MEDICAL INVENTORY MANAGEMENT

College Name: DR R V ARTS AND SCIENCE COLLEGE

College Code: bru5b

TEAM ID: NM2025TMID27643

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1.INTRODUCTION

1.1 PROJECT OVERVIEW

The *Medical Inventory Management* project in Salesforce tracks medicines and equipment, manages stock levels, sends alerts for expiry/low stock, and generates reports to ensure timely availability of medical supplies.

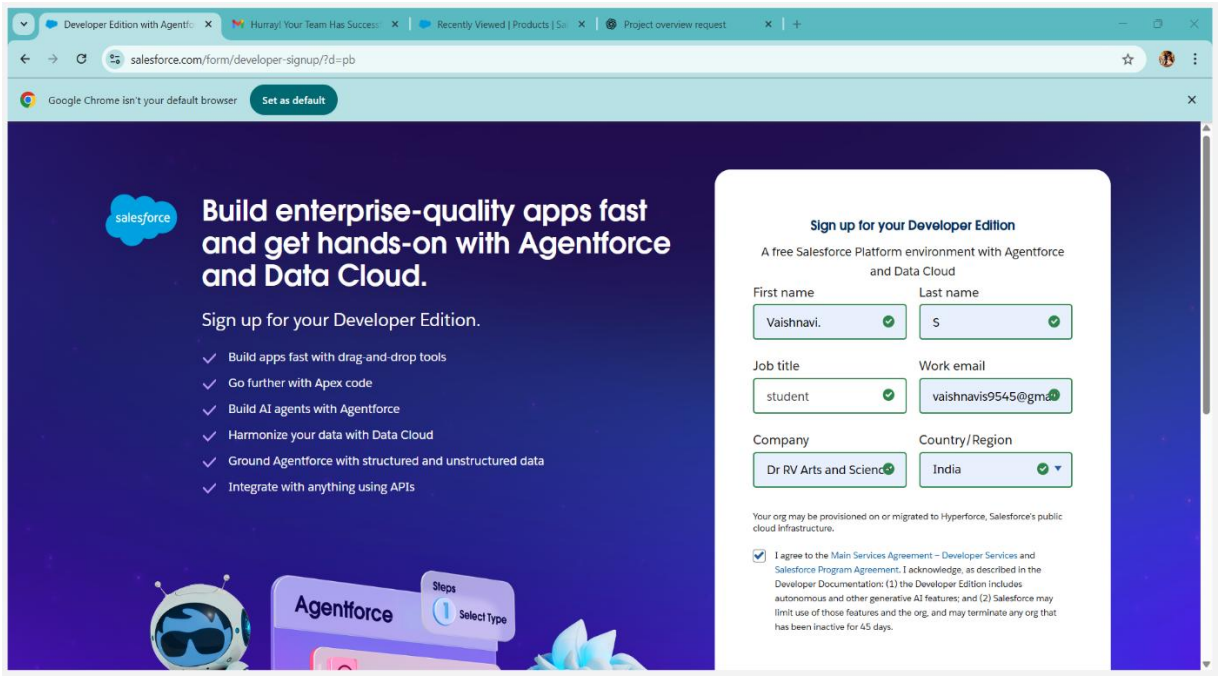
1.2 Purpose

The purpose of the Medical Inventory Management project is to ensure accurate tracking of medicines and equipment, maintain optimum stock levels, avoid shortages or expiries, and provide timely availability of supplies for better healthcare delivery.

Development phase

Creating Developer Account:

By Using URL - https://developer.salesforce.com/signup



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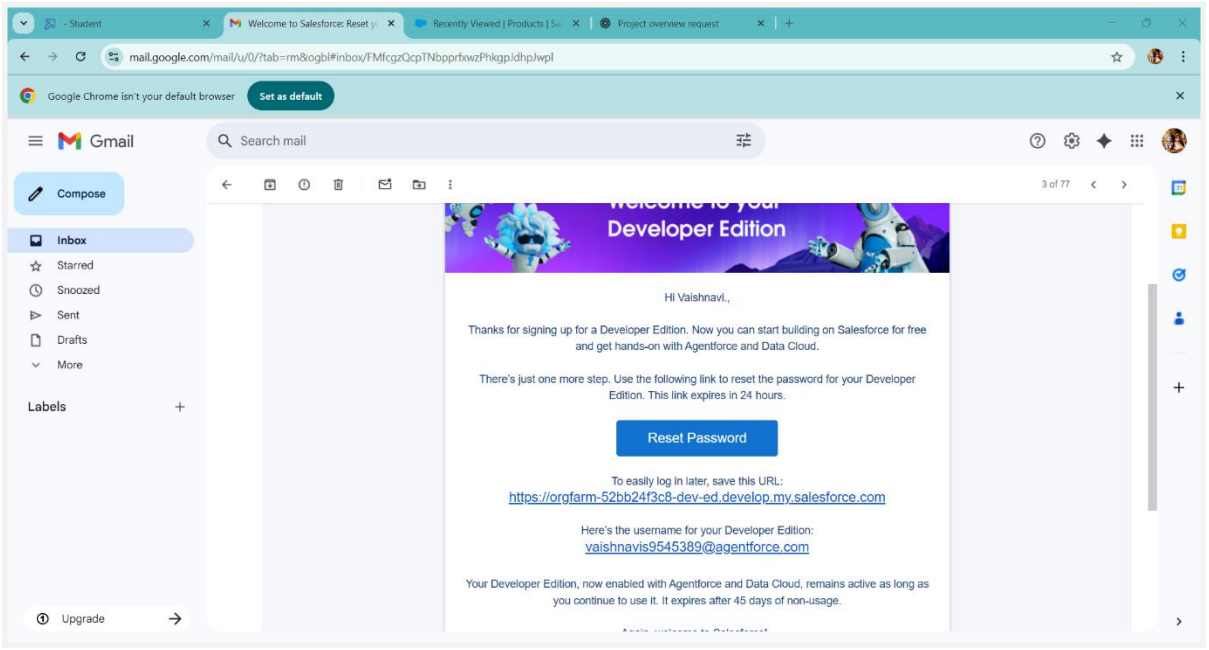
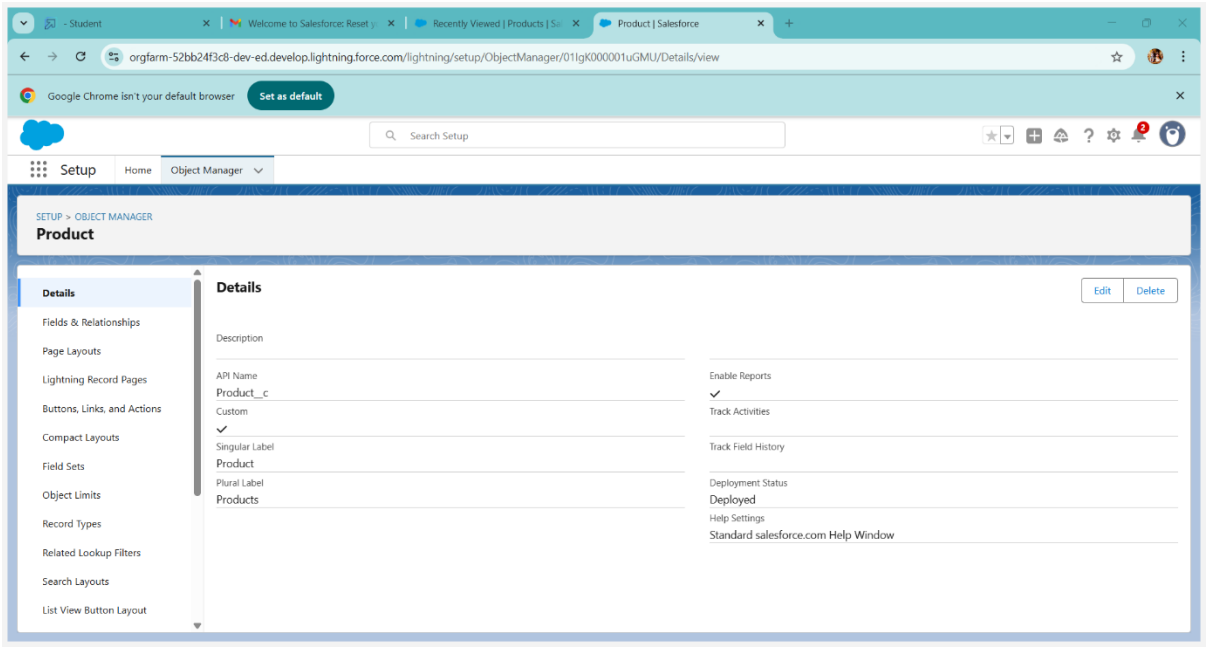


- Creating a Product object
- Creating a tab for Product object, Purchase Order, Order Item, Inventory Transaction, Supplier


