CRM APPLICATION FOR JEWEL MANAGEMENT- DEVELOPER

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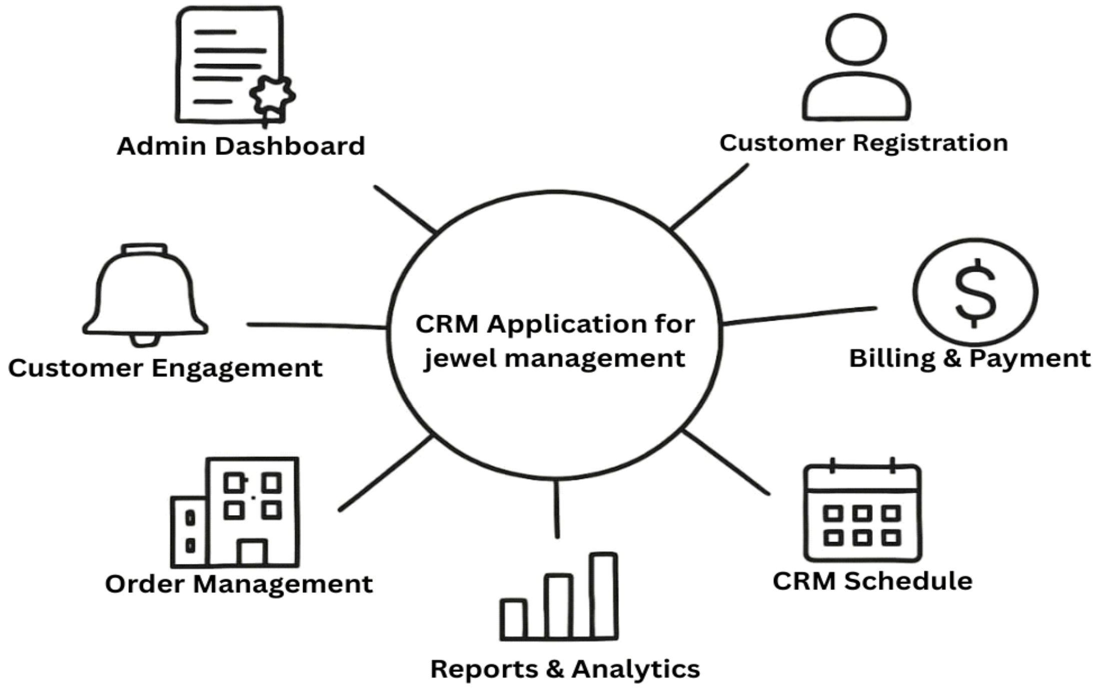
1.INTRODUCTION

1.1 Project Overview

The CRM (Customer Relationship Management) application is designed to manage jewel sales, customer interactions, and inventory in a streamlined manner. It provides an end-to-end solution for jewel shops, enabling effective tracking of customers, orders, payments, and reports.



1.2 Purpose

The CRM Application for Jewel Management is designed to streamline jewellery business operations by managing customer details, orders, and inventory efficiently. It automates billing and payment tracking, enhances customer engagement through notifications and offers, and provides analytical reports for informed decision-making. The system also ensures secure admin control and improves overall operational efficiency.

DEVELOPMEMT PHASE

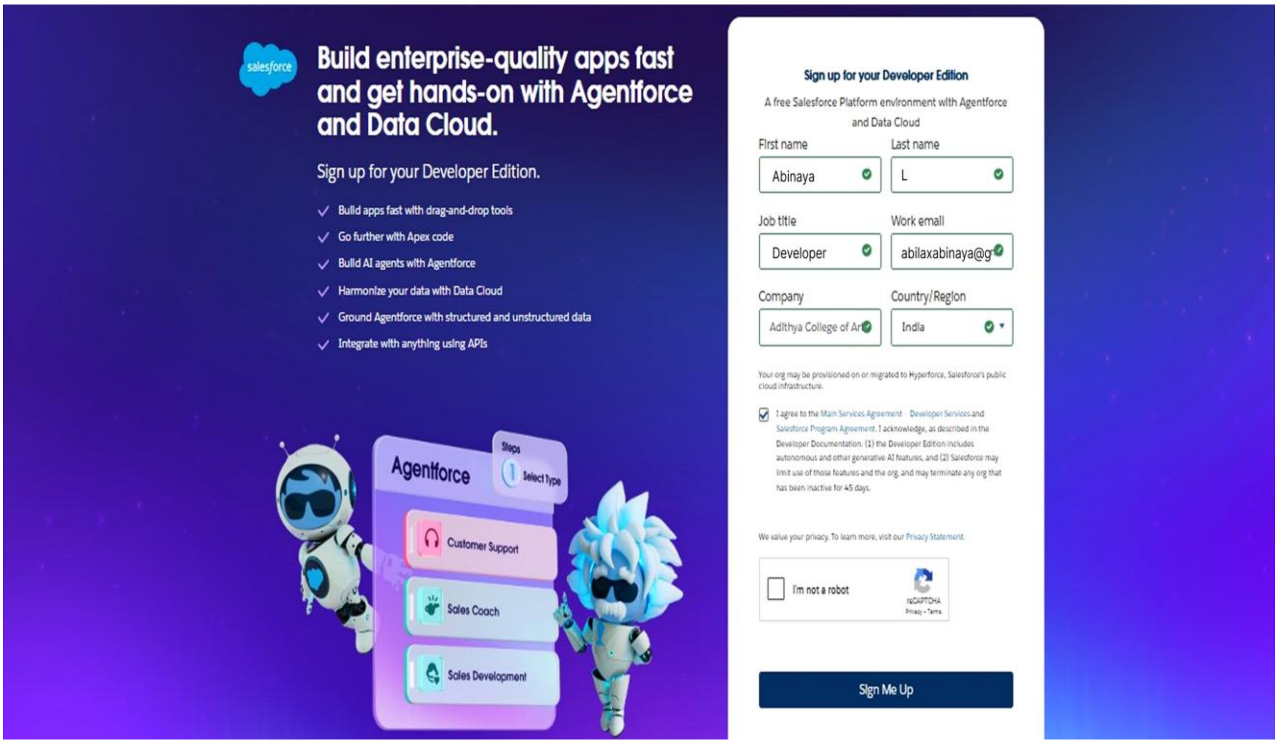
Creating Developer Account:

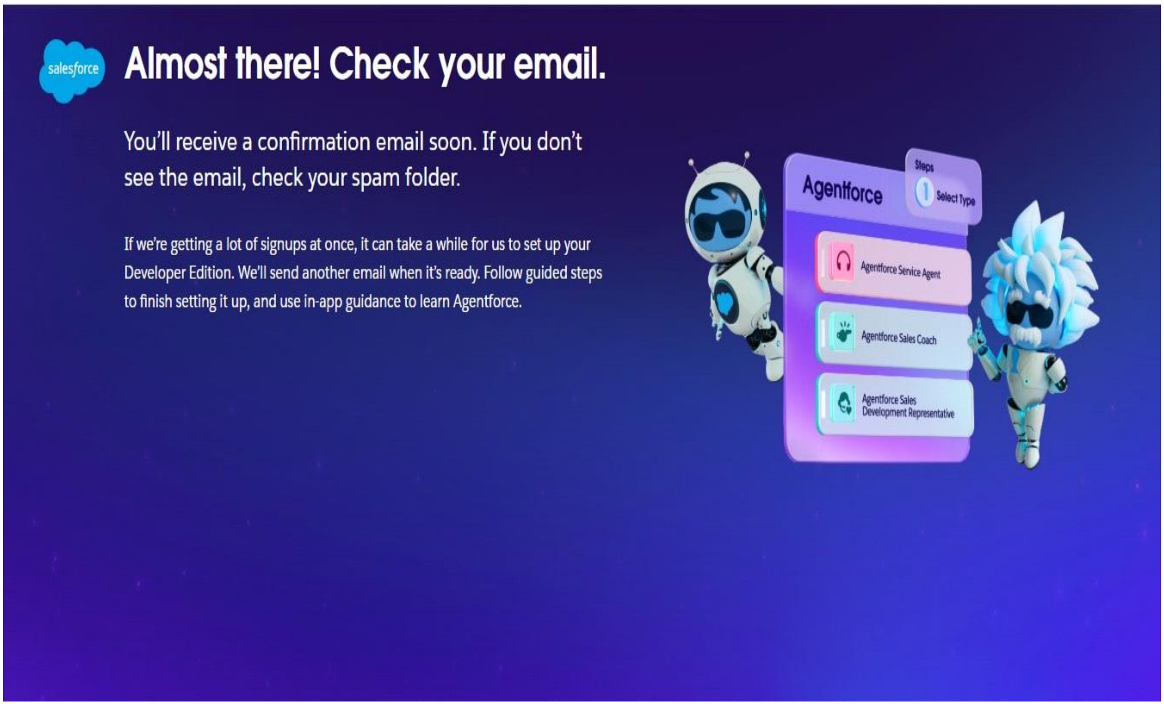
By using this URL - https://developer.salesforce.com/signup

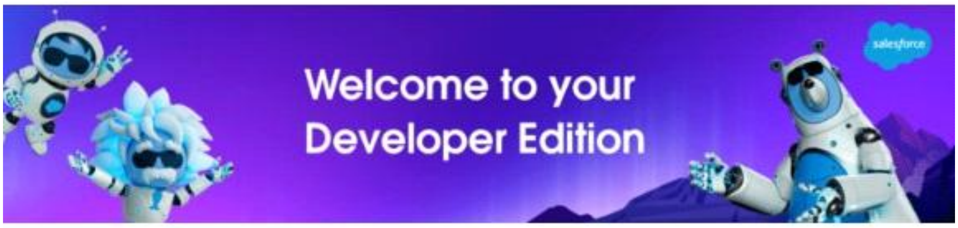
- First name & Last name
- Email
- Role: Developer
- Company: College Name
- County: India
- Postal Code: pin code
- Username: should be a combination of your name and company

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.


salesforce
Build enterprise-quality apps fast and get hands-on with Agentforce and Data Cloud.
Sign up for your Developer Edition.
Build apps fast with drag-and-drop tools
Go further with Apex code
Build AI agents with Agentforce
Harmonize your data with Data Cloud
Ground Agentforce with structured and unstructured data
Integrate with anything using APIs
Agentforce
Steps
1 Select Type
Customer Support
Sales Coach
Sales Development
Sign up for your Developer Edition
A free Salesforce Platform environment with Agentforce and Data Cloud
First name
Abinaya
Last name
L
Job title
Developer
Work email
abilaxabinaya@g
Company
Adithya College of Ar
Country/Region
India
I'm not a robot
reCAPTCHA
Sign Me Up


salesforce
Almost there! Check your email.
You'll receive a confirmation email soon. If you don't see the email, check your spam folder.
If we're getting a lot of signups at once, it can take a while for us to set up your Developer Edition. We'll send another email when it's ready. Follow guided steps to finish setting it up, and use in-app guidance to learn Agentforce.
Agentforce
Steps
1 Select Type
Agentforce Service Agent
Agentforce Sales Coach
Agentforce Sales Development Representative



Hi Abinaya,

Thanks for signing up for a Developer Edition. Now you can start building on Salesforce for free and get hands-on with Agentforce and Data Cloud.

There's just one more step. Use the following link to reset the password for your Developer Edition. This link expires in 24 hours.

Reset Password

To easily log in later, save this URL:
https://orgfarm-2ee618740b-dev-ed.develop.my.salesforce.com

Here's the username for your Developer Edition:
abilaxabinaya344@agentforce.com

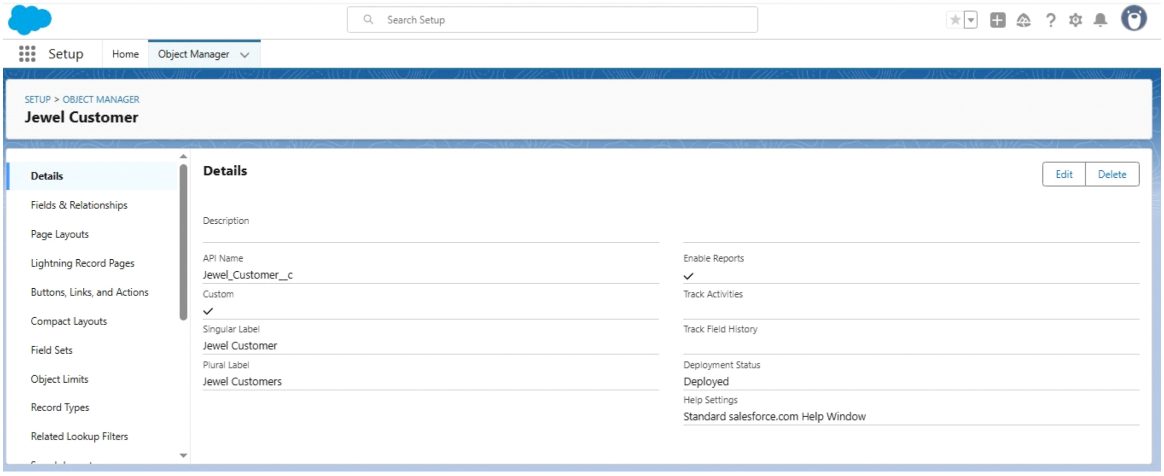
To Create Jewel Customer Object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
2. Enter the label name : Jewel Customer
3. Plural label name : Jewel Customers

- Enter Record Name Label and Format

  Record Name >> Customer name

Data Type >> Text



Create Item Object:

1.From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.

