CRM Application for Jewel Management

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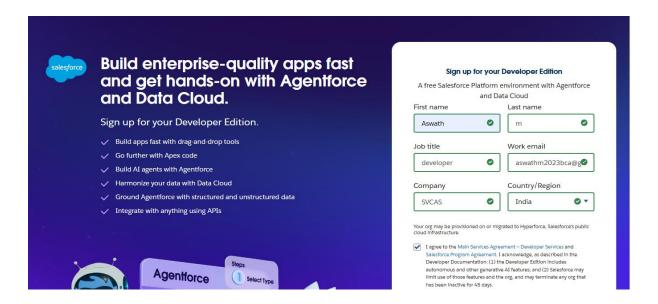
Introduction:

This project is about developing a Jewellery Inventory CRM system using Salesforce. It helps to manage customers, items, orders, prices, and billing in an easy way. The system improves data management, automates billing processes, and reduces manual work. It also provides useful reports and dashboards for business analysis.

Module 1: Salesforce Setup & Objects

Step 1: Create Developer Account

1. Go to https://developer.salesforce.com/signup



- 1. First name & Last name
- 2. Email
- 3. Role: Developer
- 4. Company: College Name
- 5. County: India
- 6. Postal Code: pin code
- 7. Username: should be a combination of your name and company

This need not be an actual email id, you can give anything in the format

: username@organization.com

Click on sign me up after filling these.

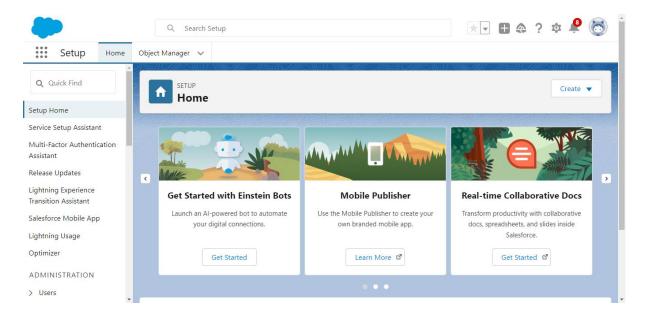
Account Activation

Step 2: Activate Account

- 1. Open your email \rightarrow click **Reset Password**.
- 2. Set a new password & security question.
- 3. You'll be redirected to Salesforce Setup page.



4. Then you will redirect to your salesforce setup page.

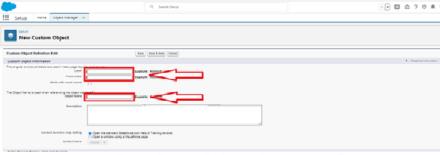


Create Jewel Customer Object

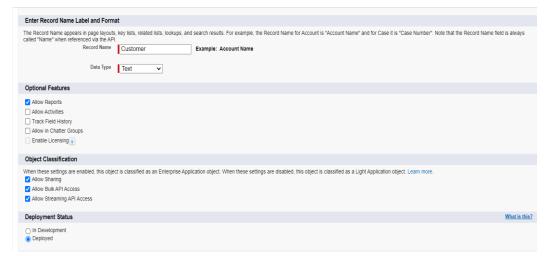
- Go to Setup \rightarrow Object Manager \rightarrow Create \rightarrow Custom Object.
- Create Jewel Customer Object
 - Label: Jewel Customer
 - Record Name: Customer Name (Text)
 - Enable Reports & Search \rightarrow Save.



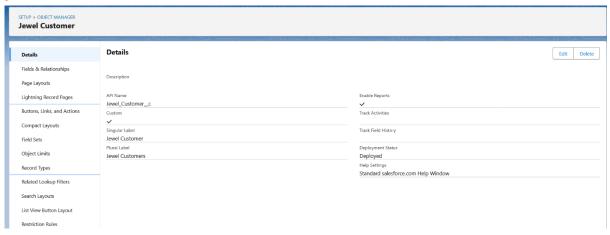
- 1. Enter the label name: Jewel Customer
- 2. Plural label name: Jewel Customers



- 3. Enter Record Name Label and Format
 - Record Name >> Customer name
 - Data Type >> Text



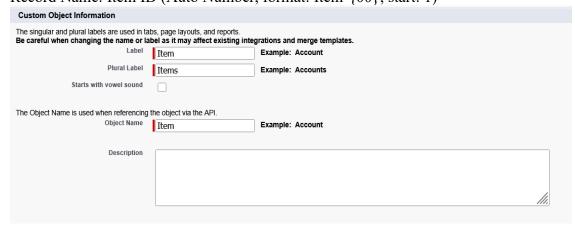
- 2. Click on Allow reports.
- Allow search and click Save.