Product | Salesforce
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Page Layouts
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Related Lookup Filters
Search Layouts
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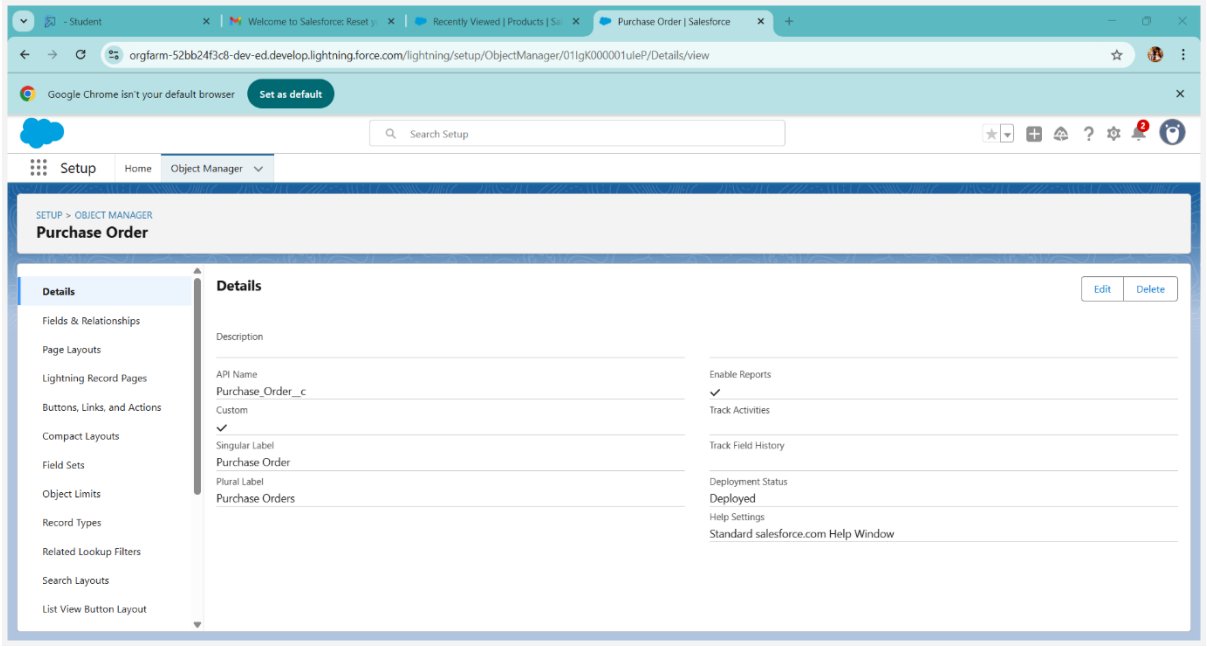
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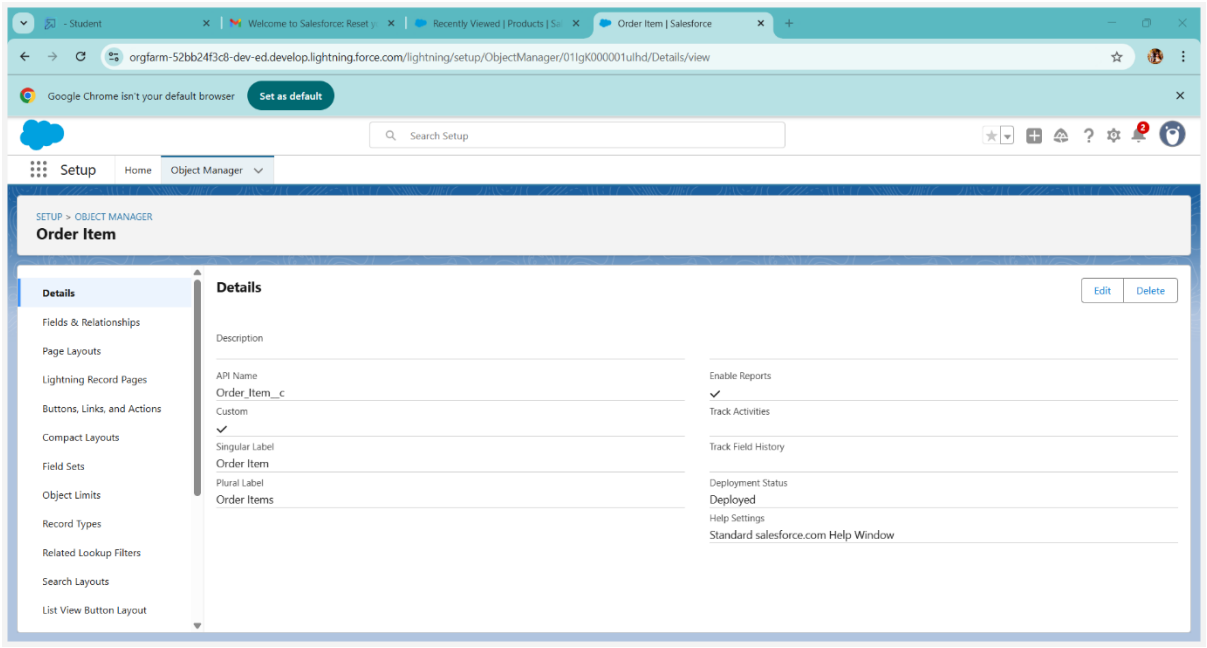
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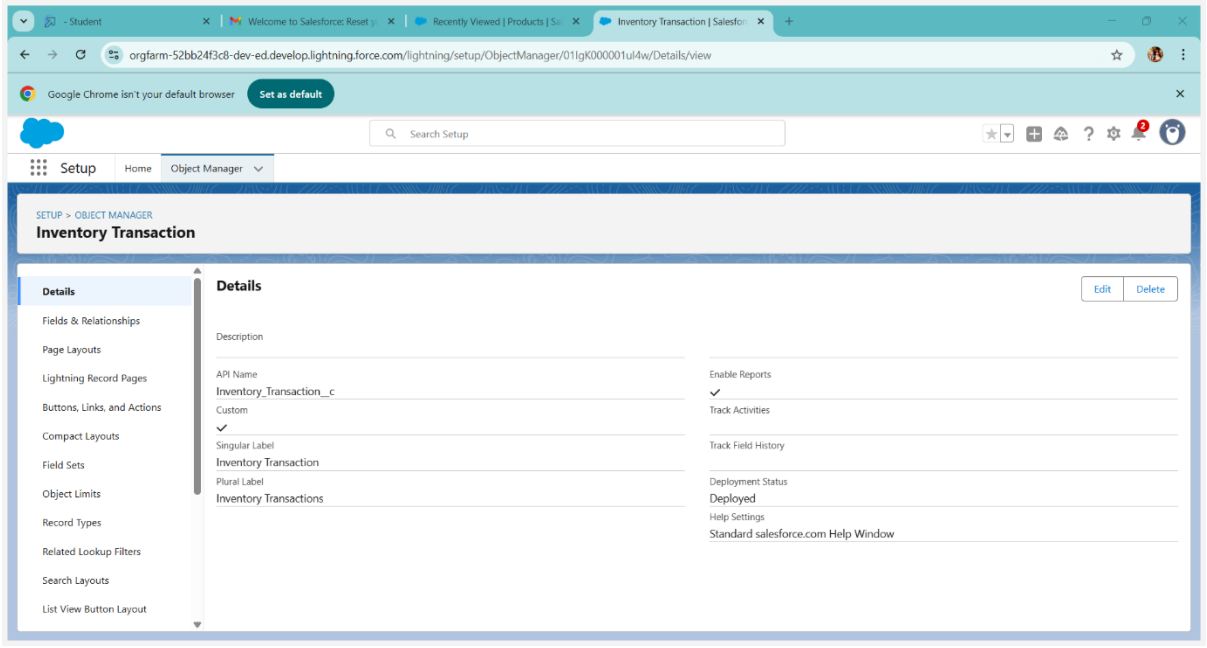
Inventory Transaction | Salesfor
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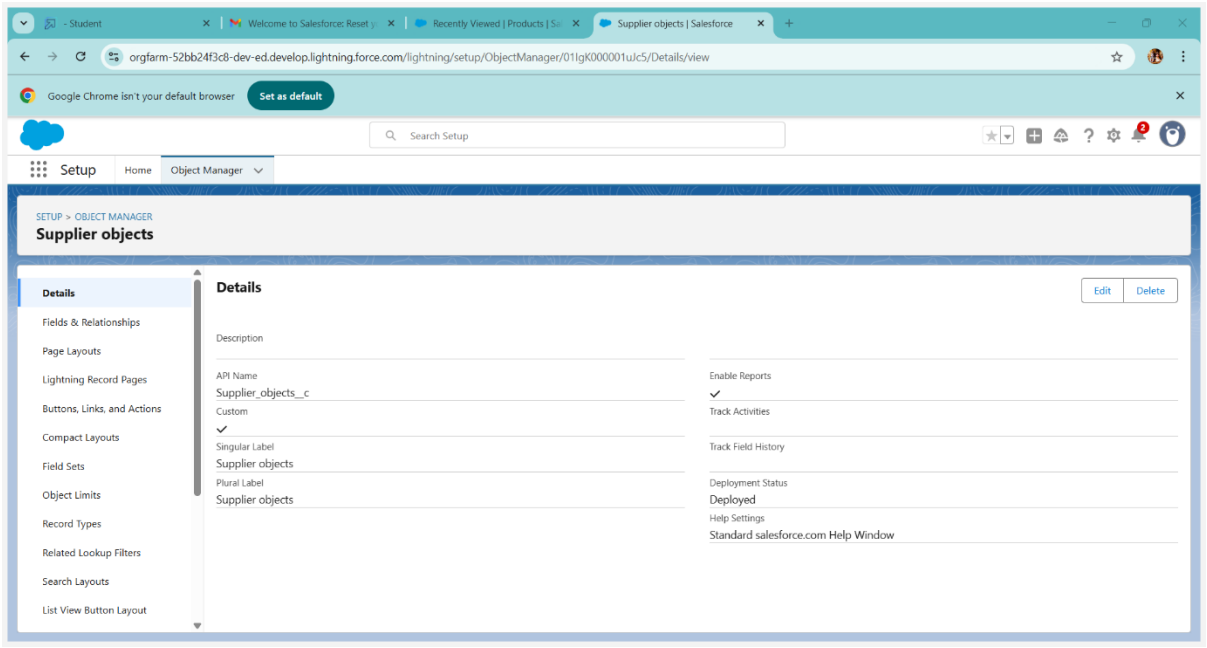