Enter the label name >> Item

Plural label name >> Items

Enter Record Name Label and Format

Record Name >> Item Id

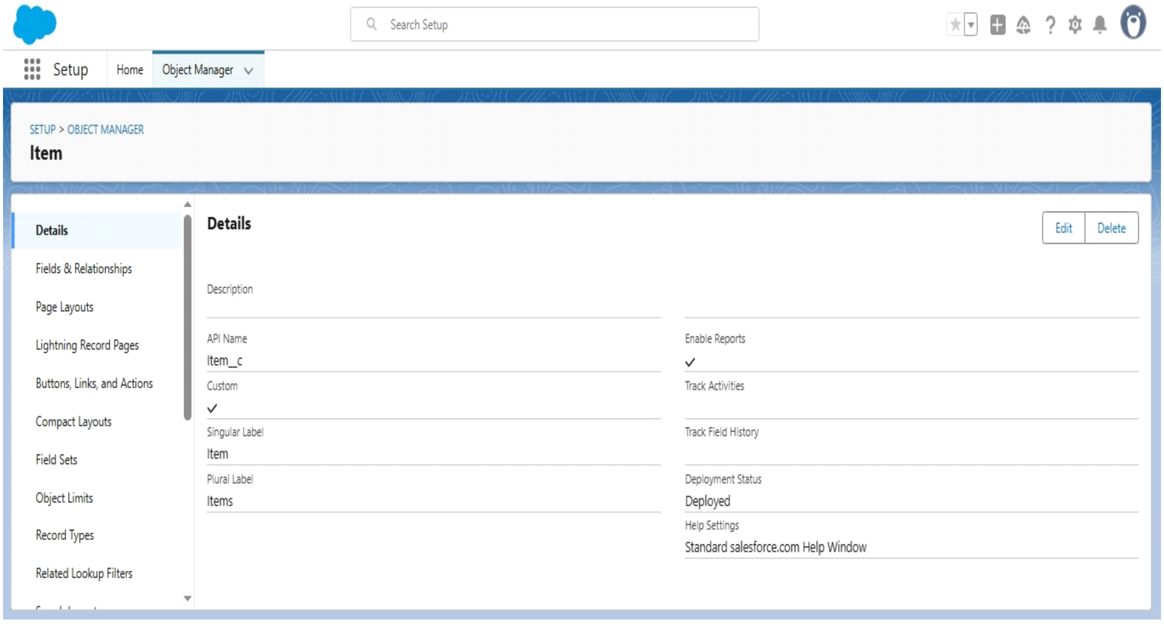
Data Type >> Auto Number

Display Format >> Item-{00}

Starting Number >> 1

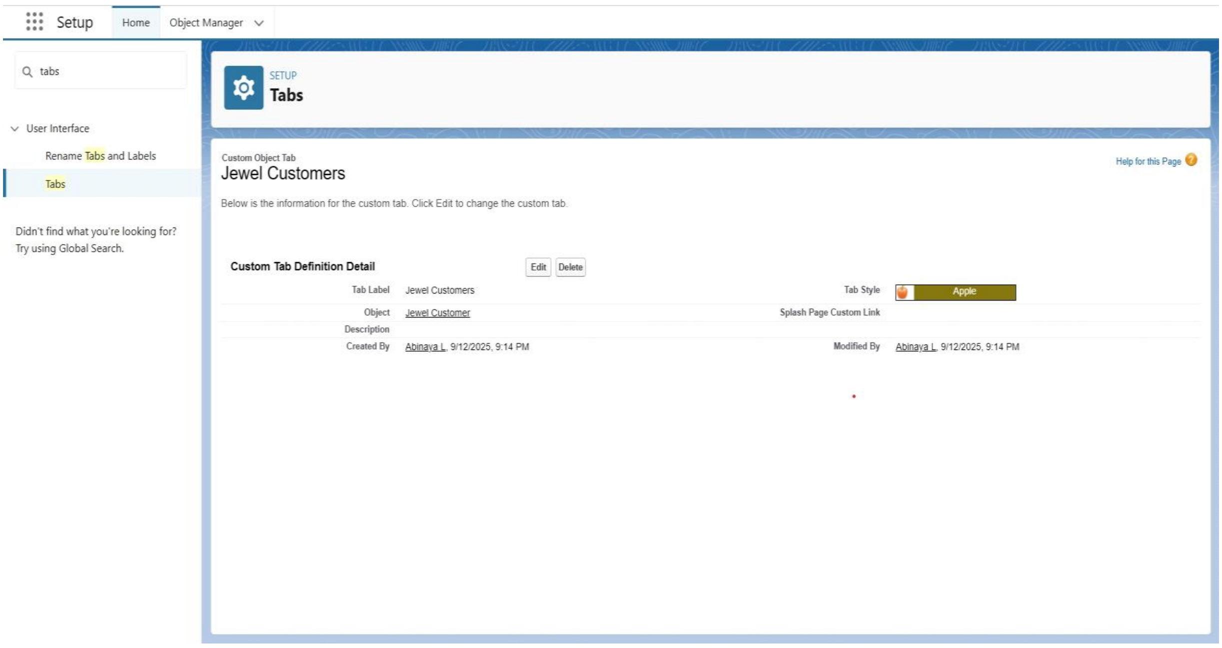
2.Click on Allow reports.

3.Allow search >> Save.



To create a Tab:(Customer)

- Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)
- Select Object(Jewel Customer) >> Select any tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) keep it as default >> Save.

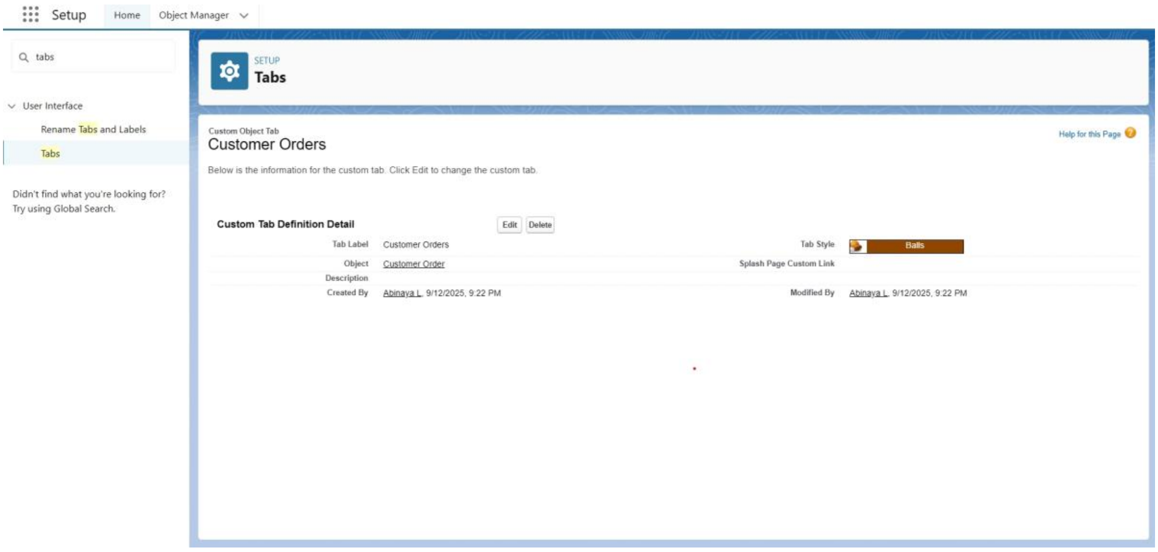


To create a Tab:(Item)

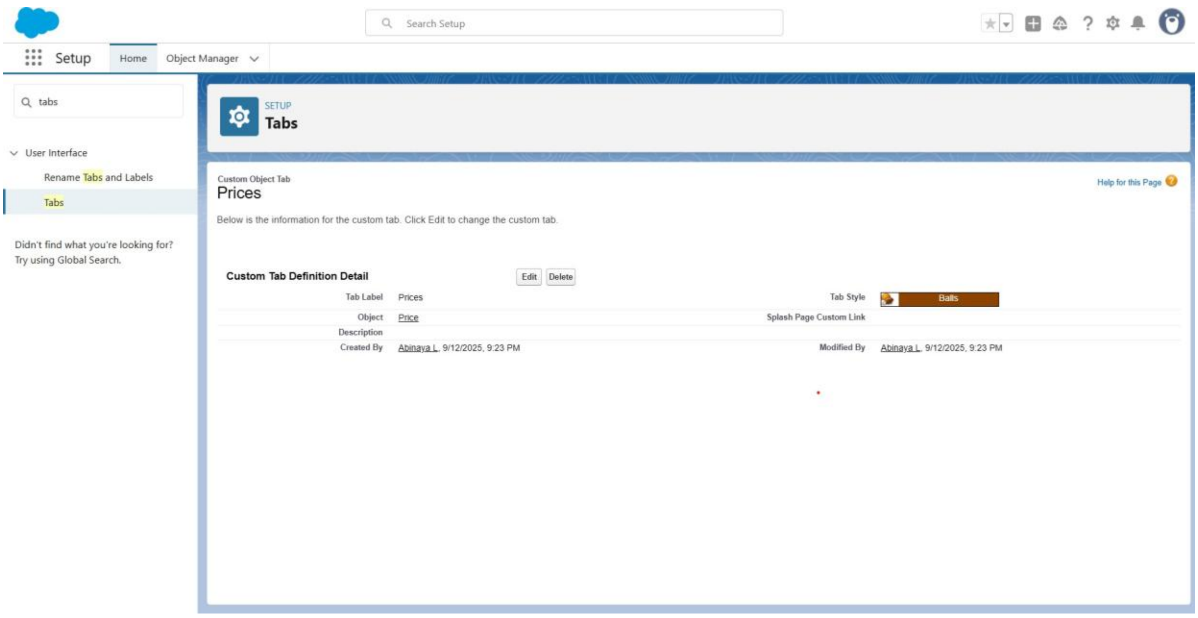
- Go to setup page >> type Tabs in Quick Find bar >> click on tabs
- New (under custom object tab)
- Select Object(Item)
- Select the tab style
- Next (Add to profiles page) keep it as default
- Next (Add to Custom App) keep it as default
- Save

To create tabs for Customer Order, Price, Billing objects.

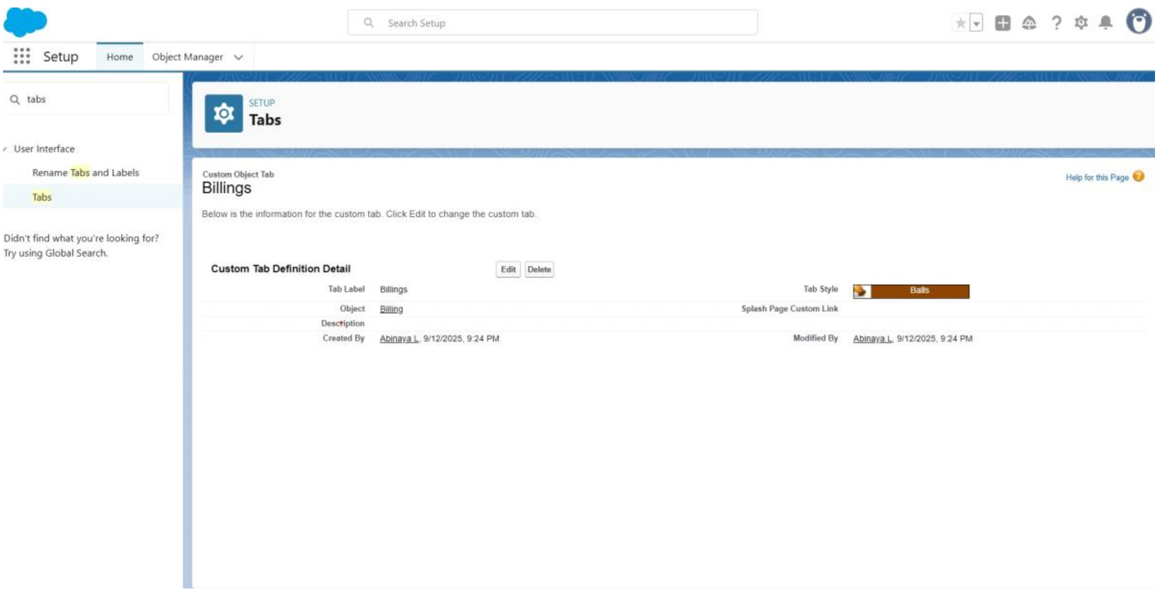
- create customer order



- create price



- create billings object



To create a lightning app page:

1. Go to setup page >> search “app manager” in quick find >> select “app manager”

- click on New lightning App.
- Fill the app name in app details and branding as follow
- App Name : Jewellery Inventory System.
- Developer Name : This will auto populated
- Description : Elevate your look with elegance

- Image : optional (if you want to give any image you can otherwise not mandatory)
- Primary colour hex value : keep this default.

Then click Next >> (App option page)Set Navigation Style as Console Navigation >> Next.

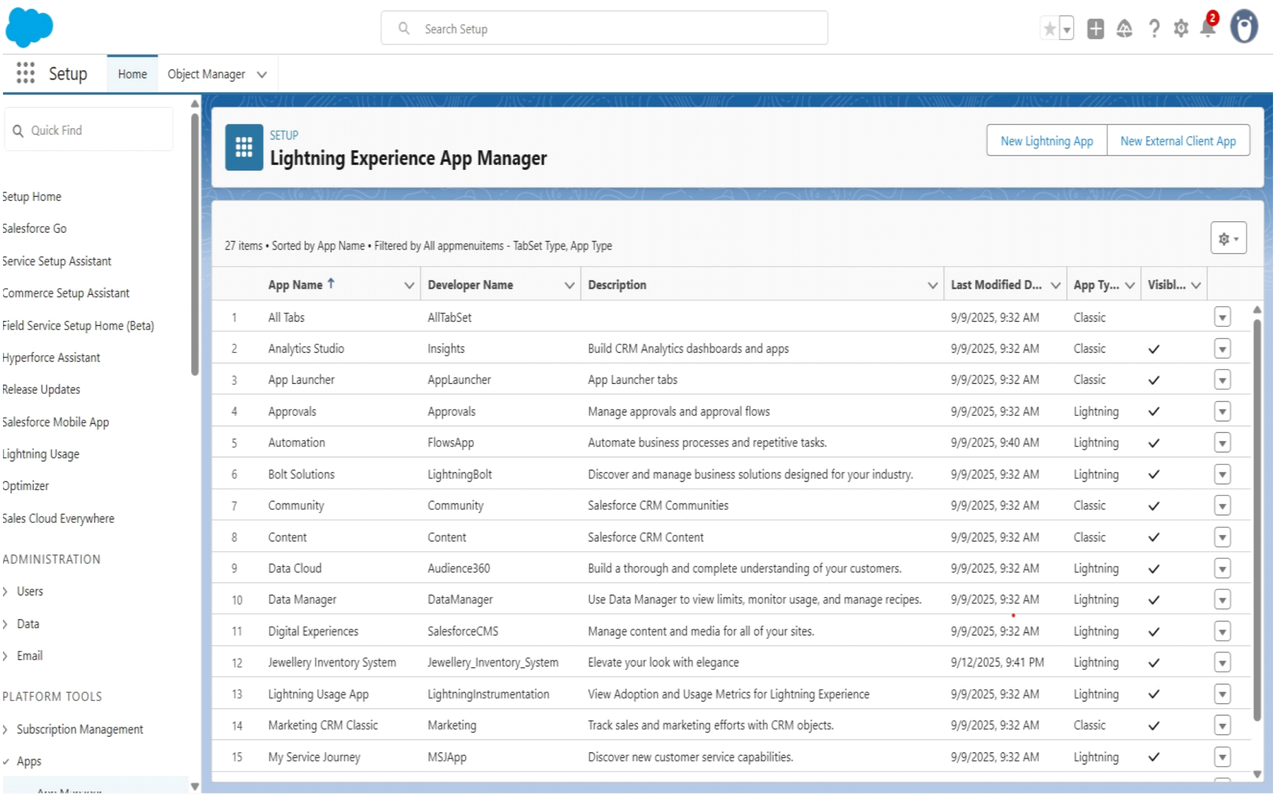
Utility Items) keep it as default >> Next.

