GOVERNMENT ART'S AND SCIENCE COLLEGE
ANTHIYUR -638501

Department of computer science

Salesforce Developer With Agent Blazer Champion

CRM Application For Jewel Management

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Introduction

Best Jewellery ERP CRM Software for 2025: Features & BenefitsA CRM application for jewelry management is specialized customer relationship management software designed for the jewelry industry to streamline operations, boost sales, and enhance customer loyalty. These systems centralize customer data, track purchase history, and manage customer preferences to enable personalized marketing, targeted services, and improved customer communication across multiple channels. By integrating sales, inventory, and customer service functions, a jewelry CRM provides a unified platform for deeper business insights, efficient operations, and ultimately, sustained growth.

Project Overview

A project overview for a CRM application in jewel management focuses on creating a centralized system to streamline customer interactions, manage sales and inventory, personalize marketing, and analyze customer behavior to drive growth and improve customer loyalty. Key components include a client database with purchase history, automated communication tools, sales tracking, inventory management, and reporting features. The goal is to provide a unified platform that enhances operational efficiency, boosts sales, and delivers personalized customer experiences.

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Objects

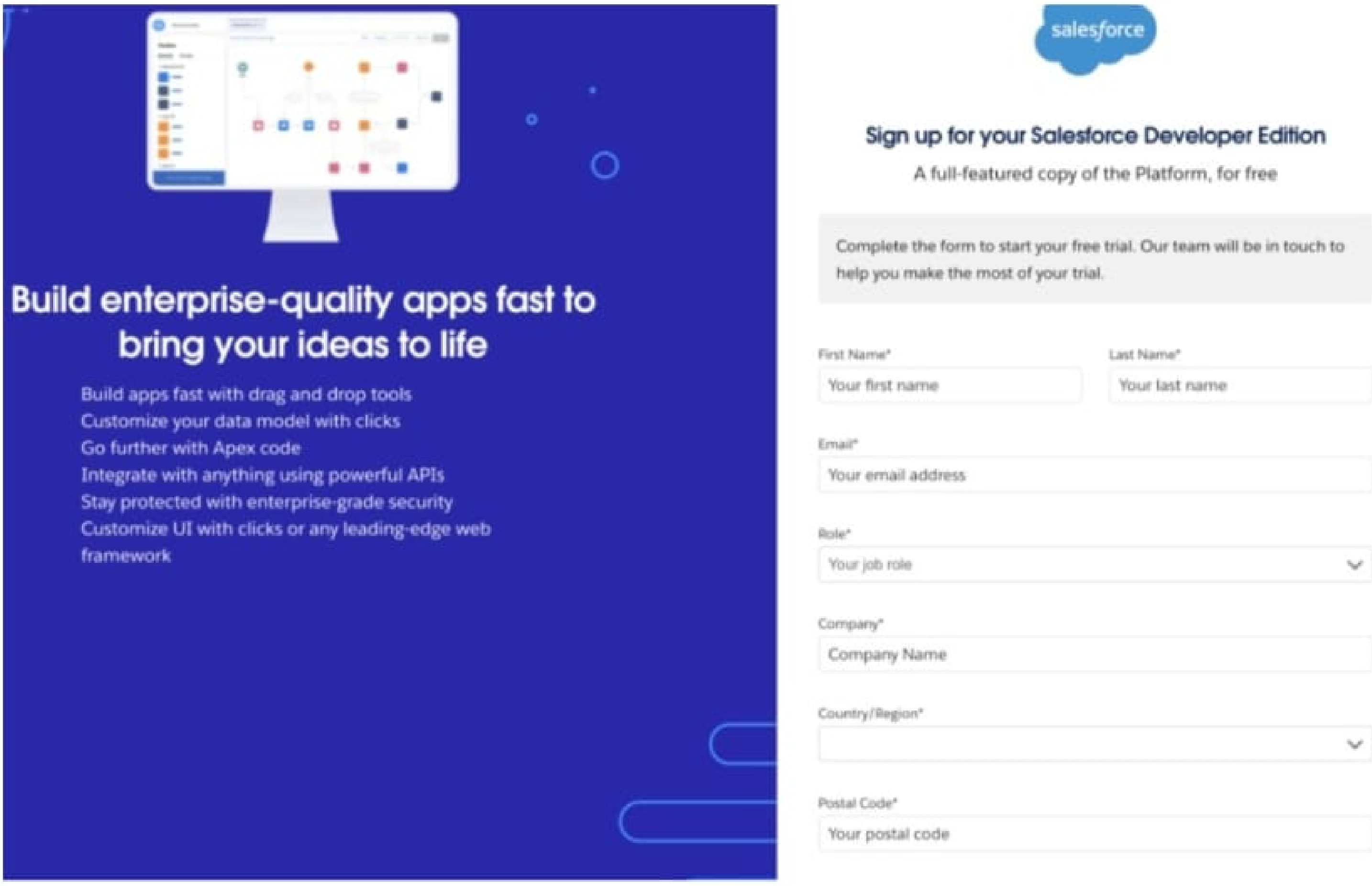
Project objectives are specific, measurable outcomes that define the purpose and success criteria of a project, guiding the team's actions and resource allocation. They are typically written using the SMART framework—Specific, Measurable, Achievable, Relevant, and Time-bound—to ensure clarity and trackability. By setting clear objectives, project managers align stakeholders, provide direction, and establish a basis for evaluating the project's success.

Salesforce

Creating Developer Account

Creating a developer org in salesforce.

- Go to https://developer.salesforce.com/signup
- On the sign up form, enter the following details :



