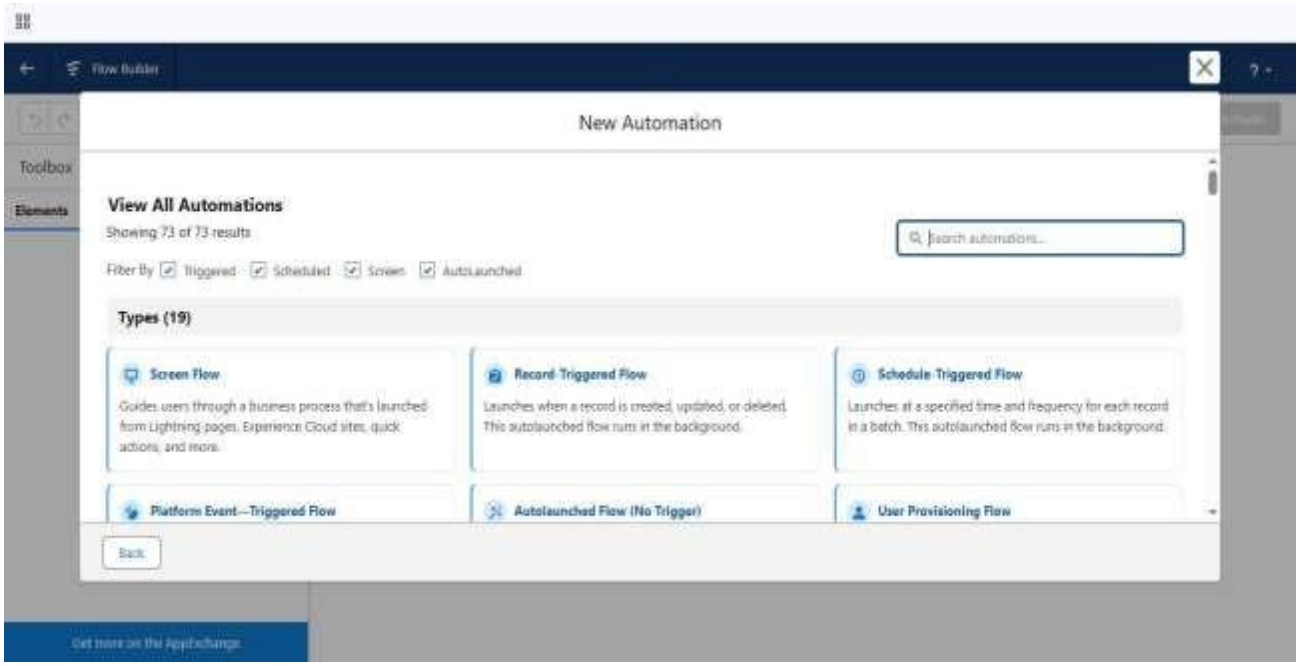

Search Setup
Setup
Home
Object Manager
Permission
Users
Permission Set Groups
Permission Sets
Custom Code
Custom Permissions
Didn't find what you're looking for?
Try using Global Search.
Select Users to Assign
All Users
1 item selected
Search this list...
Full Name
Al...
Username
R...
A...
Profile
ASHIKA R
23b
System Administrator
Chatter Expert
Chatter
Chatter Free User
Integration User
Integ
Analytics Cloud Integration Us...
OrgFarm EPIC
OEPIC
System Administrator
Cancel
Next

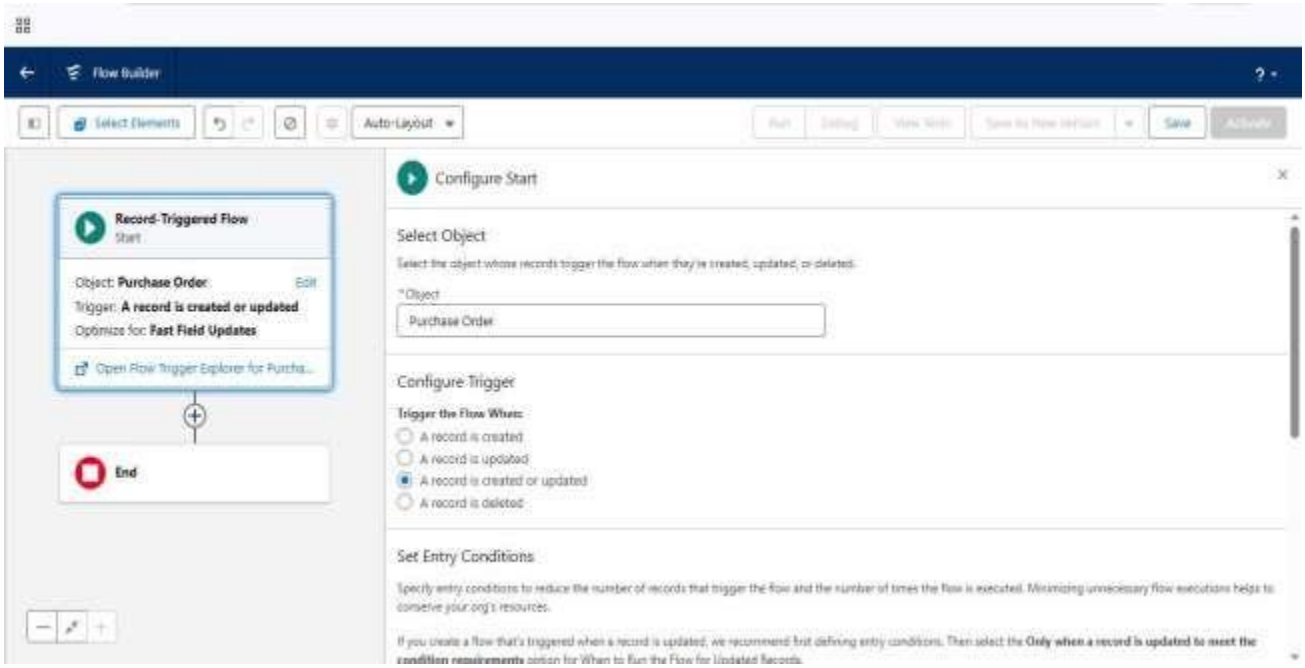

Search Setup
Setup
Home
Object Manager
Permission
Users
Permission Set Groups
Permission Sets
Custom Code
Custom Permissions
Didn't find what you're looking for?
Try using Global Search.
Select an Expiration Option For Assigned Users
No expiration date
Specify the expiration date
Time Zone
Select a time zone...
Selected Users
Full Name
Role
Profile
Active
User License
Expires On
OrgFarm EPIC
System Administrator
Salesforce
Never Expires
Cancel
Back
Assign

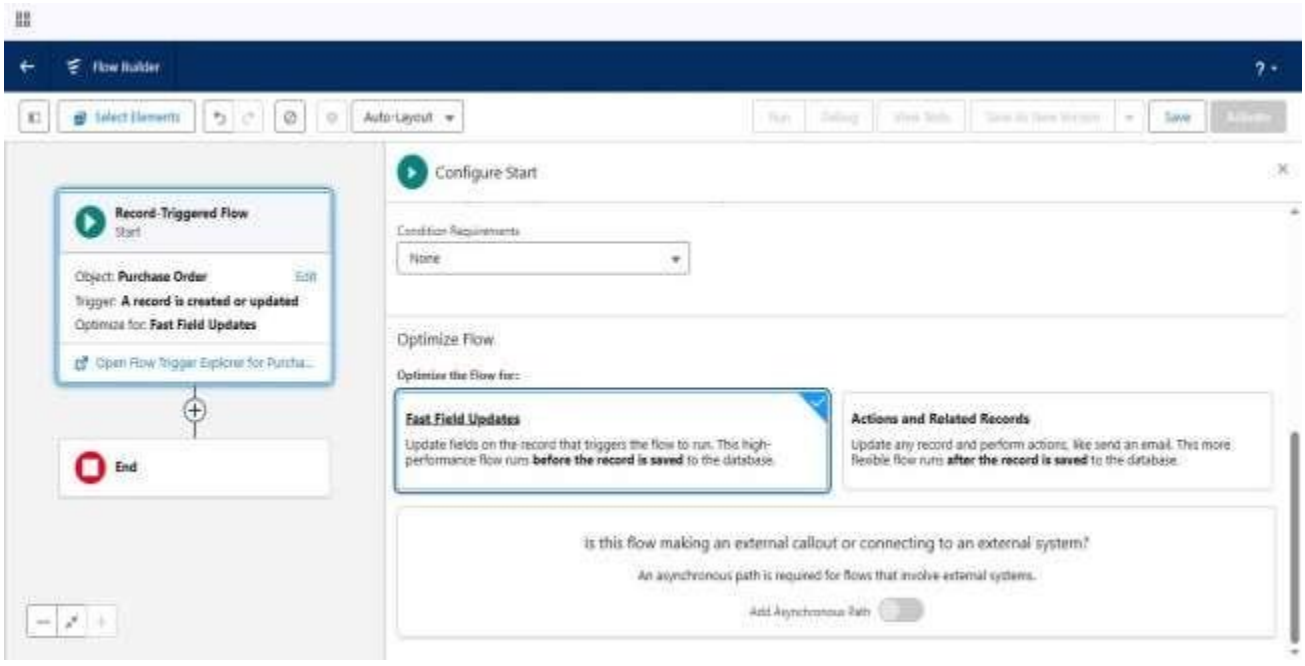
2.11 Flows:

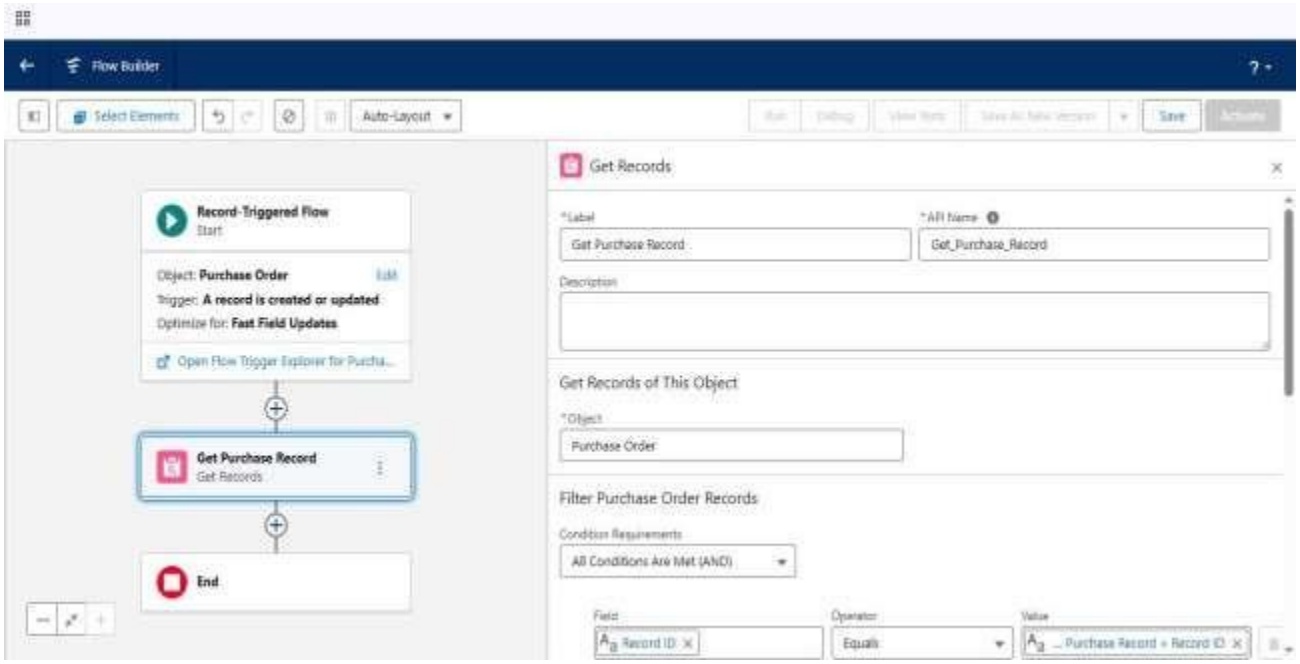
- Create Flow to Update the Actual Delivery Date:

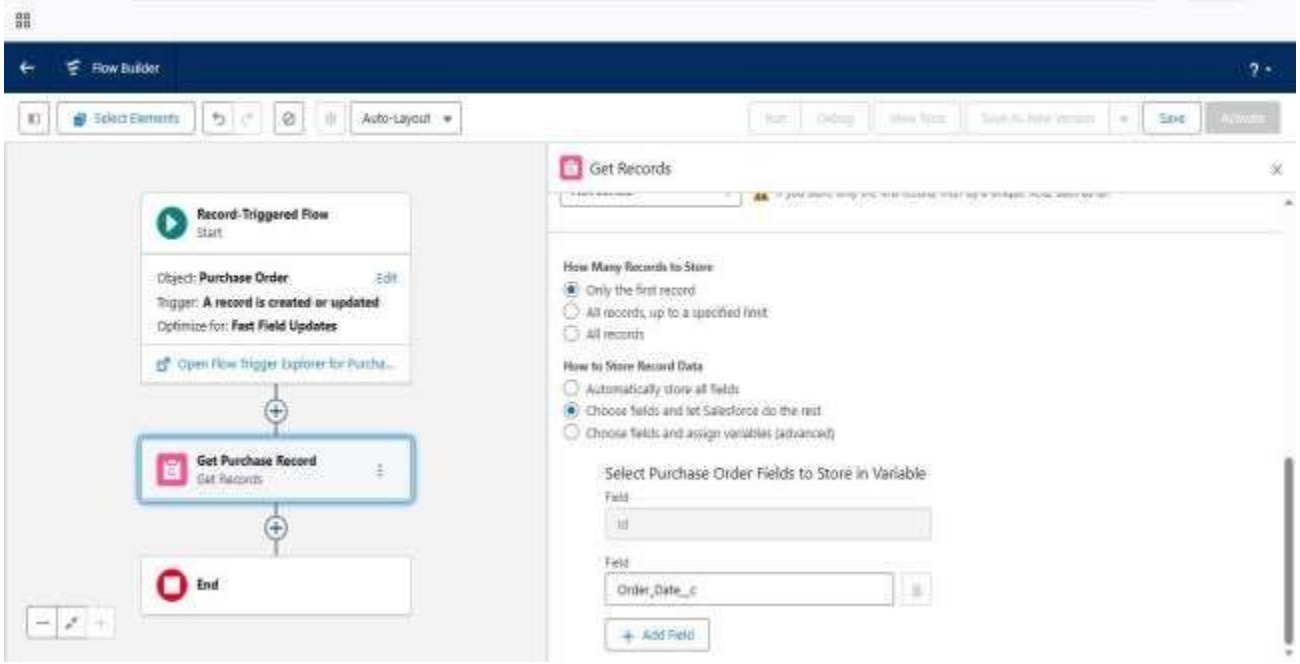


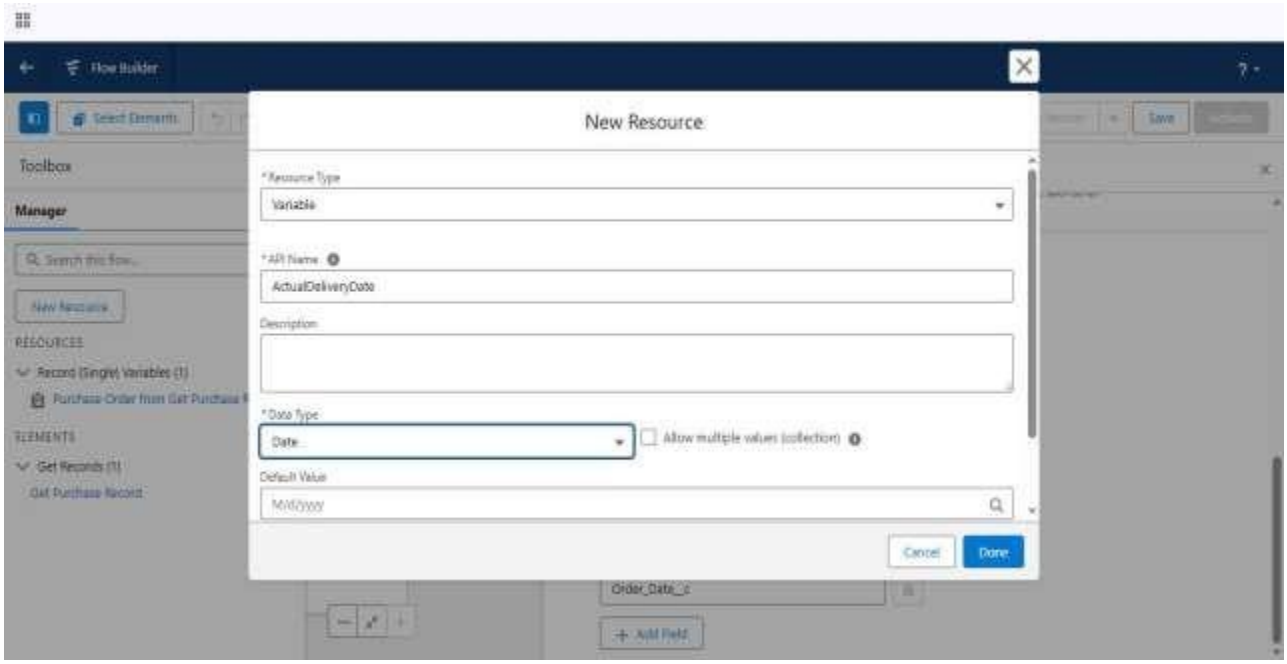


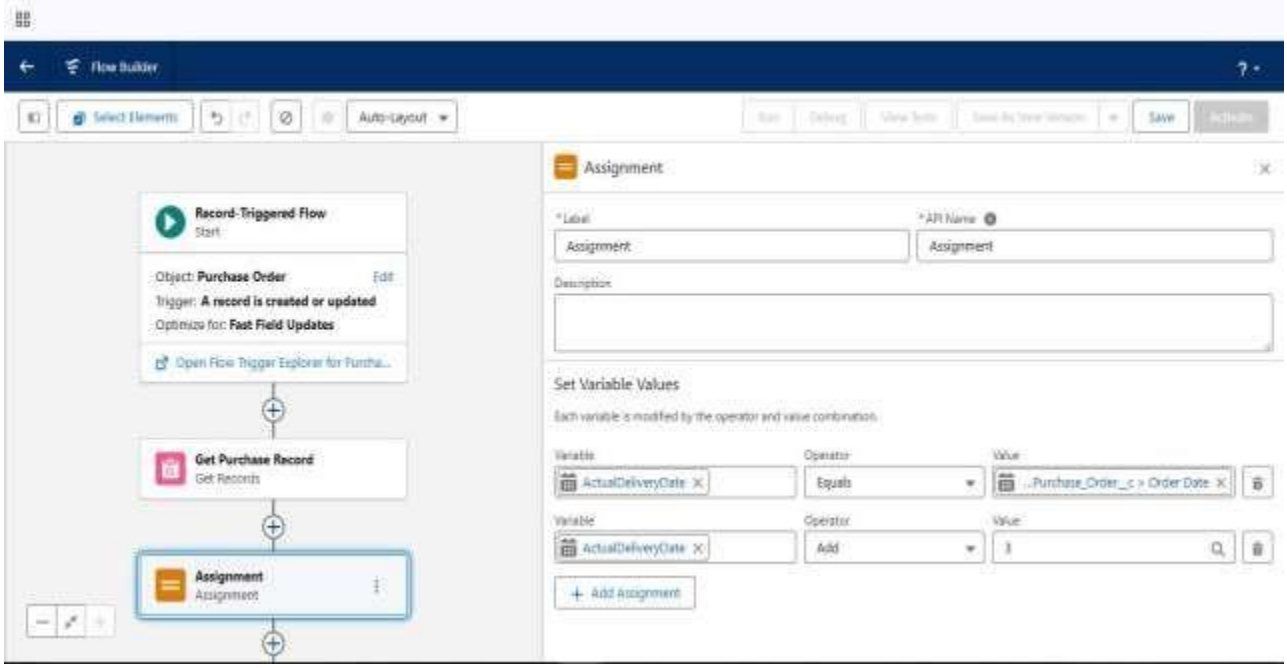

Flow Builder
Select Elements
Auto-Layout
Save
Record-Triggered Flow
Start
Object: Purchase Order
Edit
Trigger: A record is created or updated
Optimize for: Fast Field Updates
Open Flow Trigger Explorer for Purcha...
End
Configure Start
Select Object
Select the object whose records trigger the flow when they're created, updated, or deleted.
* Object
Purchase Order
Configure Trigger
Trigger the Flow When:
A record is created
A record is updated
A record is created or updated
A record is deleted
Set Entry Conditions
Specify entry conditions to reduce the number of records that trigger the flow and the number of times the flow is executed. Minimizing unnecessary flow executions helps to conserve your org's resources.
If you create a flow that's triggered when a record is updated, we recommend first defining entry conditions. Then select the Only when a record is updated to meet the condition requirements option for When to Run the Flow for Updated Records.

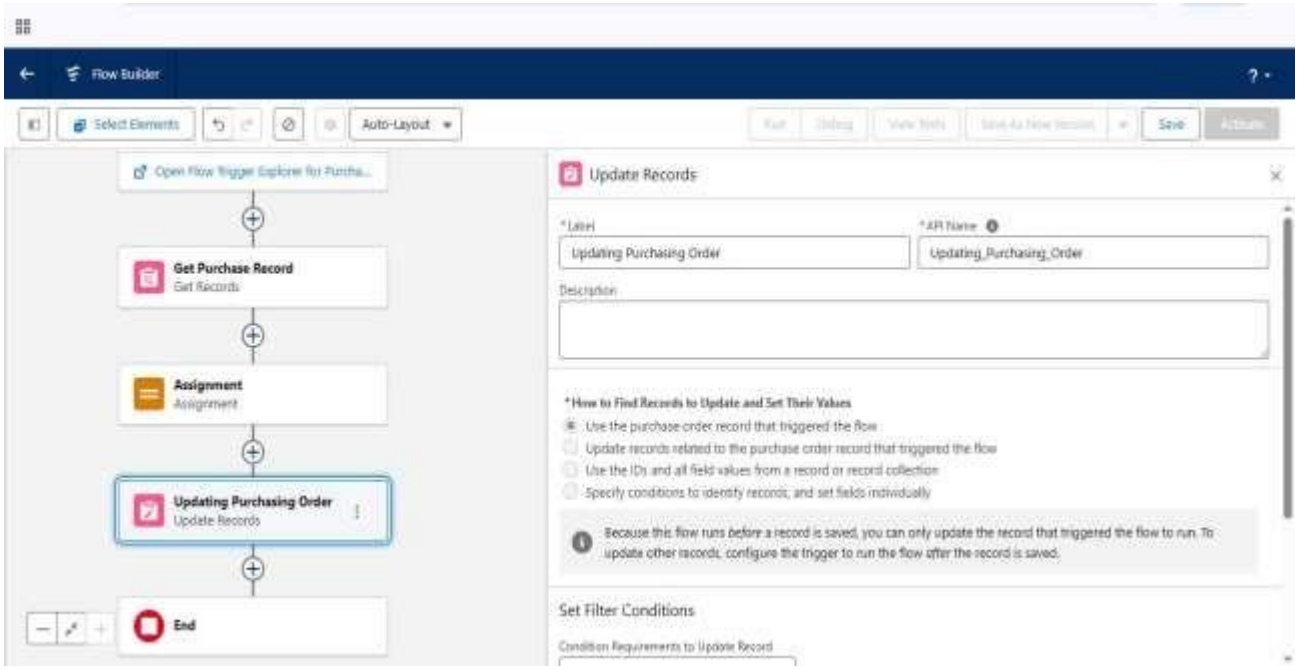

Flow Builder
Select Elements
Auto-Layout
Save
Record-Triggered Flow
Start
Object: Purchase Order
Edit
Trigger: A record is created or updated
Optimize for: Fast Field Updates
Open Flow Trigger Explorer for Purcha...
End
Configure Start
Condition Requirements
None
Optimize Flow
Optimize the Flow for:
Fast Field Updates
Update fields on the record that triggers the flow to run. This high-performance flow runs before the record is saved to the database.
Actions and Related Records
Update any record and perform actions, like send an email. This more flexible flow runs after the record is saved to the database.
Is this flow making an external callout or connecting to an external system?
An asynchronous path is required for flows that involve external systems.
Add Asynchronous Path