To Add Navigation Items:

Search for the item in the (JewelCustomer,Item,CustomerOrder,Price,Billing,Reports, Dashboard) from the search bar and move it using the arrow button ? Next? Next.

To Add User Profiles:

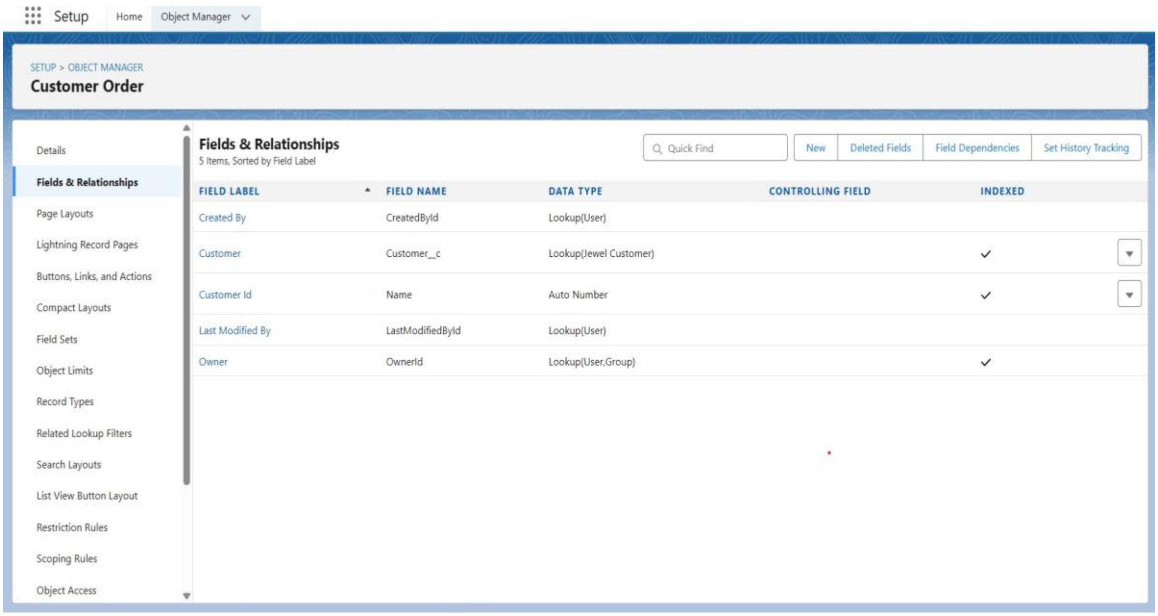
Search profiles (System administrator) in the search bar >> click on the arrow button >> save & finish.



To Creating Lookup Relationship:

- Go to the setup page >> click on object manager >> type object name(Customer Order) in the quick find bar>> click on the object.
- Click on fields & relationship >> click on New.
- Select “Lookup relationship” as data type and click Next.
- Select the related object “ Jewel Customer ”.

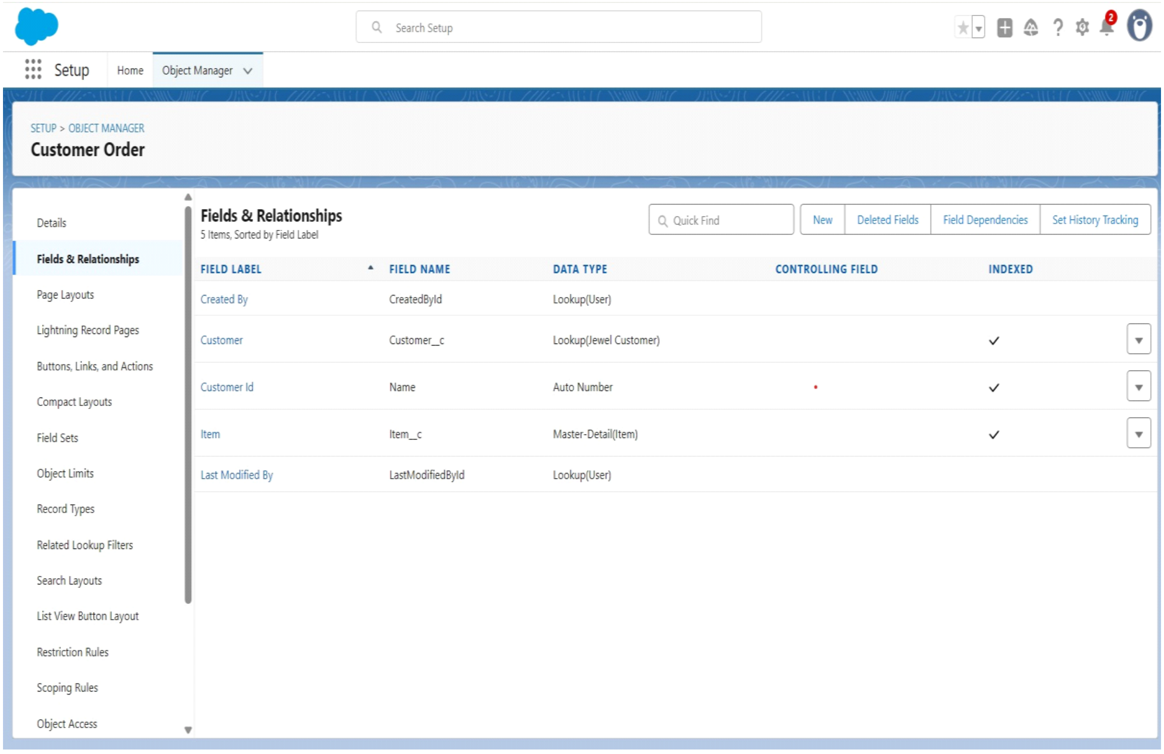
- Give Field Label as “Customer” and click Next.
- Next >> Next >> Save.



Creating a Master-Detail Relationship:

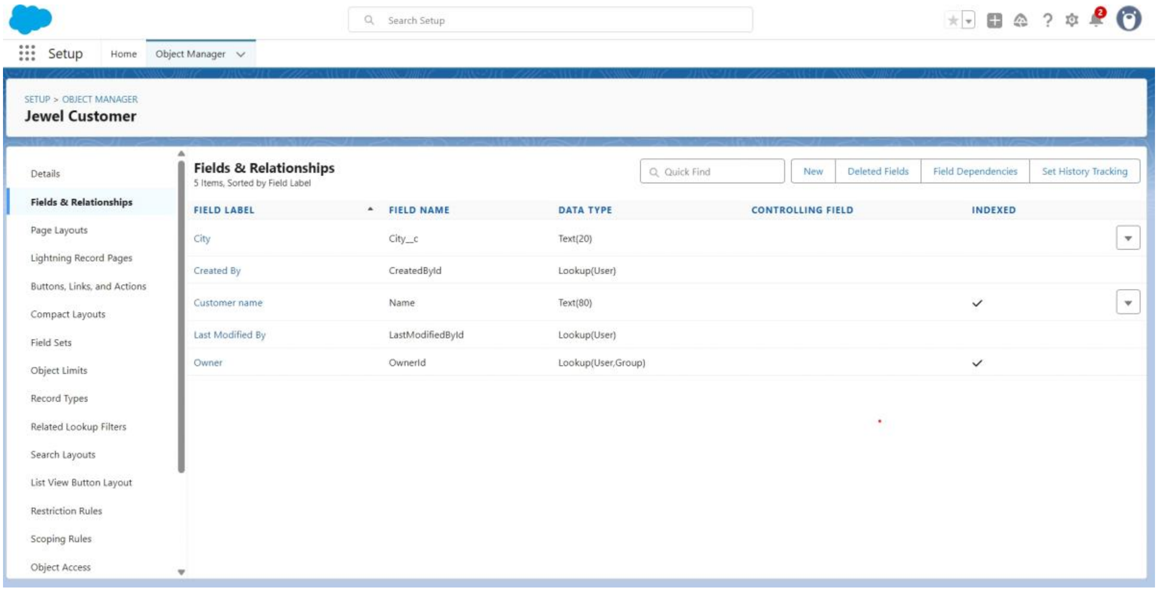
- Go to the setup page >> click on object manager >> type object name(Customer Order) in the quick find bar >> click on the object.

2.Click on fields & relationships >> click on New.
3.Select “Master-Detail relationship” as data type and click Next.
4.Select the related object “ Item”.
5.Give Field Label as “Item” and click Next.
6.Next >> Next >> Save.



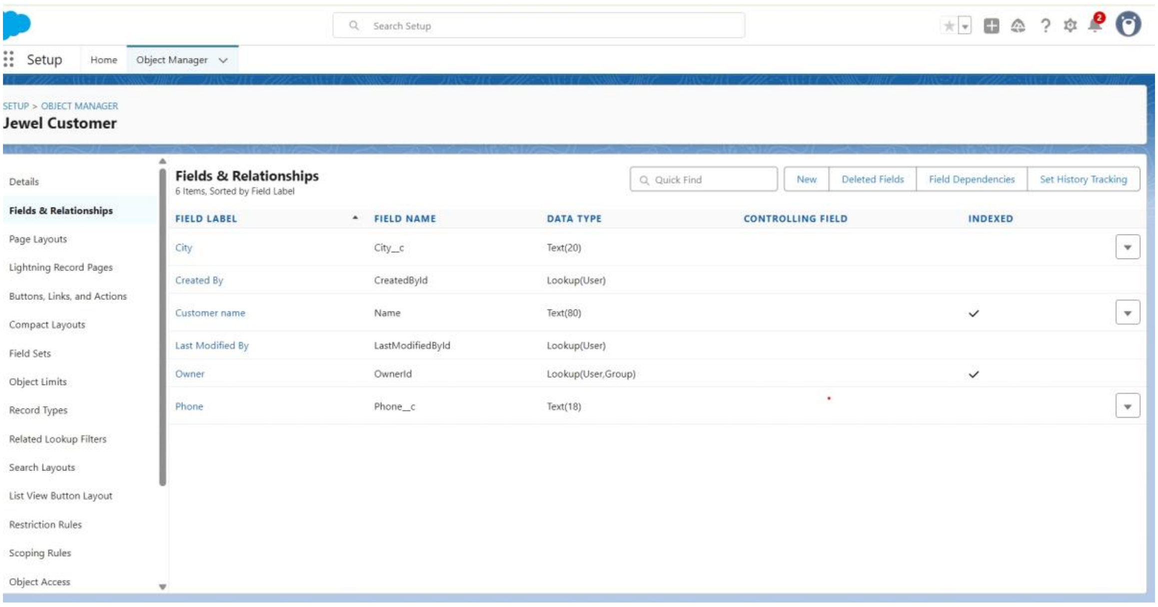
To Creating Text Field in Jewel Customer Object:

- Go to setup >> click on Object Manager >> type object name(Jewel Customer) in quick find bar >> click on the object.
- Now click on "Fields & Relationships" >> New
- Select Data type as "Text".
- Click on Next
- Fill the above as following:
- Field Label: City
- Length : 20
- Field Name : gets auto generated
- Click on Next >> Next >> Save and new.



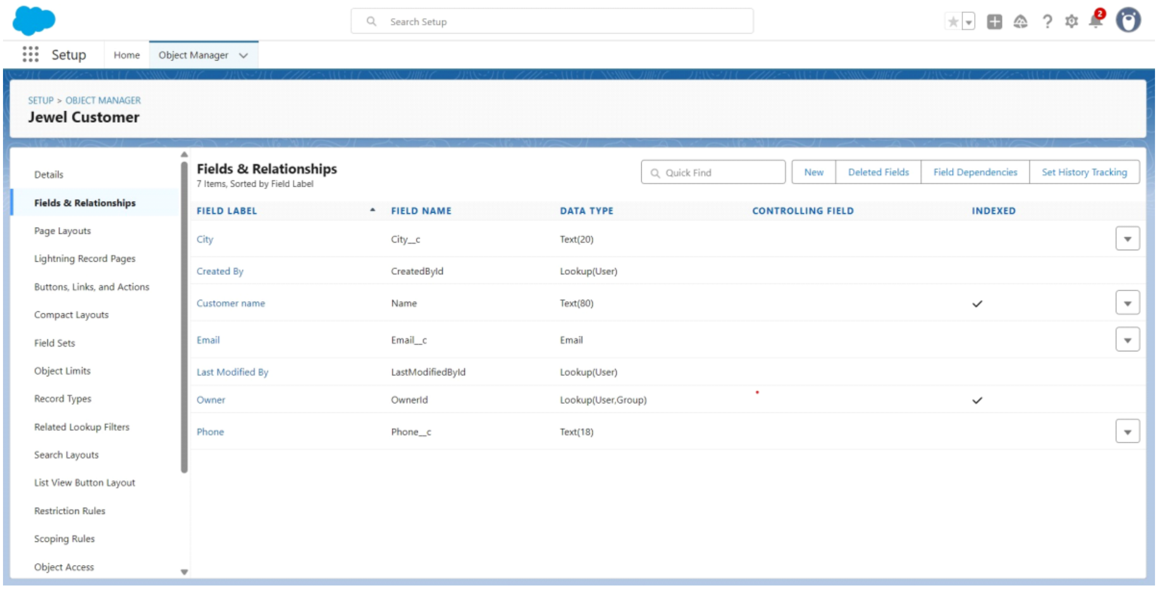
To creating the Phone field in object Jewel Customer:

- Go to setup >> click on Object Manager >> type object name(Jewel Customer) in quick find bar >> click on the object.
- Now click on “Fields & Relationships” >> New
- Select Data type as “Phone” and click Next.
- Given the Field Label as “ Phone”.
- Field Name will be auto populated, and click on Next >> Next >> Save & new.



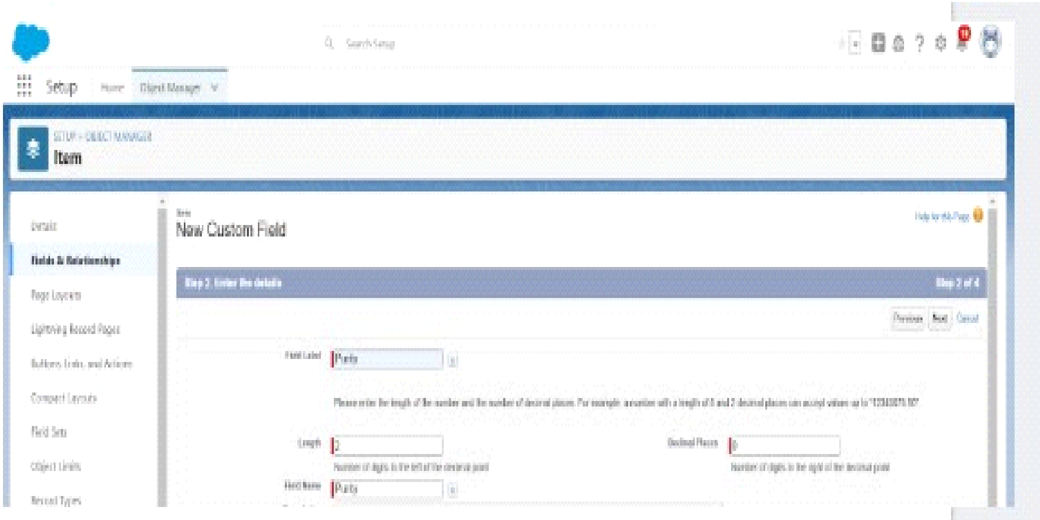
To Creating the Email field in object Jewel Customer:

- Go to setup >> click on Object Manager >> type object name(Jewel Customer) in quick find bar >> click on the object.
- Now click on "Fields & Relationships" >> New
- Select Data type as "Email" and click Next.
- Given the Field Label as " Email".
- Field Name will be auto populated, and click on Next >> Next >> Save.