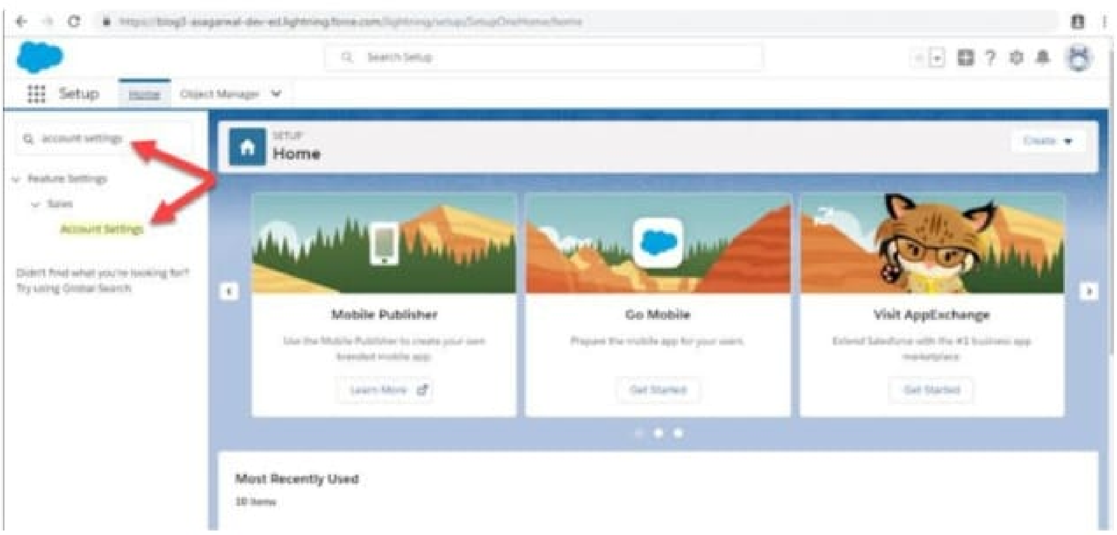
1. First name & Last name
2. Email
3.Role : Developer
4.Company : College Name
5.County : India
6.Postal Code : pin code
7.Username : should be a combination of your name and company
This need not be an actual email id, you can give anything in the format : username@organization.com Click on sign me up after filling these.

Account Activation

1. Go to the inbox of the email that you used while signing up.
2. Click on the Reset Password to activate your account.
3. The email may take 5-10mins.Click on Reset Password

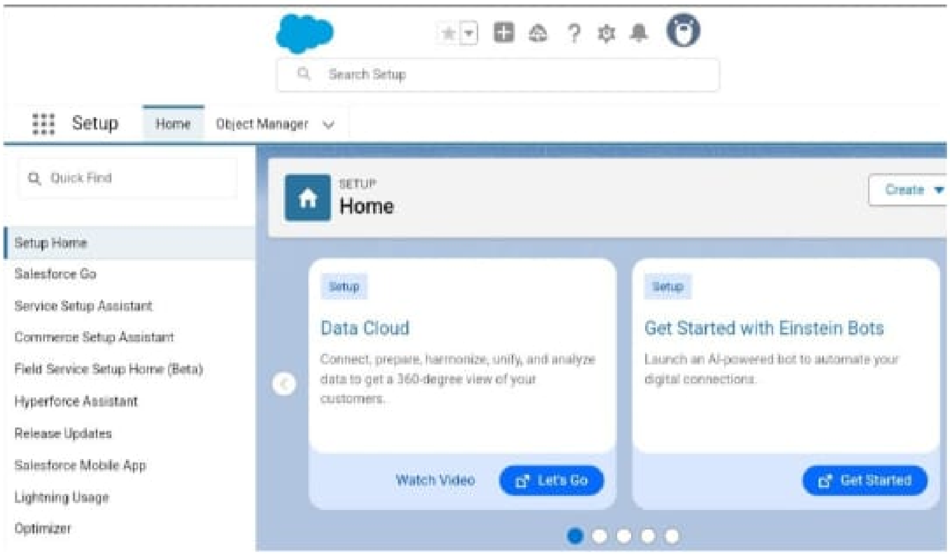
Give a password and answer a security question and click on change password.

- Then you will redirect to your salesforce setup page.

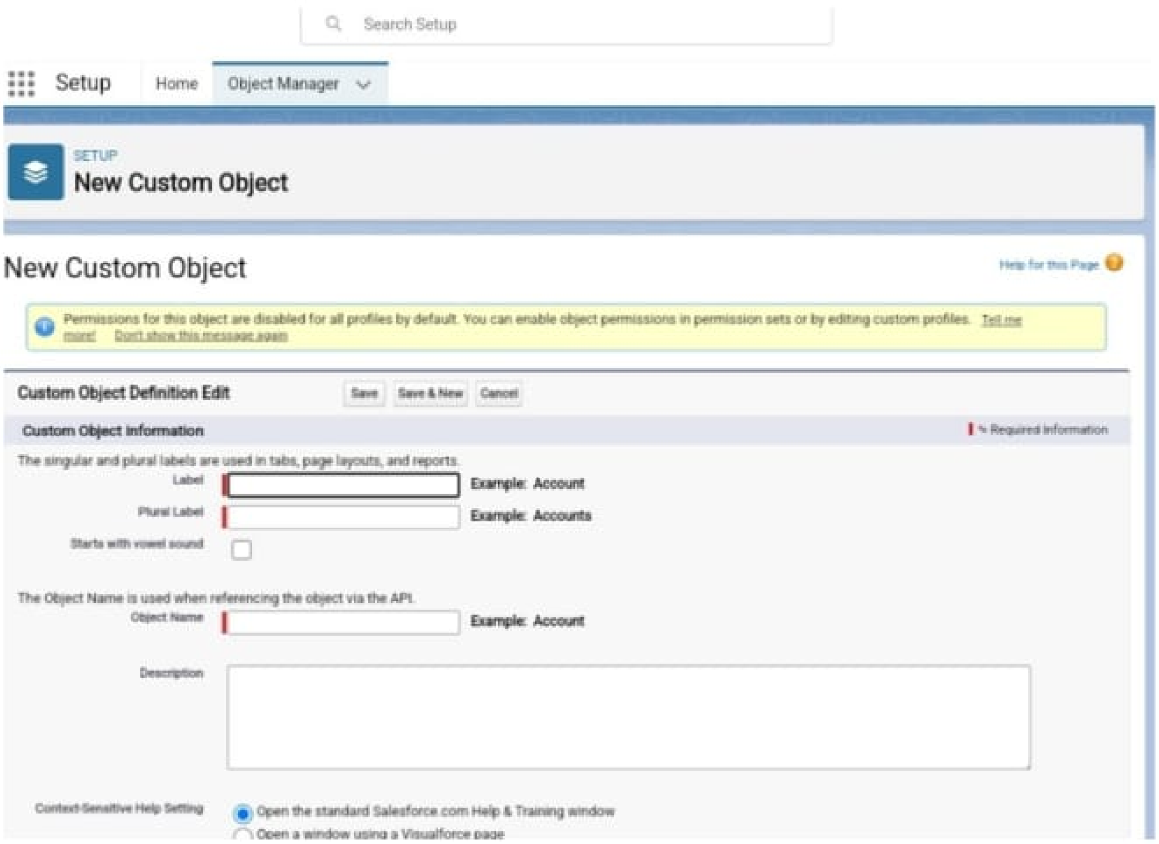


CREATE JEWEL CUSTOMER OBJECT

- The purpose of creating a Jewel Customer custom object is to storeand manage information.
- From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.