Jewl_Customer Object Is Created .

Create Item Object

- Label: Item
- Record Name: Item ID (Auto Number, format: Item-{00}, start: 1)



Enable Reports & Search \rightarrow Save.

Create 3 more objects (same steps):

- Customer Order (Auto Number)
- **Price** (Auto Number)
- **Billing** (Auto Number)

LABEL	API NAME
Billing	Billing_c
Price	Pricec
Jewel Customer	Jewel_Customerc
Item	ltemc
Order	Order_c

Module 2: Tabs & Lightning App

Step 1: Create Tabs

- 1. Go to Setup \rightarrow Quick Find \rightarrow Tabs \rightarrow New (Custom Object Tab).
- 2. Create Tab for each object:
 - Jewel Customer
 - o Item
 - Customer Order
 - o Price
 - o Billing



3. Select a tab style \rightarrow keep default settings \rightarrow Save.

Step 2: Create Lightning App

- 1. Go to Setup \rightarrow Quick Find \rightarrow App Manager \rightarrow New Lightning App.
- 2. Fill details:

App Details & Branding	
Give your Lightning app a name and description. Upload a	n image and choose the highlight color for its navigation bar.
App Details	App Branding
*App Name Jewellery Inventory System	Image Primary Color Hex Value #0070D2
* Developer Name Jewellery_Inventory_System Description	⚠ Upload
Enter a description	Org Theme Options Use the app's image and color instead of the org's custom theme
	App Launcher Preview
	Jewellery Inventory System

- o App Name: Jewellery Inventory System
- o Description: Elevate your look with elegance
- o Keep default branding & color.
- 3. Set Navigation Style = Console Navigation \rightarrow Next.
- 4. Keep Utility Items default \rightarrow Next.



- 5. Add Navigation Items: **Jewel Customer**, **Item**, **Customer Order**, **Price**, **Billing**, **Reports**, **Dashboard** → Next.
- 6. Add User Profiles: Select **System Administrator** → Save & Finish.

Module 3: Relationships & Fields

Step 1: Create Lookup Relationship

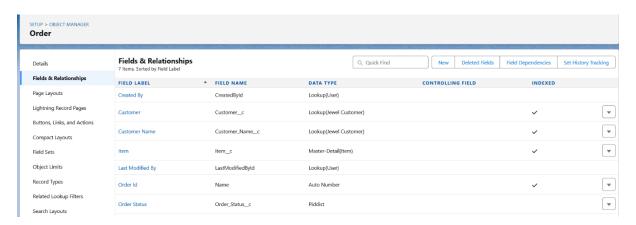
(Connect Jewel Customer ↔ Customer Order)



- 1. Go to Setup \rightarrow Object Manager \rightarrow Customer Order.
- 2. Click Fields & Relationships \rightarrow New.
- 3. Select Lookup Relationship \rightarrow Next.
- 4. Related Object = **Jewel Customer**.
- 5. Field Label = Customer \rightarrow Next \rightarrow Save.

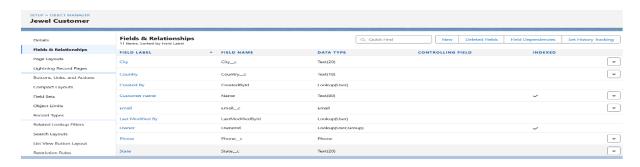
Step 2: Create Master-Detail Relationship

(Connect Item ↔ Customer Order)



- 1. Go to Setup \rightarrow Object Manager \rightarrow Customer Order.
- 2. Click Fields & Relationships \rightarrow New.
- 3. Select Master-Detail Relationship \rightarrow Next.
- 4. Related Object = Item.
- 5. Field Label = Item \rightarrow Next \rightarrow Save.