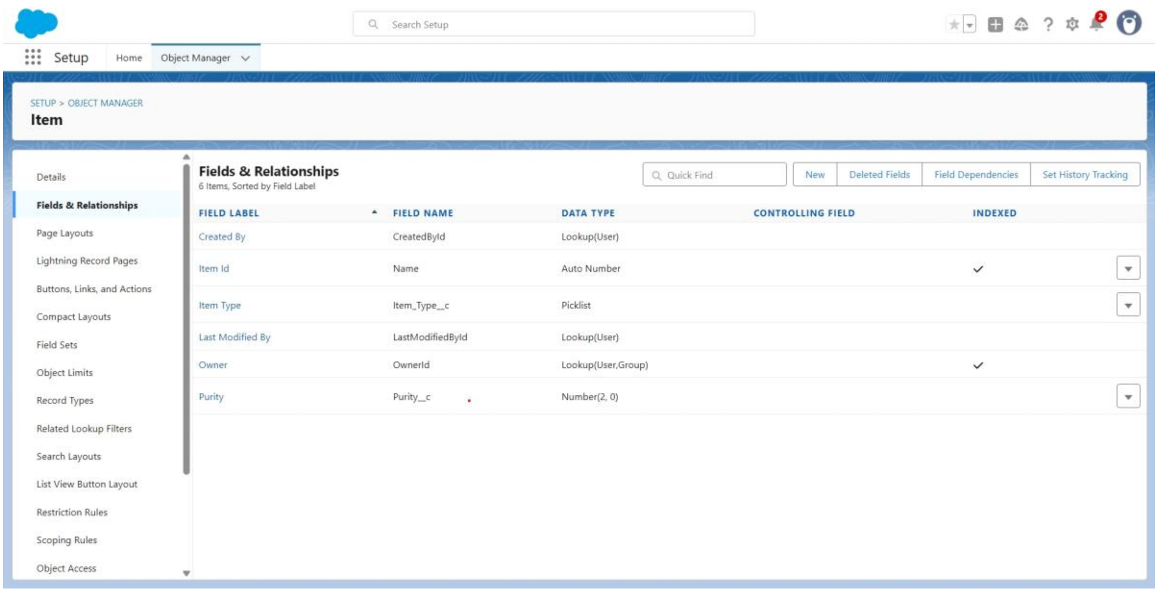
To creating the number field in Item object:

- Go to setup >> click on Object Manager >> type object name(Item) in quick find bar? click on the object.
- Now click on "Fields & Relationships" >> New
- Select Data type as "Number" and click Next.
- Given the Field Label as " Purity" and length as " 2 ".
- Field Name will be auto populated, and click on Next >> Next >> Save.



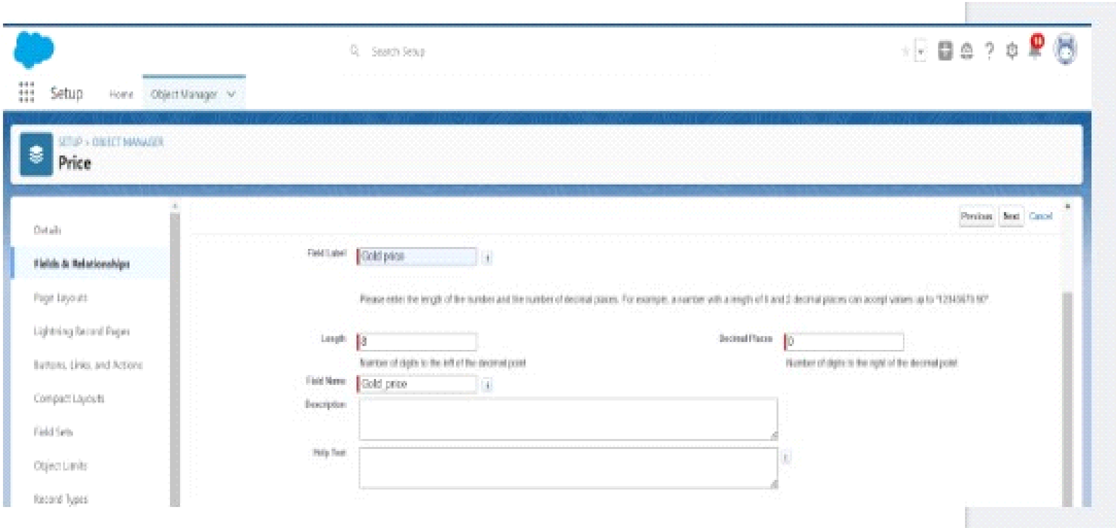
To Creating Picklist Field in Item Object :

- Go to setup >> click on Object Manager >> type object name(Item) in quick find bar>> click on the object.
- Now click on “Fields & Relationships” >> New.
- Select Data type as “Picklist” and click Next.
- Enter Field Label as “Item Type”.
- In values select “Enter values(Gold,Silver), with each value separated by a new line" and enter values as shown below.



To Create Currency Field in Price Object:

- Go to setup >> click on Object Manager >> type object name(Price) in quick find bar >> click on the object.
- Now click on “Fields & Relationships” >> New.
- Select Data type as “Currency” and click Next.
- Enter Field Label as “Gold Price” and length as “ 8”and decimal 0.Field name will be auto generated.
- Click Next >> Next >> Next >> Save .

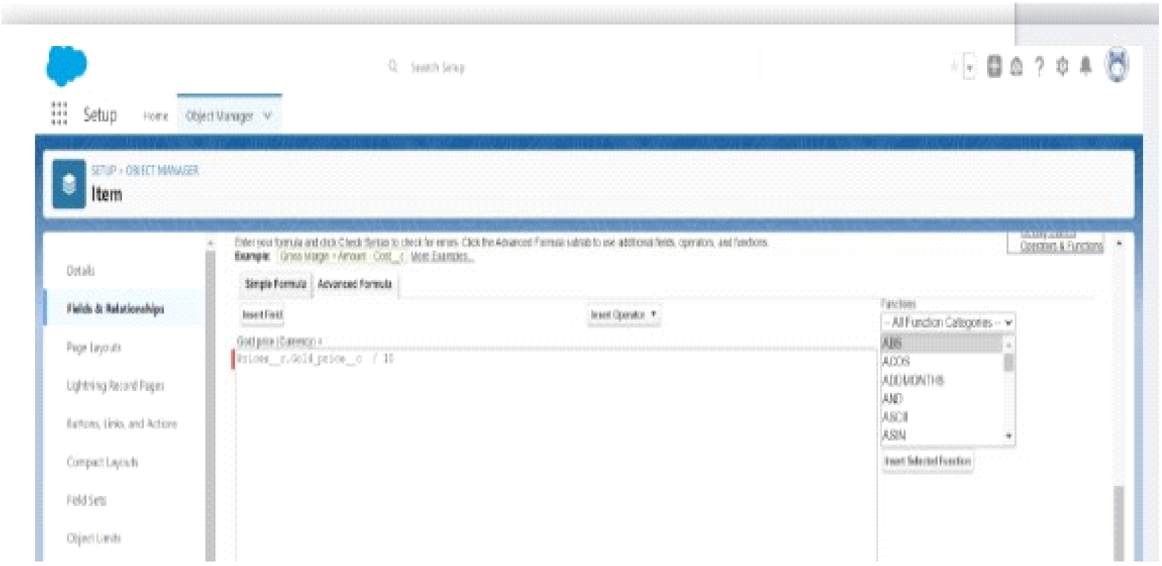


To Creating Formula Field(Cross Object) in Item Object:

- Go to setup >> click on Object Manager >> type object name(Item) in quick find bar? click on the object.
- Now click on “Fields & Relationships” >> New.
- Select Data type as “Formula” and click Next.
- Give Field Label and Field Name as “Gold Price” and select formula return type as “Currency” and click next.
- Under Advanced Formula write down the formula :

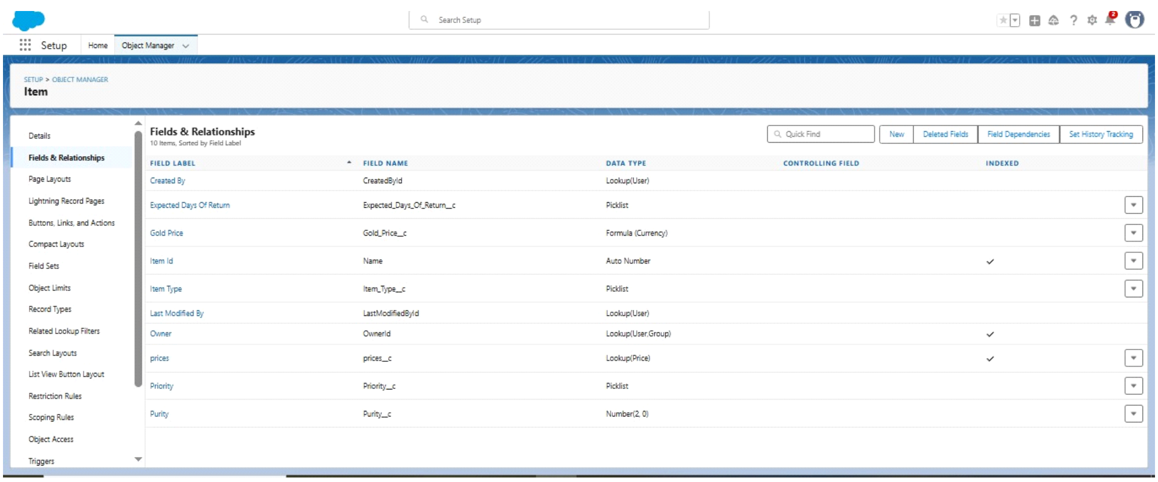
  Prices__r.Gold_price__c / 10.

- click “Check Syntax” and Next >> Next >> Save & New.



To Creating the Field Dependencies:

- Go to setup >> click on Object Manager >> type object name(Item) in quick find bar >> click on the object.
- Click on Fields & Relationships and click on the Priority field.
- Search for Field Dependencies and click on New.
- Select Controlling Field as “Priority” and Depending field as “Expected Days of Return” >> Continue.
- Select the “Expected Days of Return” values of related Priority values and Click on Include Values >> Save.

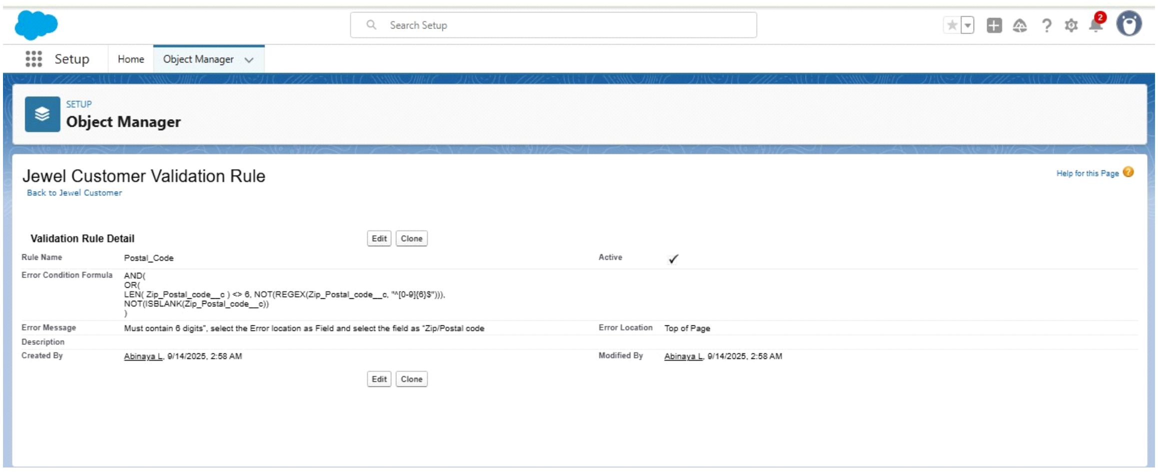


To Creating the validation rule:

- Go to setup >> click on Object Manager >> type object name(Jewel Customer) in quick find bar>> click on the object.
- Click on the validation rule >> click New.
- Enter the Rule name as “Postal Code “.
- Insert the Error Condition Formula as : -

```
AND(
  OR(
    LEN( Zip_Postal_code__c ) <> 6, NOT(REGEX(Zip_Postal_code__c, "^[0-9]{6}$"))),
       NOT(ISBLANK(Zip_Postal_code__c))
  )
)
```

- Enter the Error Message as “Must contain 6 digits”, select the Error location as Field and select the field as “Zip/Postal code”, and click Save.

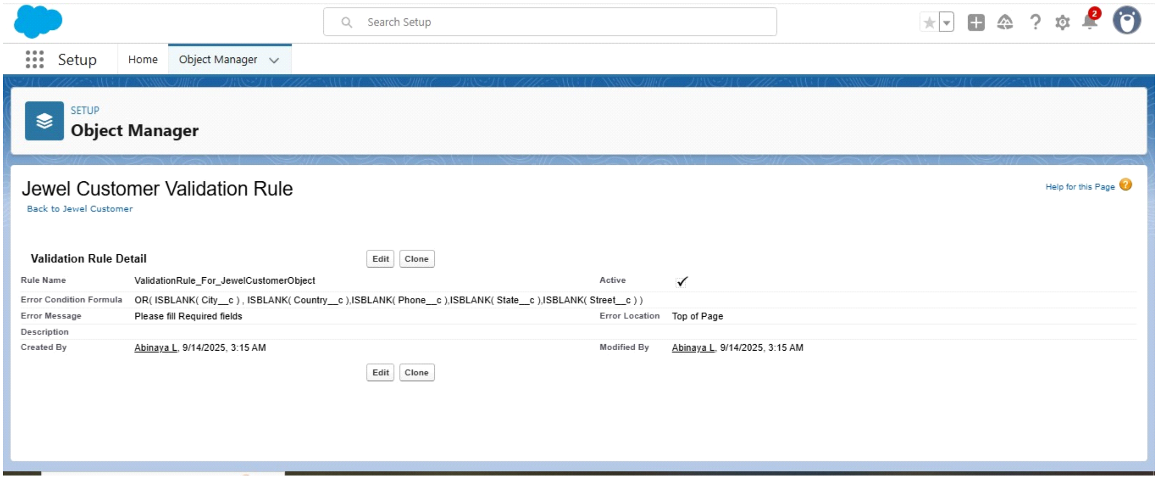


To Create One more Validation rule for Jewel Customer object:

- Enter Rule name as “ValidationRule For JewelCustomerObject “.
- Insert the Error Condition Formula as : -

OR(ISBLANK(City__c) , ISBLANK(Country__c),ISBLANK(Phone__c),ISBLANK(State__c),ISBLANK(Street__c))

- Enter the Error Message as “Please fill Required fields”, select the Error location as Top of Page and click Save.