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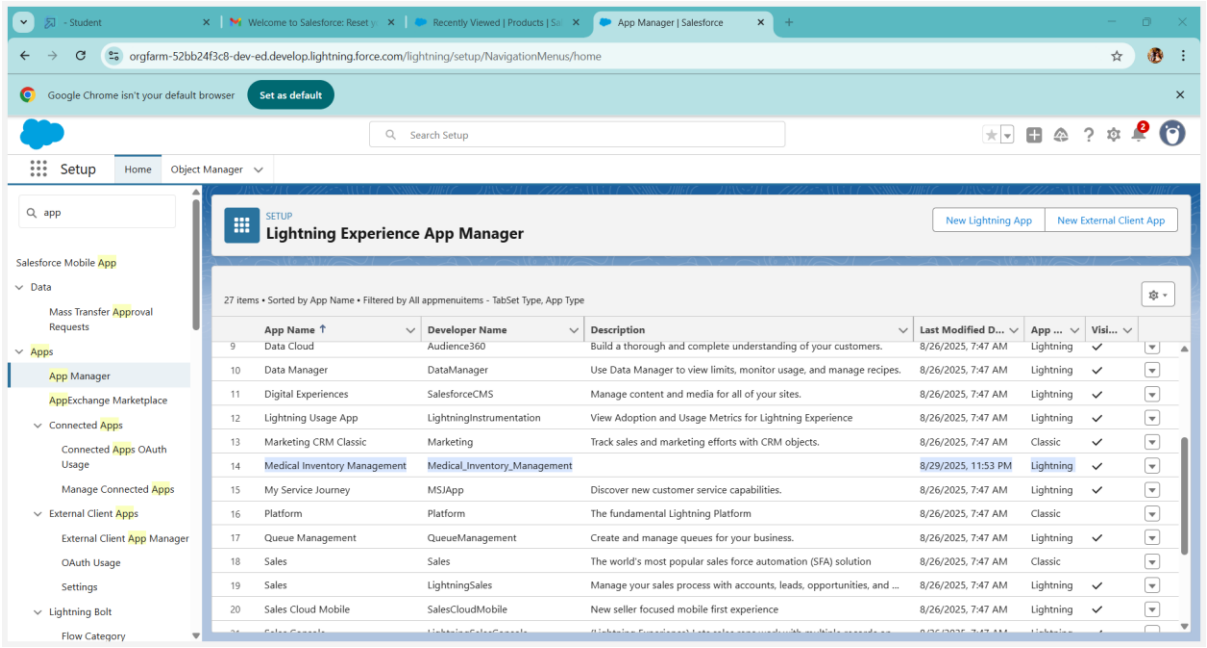
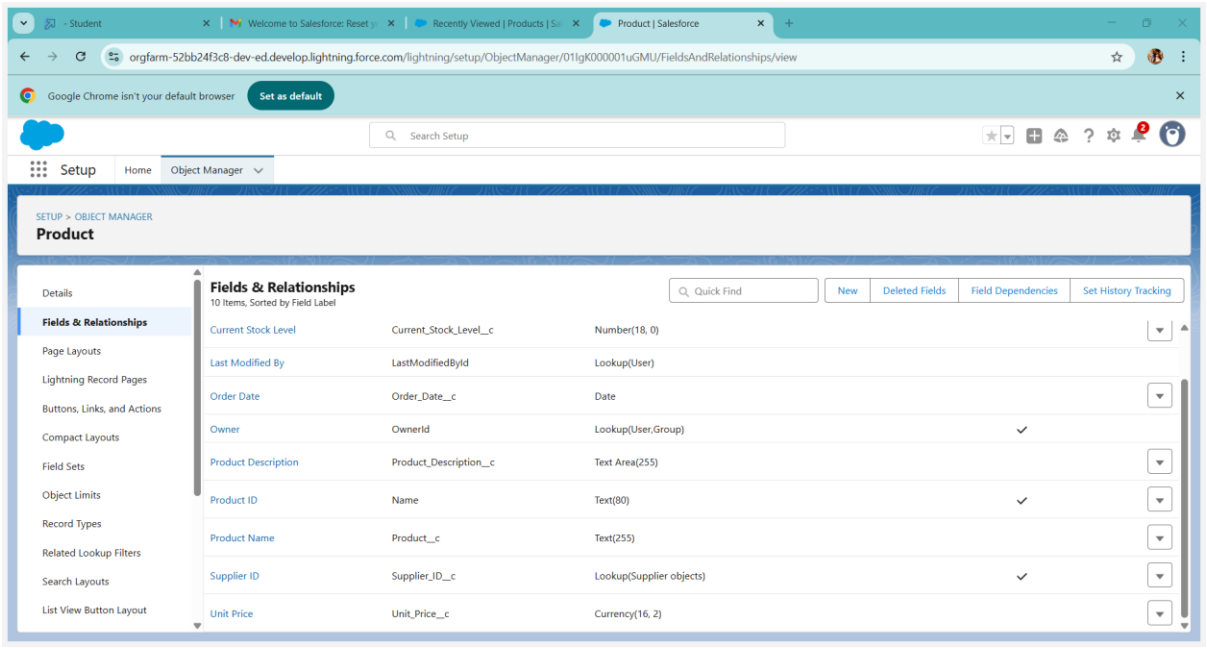


- Creating a fields: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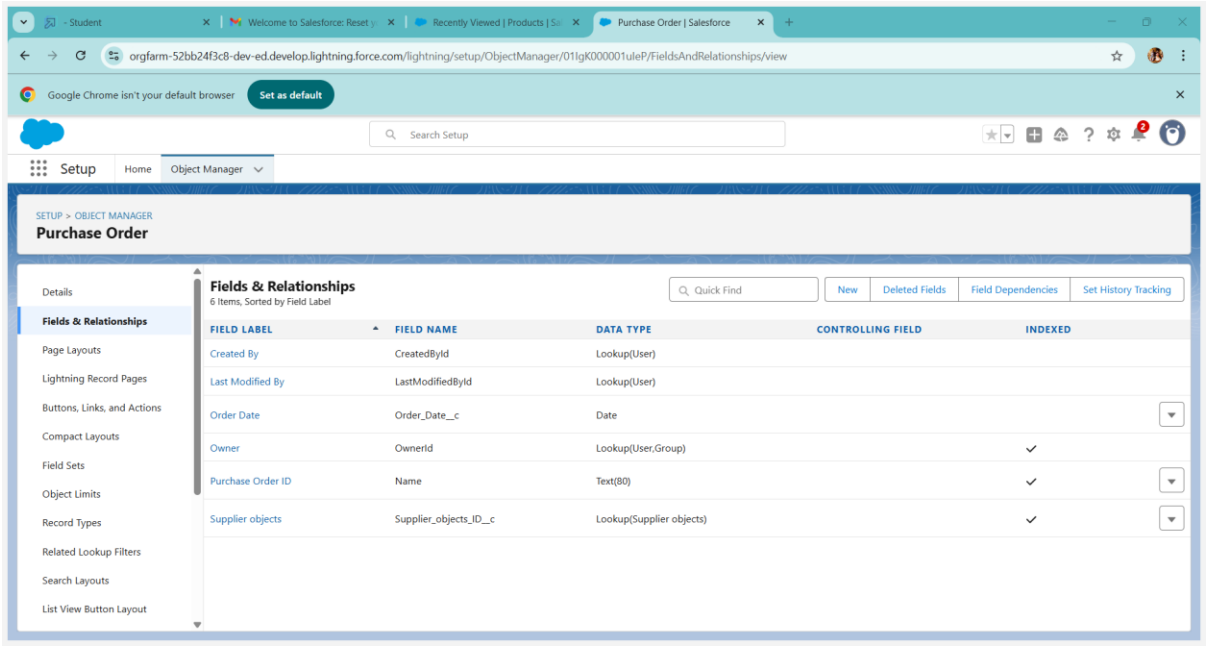
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Fields & Relationships
10 Items, Sorted by Field Label
Quick Find
New
Deleted Fields
Field Dependencies
Set History Tracking
Current Stock Level Current_Stock_Level__c Number(18, 0)
Last Modified By LastModifiedById Lookup(User)
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__c Text(255)
Supplier ID Supplier_ID__c Lookup(Supplier objects)
Unit Price Unit_Price__c Currency(16, 2)