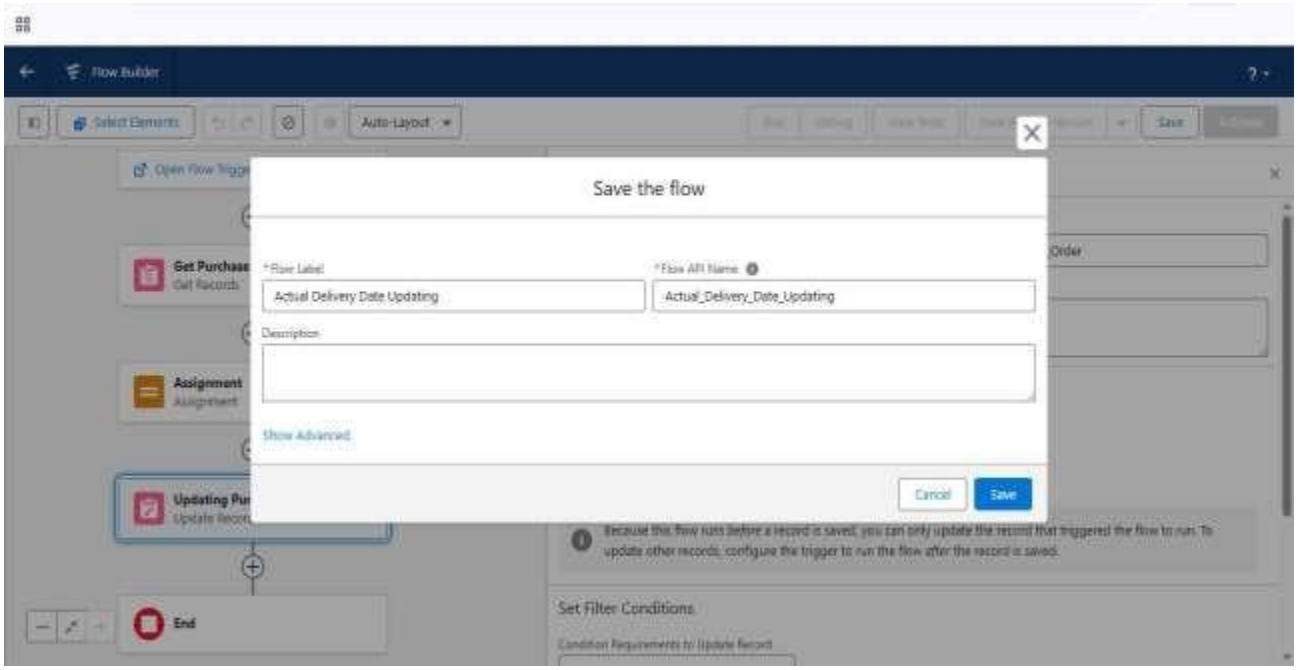

Flow Builder
Select Elements
Auto-Layout
Save
Record-Triggered Flow
Start
Object: Purchase Order
Edit
Trigger: A record is created or updated
Optimize for: Fast Field Updates
Open Flow Trigger Explorer for Purcha...
Get Purchase Record
Get Records
End
Get Records
*Label
Get Purchase Record
*API Name
Get_Purchase_Record
Description
Get Records of This Object
*Object
Purchase Order
Filter Purchase Order Records
Condition Requirements
All Conditions Are Met (AND)
Field
Record ID
Operator
Equals
Value
... Purchase Record » Record ID

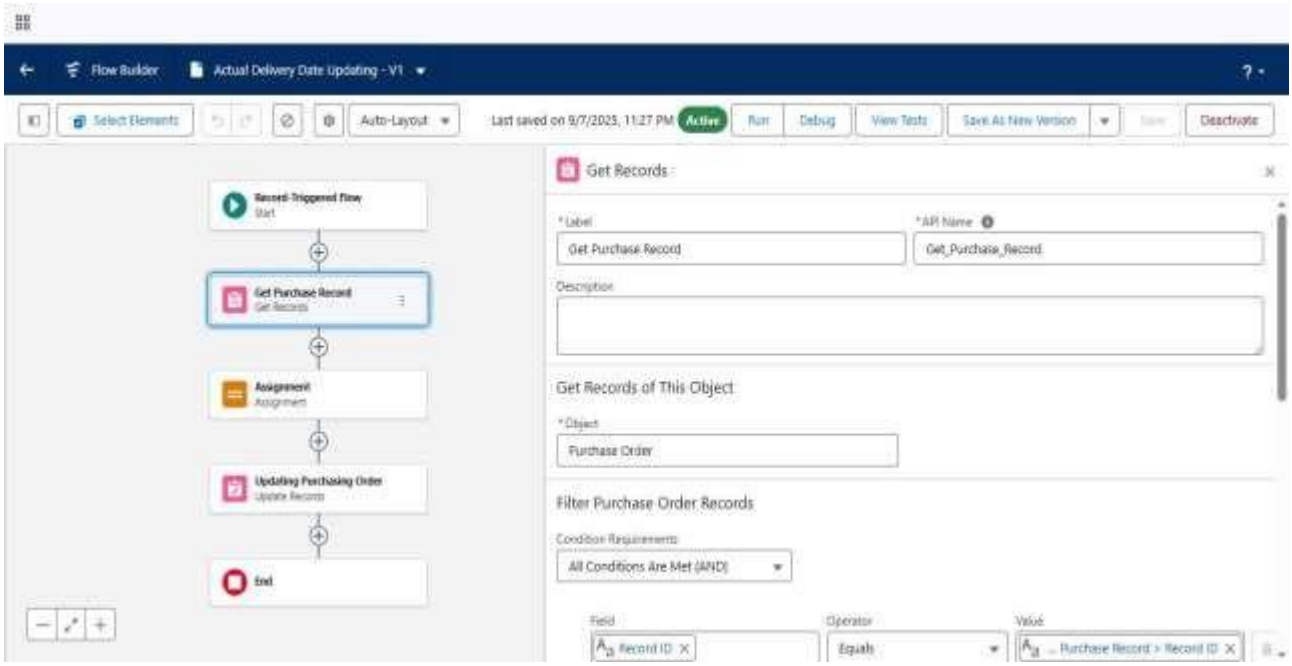

Flow Builder
Select Elements
Auto-Layout
Save
Record-Triggered Flow
Start
Object: Purchase Order
Edit
Trigger: A record is created or updated
Optimize for: Fast Field Updates
Open Flow Trigger Explorer for Purcha...
Get Purchase Record
Get Records
End
Get Records
How Many Records to Store
Only the first record
All records, up to a specified limit
All records
How to Store Record Data
Automatically store all fields
Choose fields and let Salesforce do the rest
Choose fields and assign variables (advanced)
Select Purchase Order Fields to Store in Variable
Field
Id
Field
Order_Date__c
Add Field


Flow Builder
New Resource
Resource Type
Variable
API Name
ActualDeliveryDate
Description
Data Type
Date
Allow multiple values (collection)
Default Value
M/d/yyyy
Cancel
Done
Toolbox
Manager
Order_Date__c
Add Field


Flow Builder
Select Elements
Auto-Layout
Save
Record-Triggered Flow
Start
Object: Purchase Order
Edit
Trigger: A record is created or updated
Optimize for: Fast Field Updates
Open Flow Trigger Explorer for Purcha...
Get Purchase Record
Get Records
Assignment
Assignment
Assignment
Label
Assignment
API Name
Assignment
Description
Set Variable Values
Each variable is modified by the operator and value combination.
Variable
ActualDeliveryDate
Operator
Equals
Value
...Purchase_Order__c > Order Date
Variable
ActualDeliveryDate
Operator
Add
Value
1
Add Assignment

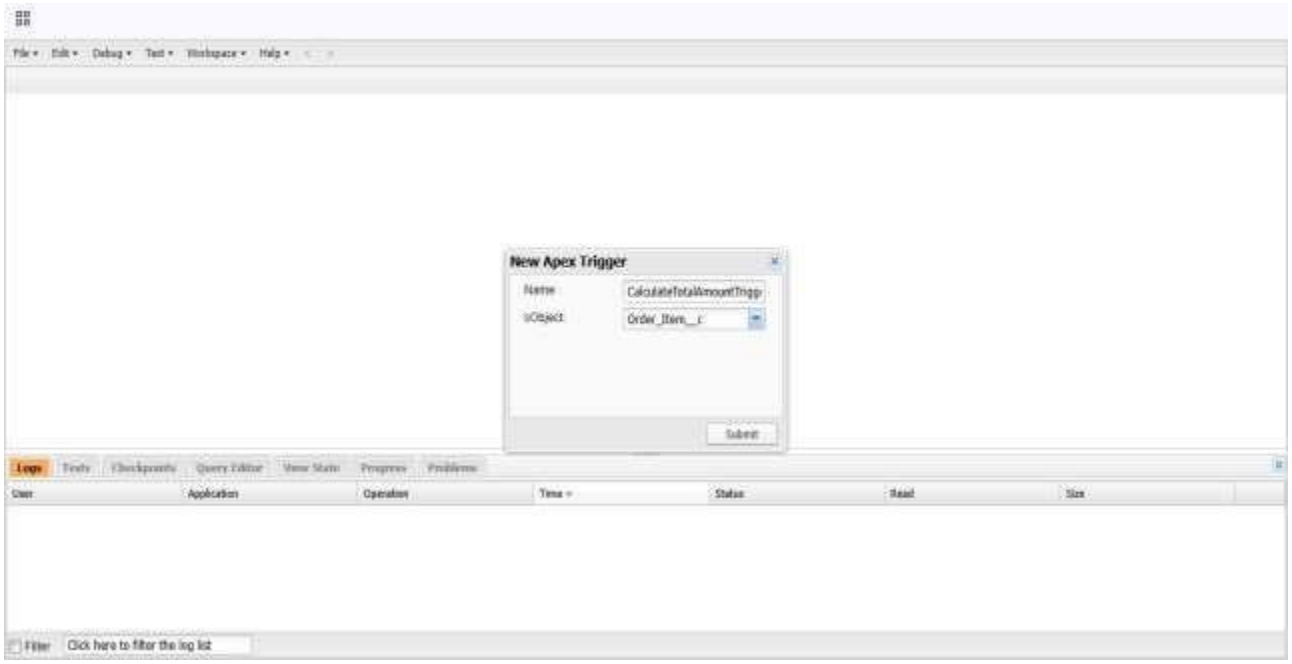

Flow Builder
Select Elements
Auto-Layout
Save
Open Flow Trigger Explorer for Purcha...
Get Purchase Record
Get Records
Assignment
Assignment
Updating Purchasing Order
Update Records
End
Update Records
*Label
Updating Purchasing Order
*API Name
Updating_Purchasing_Order
Description
*How to Find Records to Update and Set Their Values
Use the purchase order record that triggered the flow
Update records related to the purchase order record that triggered the flow
Use the IDs and all field values from a record or record collection
Specify conditions to identify records, and set fields individually
Because this flow runs before a record is saved, you can only update the record that triggered the flow to run. To update other records, configure the trigger to run the flow after the record is saved.
Set Filter Conditions
Condition Requirements to Update Record