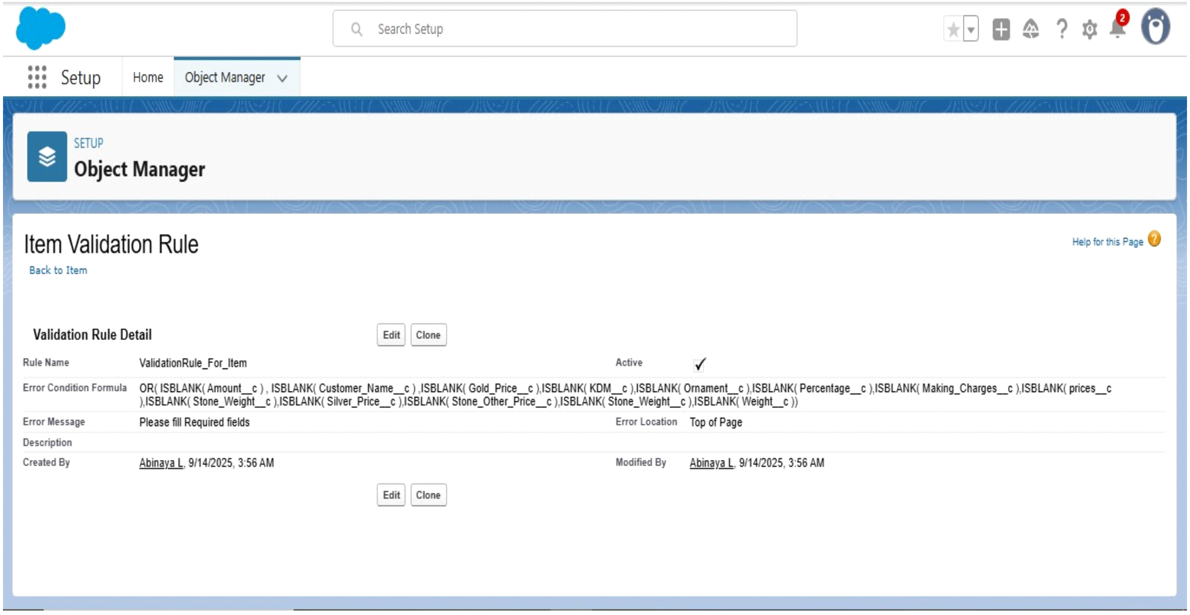


To Create Validation rule for Item object:

- Enter Rule name as “ValidationRule For Item“.
- Insert the Error Condition Formula as : -

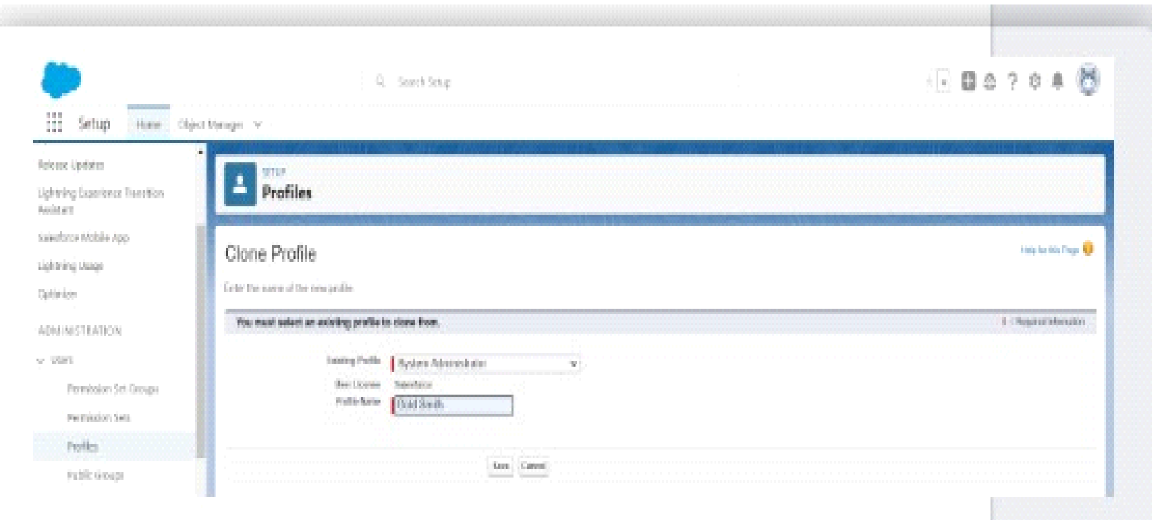
OR(ISBLANK(Amount__c) , ISBLANK(Customer_Name__c) ,ISBLANK(Gold_price__c),ISBLANK(KDM__c),ISBLANK(Ornament__c),ISBLANK(Percentage__c),ISBLANK(Making_Charges__c),ISBLANK(Prices__c),ISBLANK(Stone_weight__c),ISBLANK(Silver_price__c),ISBLANK(Stone_other_price__c),ISBLANK(Stone_weight__c),ISBLANK(Weight__c))

- Enter the Error Message as “Please fill Required fields”, select the Error location as Top of Page and click Save



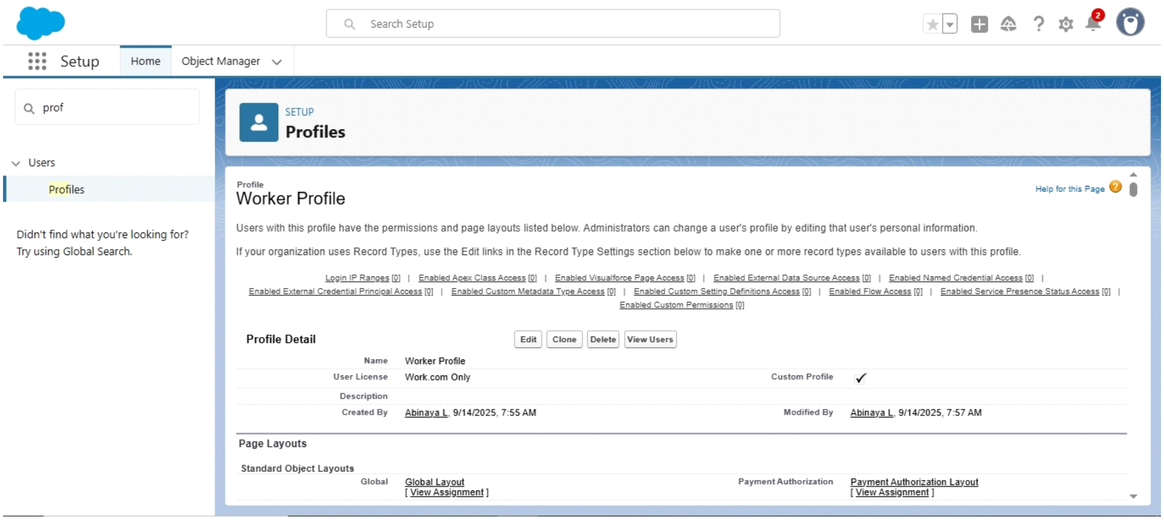
To Create Gold Smith Profile:

- Go to setup >> type profiles in quick find box >>click on profiles ? clone the desired profile (System Administrator) >> enter profile name (Gold Smith) >> Save.
- While still on the profile page, then click Edit.
- Scroll down to Custom Object Permissions and Give access permissions for Jewel Customer,Item,Customer Order,Prices,Billings
- Scroll down and Click on Save.



To Create Worker Profile:

- Go to setup >> type profiles in quick find box >> click on profiles >> clone the desired profile (Salesforce Platform User) >> enter profile name () >> Save.Click on the validation rule >> click New.
- While still on the profile page, then click Edit.
- Scroll down to Custom Object Permissions and Give access permissions for Items,Price and Customer Order objects.
- Scroll down and Click on Save.

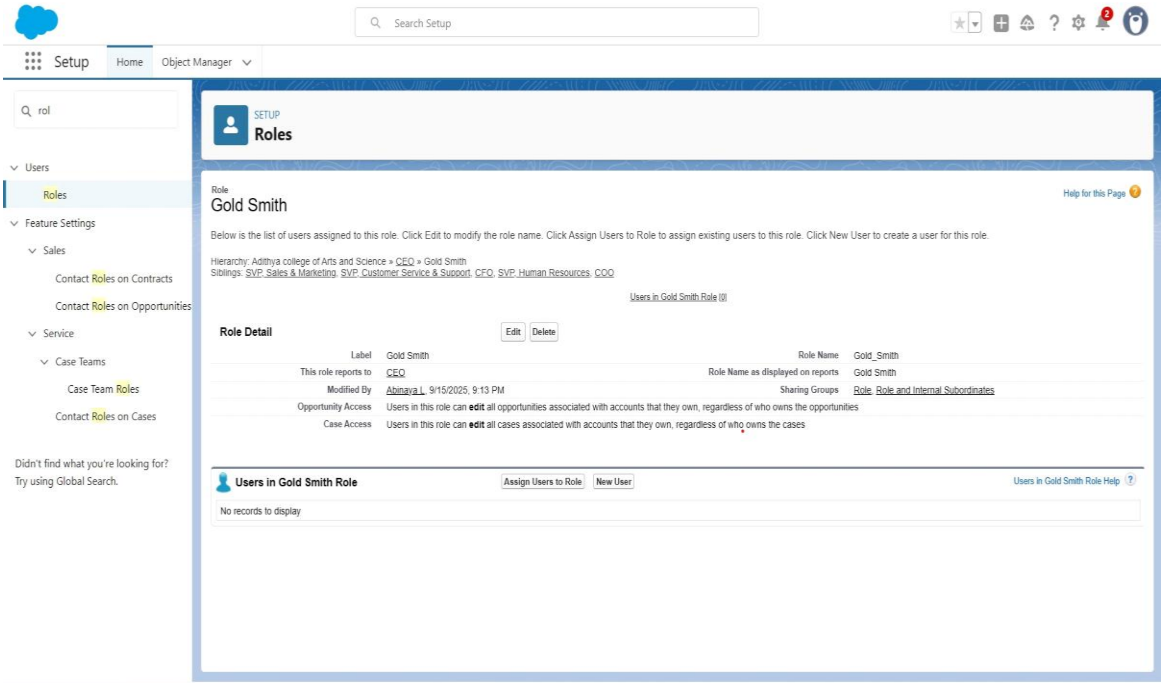


To Creating Gold Smith Role:

1.From setup ,Go to quick find >> Search for Roles >> click on set up roles.

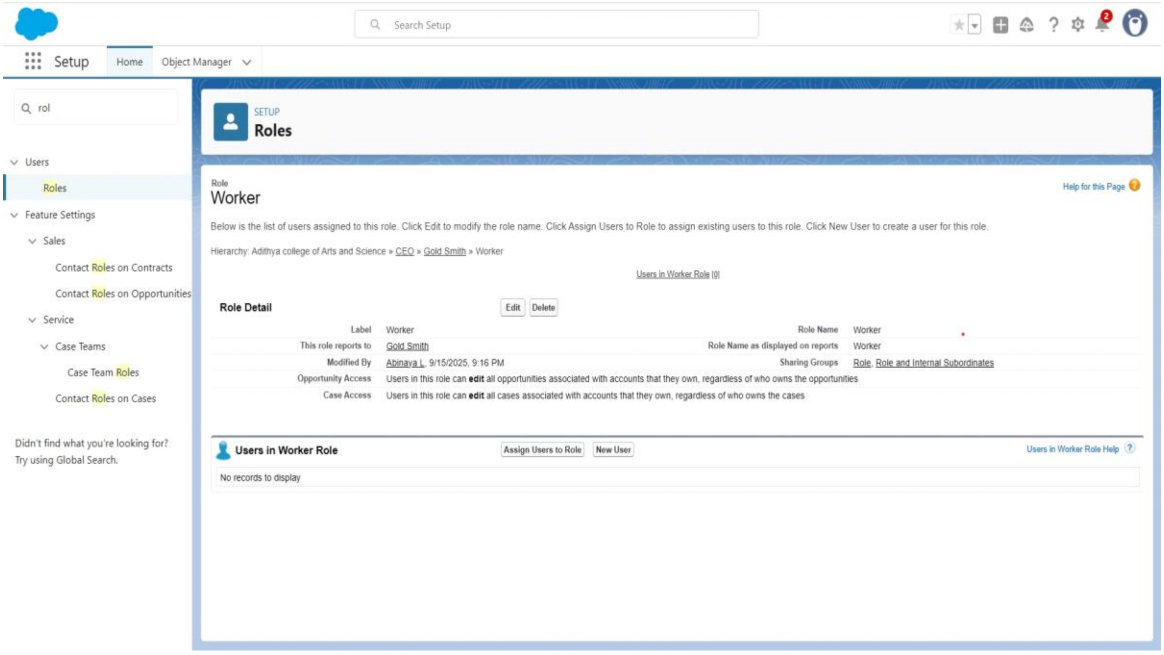
2.Click on Expand All and click on add role under whom this role works.

3.Give Label as “Gold Smith” and Role name gets auto populated. Check to whom this role (Gold Smith) reports. Then click on Save.



To Create another role:

1. From setup ,Go to quick find >> Search for Roles >> click on set up roles
2. Click on Expand All and click on add role under whom this role works.
3. Give Label as “Gold Smith” and Role name gets auto populated. Check to whom this role (Gold Smith) reports. Then click on Save.