Step 3: Create Fields in Jewel Customer Object



- 1. City \rightarrow Text(20)
- 2. Phone \rightarrow Phone

Step 4: Create Fields in Item Object



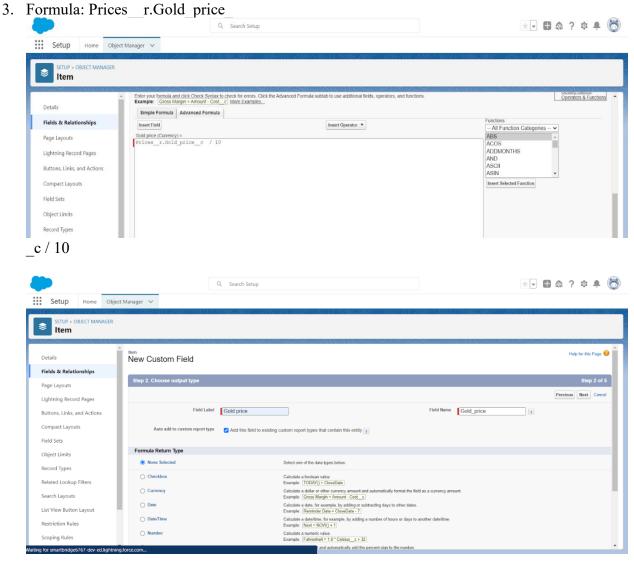
- 1. Purity \rightarrow Number(2)
- 2. Item Type → Picklist (Values: Gold, Silver)

Step 5: Create Fields in Price Object

1. Gold Price \rightarrow Currency(8,0)

Step 6: Create Formula Field in Item Object

- 1. Lookup Relationship: Item ↔ Price (Field Name: Prices).
- 2. Create Formula Field: Gold Price \rightarrow Formula Return Ty pe = Currency.



click "Check Syntax" and Next >> Next >> Save & New.

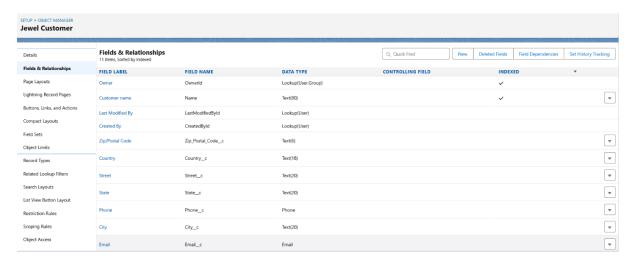
Module 4: Remaining Fields & Validation Rules

Step 1: Add Remaining Fields



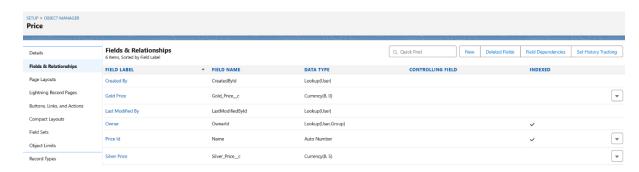
♦ Jewel Customer Object

- State \rightarrow Text(20)
- Street \rightarrow Text(20)
- Country \rightarrow Text(18)
- Zip/Postal Code \rightarrow Text(6)

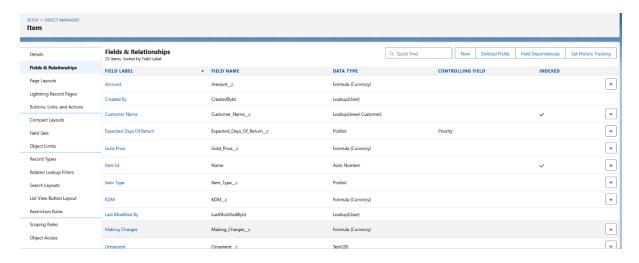


♦ Price Object

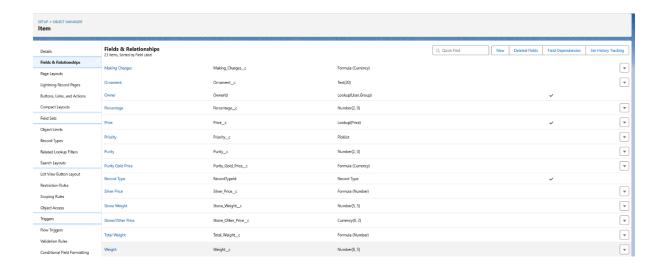
• Silver Price \rightarrow Currency(8,5)