Purchase Order | Salesforce
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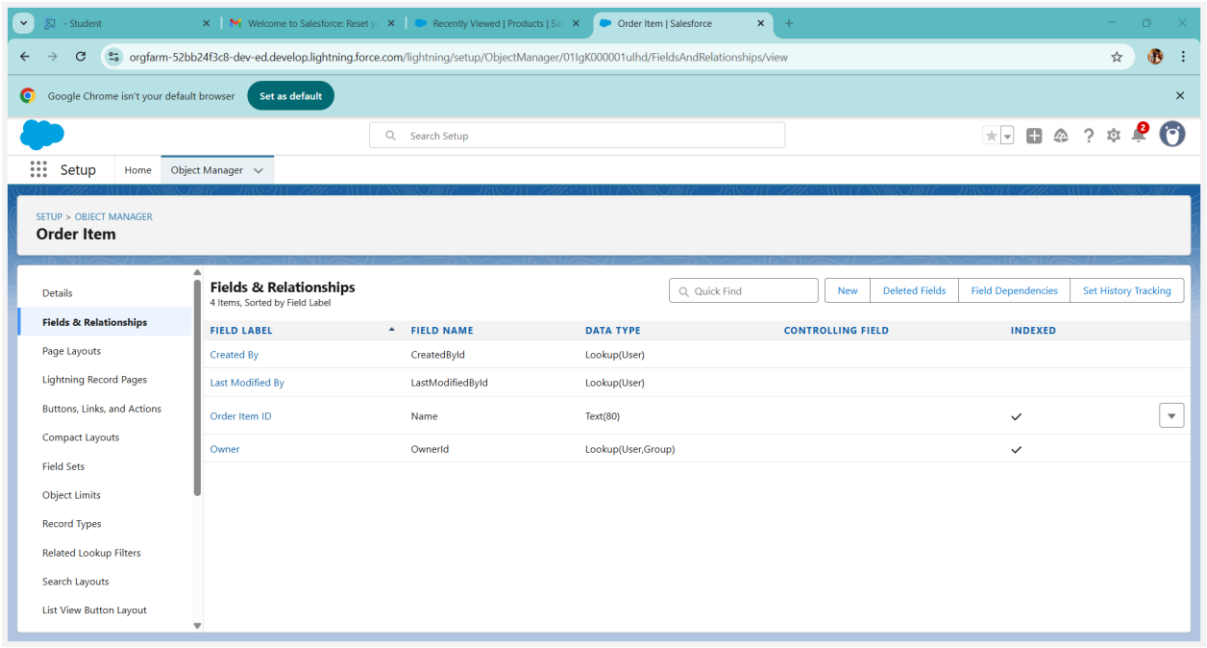
Search Layouts
List View Button Layout
Fields & Relationships
6 Items, Sorted by Field Label
Quick Find
New
Deleted Fields
Field Dependencies
Set History Tracking
FIELD LABEL
FIELD NAME
DATA TYPE
CONTROLLING FIELD
INDEXED
Created By CreatedById Lookup(User)
Last Modified By LastModifiedById Lookup(User)
Order Date Order_Date__c Date
Owner OwnerId Lookup(User,Group)
Purchase Order ID Name Text(80)
Supplier objects Supplier_objects_ID__c Lookup(Supplier objects)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Related Lookup Filters
Search Layouts
List View Button Layout
Fields & Relationships
4 Items, Sorted by Field Label
Quick Find
New
Deleted Fields
Field Dependencies
Set History Tracking
FIELD LABEL
FIELD NAME
DATA TYPE
CONTROLLING FIELD
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CreatedById
Lookup(User)
Last Modified By
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Lookup(User)
Order Item ID
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Text(80)
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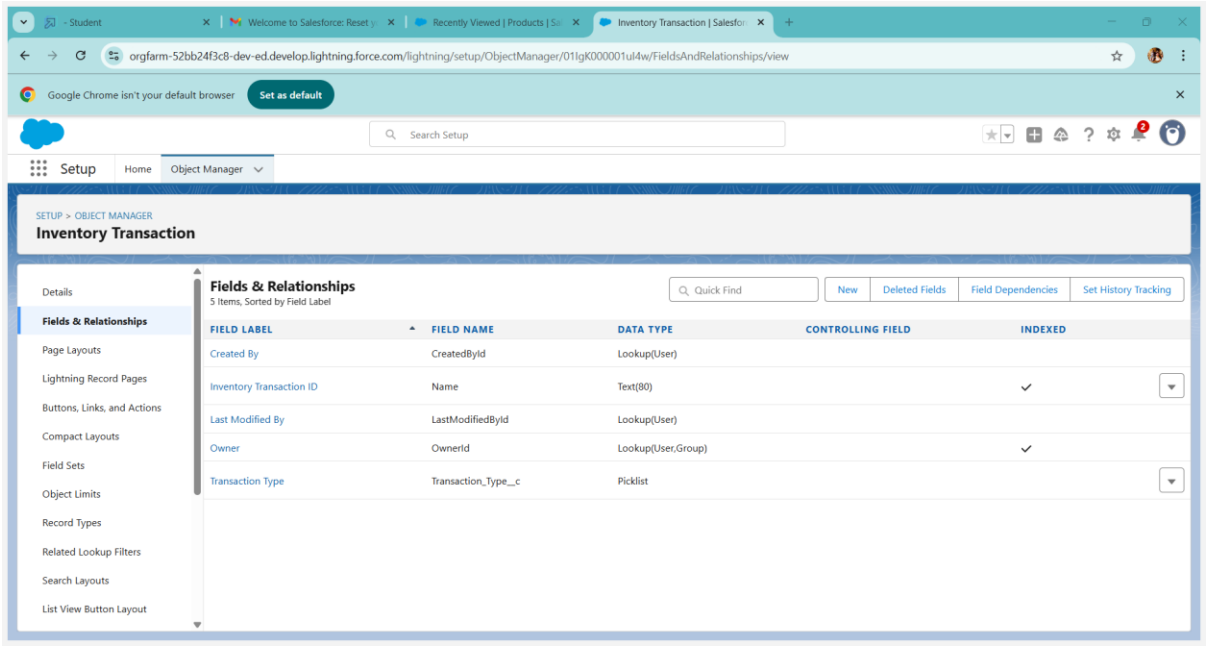
OwnerId
Lookup(User,Group)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FIELD NAME
DATA TYPE
CONTROLLING FIELD
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Created By
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Lookup(User)
Inventory Transaction ID
Name
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Last Modified By
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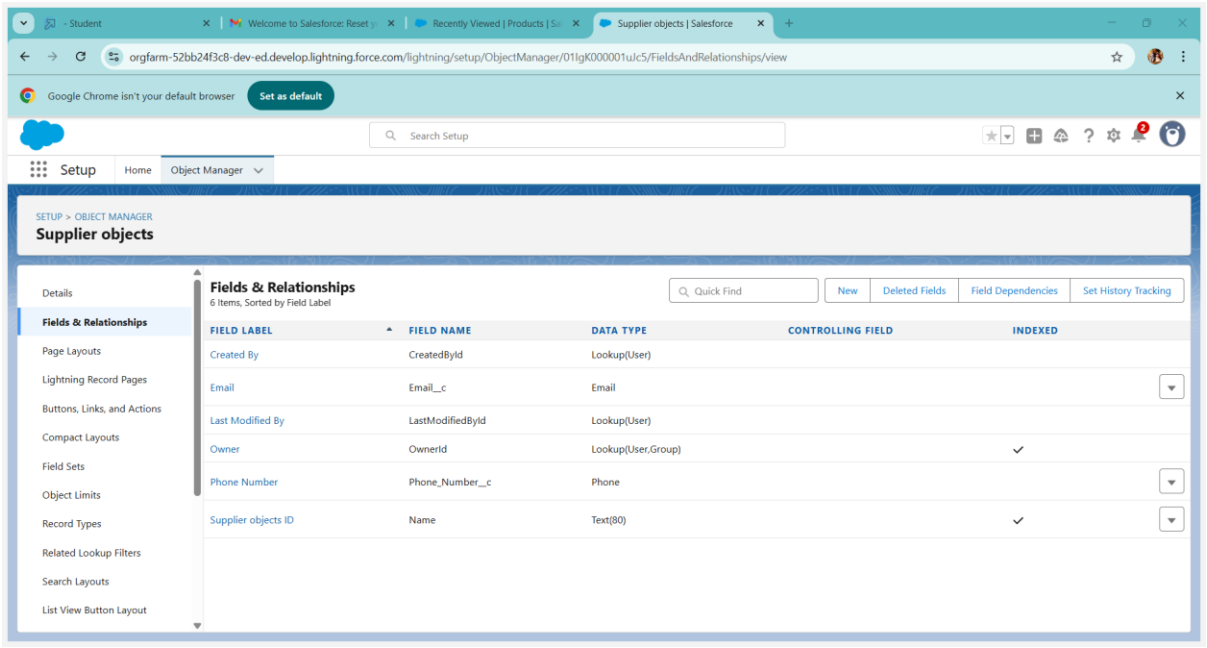
Lookup(User)
Owner
OwnerId
Lookup(User,Group)
Transaction Type
Transaction_Type__c
Picklist



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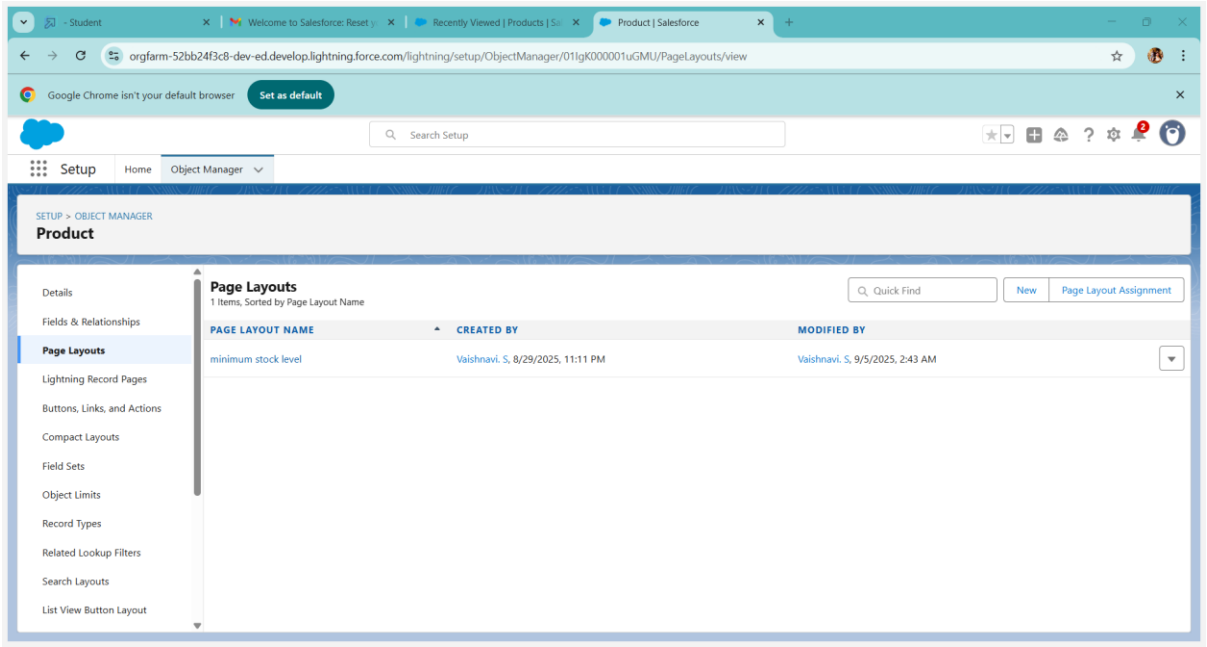