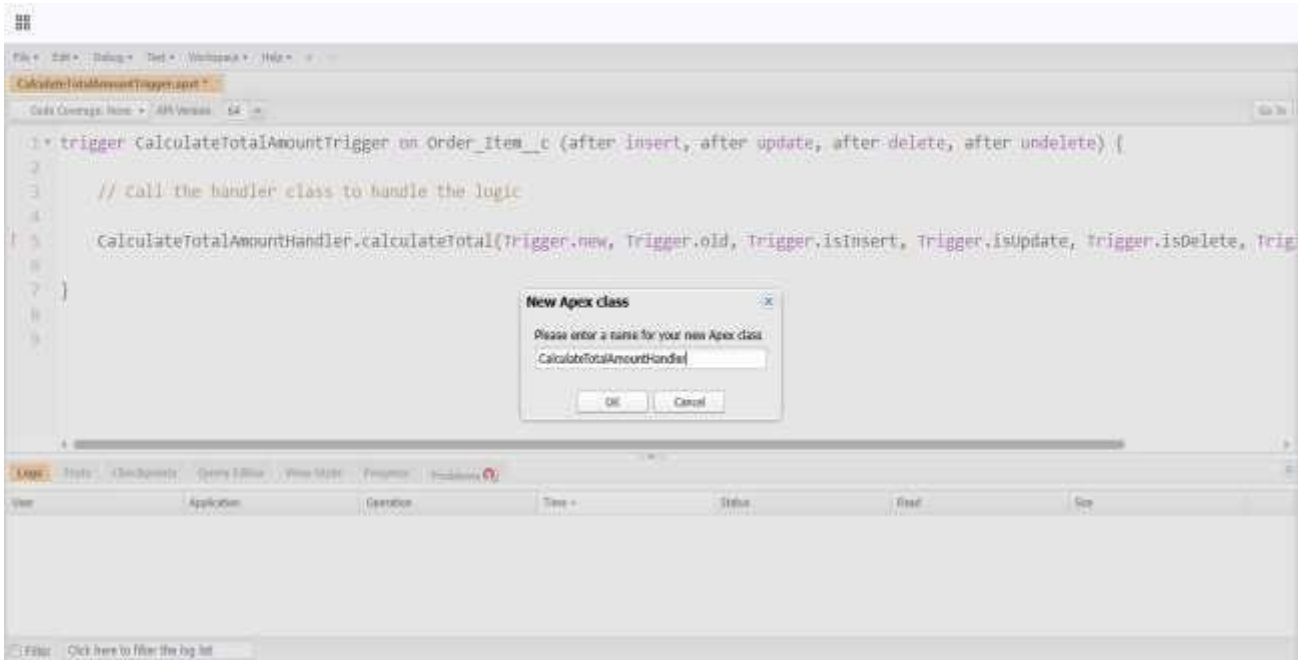

Flow Builder
Select Elements
Auto-Layout
Save
Save the flow
*Flow Label
Actual Delivery Date Updating
*Flow API Name
Actual_Delivery_Date_Updating
Description
Show Advanced
Cancel
Save
Get Purchase
Get Records
Assignment
Assignment
Updating Pu
Update Record
End
Because this flow runs before a record is saved, you can only update the record that triggered the flow to run. To update other records, configure the trigger to run the flow after the record is saved.
Set Filter Conditions
Condition Requirements to Update Record



2.12 Triggers:

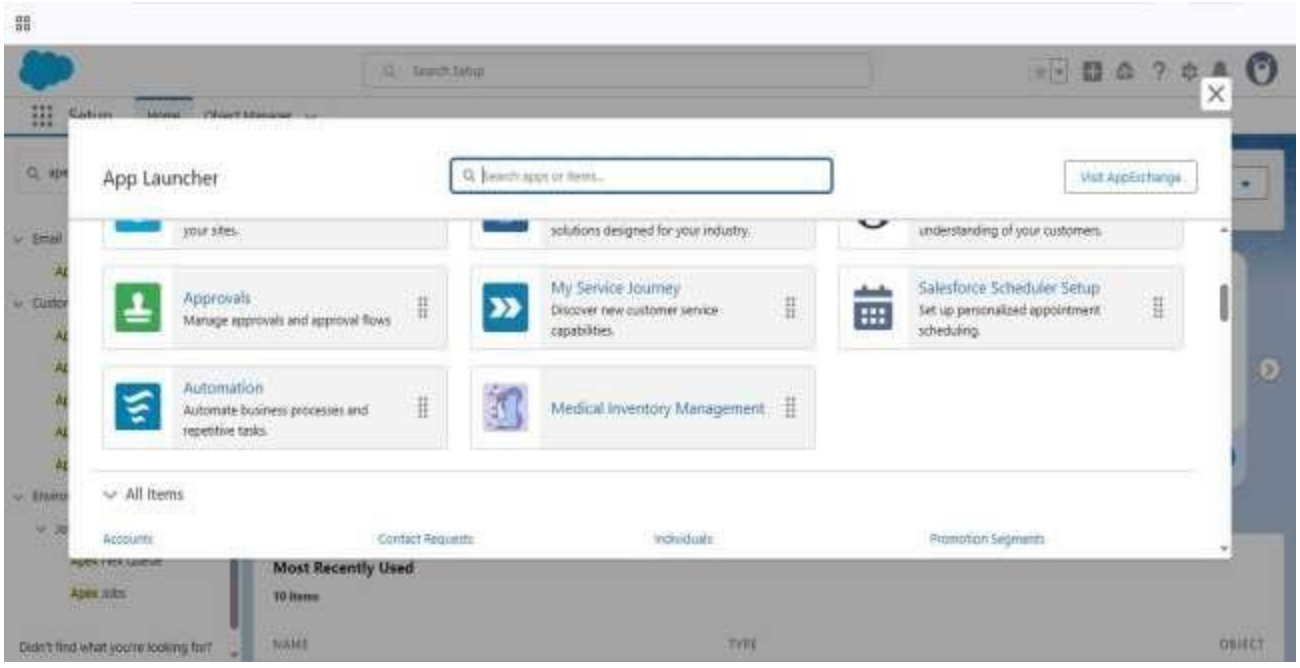
- Create a Trigger to calculate Total Amount on Order Item :