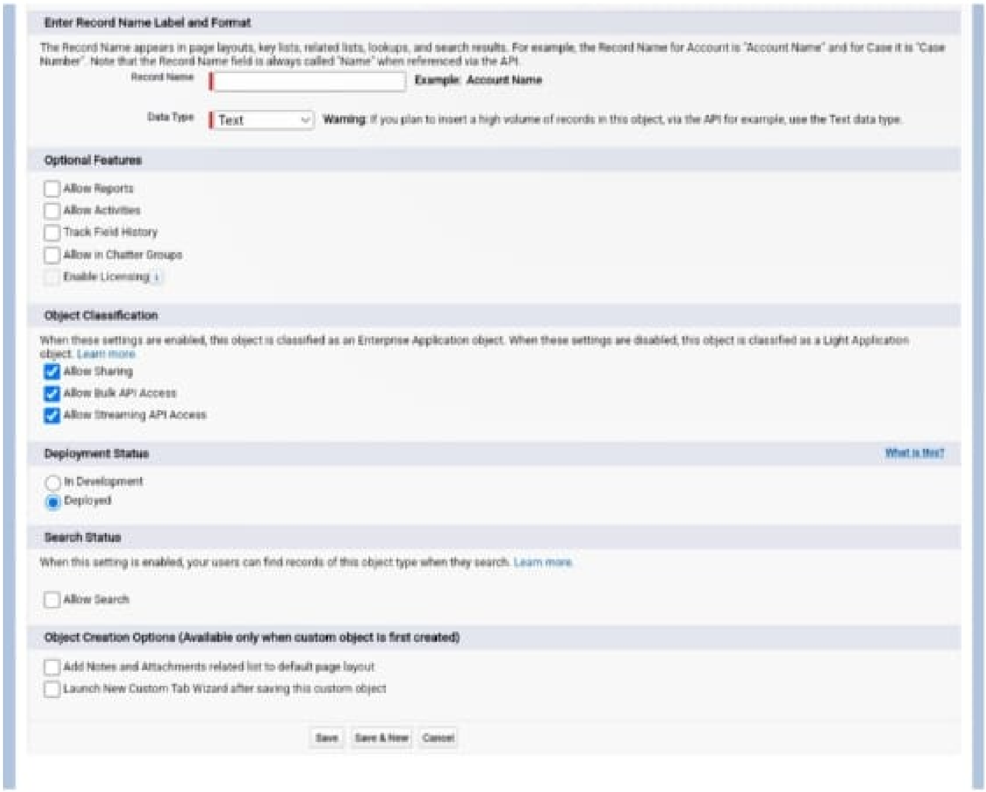


- Enter the label name : Jewel CUSTOMER
- Plural label name : Jewel Customers



- Enter Record Name Label and Format
  RECORD NAME >> CUSTOMER NAME

- DATA TYPE >> TEXT



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

Create Item Object

The purpose of creating a Item object is to manage the inventory of gold and silver items.

TO CREATE AN OBJECT:
From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.

- 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
- Data Type >> Auto Number
- Display Format >> Item-{oo}

Starting Number >> 1

- Click on Allow reports.

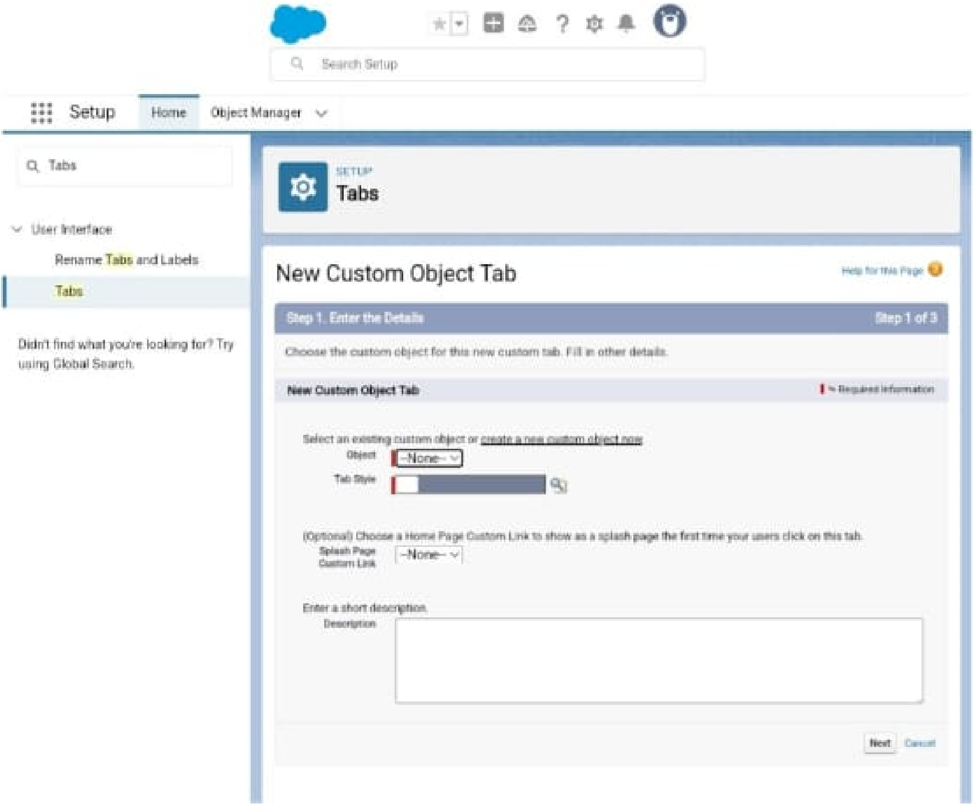
Allow search >> Save.

TABS

Creating a Custom Tab

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.