♦ Item Object

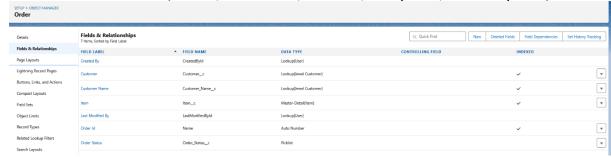


- Customer Name → Lookup (Jewel Customer)
- Ornament \rightarrow Text(20)
- Weight \rightarrow Number(8,5)
- Stone Weight \rightarrow Number(5,5)
- Percentage \rightarrow Number(2,0)
- Stone/Other Price → Currency(8,2)
- Expected Days of Return \rightarrow Picklist (1-3, 4-5, 6-7, 8-10 Days)
- Priority → Picklist (Low, Medium, High, Critical)
- Silver Price Formula → (Prices r.Silver price c / 1000)
- Purity Gold Price Formula \rightarrow ((Prices r.Gold price c * Purity c) / 24) / 10
- Total Weight Formula \rightarrow (Weight c Stone weight c)
- Amount Formula → IF(Gold, Total_weight * Purity_Gold_price, Total_weight * Silver_price)
- KDM Formula → (Amount * Percentage / 100)
- Making Charges Formula → IF(Gold, Weight * 300, Weight * 10)



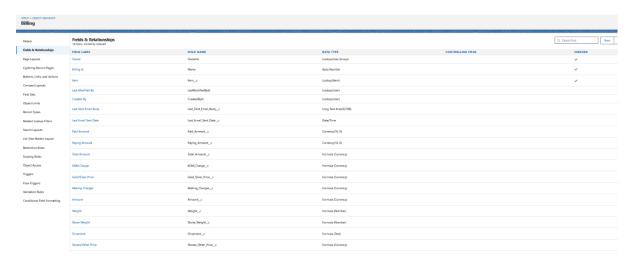
\$ Customer Order Object

• Order Status → Picklist (Started, Not Started, On Hold, Completed, Not Completed)

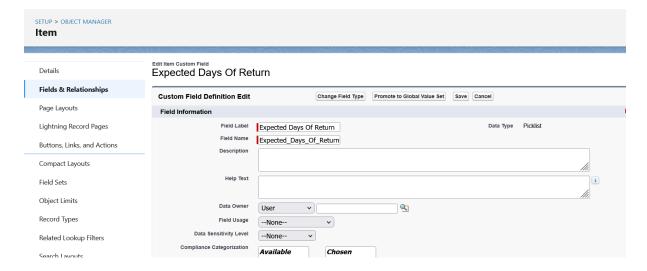


Billing Object

- Lookup to Item
- Formulas (Ornament, Weight, Amount, Gold/Silver Price, KDM, Making Charges, Stone/Other Price, Total Amount)



Step 2: Field Dependencies

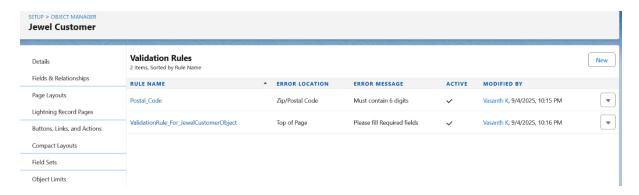


- Go to Setup → Object Manager → Item → Priority field → Field Dependencies → New.
- Controlling Field = **Priority**
- Dependent Field = Expected Days of Return
- Map values accordingly → Save.

step 3: Validation Rules

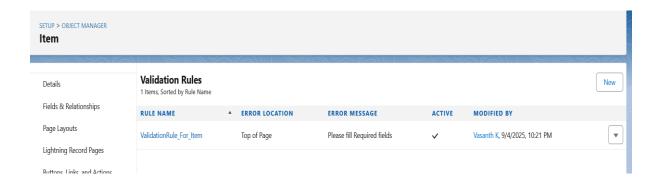
♦ Jewel Customer Object

- Postal Code must be 6 digits:
 AND(OR(LEN(Zip_Postal_code__c) <> 6,
 NOT(REGEX(Zip_Postal_code__c,"^[0-9]{6}\$"))),
 NOT(ISBLANK(Zip_Postal_code__c)))
- Mandatory Fields (City, Country, Phone, State, Street):
 OR(ISBLANK(City_c), ISBLANK(Country_c), ISBLANK(Phone_c),
 ISBLANK(State_c), ISBLANK(Street_c))