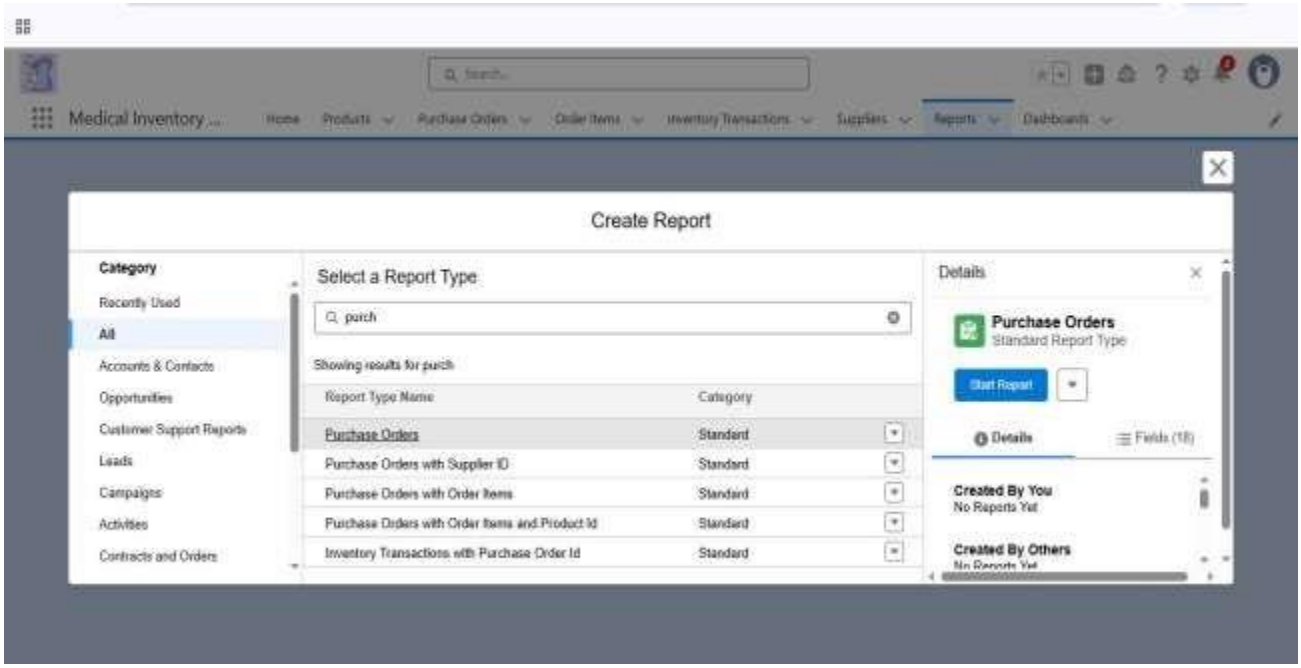


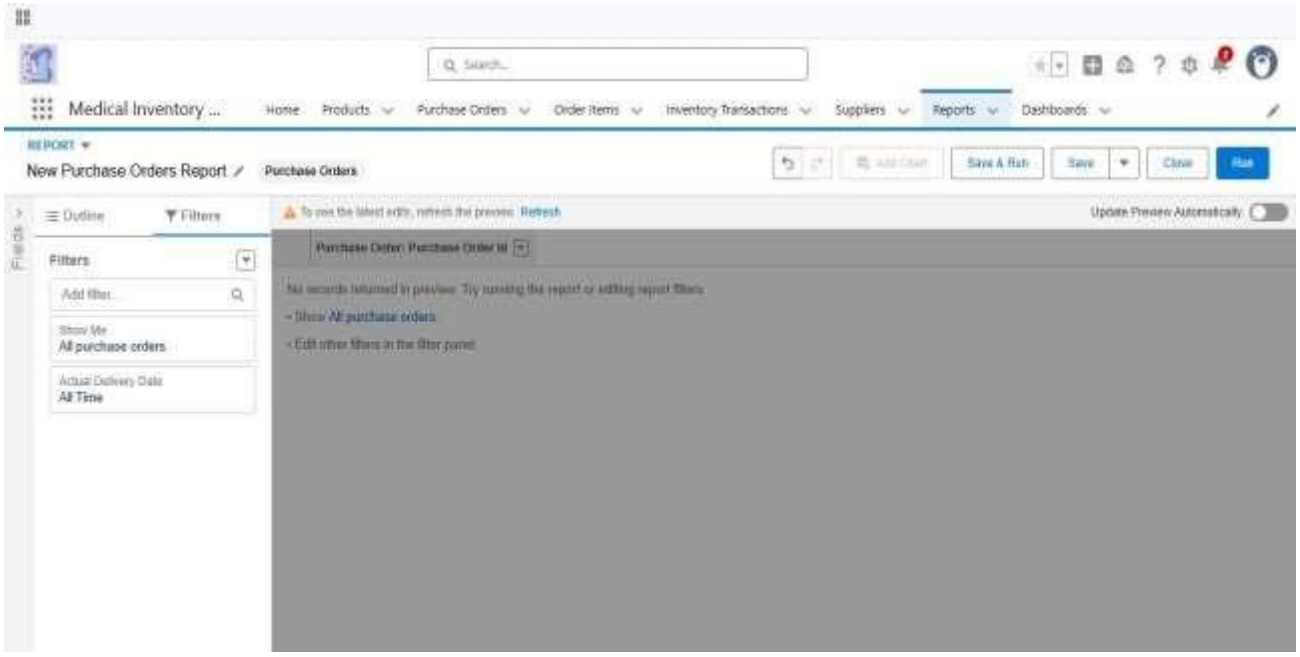


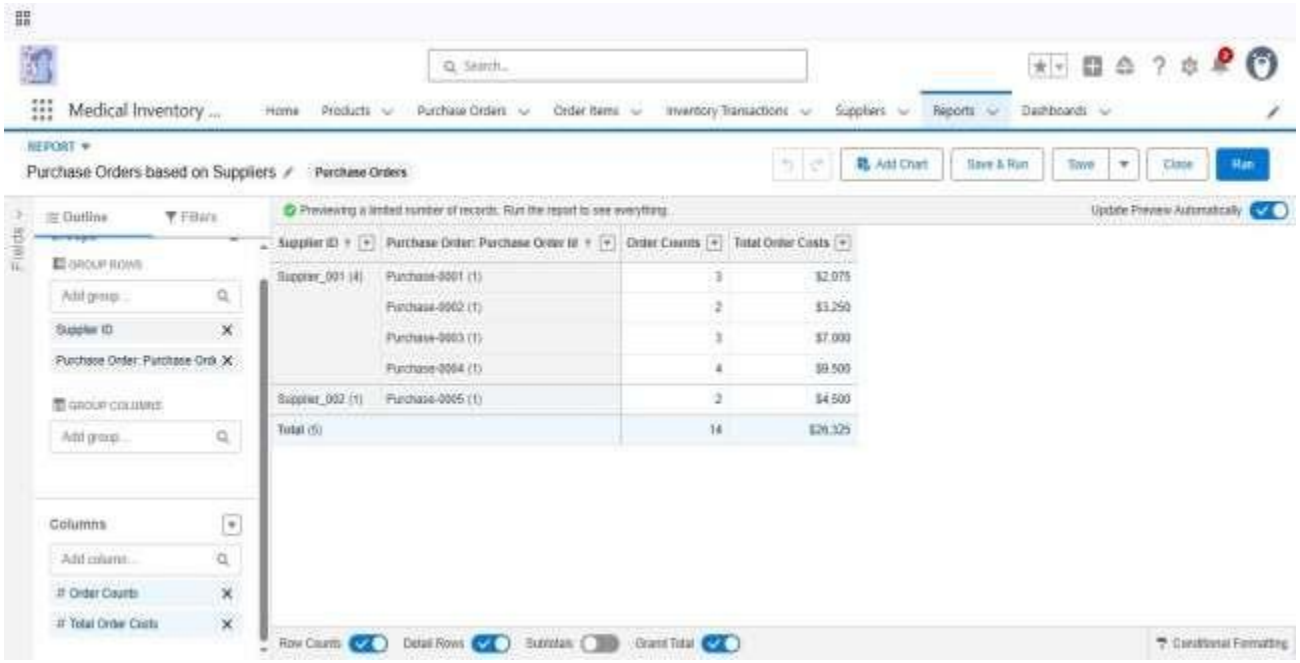
2.13 Reports:

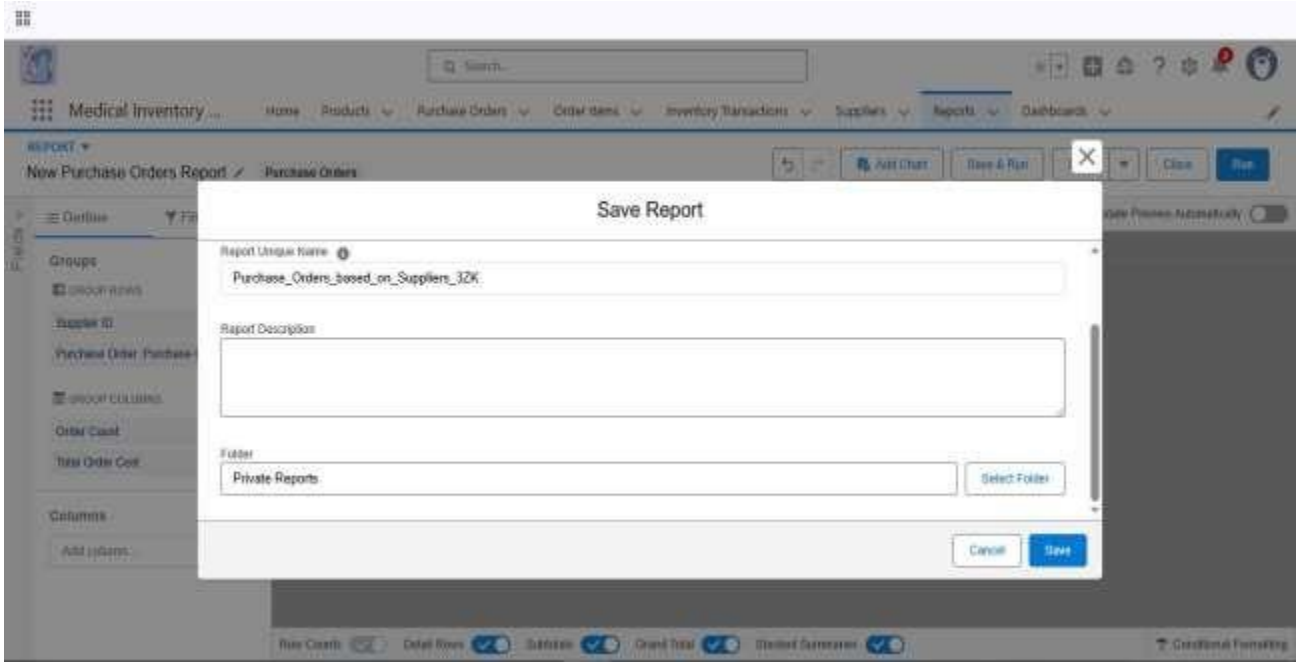
- Create a Purchase Orders based in Suppliers(Summary) Report:



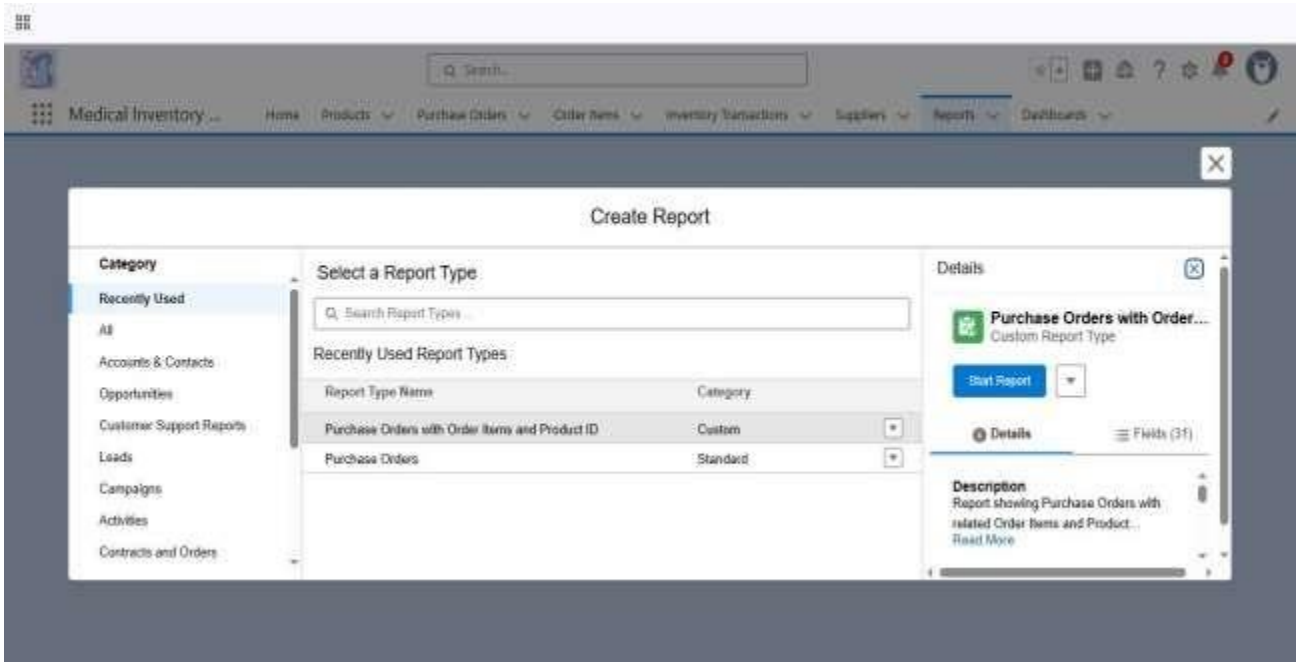

Medical Inventory ...
Home
Products
Purchase Orders
Order Items
Inventory Transactions
Suppliers
Reports
Dashboards
Create Report
Category
Recently Used
All
Accounts & Contacts
Opportunities
Customer Support Reports
Leads
Campaigns
Activities
Contracts and Orders
Select a Report Type
purch
Showing results for purch
Report Type Name
Category
Purchase Orders
Standard
Purchase Orders with Supplier ID
Standard
Purchase Orders with Order Items
Standard
Purchase Orders with Order Items and Product Id
Standard
Inventory Transactions with Purchase Order Id
Standard
Details
Purchase Orders
Standard Report Type
Start Report
Details
Fields (18)
Created By You
No Reports Yet
Created By Others