To Create User:

1. Go to setup >> type users in quick find box >> select users >> click New user.
2. Fill in the fields

   First Name : Niklaus

   Last Name: Mikaelson

   Alias: Give a Alias Name

   Email id: Give your Personal Email id

   Username: Username should be in this form: text@text.text

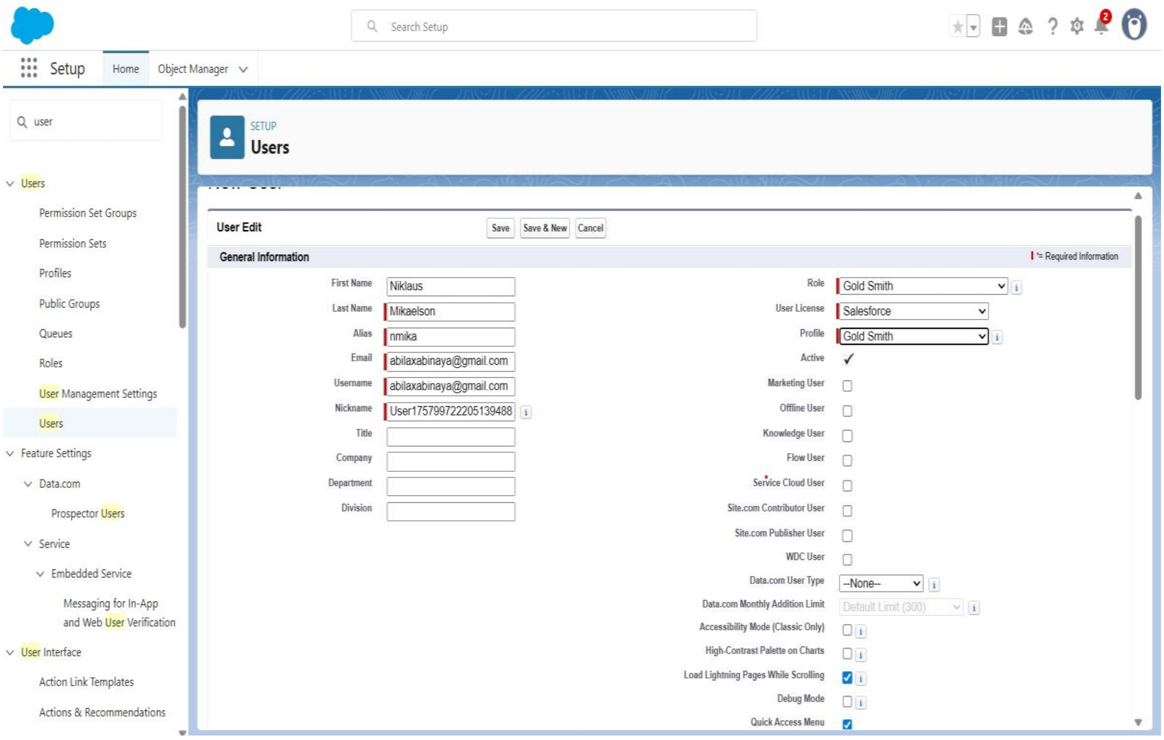
   Nick Name: Give a Nickname

   Role: Gold Smith

   User licence: Salesforce

   Profiles: Gold Smith

3.Save



To Create another user:

1.Go to setup >> type users in quick find box >> select users >> click New user.

2.Fill in the fields :

First Name : Kol

Last Name : Mikaelson

Alias : Give a Alias Name

Email id : Give your Personal Email id

Username : Username should be in this form: text@text.text

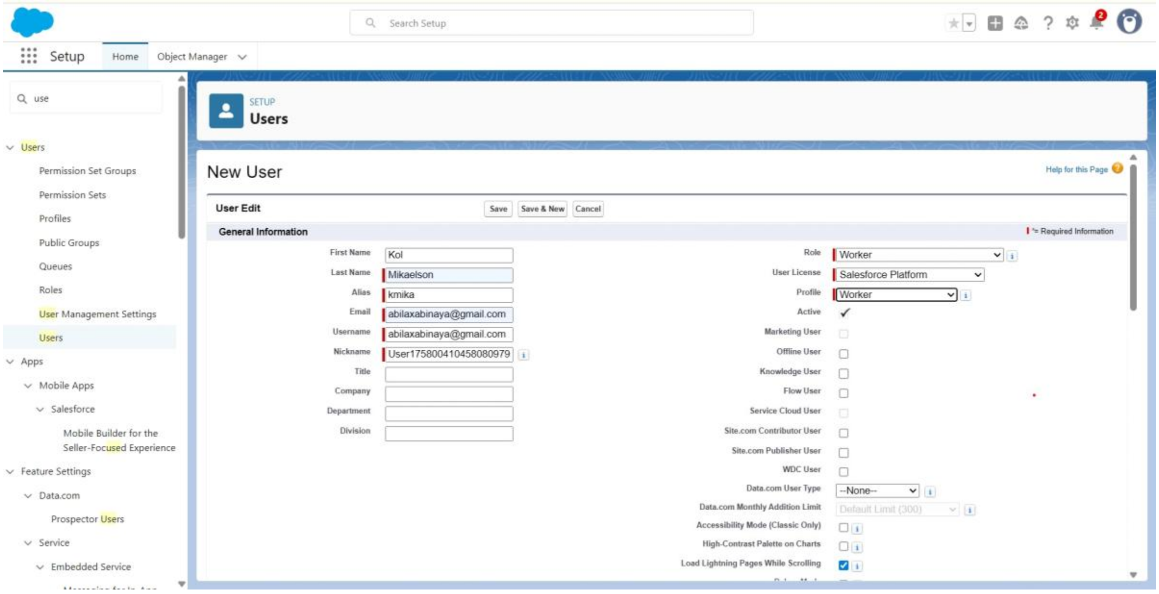
Nick Name : Give a Nickname

Role : Worker

User licence : Salesforce Platform

Profiles : Worker

3.Save.



To Create another user:

1.Go to setup >> type users in quick find box >> select users >> click New user.

2.Fill in the fields :

First Name : Kol

Last Name : Mikaelson

Alias : Give a Alias Name

Email id : Give your Personal Email id

Username : Username should be in this form: text@text.text

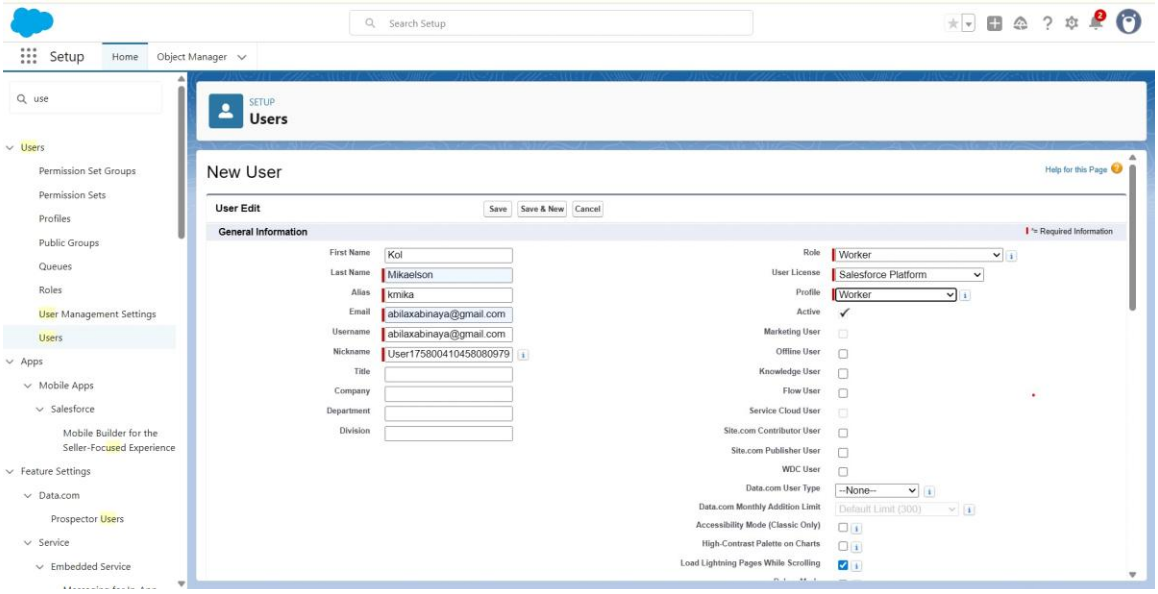
Nick Name : Give a Nickname

Role : Worker

User licence : Salesforce Platform

Profiles : Worker

3.Save.



To Create a Gold Page layout:

1.Go to Setup >> Click on Object Manager >> Search for the object (Item) >> From drop down click on Edit.

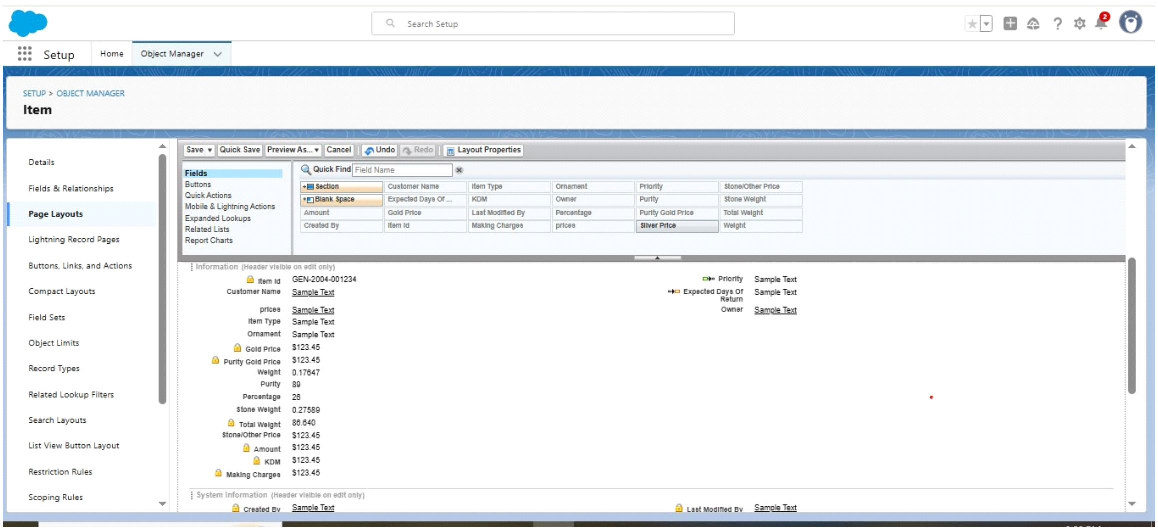
2.Click on Page layout >> Click on New.

3.Give Page layout Name as “Page Layout for Gold” and click on Save and New.

4.Arrange the field as shown in the Information Section ,remove fields which are related to Silver and click Ok.

5.Click Save.

6. Make sure your page layout looks like the picture above.



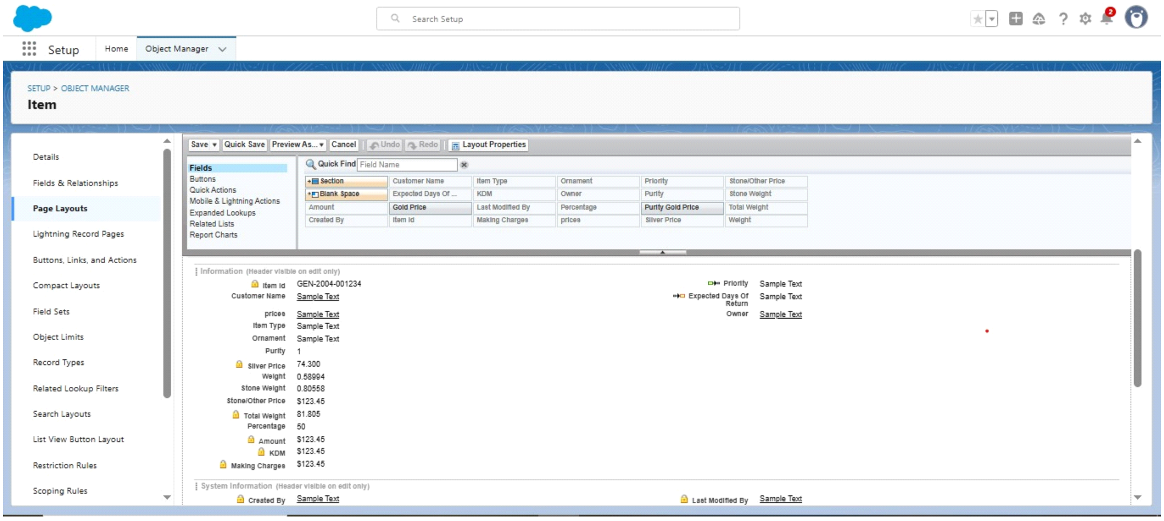
To Create a Silver Page layout:

1.Go to Setup >> Click on Object Manager >> Search for the object (Item) >> From drop down click on Edit.

2.Click on Page layout >> Click on New.

3.Give Page layout Name as “Page Layout for Silver” and click on Save.

4.Arrange the field as shown in the Information Section ,remove fields which are related to Gold and click Ok.



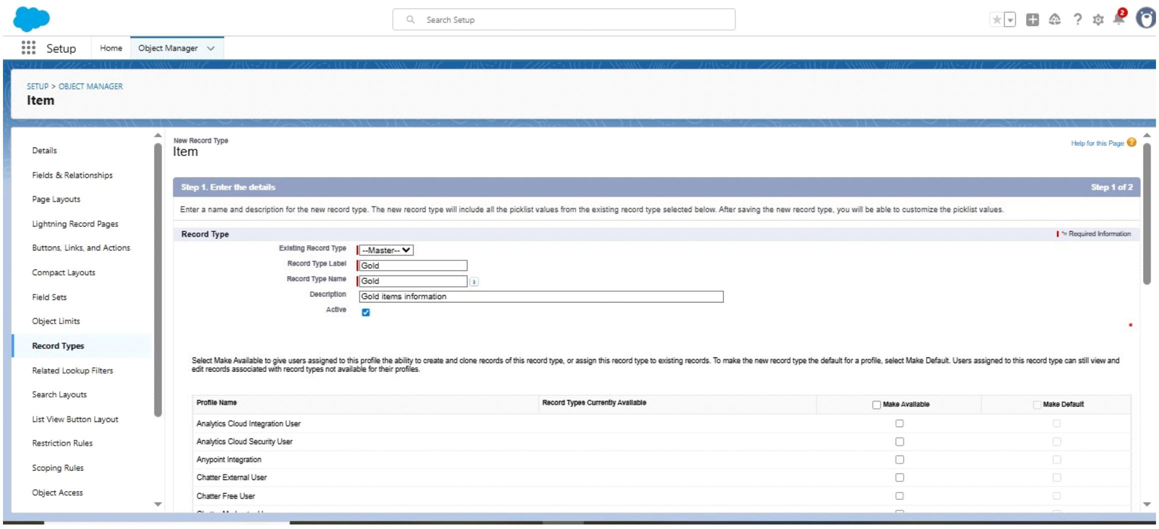
To create a Record Type:

1.Go to setup >> click on Object Manager >> type object name(Item) in quick find bar? click on the object.

2.Click on the Record Types >> click New.