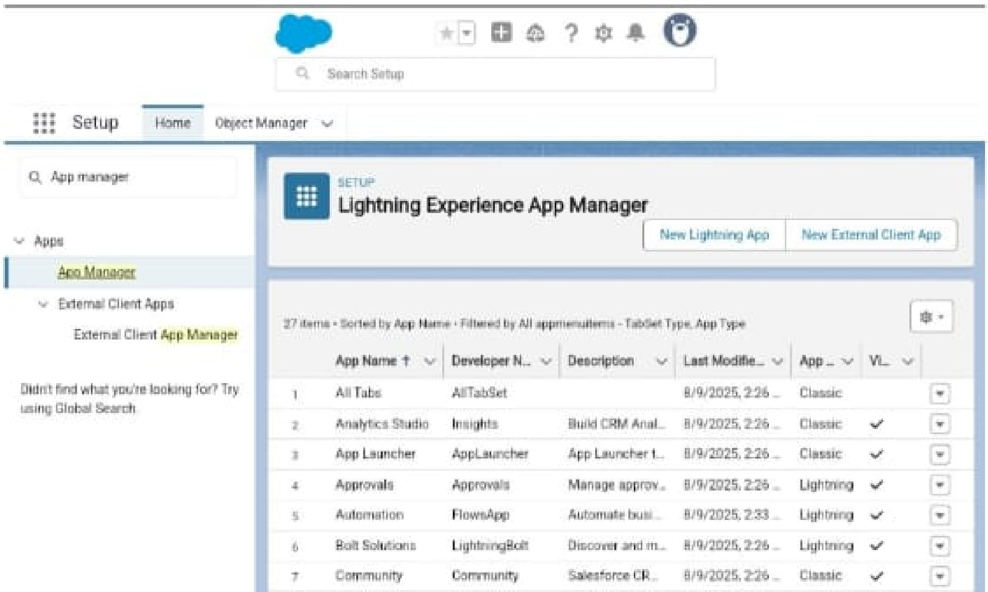
To create a Tab:(Item)

- 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.

The Lightning App

To create a lightning app page:

- 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

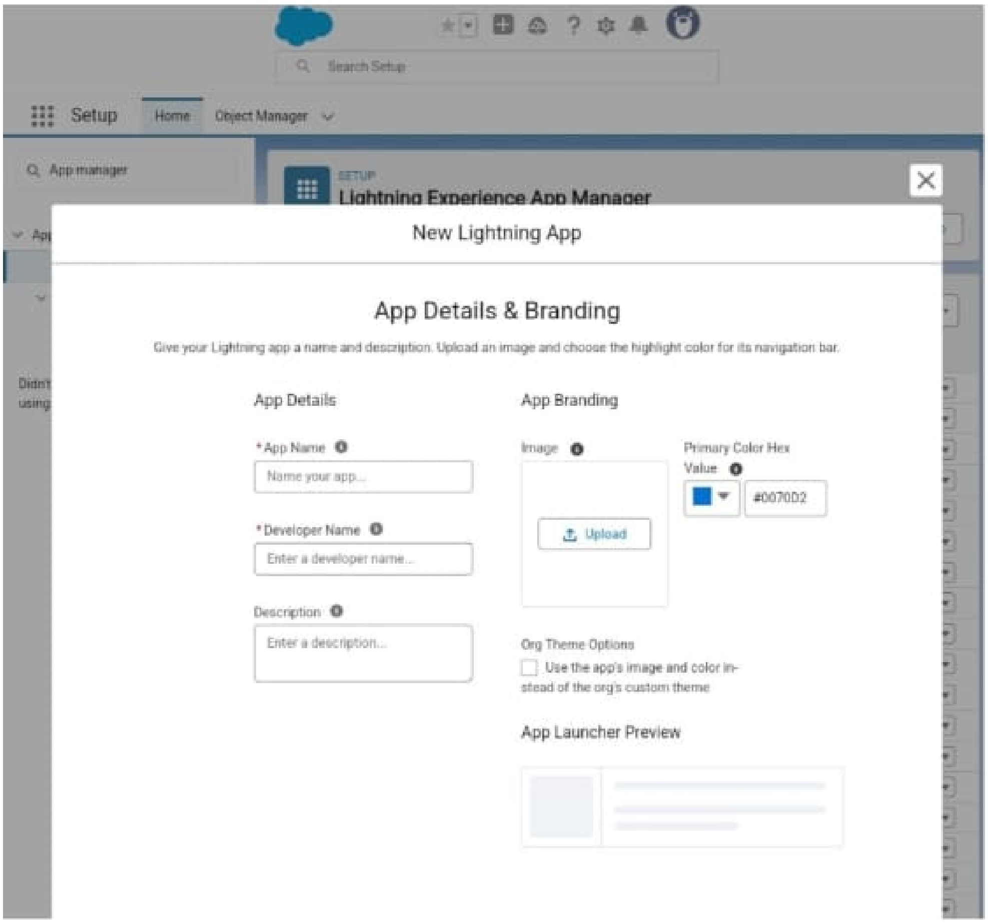
App Name : Jewellery Inventory System.

- Developer Name : This will auto populatedescription : Elevate your look with eleganed

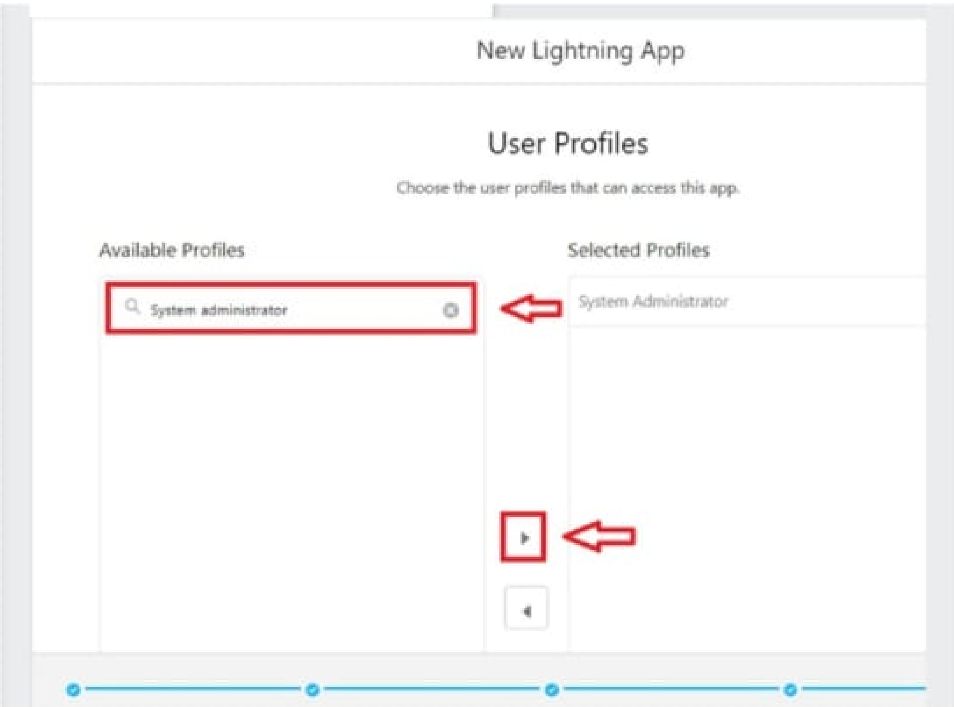
Image :