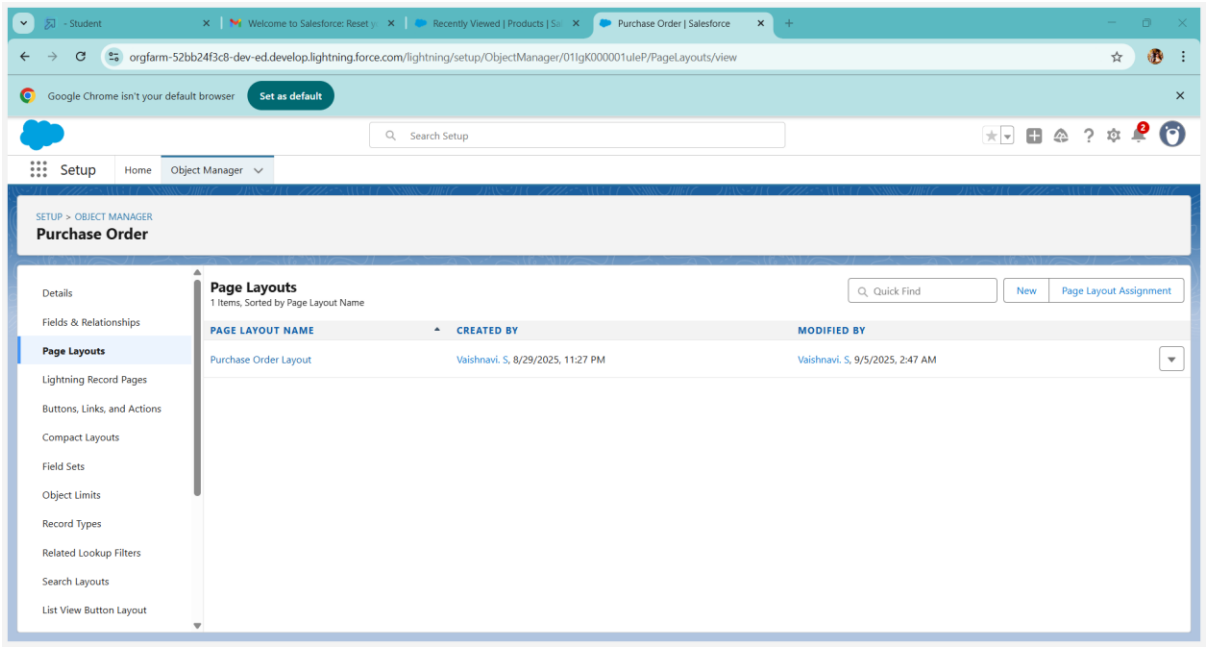
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1 Items, Sorted by Page Layout Name
Quick Find
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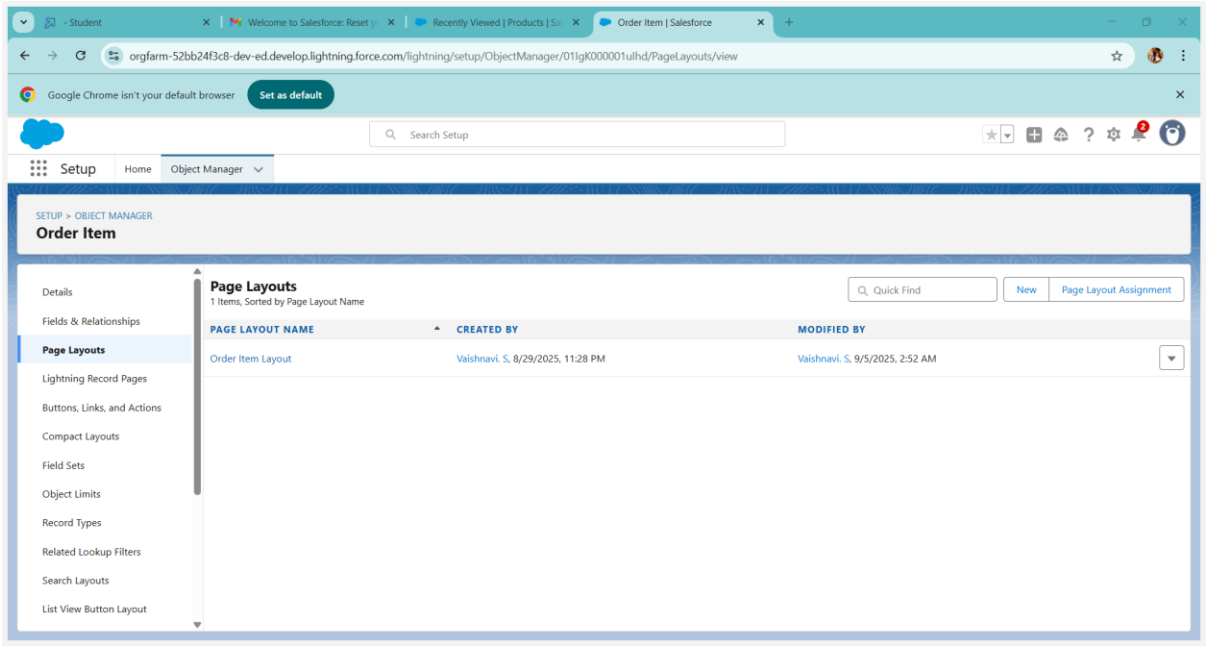
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1 Items, Sorted by Page Layout Name
Quick Find
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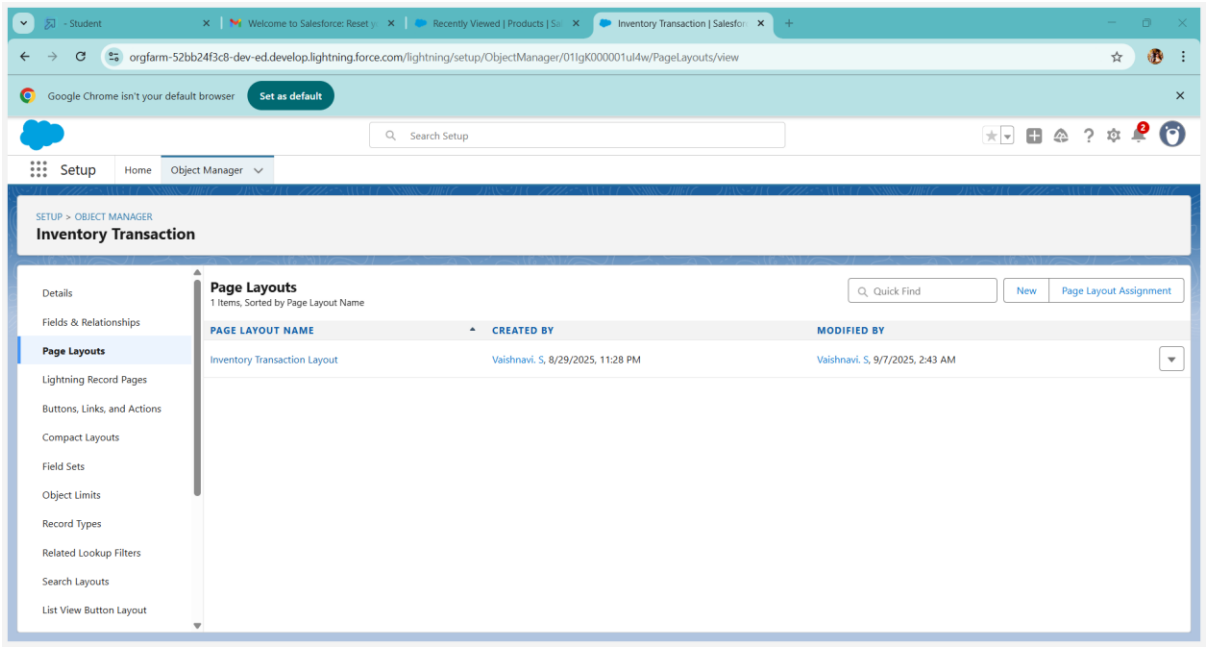