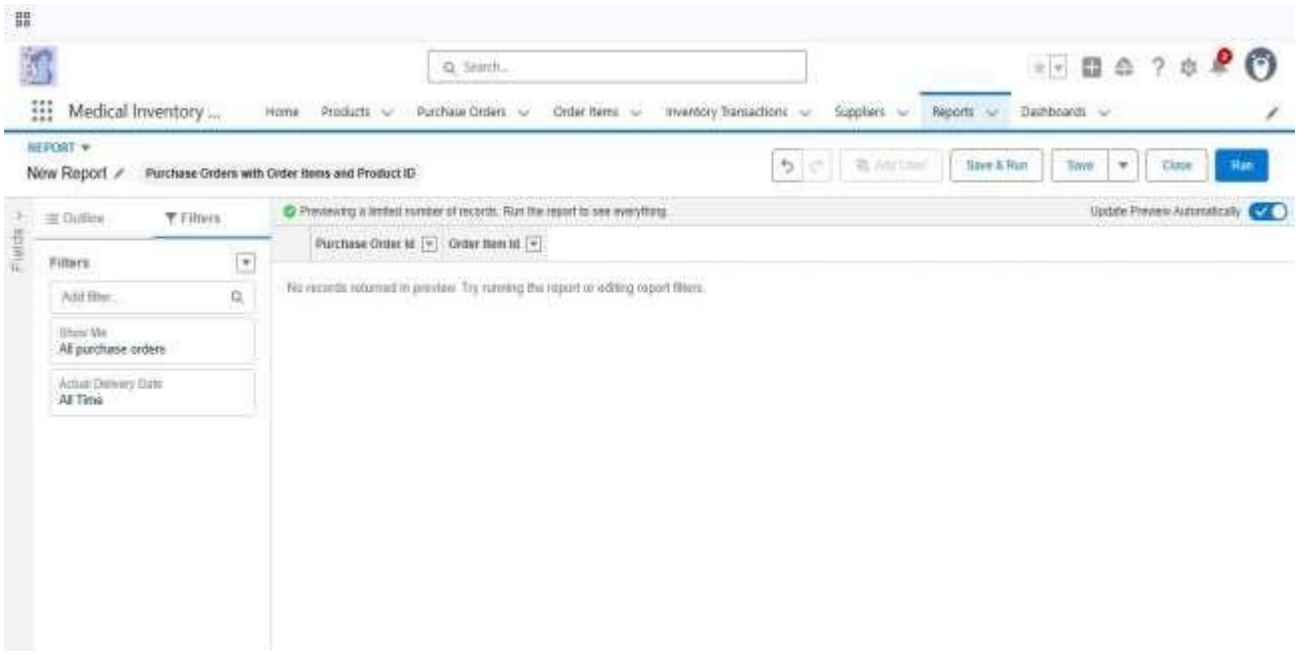

Medical Inventory ...
Home
Products
Purchase Orders
Order Items
Inventory Transactions
Suppliers
Reports
Dashboards
REPORT
New Purchase Orders Report
Purchase Orders
Save & Run
Save
Close
Run
Outline
Filters
Update Preview Automatically
Filters
Add filter...
Show Me
All purchase orders
Actual Delivery Date
All Time
Purchase Order: Purchase Order Id
Show All purchase orders

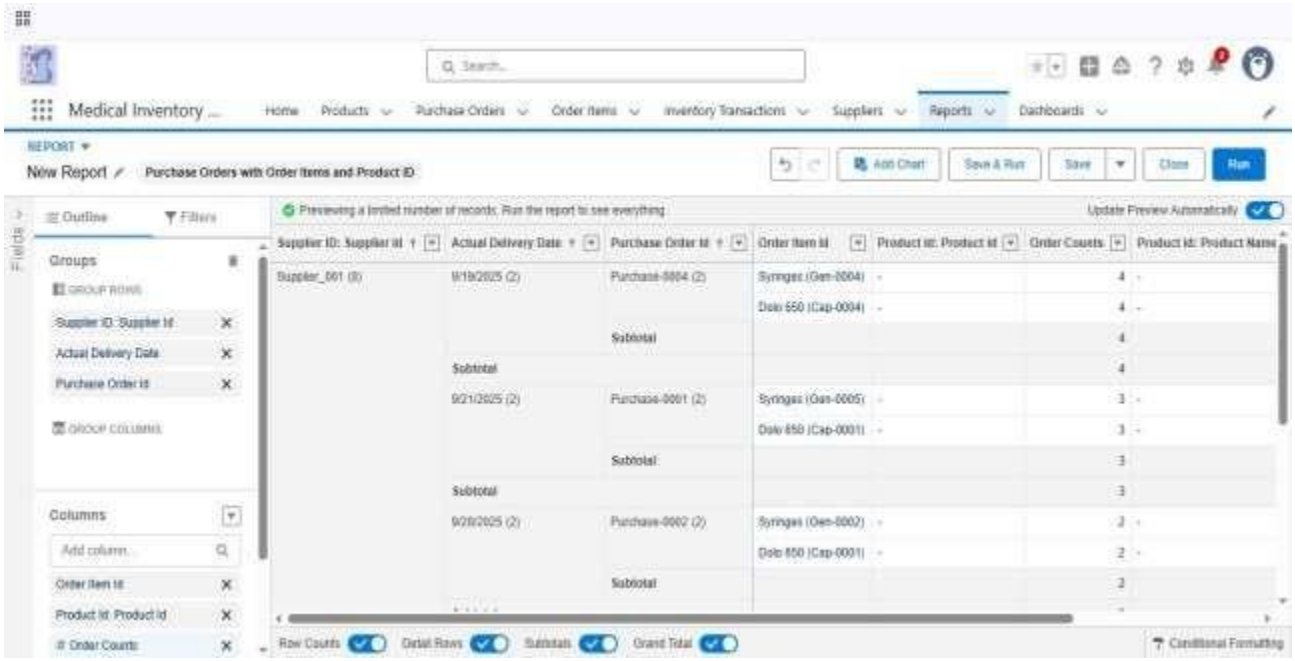

Medical Inventory ...
Home
Products
Purchase Orders
Order Items
Inventory Transactions
Suppliers
Reports
Dashboards
REPORT
Purchase Orders based on Suppliers
Purchase Orders
Add Chart
Save & Run
Save
Close
Run
Outline
Filters
Previewing a limited number of records. Run the report to see everything.
Update Preview Automatically
GROUP ROWS
Add group...
Supplier ID
Purchase Order: Purchase Orde
GROUP COLUMNS
Add group...
Columns
Add column...
Order Counts
Total Order Costs
Supplier ID
Purchase Order: Purchase Order Id
Order Counts
Total Order Costs
Supplier_001 (4)
Purchase-0001 (1)
3
$2,075
Purchase-0002 (1)
2
$3,250
Purchase-0003 (1)
3
$7,000
Purchase-0004 (1)
4
$9,500
Supplier_002 (1)
Purchase-0005 (1)
2
$4,500
Total (5)
14
$26,325
Row Counts
Detail Rows
Subtotals
Grand Total
Conditional Formatting

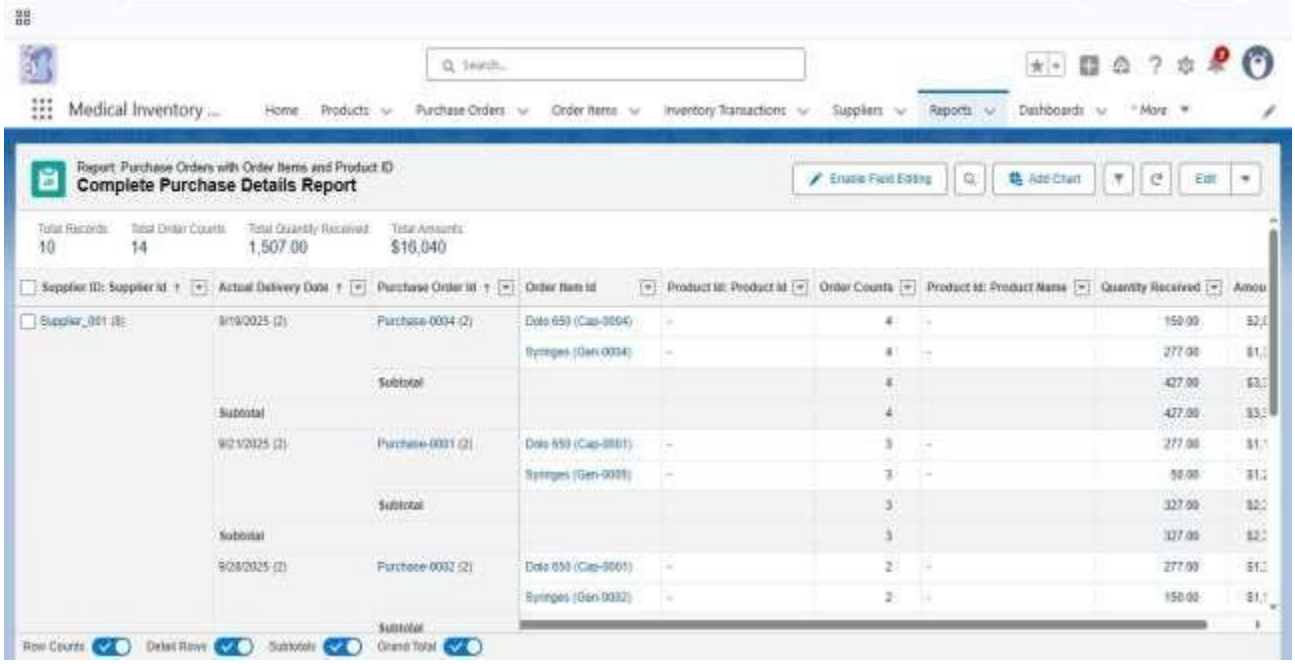

Medical Inventory ...
Home
Products
Purchase Orders
Order Items
Inventory Transactions
Suppliers
Reports
Dashboards
REPORT
New Purchase Orders Report
Purchase Orders
Add Chart
Save & Run
Close
Run
Outline
Groups
GROUP ROWS
Supplier ID
Purchase Order: Purchase-
GROUP COLUMNS
Order Count
Total Order Cost
Columns
Add column...
Save Report
Report Unique Name
Purchase_Orders_based_on_Suppliers_3ZK
Report Description
Folder
Private Reports
Select Folder
Cancel
Save
Row Counts
Detail Rows
Subtotals
Grand Total
Conditional Formatting

- Create a Complete Purchase Details Report:



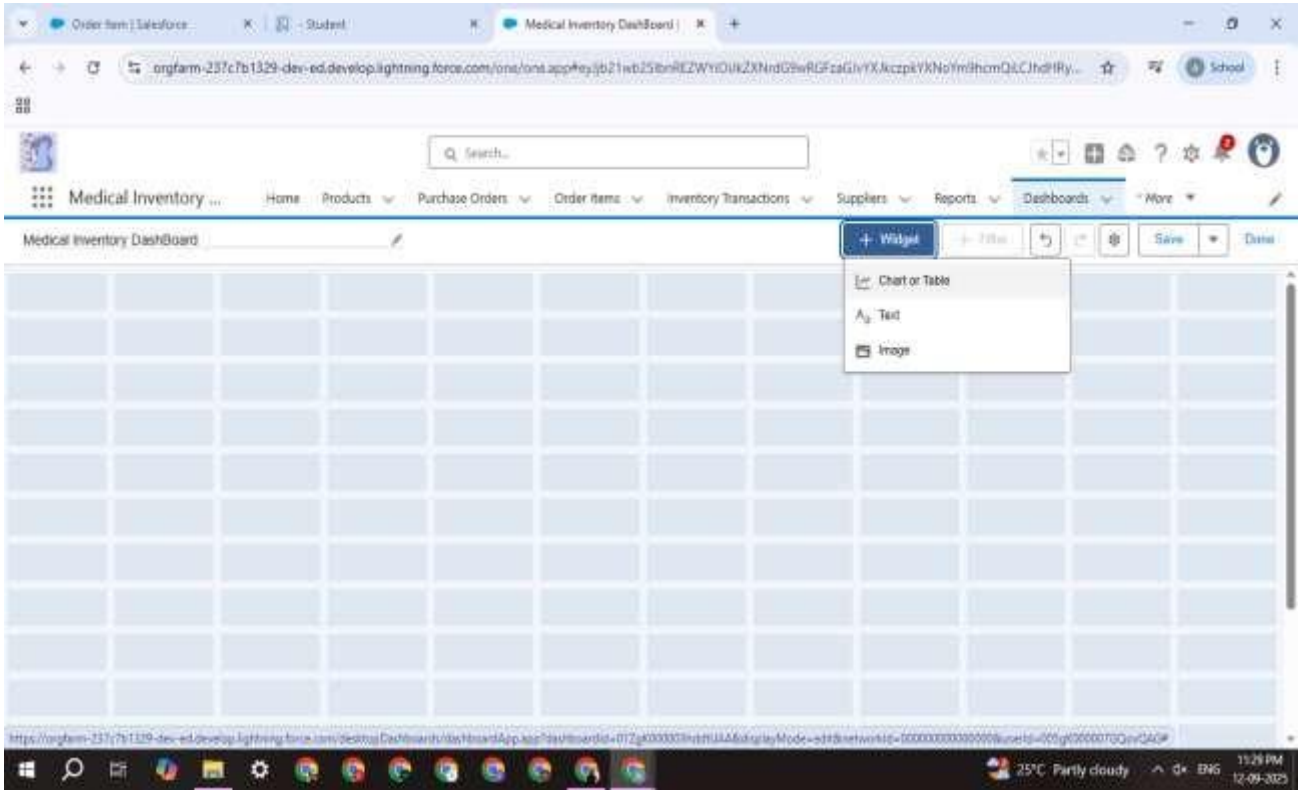


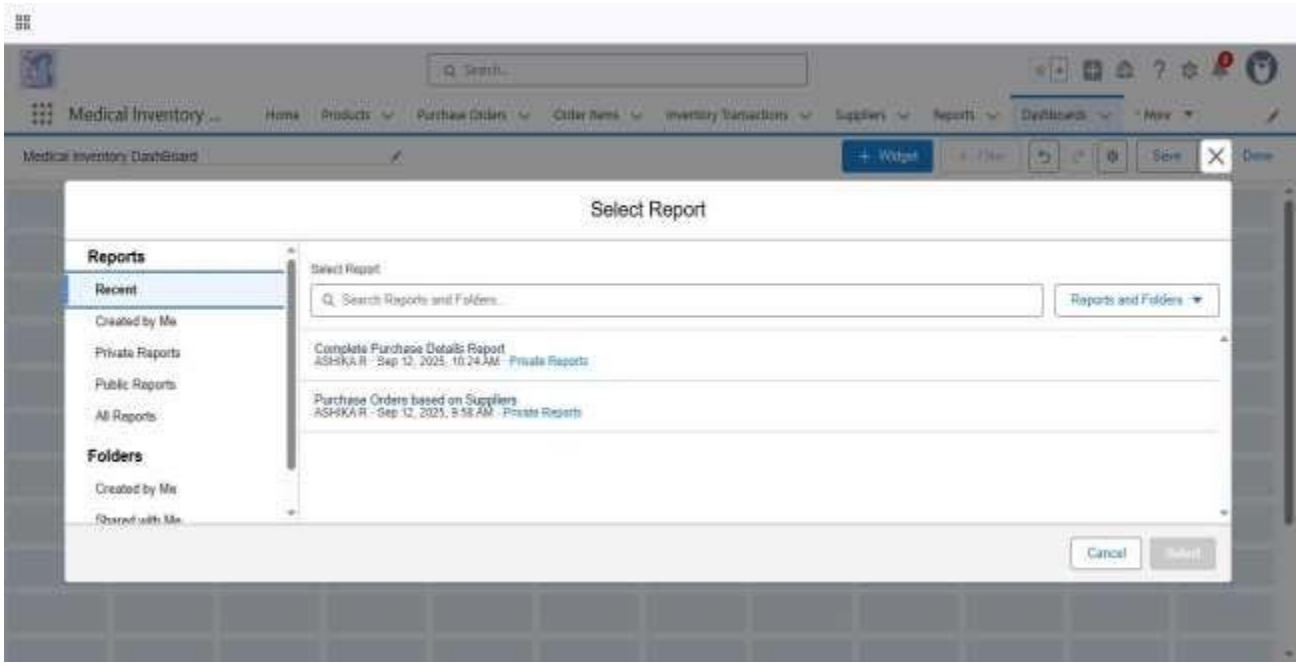

Medical Inventory ...
Home
Products
Purchase Orders
Order Items
Inventory Transactions
Suppliers
Reports
Dashboards
REPORT
New Report
Purchase Orders with Order Items and Product ID
Add Chart
Save & Run
Save
Close
Run
Outline
Filters
Previewing a limited number of records. Run the report to see everything.
Update Preview Automatically
Groups
Supplier ID: Supplier Id
Actual Delivery Date
Purchase Order Id
Columns
Order Item Id
Product Id: Product Id
Order Counts
Supplier ID: Supplier Id
Actual Delivery Date
Purchase Order Id
Order Item Id
Product Id: Product Id
Order Counts
Product Id: Product Name
Supplier_001 (8)
9/19/2025 (2)
Purchase-0004 (2)
Syringes (Gen-0004)
Dolo 650 (Cap-0004)
Subtotal
9/21/2025 (2)
Purchase-0001 (2)
Syringes (Gen-0005)
Dolo 650 (Cap-0001)
9/28/2025 (2)
Purchase-0002 (2)
Syringes (Gen-0002)
Dolo 650 (Cap-0001)
Row Counts
Detail Rows
Subtotals
Grand Total
Conditional Formatting

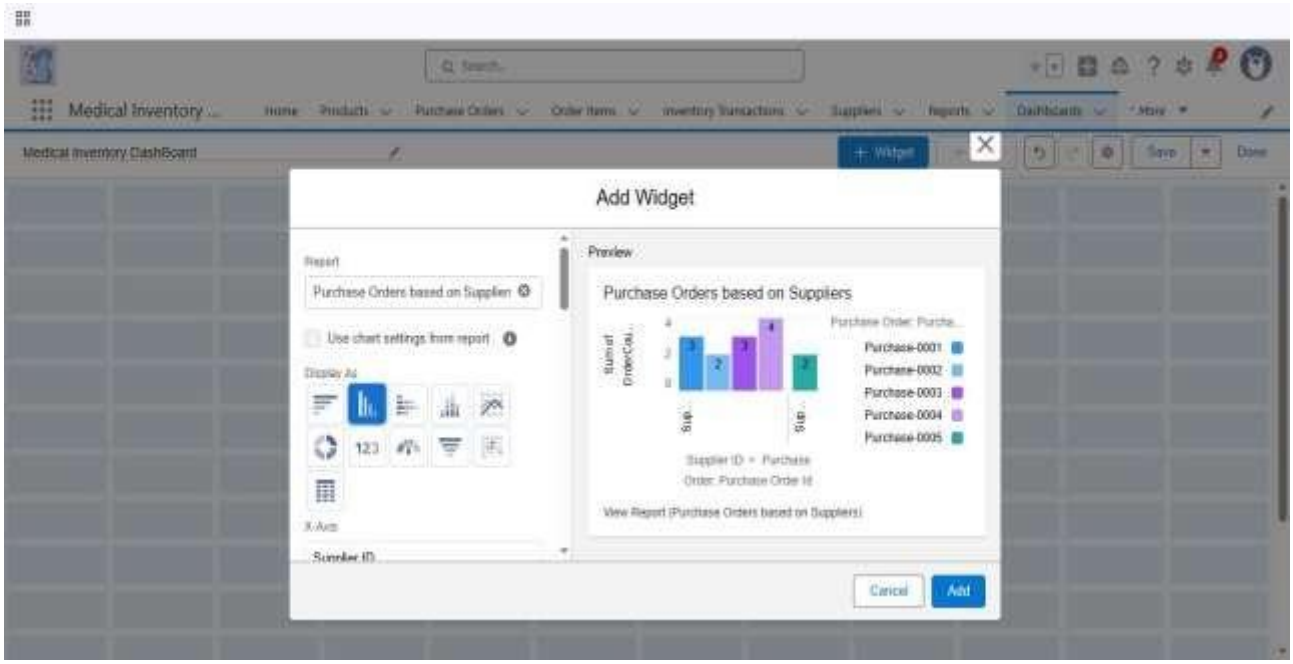

Medical Inventory ...
Home
Products
Purchase Orders
Order Items
Inventory Transactions
Suppliers
Reports
Dashboards
More
Report: Purchase Orders with Order Items and Product ID
Complete Purchase Details Report
Enable Field Editing
Add Chart
Edit
Total Records
10
Total Order Counts
14
Total Quantity Received
1,507.00
Total Amounts
$16,040
Supplier ID: Supplier Id
Actual Delivery Date
Purchase Order Id
Order Item Id
Product Id: Product Id
Order Counts
Product Id: Product Name
Quantity Received
Amou
Supplier_001 (8)
9/19/2025 (2)
Purchase-0004 (2)
Dolo 650 (Cap-0004)
Syringes (Gen-0004)
Subtotal
9/21/2025 (2)
Purchase-0001 (2)
Dolo 650 (Cap-0001)
Syringes (Gen-0005)
9/28/2025 (2)
Purchase-0002 (2)
Dolo 650 (Cap-0001)
Syringes (Gen-0002)
Row Counts
Detail Rows
Subtotals
Grand Total

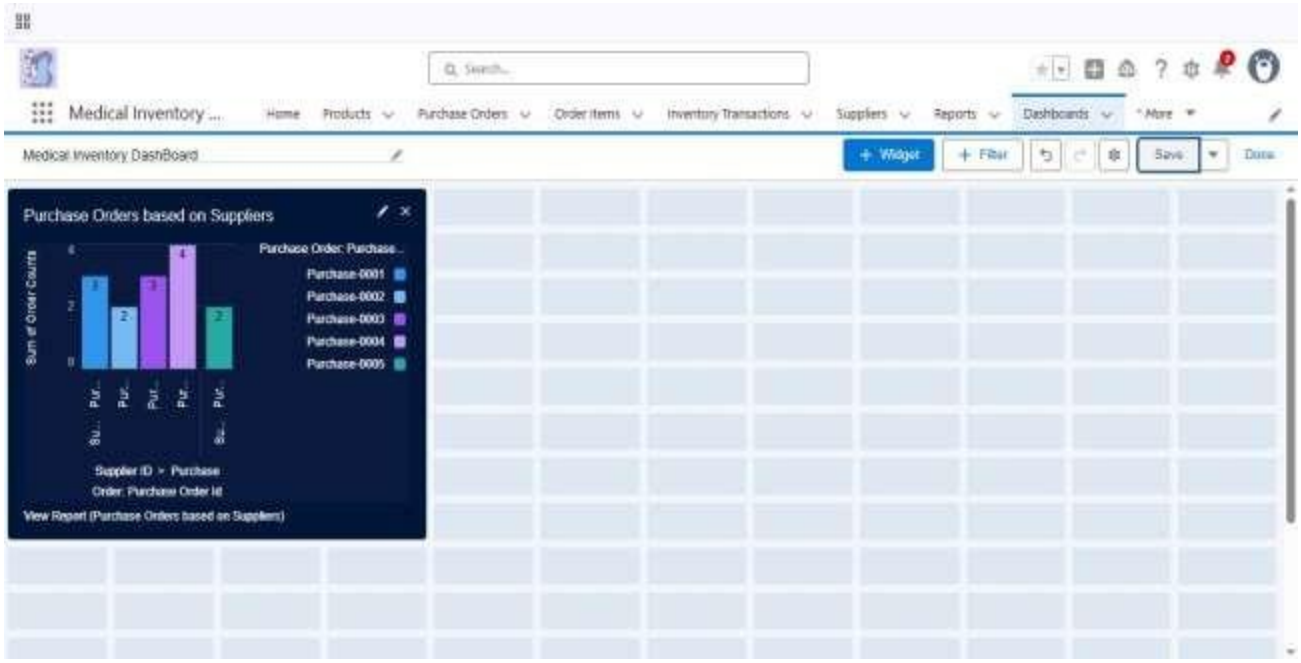
2.14 Dashboards:

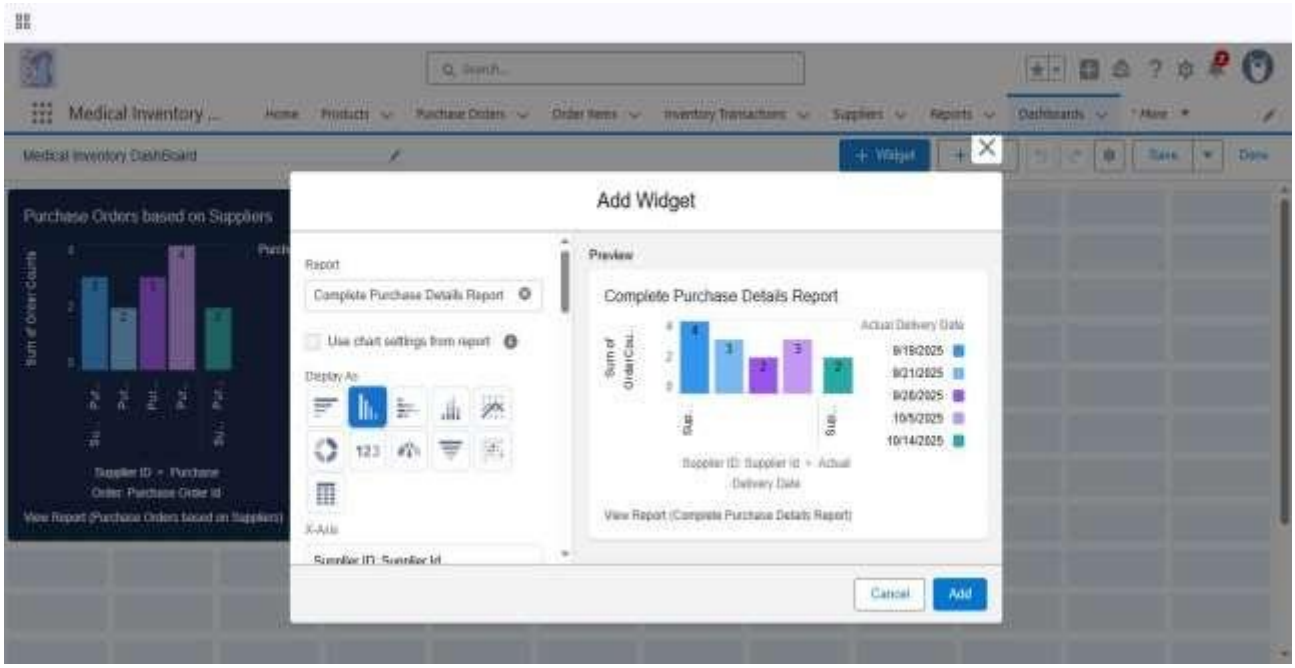
- Create Dashboards:

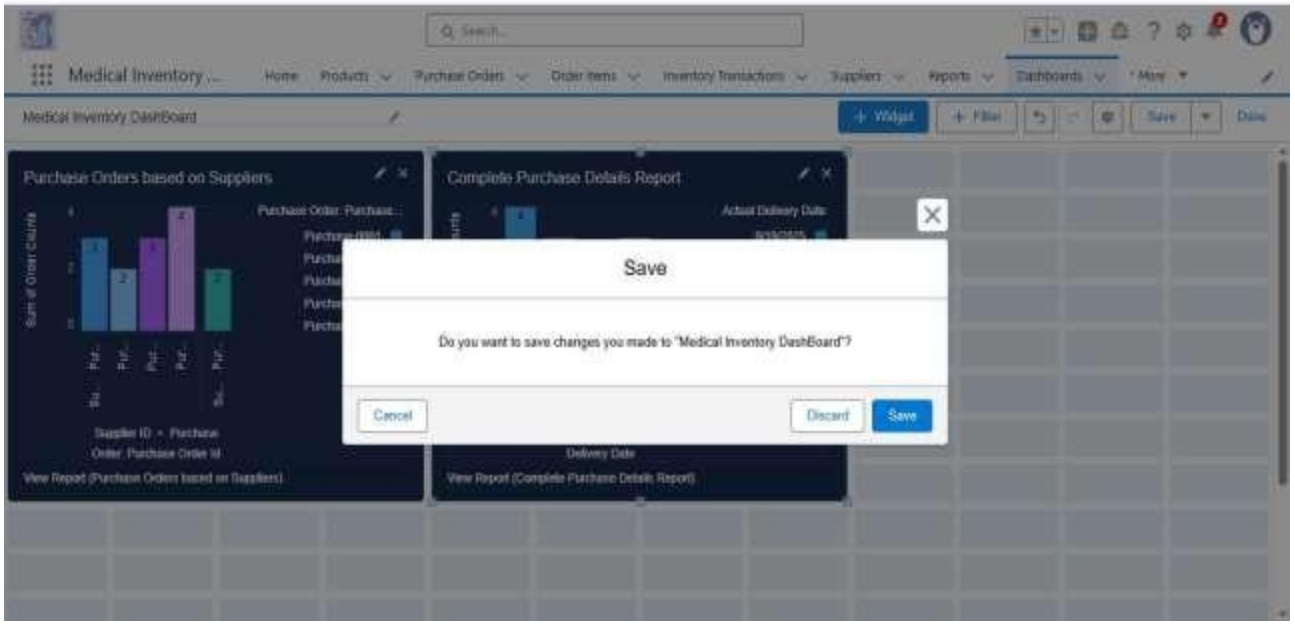


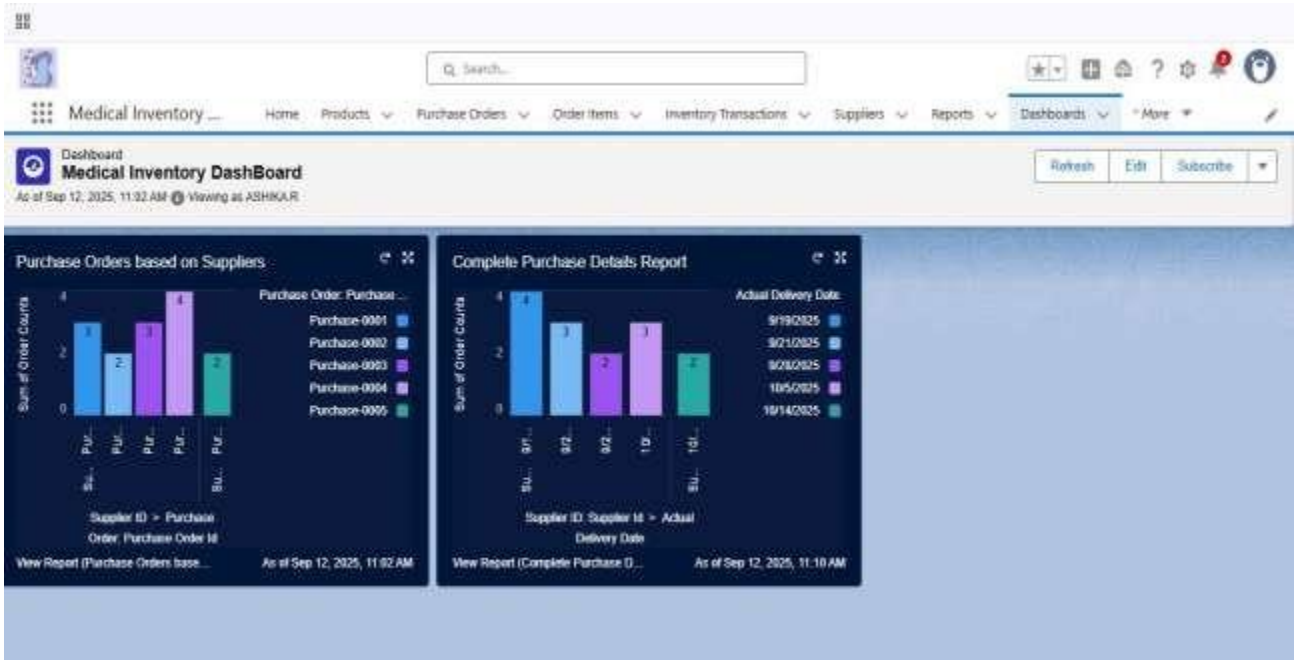



Medical Inventory ...
Home
Products
Purchase Orders
Order Items
Inventory Transactions
Suppliers
Reports
Dashboards
More
Medical Inventory DashBoard
+ Widget
Save
Done
Add Widget
Report
Purchase Orders based on Suppliers
Use chart settings from report
Display As
X-Axis
Supplier ID
Preview
Purchase Orders based on Suppliers
Purchase Order: Purcha...
Purchase-0001
Purchase-0002
Purchase-0003
Purchase-0004
Purchase-0005
Supplier ID > Purchase Order: Purchase Order Id
View Report (Purchase Orders based on Suppliers)
Cancel
Add


Medical Inventory ...
Home
Products
Purchase Orders
Order Items
Inventory Transactions
Suppliers
Reports
Dashboards
More
Medical Inventory DashBoard
+ Widget
+ Filter
Save
Done
Purchase Orders based on Suppliers
Sum of Order Counts
Purchase Order: Purchase...
Purchase-0001
Purchase-0002
Purchase-0003
Purchase-0004
Purchase-0005
Supplier ID > Purchase Order: Purchase Order Id
View Report (Purchase Orders based on Suppliers)


Medical Inventory ...
Home
Products
Purchase Orders
Order Items
Inventory Transactions
Suppliers
Reports
Dashboards
More
Medical Inventory DashBoard
Widget
Save
Done
Purchase Orders based on Suppliers
Add Widget
Report
Complete Purchase Details Report
Use chart settings from report
Display As
X-Axis
Preview
Complete Purchase Details Report
Actual Delivery Date
9/19/2025
9/21/2025
9/26/2025
10/5/2025
10/14/2025
View Report (Complete Purchase Details Report)
Cancel
Add


Medical Inventory ...
Home
Products
Purchase Orders
Order Items
Inventory Transactions
Suppliers
Reports
Dashboards
More
Medical Inventory DashBoard
Widget
Filter
Save
Done
Purchase Orders based on Suppliers
Complete Purchase Details Report
Actual Delivery Date
Save
Do you want to save changes you made to "Medical Inventory DashBoard"?
Cancel
Discard
Save
View Report (Purchase Orders based on Suppliers)
View Report (Complete Purchase Details Report)



3. CONCLUSION

The Medical Inventory Management System successfully streamlines the operations of medical inventory through a structured, automated Salesforce application. It improves efficiency, accuracy, and transparency in managing suppliers, purchase orders, product inventory, and expiry monitoring, helping medical organizations focus on delivering better healthcare services.

APPENDIX:

- **Source Code:** Provided in Apex Classes and Triggers

CalculateTotalAmountTrigger.apxt:

```
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);}
```

CalculateTotalAmountHandler.apxc:

```
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_costs__c = purchaseToUpdateMap.get(purchaseOrderId));
            purchaseToUpdate.add(purchaseOrder);
        }
        // Update Purchase Orders if there are any changes
        if (!purchaseToUpdate.isEmpty()) {
            update purchaseToUpdate;}
        }
    }
}
```