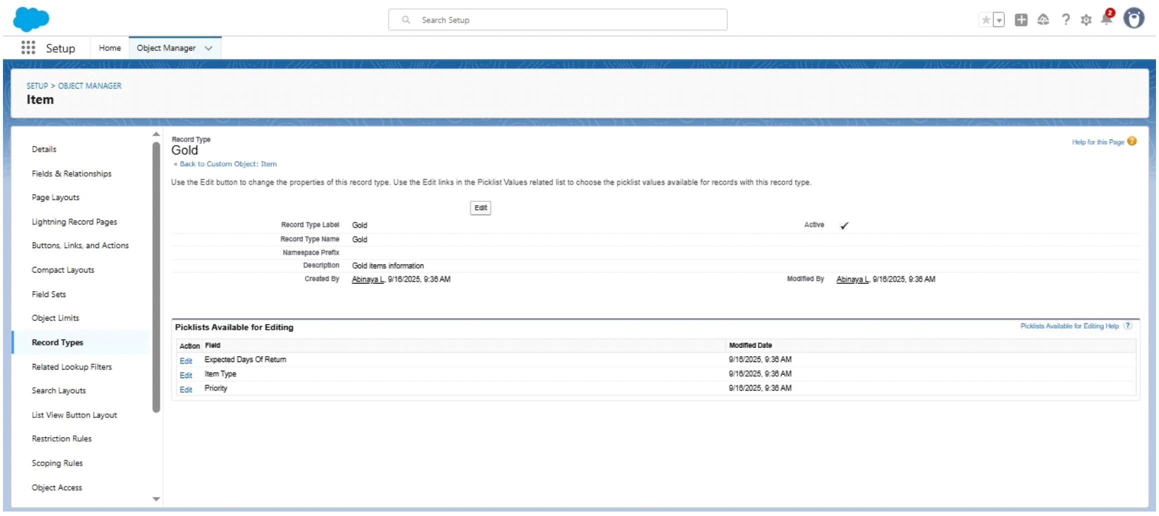
3.Select Existing Record as “Master”,Record type Label as “Gold”,Description as “Gold items information”.

4.Uncheck for “Make Available”.



5.Scroll down and check for the Gold Smith,Worker JW & System Administrator profile and click on Next.

6.Select “Apply a different layout for each profile”, and change page layout to “Page Layout for Gold“for Gold Smith,Worker and System Administrator ? save & new.



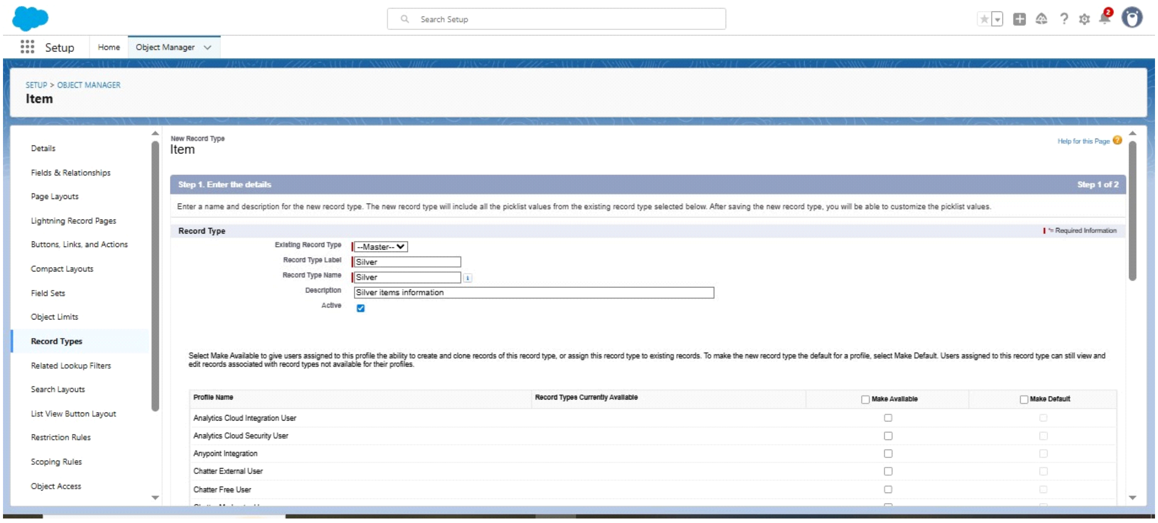
To create Create another Record Type:

1.Go to setup >> click on Object Manager >> type object name(Item) in quick find bar? click on the object.

2.Click on the Record Types >> click New.

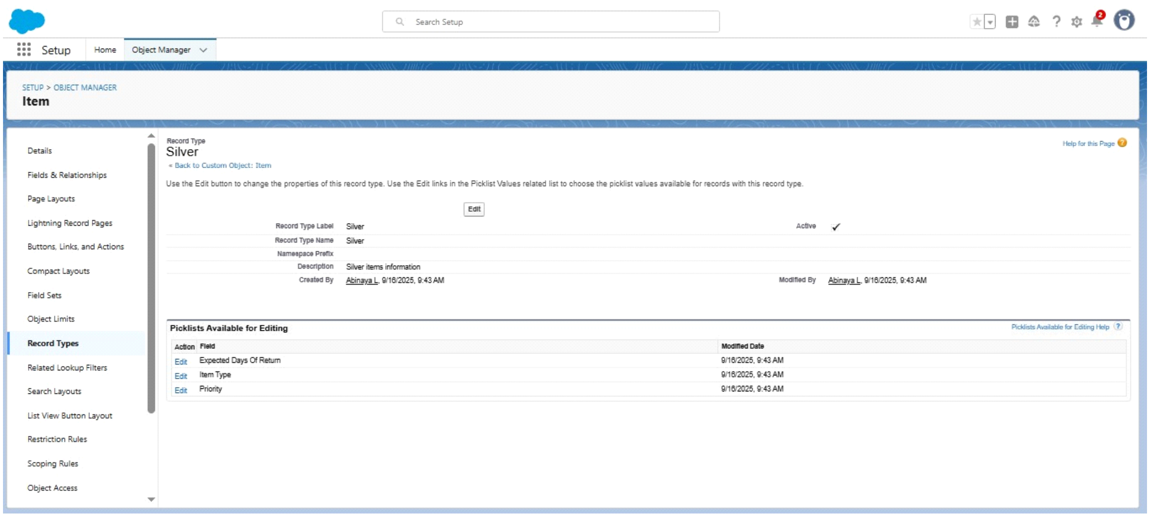
3.Select Existing Record as “Master”,Record type Label as “Silver”,Description as “Silver items information”.

4.Uncheck for “Make Available”.



5.Scroll down and check for the Gold Smith,Worker JW & System Administrator profile and click on Next.

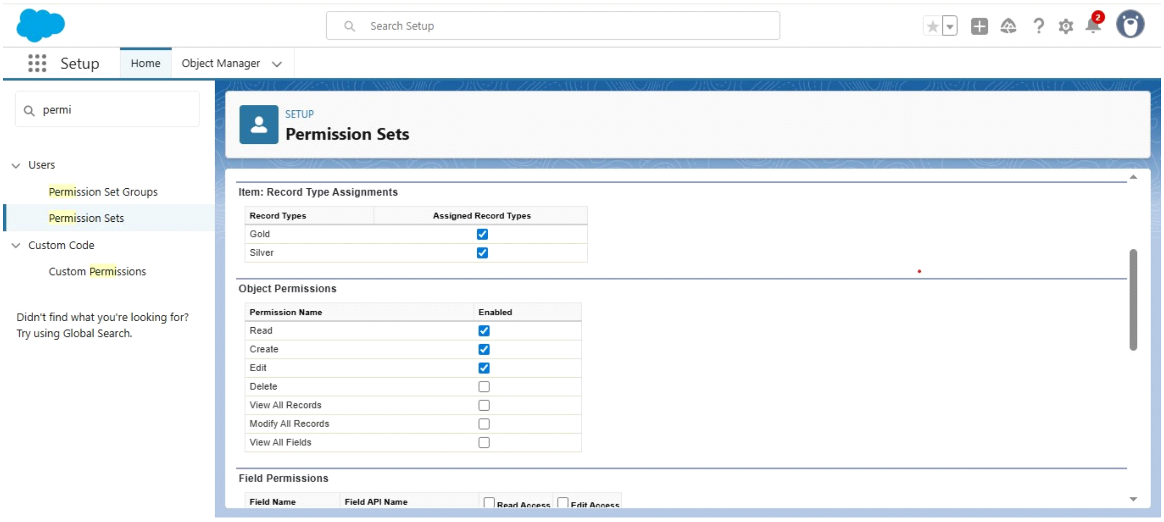
6.Select “Apply a different layout for each profile”, and change page layout to “Page Layout for silver“ for Gold Smith,Worker and System Administrator ? save & new.

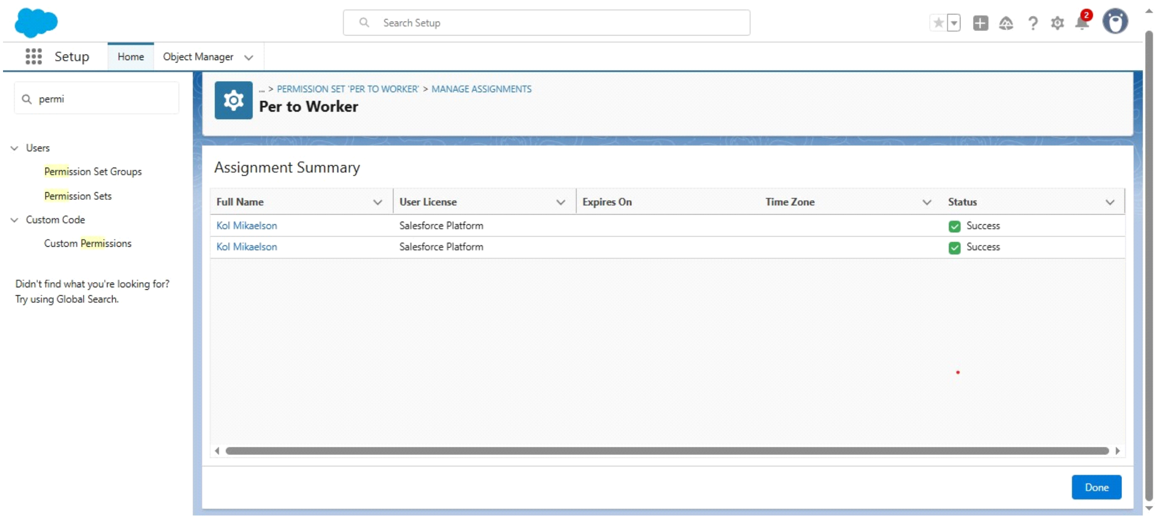


To Creating permission set:

1. Go to setup >> type “permission sets” in quick search >> select permission sets >> New.
2. Enter the label name as “Per to Worker”, API will be auto populated ? save.
3. Under Apps Select object settings.

4. Click on Items object ? click on Edit ? under Item:Record Type Assignments,enable Gold,Silver ? Object permission check for read ,edit and create.
5. Click on Save.
6. After saving the permission click on the Manage assignment
7. Now click on the Add Assignment.
8. Now select the users which you have created in user milestone, using Worker profile and click on Next ? Assign? Done.

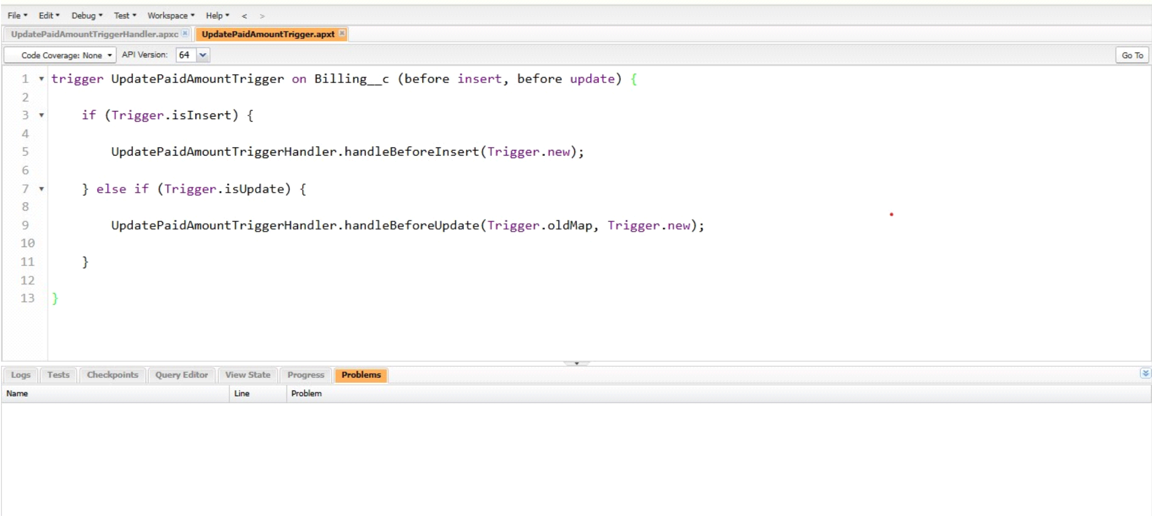




To Create a Trigger Handler class:

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;
        }
    }
}
```

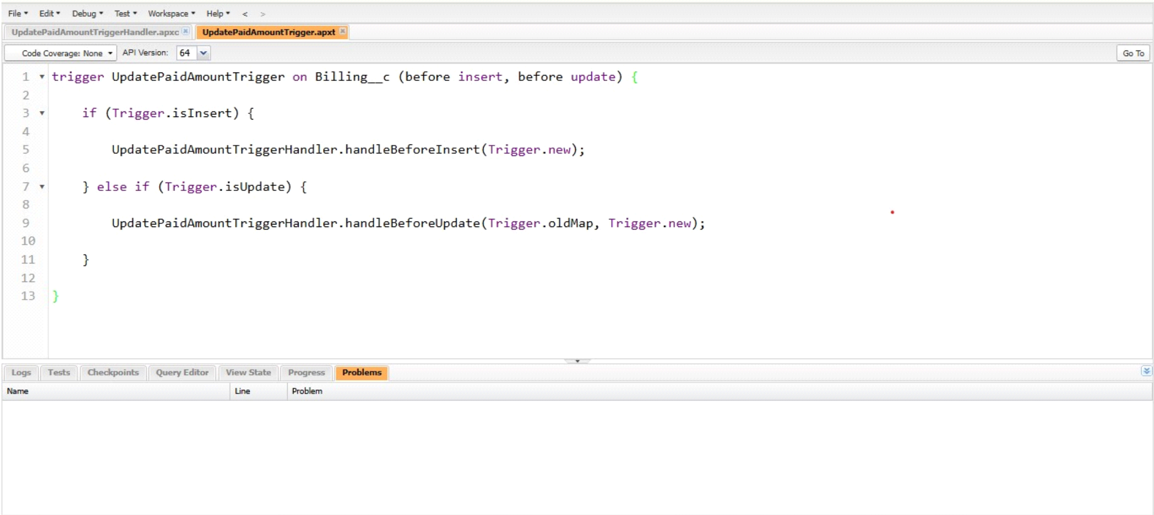


To Create the trigger:

CODE:

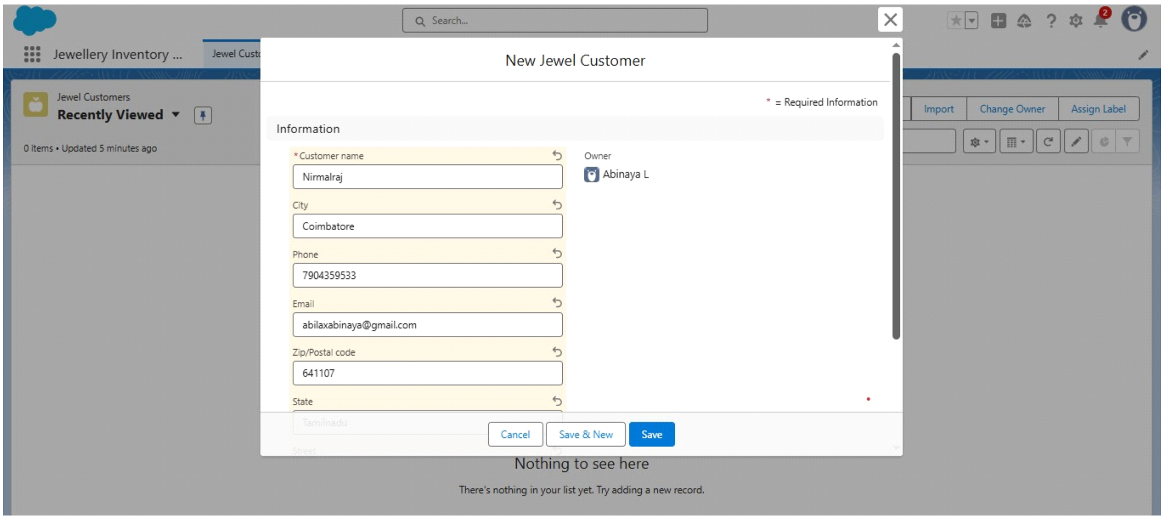
```
trigger UpdatePaidAmountTrigger on Billing__c (before insert, before update) {
    if (Trigger.isInsert) {
```