Item Object

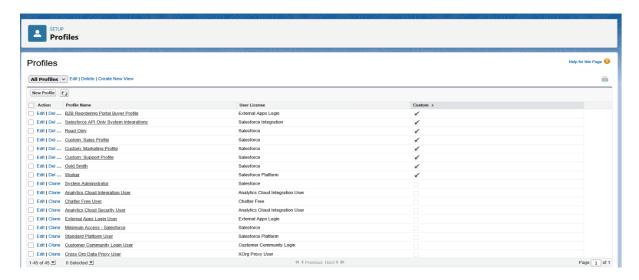
Required Fields Validation:
 OR(ISBLANK(Amount_c), ISBLANK(Customer_Name_c),
 ISBLANK(Gold_price_c), ISBLANK(KDM_c), ISBLANK(Ornament_c),
 ISBLANK(Percentage_c), ISBLANK(Making_Charges_c), ISBLANK(Prices_c),
 ISBLANK(Stone_weight_c), ISBLANK(Silver_price_c),
 ISBLANK(Stone_other_price_c), ISBLANK(Weight_c))



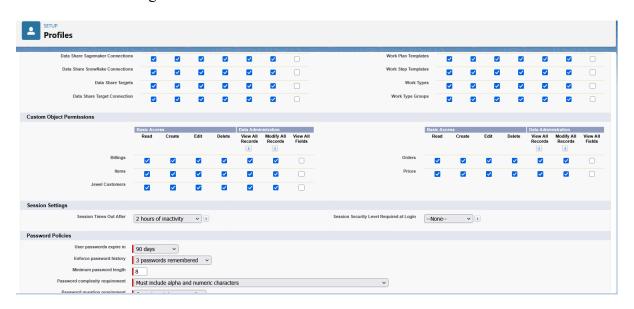
Module 5: Profiles, Roles & Users

Step 1: Create Gold Smith Profile

1. Go to **Setup** \rightarrow **Quick Find** \rightarrow **Profiles**.



- 2. Clone System Administrator \rightarrow Name it Gold Smith \rightarrow Save.
- 3. Edit Profile \rightarrow Scroll to Custom Object Permissions \rightarrow Give access to:
 - Jewel Customer
 - o Item
 - o Customer Order
 - Price
 - o Billing

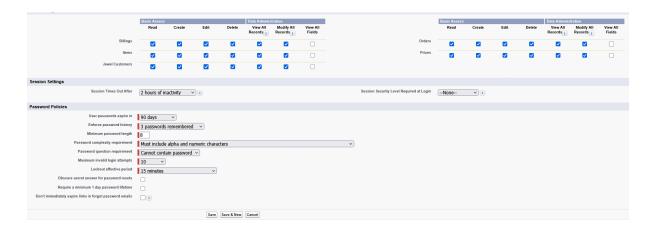


4. Save.

Step 2: Create Worker Profile



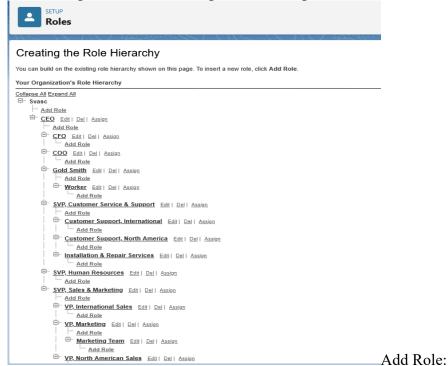
- 1. Go to **Setup** \rightarrow **Profiles**.
- 2. Clone **Salesforce Platform User** \rightarrow Name it **Worker** \rightarrow Save.



- 3. Edit Profile \rightarrow Give access to:
 - o Item
 - o Price
 - Customer Order
- 4. Save.

Step 3: Create Roles

1. Go to Setup \rightarrow Roles \rightarrow Set Up Roles \rightarrow Expand All.



- o Gold Smith (Reports to higher role if needed).
 - o Worker (Reto Gold Smith).
- 3. Save

2.

Step 4: Create Users

♦ Gold Smith User

First Name: NiklausLast Name: Mikaelson

• Alias, Email, Username: any valid format

Role: Gold Smith

• User License: Salesforce

Profile: Gold Smith

♦ Worker User

First Name: Kol

Last Name: Mikaelson

• Alias, Email, Username: any valid format

• Role: Worker

• User License: Salesforce Platform

Profile: Worker

(Note: Create 2 more Worker users using same profile)

Step 5: Create Page Layouts & Record Types

- Page Layouts
 - 1. Go to Setup \rightarrow Object Manager \rightarrow Item \rightarrow Page Layouts \rightarrow New.
 - \circ Page Layout for Gold \rightarrow Keep gold-related fields only.
 - \circ Page Layout for Silver \rightarrow Keep silver-related fields only.