- optional (if you want to give any image you can otherwise not mandatory)

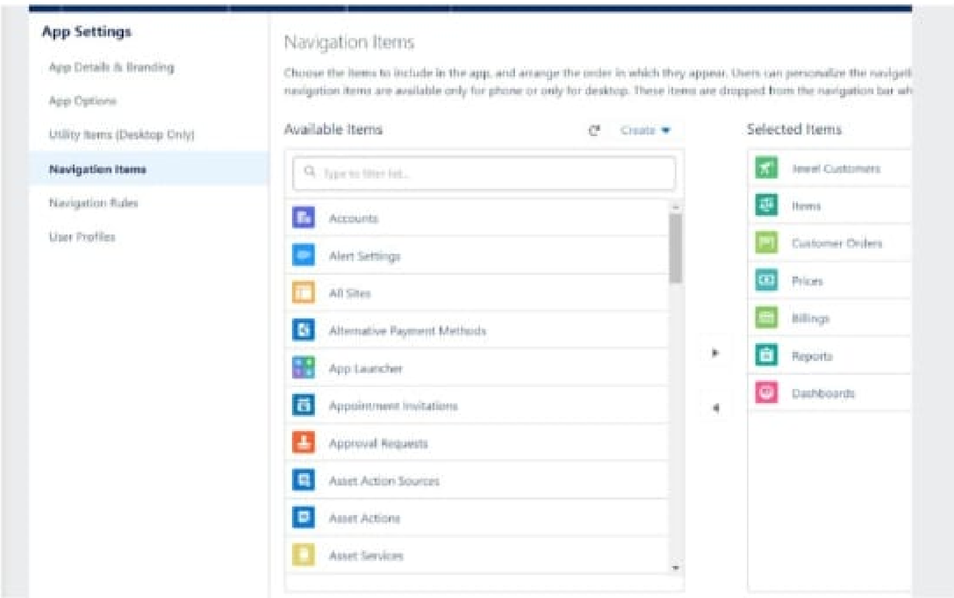
Primary colour hex value : keep this default.



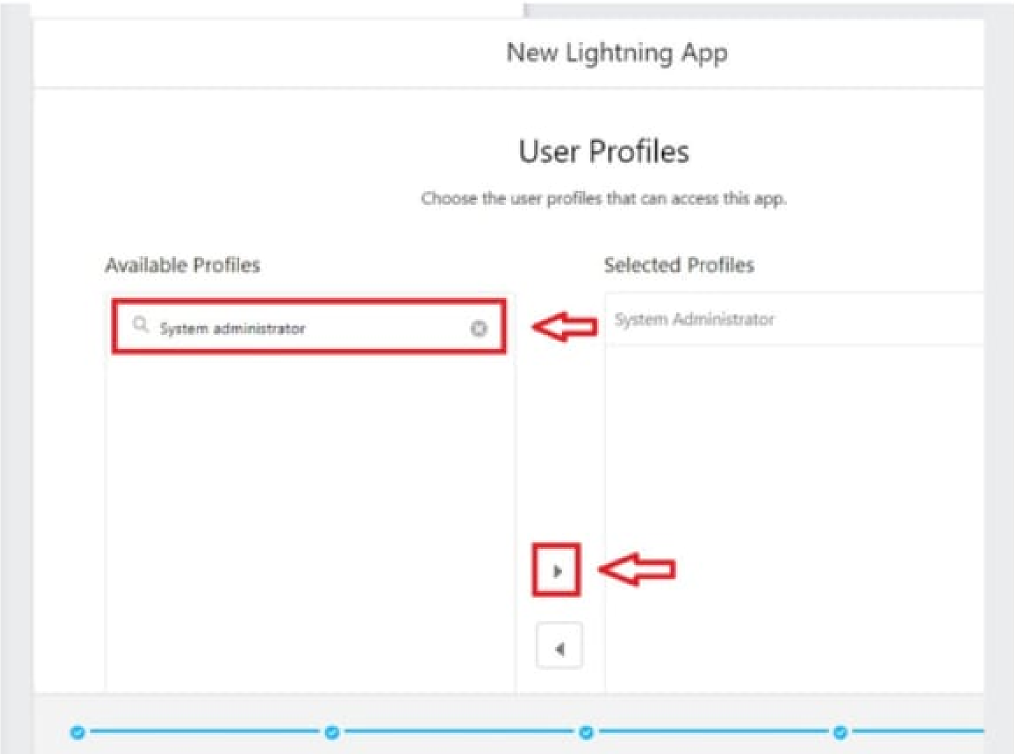
Then click Next >> (App option page)Set Navigation Style as Console Navigation >> Next.



- 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.



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

FIELDS

Creating Lookup Relationship

- A Lookup relationship is a type of relationship in Salesforce that connects two objects together based on a field known as the Lookup field. It establishes a relationship between a child object and a parent object, allowing the child object to reference the parent object.
- To Create a relationship between Jewel Customer & Customer Order Objects.
- 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

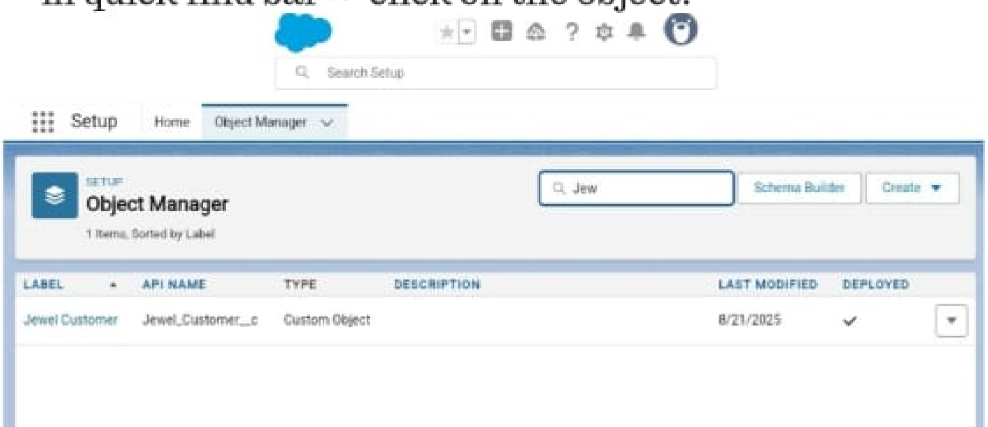
- Master-detail relationship is a type of relationship between two objects where the master object controls certain behaviours and settings of the detail object. Here are a few use cases that demonstrate the use of master-detail relationships
- Creating Master-Detail Relationship between Item & Customer Order Object.
- To Create a Master-Detail relationship :

1. 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.