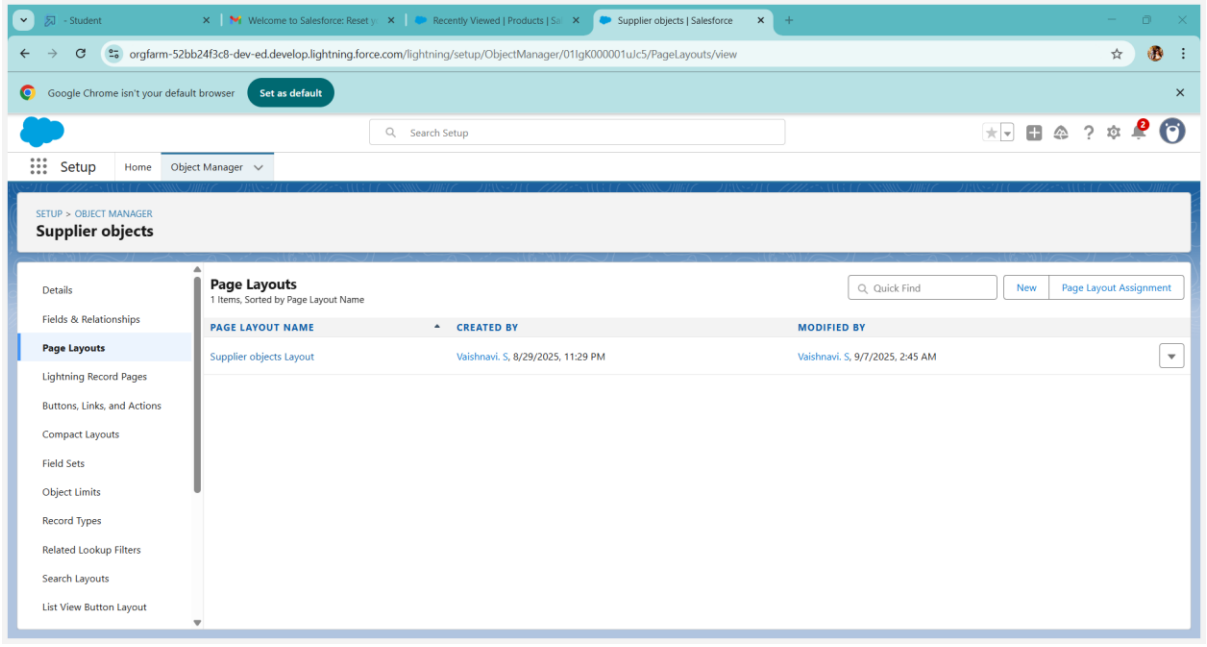

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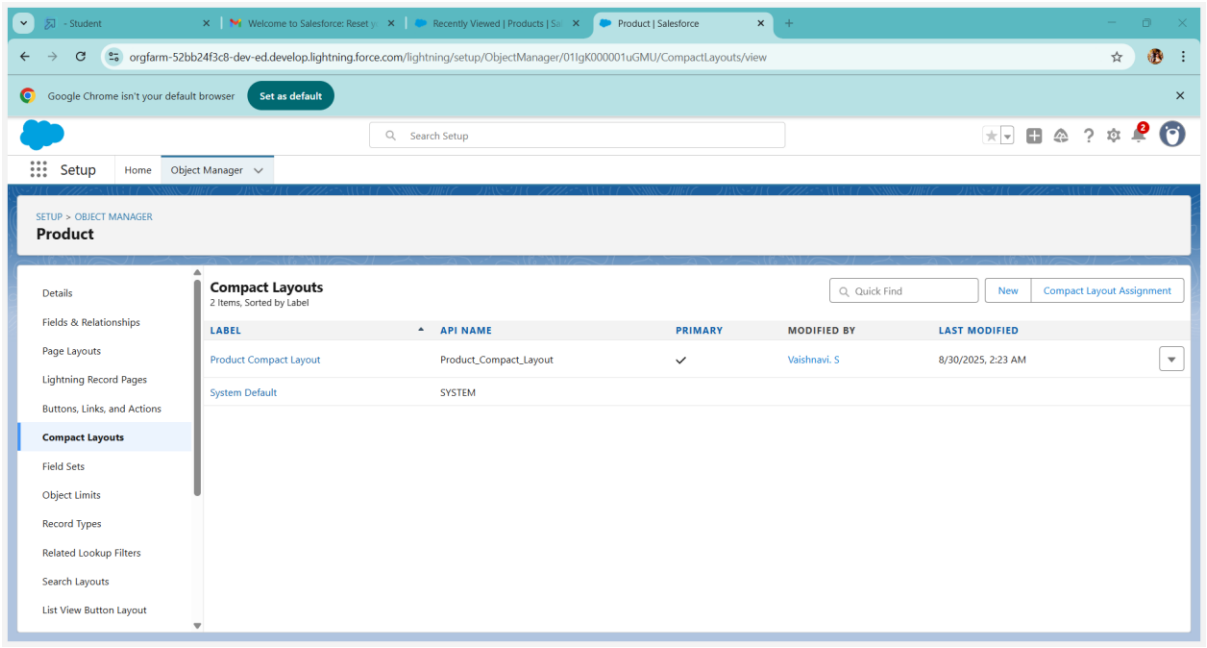
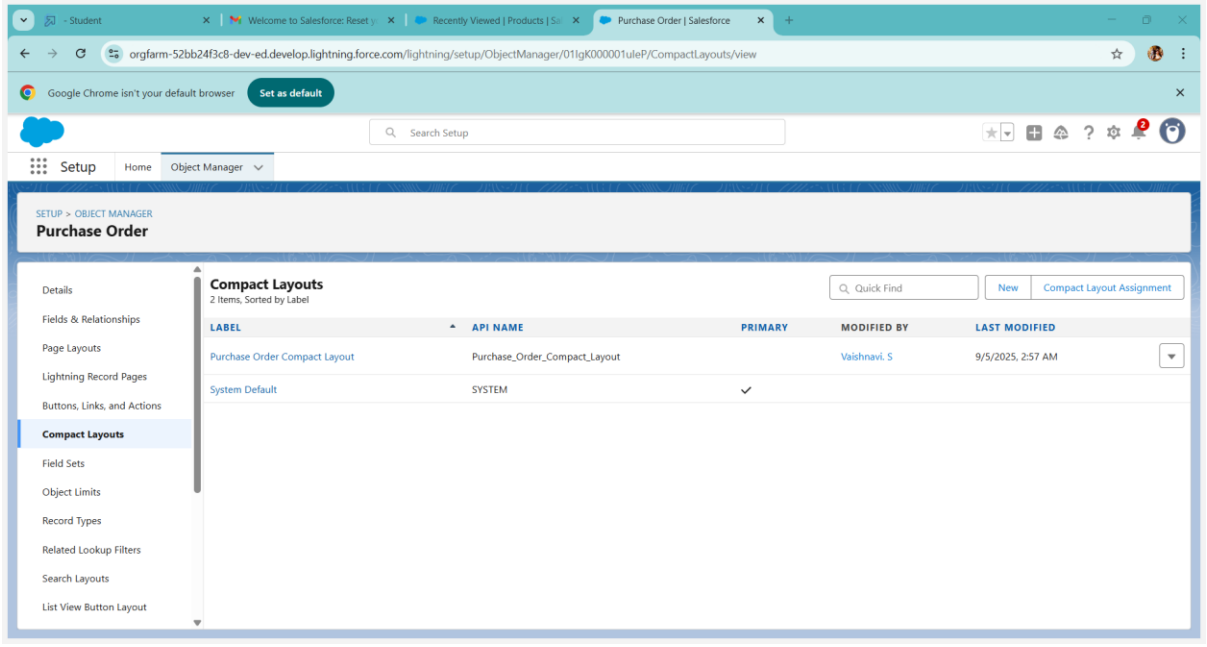
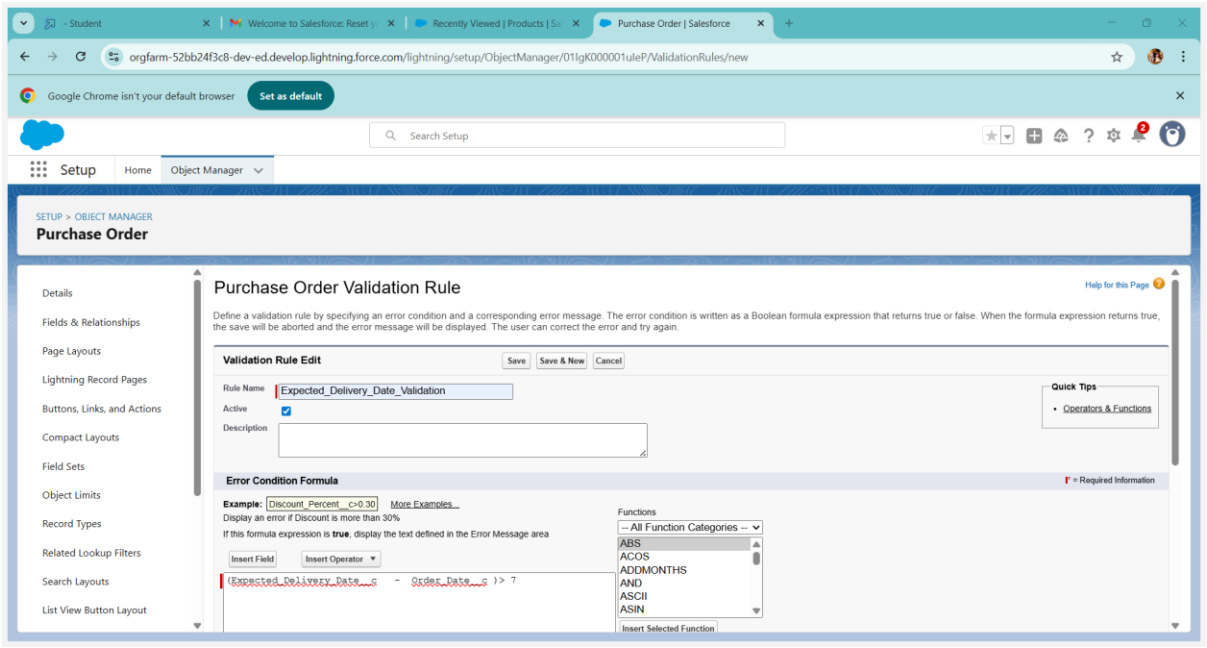
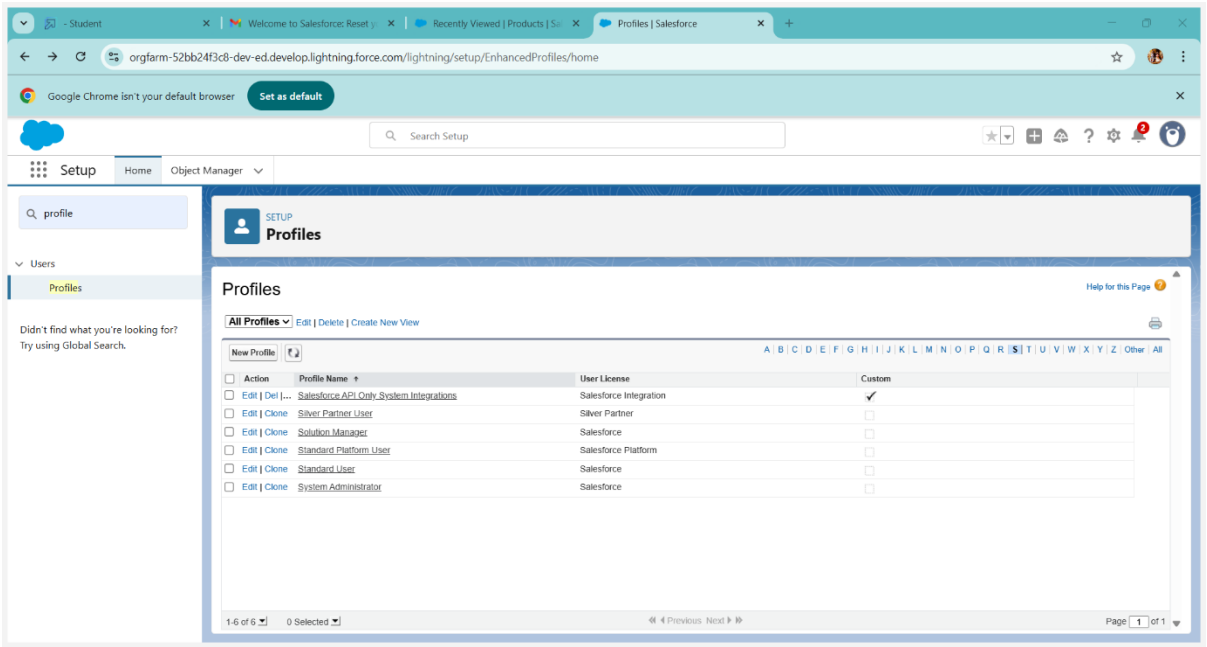