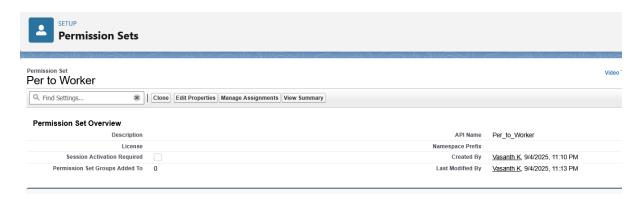
Record Types

- 1. Go to Object Manager \rightarrow Item \rightarrow Record Types \rightarrow New.
 - o Record Type: Gold \rightarrow Use "Page Layout for Gold".
 - \circ Record Type: Silver \rightarrow Use "Page Layout for Silver".



Step 6: Create Permission Set

- 1. Go to Setup \rightarrow Permission Sets \rightarrow New.
- 2. Label: **Per to Worker** \rightarrow Save.
- 3. Under Object Settings \rightarrow Items \rightarrow Edit \rightarrow
 - o Enable Record Types: Gold, Silver.
 - o Permissions: Read, Edit, Create.
- 4. Save.



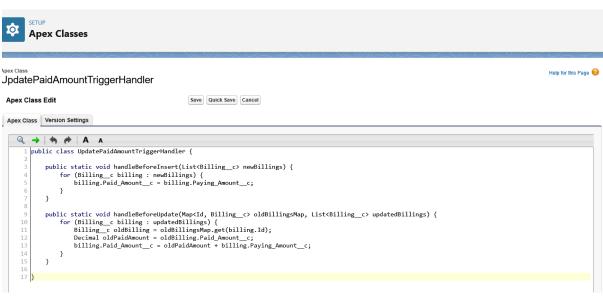
5. Assign this permission set to **Worker Users**.

Module 6: Triggers, Flow, Reports & Dashboards

Step 1: Create Trigger Handler Class

- 1. Go to Developer Console \rightarrow New Apex Class.
- 2. Name: UpdatePaidAmountTriggerHandler.
- 3. Paste code:

```
public class UpdatePaidAmountTriggerHandler {
  public static void handleBeforeInsert(List<Billing__c > newBillings) {
    for (Billing__c billing : newBillings) {
        billing.Paid_Amount__c = billing.Paying_Amount__c;
    }
  }
  public static void handleBeforeUpdate(Map<Id, Billing__c> oldBillingsMap,
        List<Billing__c> updatedBillings) {
    for (Billing__c billing : updatedBillings) {
        Billing__c oldBilling = oldBillingsMap.get(billing.Id);
        Decimal oldPaidAmount = oldBilling.Paid_Amount__c;
        billing.Paid_Amount__c = oldPaidAmount + billing.Paying_Amount__c;
    }
  }
}
```



Step 2: Create Trigger

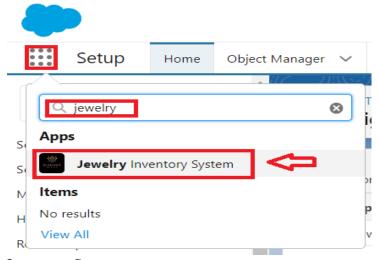
- 1. Go to Setup \rightarrow Object Manager \rightarrow Billing \rightarrow Triggers \rightarrow New.
- 2. Name: UpdatePaidAmountTrigger.
- 3. Paste the code and Save.

```
trigger UpdatePaidAmountTrigger on Billing__c (before insert, before update) {
   if (Trigger.isInsert) {
      UpdatePaidAmountTriggerHandler.handleBeforeInsert(Trigger.new);
   } else if (Trigger.isUpdate) {
      UpdatePaidAmountTriggerHandler.handleBeforeUpdate(Trigger.oldMap, Trigger.new);
   }
}
```