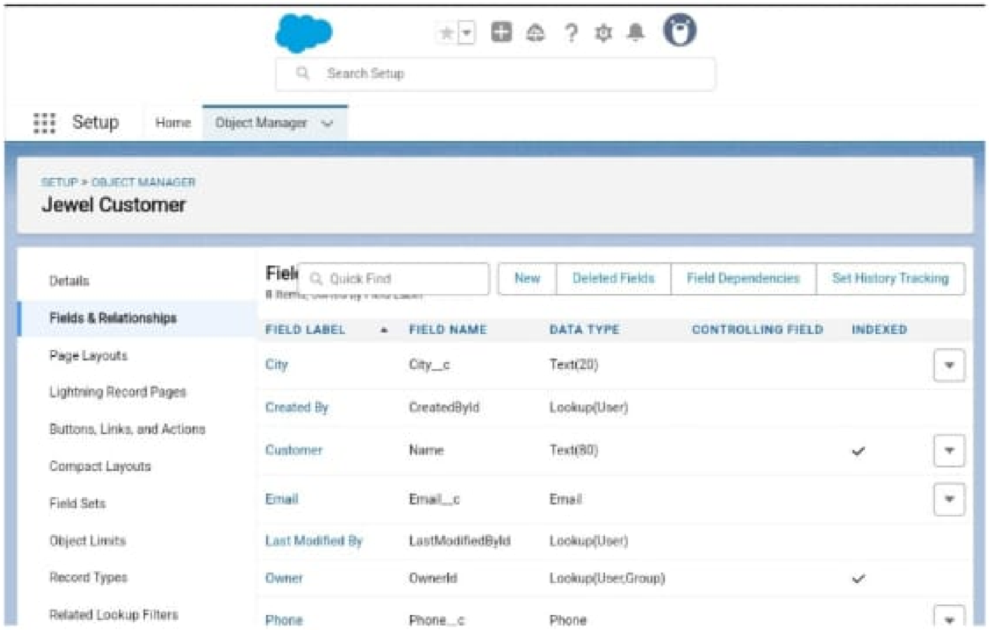
Creating Text Field in Jewel Customer Object

To create fields in an object:

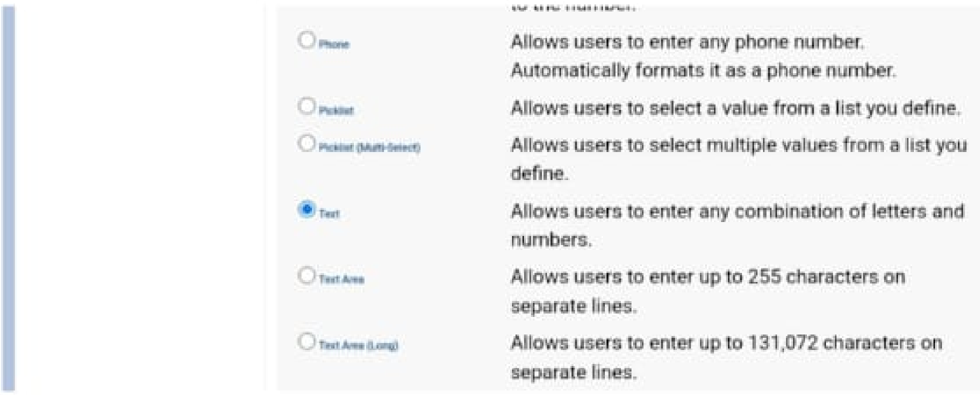
Go to setup >> click on Object Manager >> type object name(Jewel Customer) in quick find bar >> click on the object.



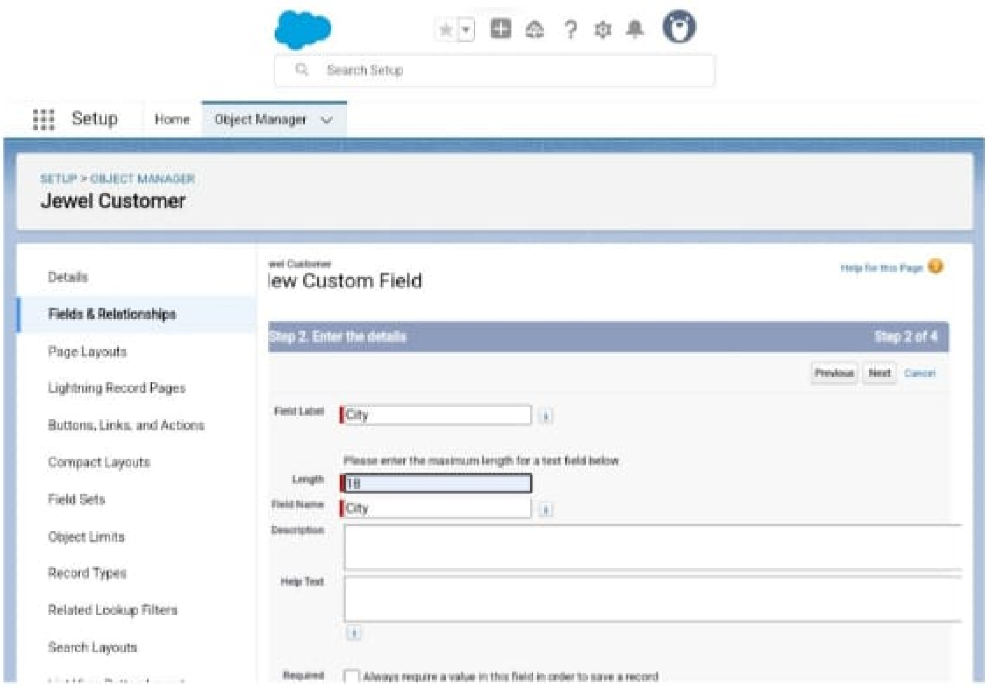
- **Now click on "Fields & Relationships" >> New**



- Select Data type as "Text".