```
            UpdatePaidAmountTriggerHandler.handleBeforeInsert(Trigger.new);
        } else if (Trigger.isUpdate) {
            UpdatePaidAmountTriggerHandler.handleBeforeUpdate(Trigger.oldMap, Trigger.new);
    }
}
```



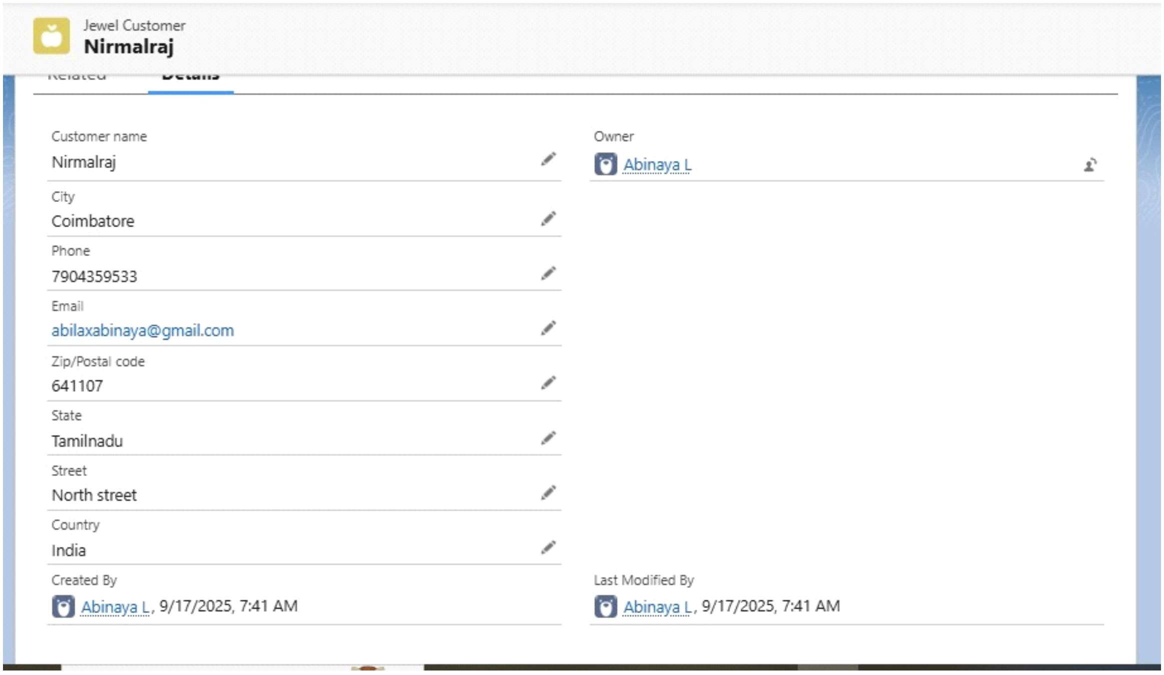
To Create a Record (Jewel Customer):

1. Click on App Launcher on the left side of the screen.
2. Search Jewelry Inventory System & click on it.
3. Click on Drop Down and Click on the Jewel Customer tab.
4. Click New.
5. Fill the Details and click on Save.



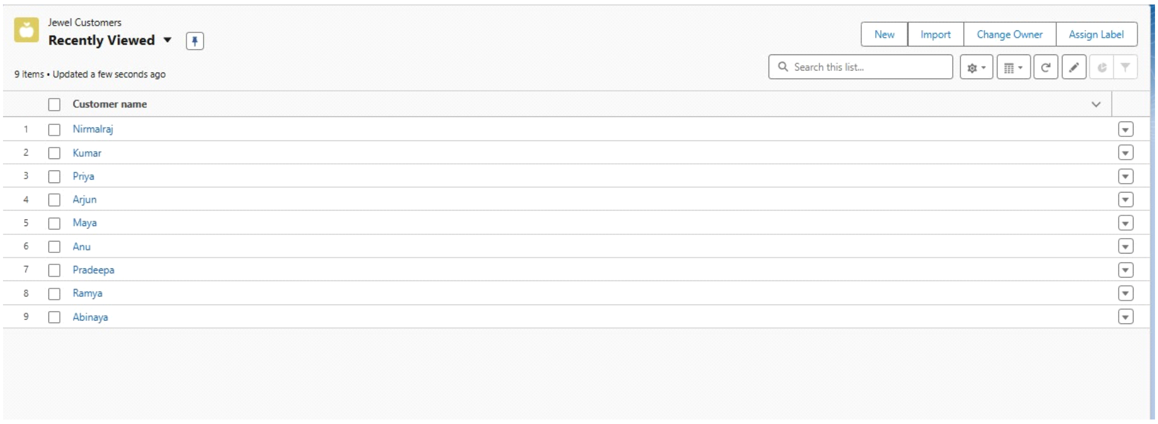
To View a Record(Jewel Customer):

1. Click on App Launcher on the left side of the screen.
2. Search Jewelry Inventory System & click on it.
3. Click on the Jewel Customer Tab.
4. Click on any record name. you can see the details of the Jewel Customer.

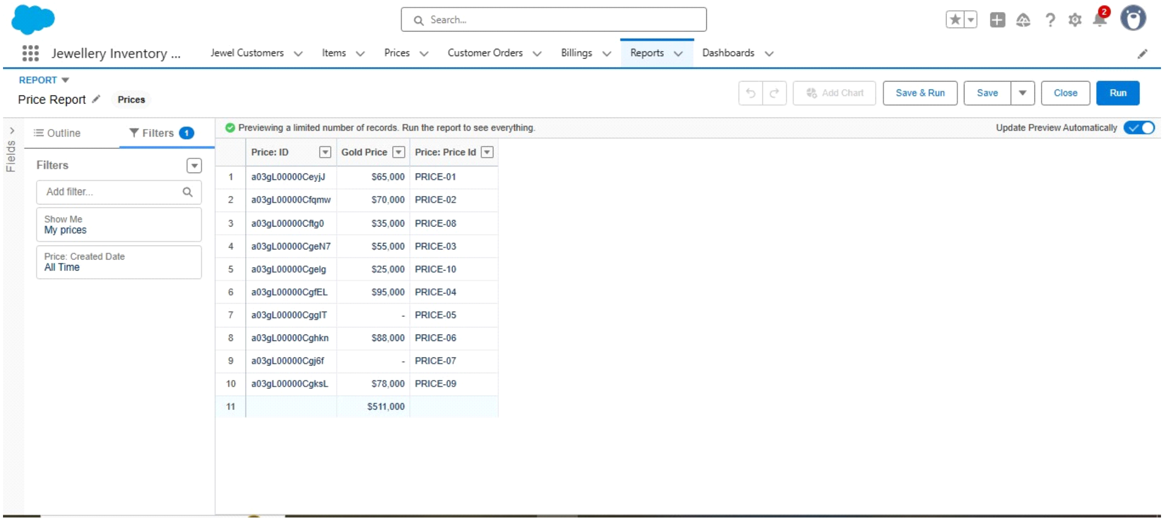


To Delete a Record(Jewel Customer)

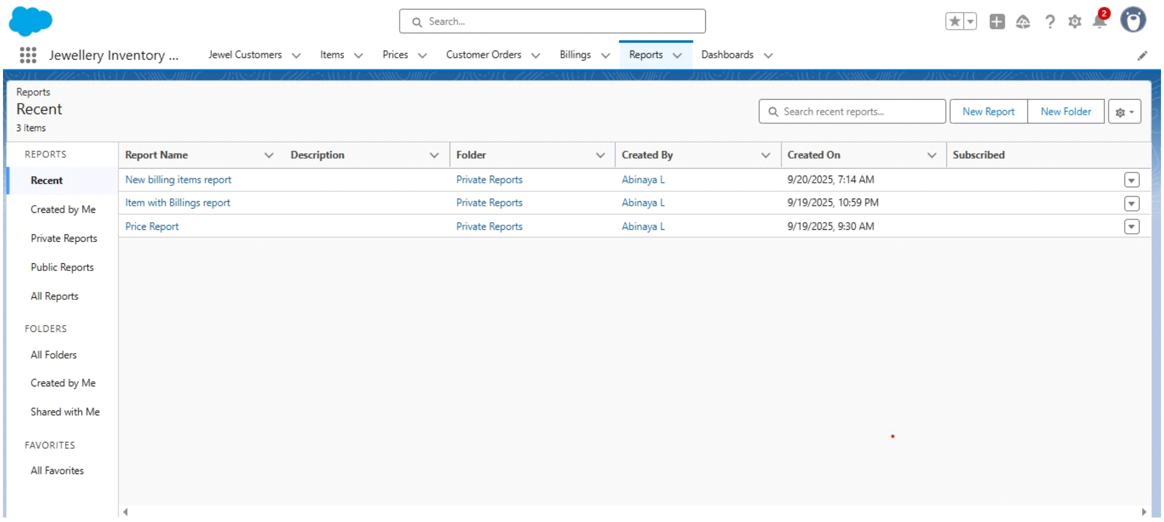
1. Click on App Launcher on the left side of the screen.
2. Search Jewelry Inventory System & click on it.
3. Click on the Jewel Customer Tab.
4. Click on Arrow at right hand side on that Particular record.
5. Click delete.



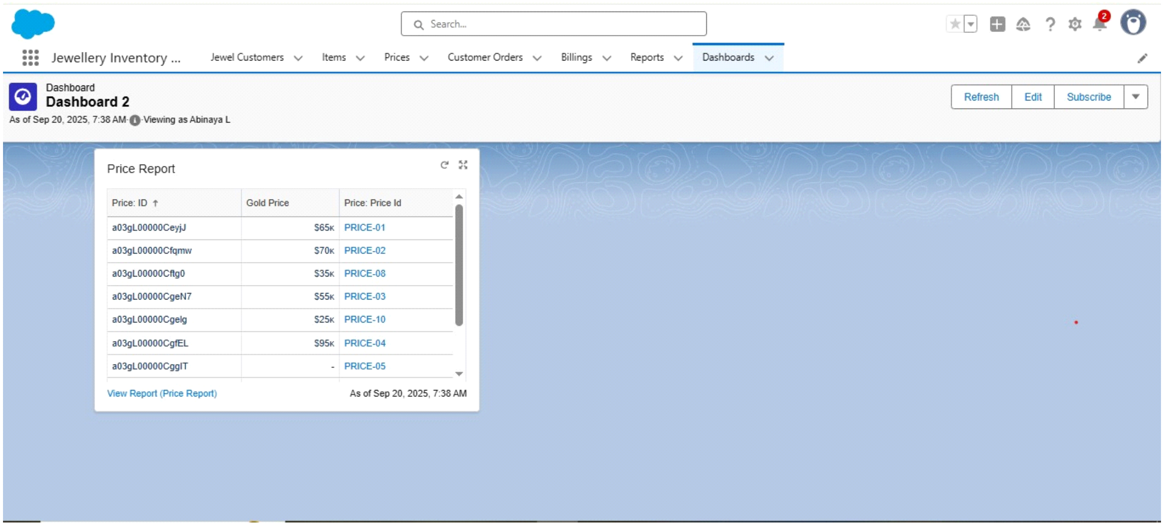
To create report types:



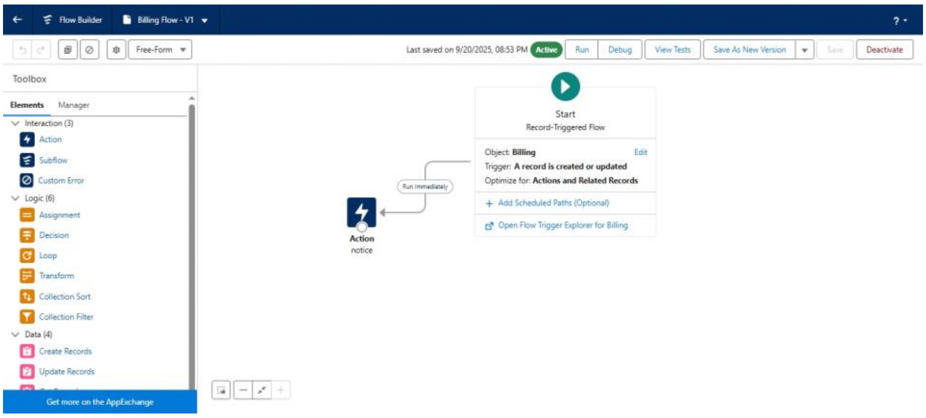
To create another report type:



To Create Dashboard:



To Create Flow:



Conclusion

The CRM application for jewel management provides an efficient platform for managing customer relationships, sales, billing, and inventory in the jewelry business. By automating processes, integrating customer data, and offering real-time insights, it enables developers to deliver a scalable, secure, and user-friendly solution. This system not only improves business operations but also enhances customer satisfaction, ensuring long-term growth and competitiveness in the jewelry market.

Appendix:

Create A Trigger Handler Class :

```
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;
```

}

}

}

Create The Trigger :

```
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);
}
}
```