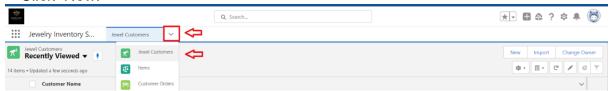
Step 3: Create Records

1. Open App Launcher → Jewellery



2. Inventory System.

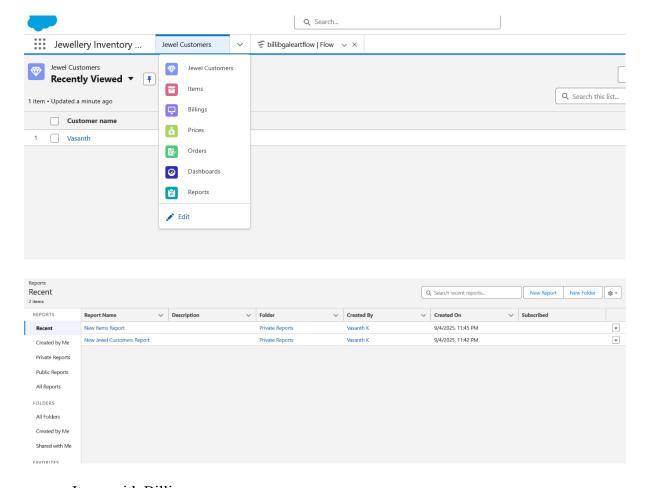
- 3. Create minimum 10 records for each object: Jewel Customer, Price, Item, Customer Order, Billing.
- 4. Click on Drop Down and Click on the Jewel Customer tab.
- 5. Click New.



6. • Fill the Details and click on Save.

Step 4: Create Reports

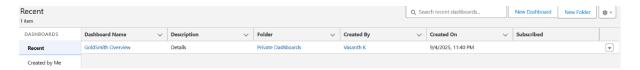
- 1. Go to Reports tab \rightarrow New Report.
- 2. Select Report Type \rightarrow Start Report.
- 3. Add fields \rightarrow Save/Run.
- 4. Example reports:



- Items with Billings
- o Billings with Item & Customer Order

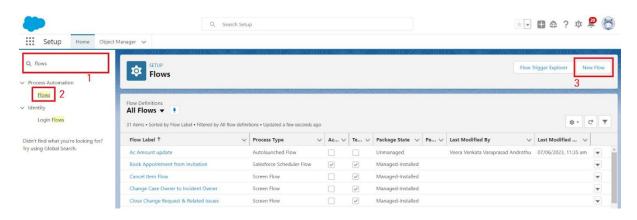
Step 5: Create Dashboard

- 1. Go to Dashboards tab \rightarrow New Dashboard.
- 2. Enter name \rightarrow Create.
- 3. Add Component \rightarrow Select Report \rightarrow Save & Done.
- 4. Create at least 2 dashboards.

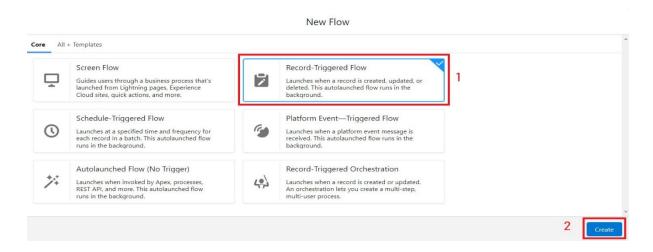


Step 6: Create Flow (Email Automation)

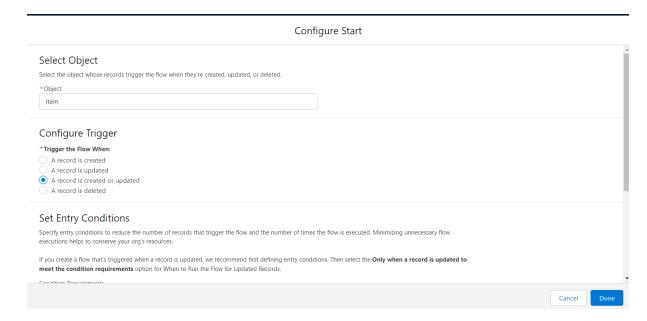
1. Setup \rightarrow Flows \rightarrow New Flow.



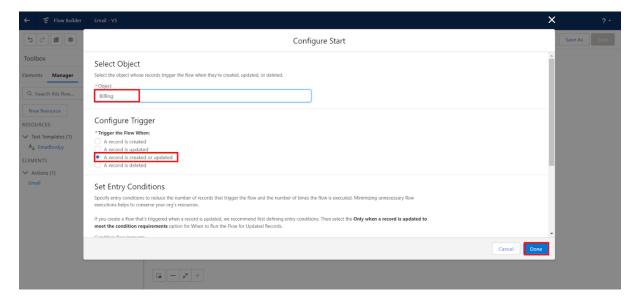
2. Select Record-Triggered Flow.