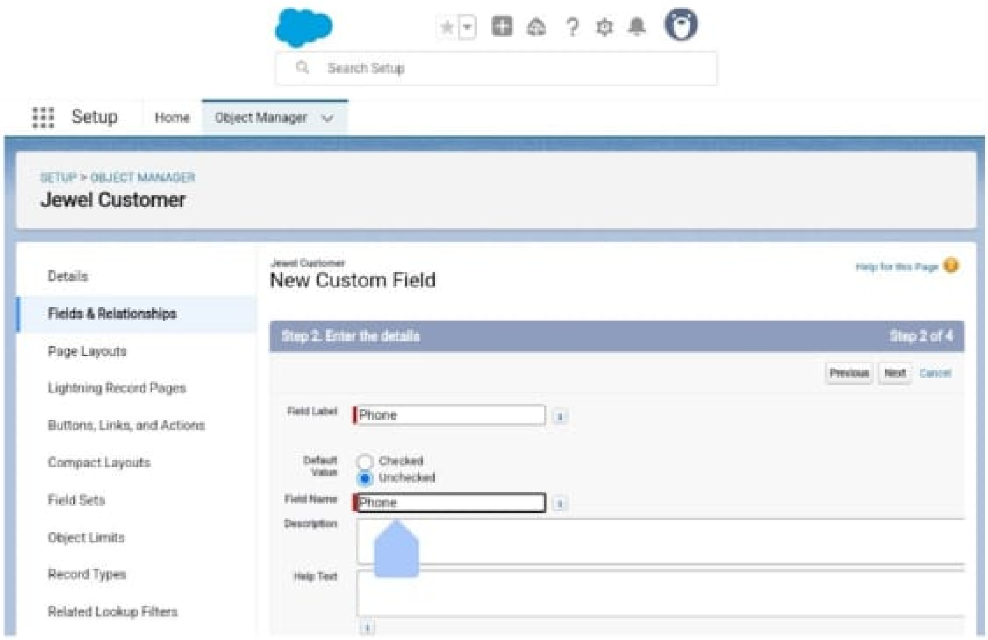
- Click on Next



Fill the above as following:
Field Label: City
Length : 20
Field Name : gets auto generateClick on Next >> Next >> Save and new.

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" >> Select Data type as "Phone" and click Next.
- Given the Field Label as " Phone".



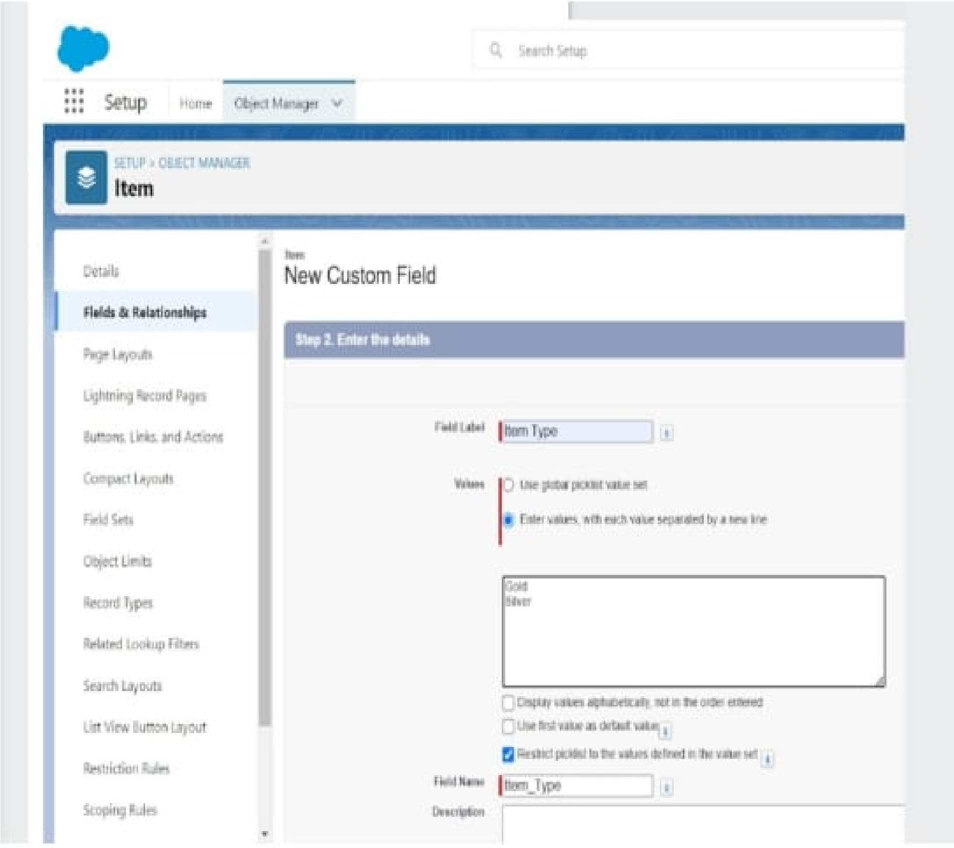
FIELD NAME WILL BE AUTO POPULATED, AND CLICK ON NEXT >> NEXT >> SAVE & NEW.

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.*

CREATING PICKLIST FIELD IN ITEM OBJECT

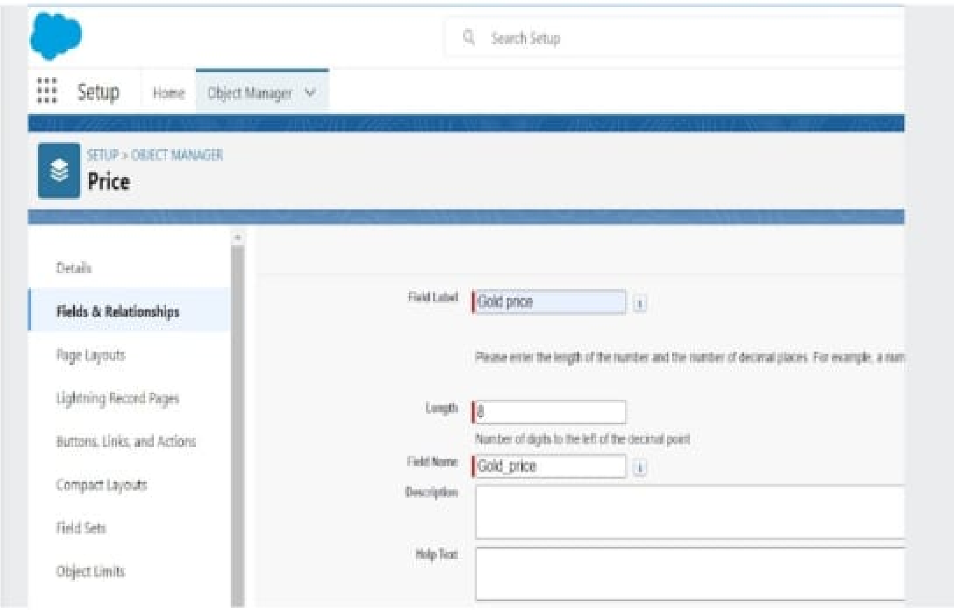
- Go to setup >> click on Object Manager >> type object name(Item) in quick find bar>> click on the object.
- Now click on "Fields & Relationships" >> New
- Select Data type as "Picklist" and click Next.
- Enter Field Label as "Item Type".
- In values select "Enter values(Gold,Silver), with each value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