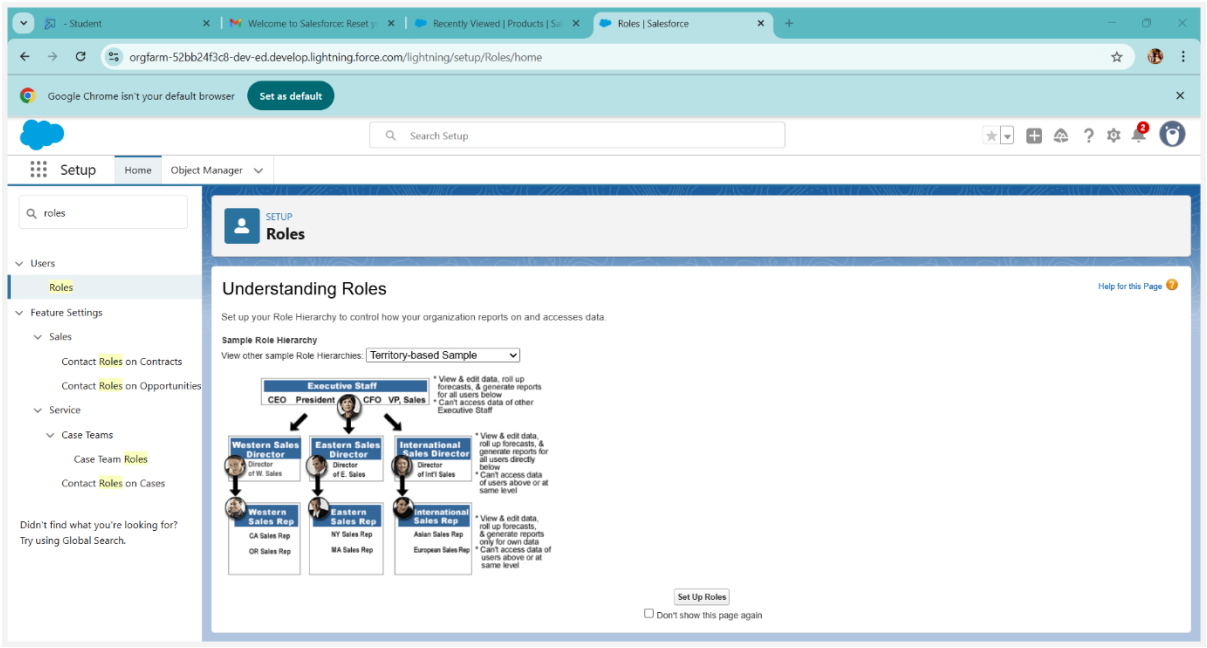
Validation Rules in Purchasing order object:



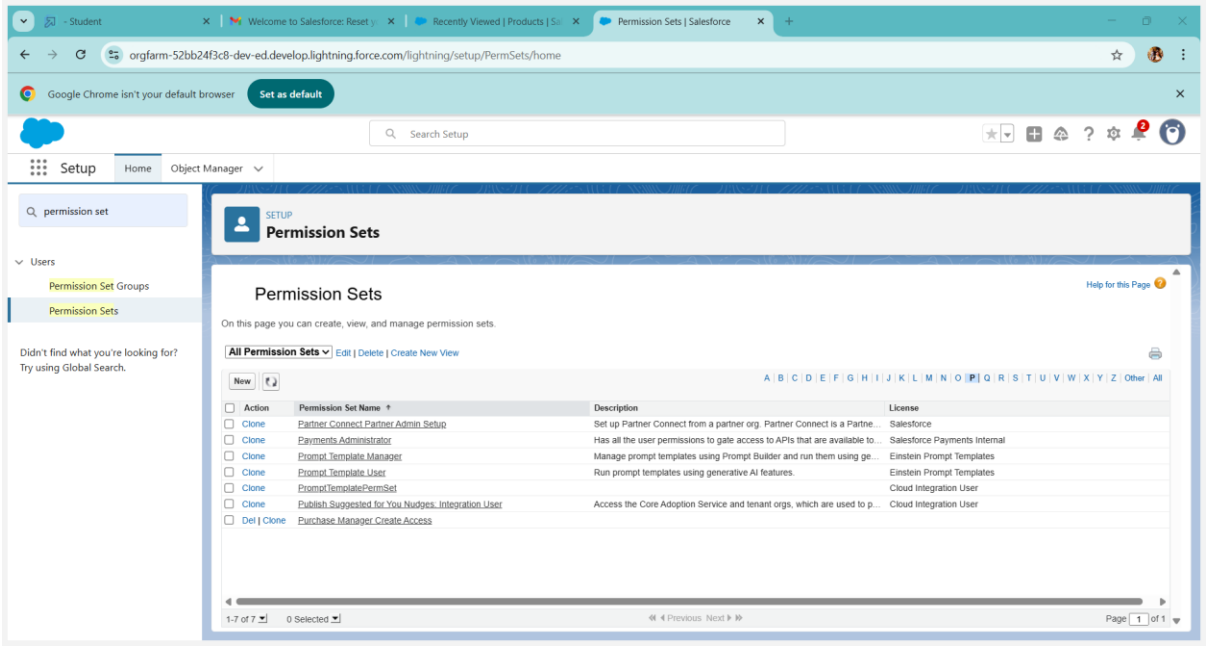
Profiles



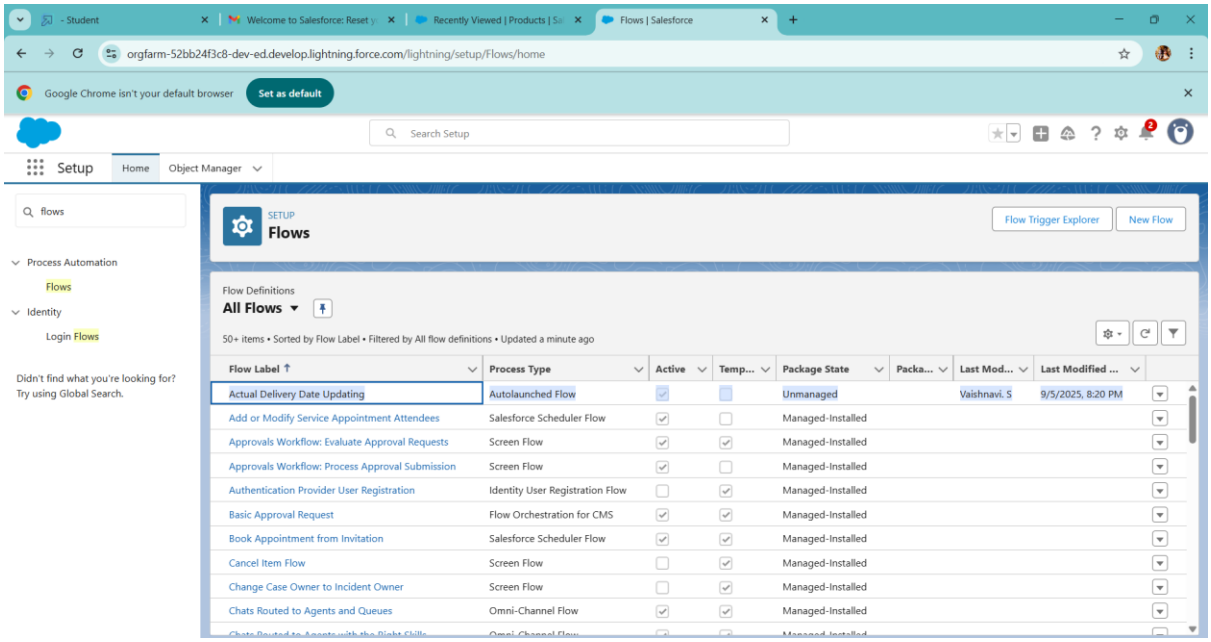
Roles for creating a purchasing manager:



Create a permission set:



Create Flow to update the Actual Delivery Date:



Create a Trigger to Calculate total amount on Order Item:

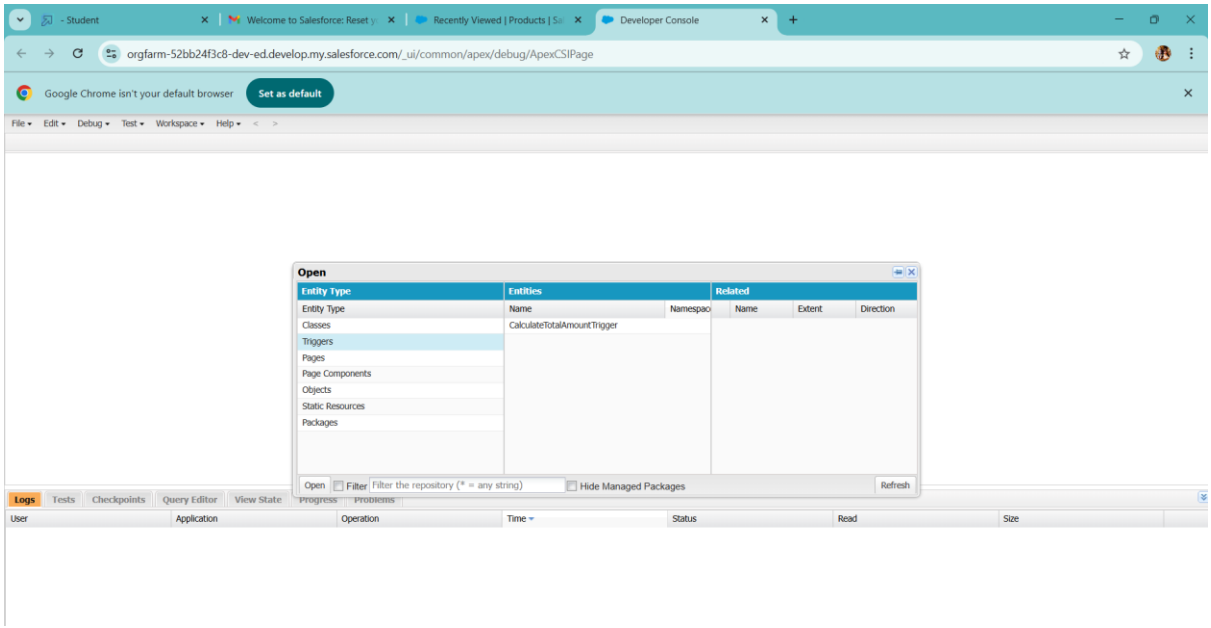
Create an Apex Trigger:

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

CalculateTotalAmountHandler

```
 public class CalculateTotalAmountHandler {

    // Method to calculate the total amount for Purchase Orders based on related Order
Items
    public static void calculateTotal(List<Order_Item__c> newItems,
List<Order_Item__c> oldItems, Boolean isInsert, Boolean isUpdate, Boolean isDelete,
Boolean isUndelete) {
```

```
        // Collect Purchase Order IDs affected by changes in Order_Item__c records
        Set<Id> parentIds = new Set<Id>();

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

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

        // Calculate the total amounts for affected Purchase Orders
        Map<Id, Decimal> purchaseToUpdateMap = new Map<Id, Decimal>();

        if (!parentIds.isEmpty()) {
            // Perform an aggregate query to sum the Amount__c for each Purchase Order
            List<AggregateResult> aggrList = [
                SELECT Purchase_Order_Id__c, SUM(Amount__c) totalAmount
                FROM Order_Item__c
                WHERE Purchase_Order_Id__c IN :parentIds
                GROUP BY Purchase_Order_Id__c
            ];

            // Map the result to Purchase Order IDs
            for (AggregateResult aggr : aggrList) {
                Id purchaseOrderId = (Id)aggr.get('Purchase_Order_Id__c');
                Decimal totalAmount = (Decimal)aggr.get('totalAmount');
                purchaseToUpdateMap.put(purchaseOrderId, totalAmount);
            }

            // Prepare Purchase Order records for update
            List<Purchase_Order__c> purchaseToUpdate = new List<Purchase_Order__c>();
            for (Id purchaseOrderId : purchaseToUpdateMap.keySet()) {
                Purchase_Order__c purchaseOrder = new Purchase_Order__c(Id =
purchaseOrderId, Total_Order_cost__c =
purchaseToUpdateMap.get(purchaseOrderId));
                purchaseToUpdate.add(purchaseOrder);
            }

            // Update Purchase Orders if there are any changes
            if (!purchaseToUpdate.isEmpty()) {
                update purchaseToUpdate;
            }
        }
    }
}
```


Developer Console
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Pages
Page Components
Objects
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Hide Managed Packages
Refresh
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
User
Application
Operation
Time
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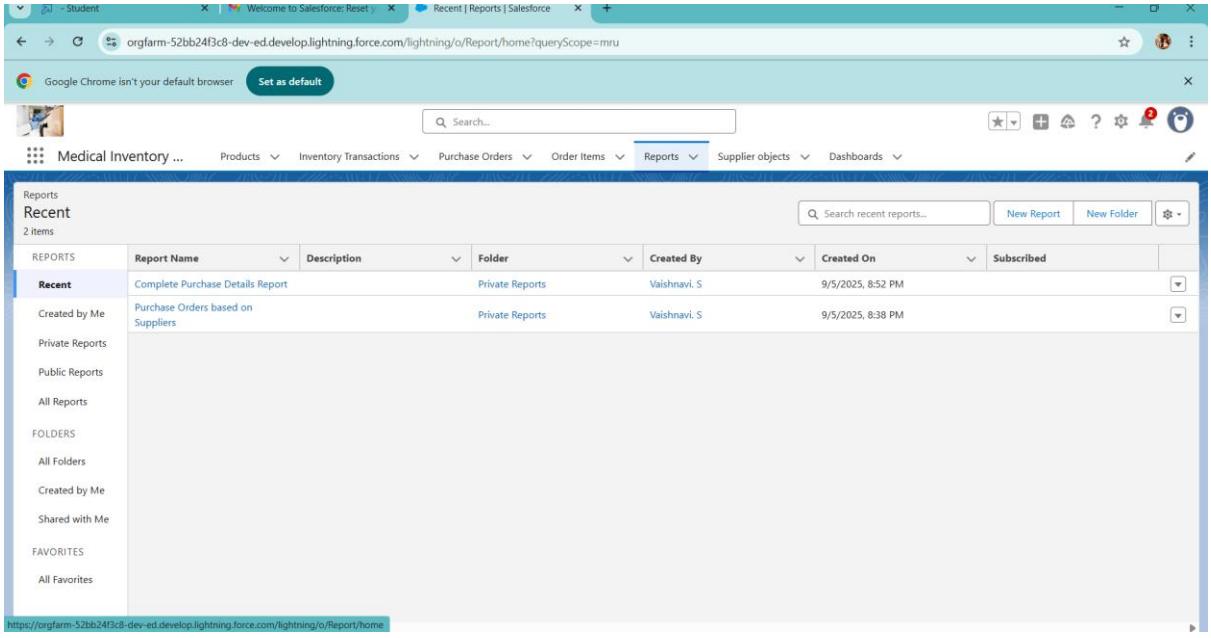
Size

Reports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Public Reports
All Reports
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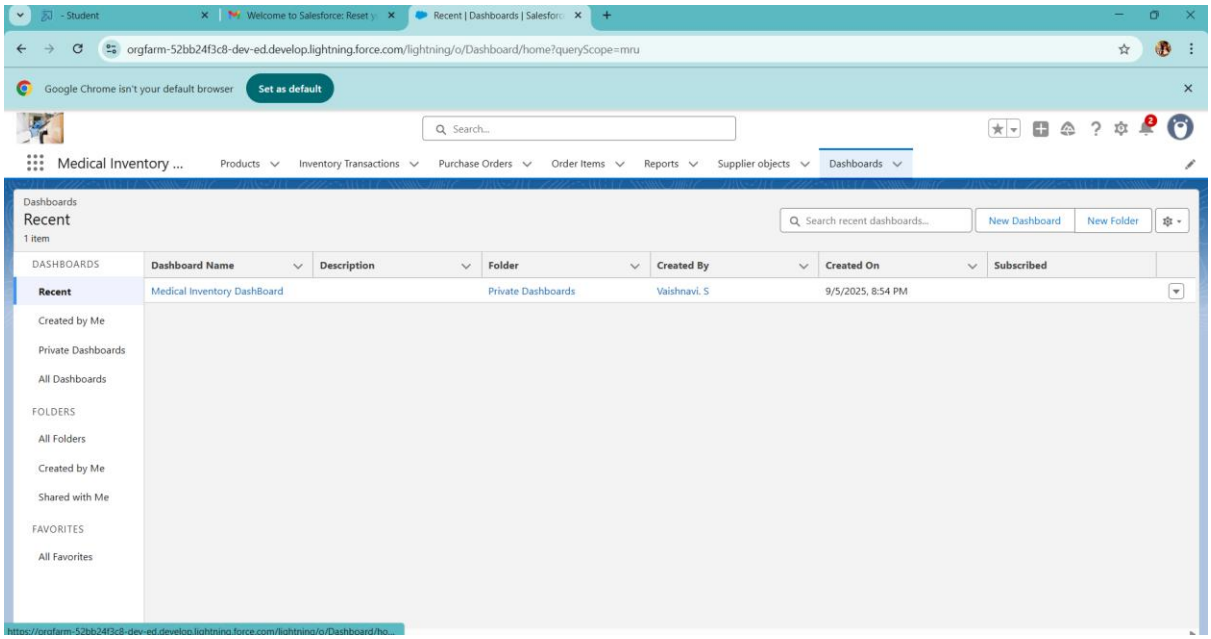
https://orgfarm-52bb24f3c8-dev-ed.develop.lightning.force.com/lightning/o/Report/home

Dashboards:


orgfarm-52bb24f3c8-dev-ed.develop.lightning.force.com/lightning/o/Dashboard/home?queryScope=mru
Google Chrome isn't your default browser
Set as default
Search...
Medical Inventory ...
Products
Inventory Transactions
Purchase Orders
Order Items
Reports
Supplier objects
Dashboards
Dashboards
Recent
1 item
Search recent dashboards...
New Dashboard
New Folder
DASHBOARDS
Recent
Created by Me
Private Dashboards
All Dashboards
FOLDERS
All Folders
Created by Me
Shared with Me
FAVORITES
All Favorites
Dashboard Name
Description
Folder
Created By
Created On
Subscribed
Medical Inventory DashBoard
Private Dashboards
Vaishnavi. S
9/5/2025, 8:54 PM