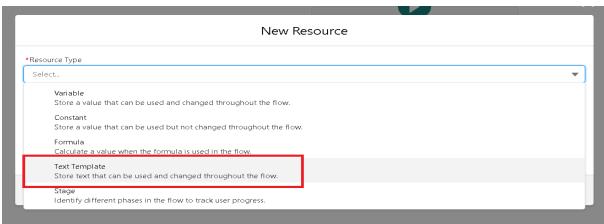


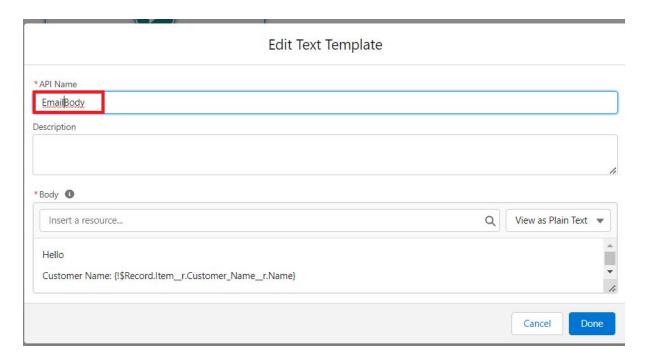
3. Object = Billing \rightarrow Trigger = Created/Updated.



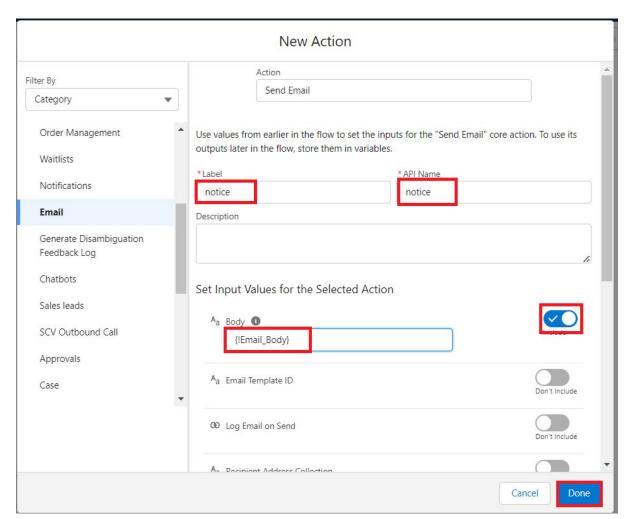
4. Add Text Template → Email Body.





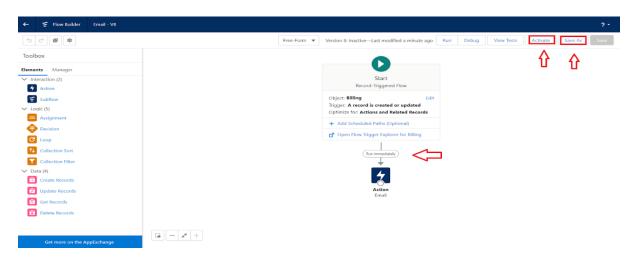


5. Add Action → Send Email → Fill subject, body, recipient.

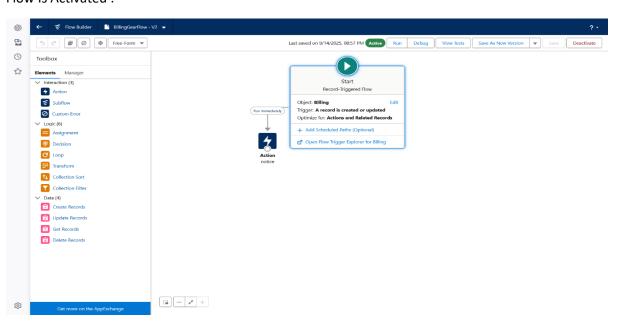


Save the flow		
*Flow Label Description: Show Advanced	*Flow API Name	
	Cancel	

6. Connect elements \rightarrow Save \rightarrow Activate.



Flow Is Activated:



Conclusion

By completing this project, we learned the practical use of Salesforce. We created objects, fields, relationships, and validation rules to manage data correctly. We also implemented triggers, flows, and dashboards to automate tasks and analyze information. This project gave us hands-on experience to apply CRM solutions in real-world business needs.