Click Next? Next ? Next ? Save .

Creating Currency Field in Price Object

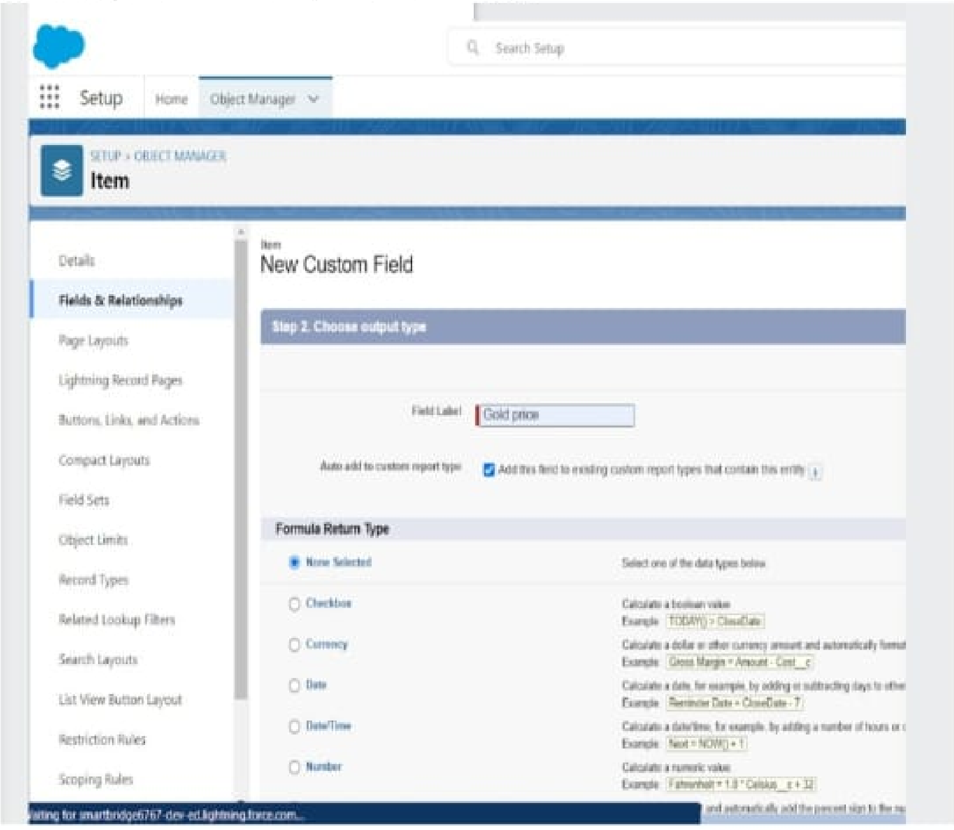
- Go to setup >> click on Object Manager >> type object name(Price) in quick find bar >> click on the object.
- Now click on "Fields & Relationships" >> New.
- Select Data type as "Currency" and click Next.



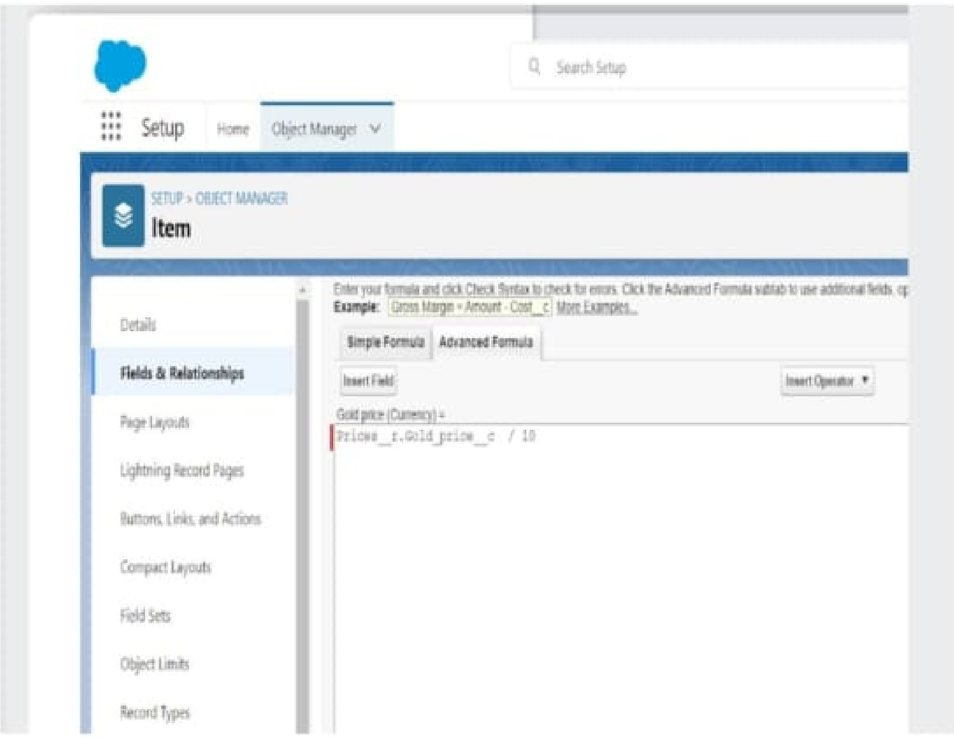
- *ENTER FIELD LABEL AS "GOLD PRICE" AND LENGTH AS " 8"AND DECIMAL 0.FIELD NAME WILL BE AUTO GENERATED*
- *CLICK NEXT >> NEXT >> NEXT >> SAVE .*

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.

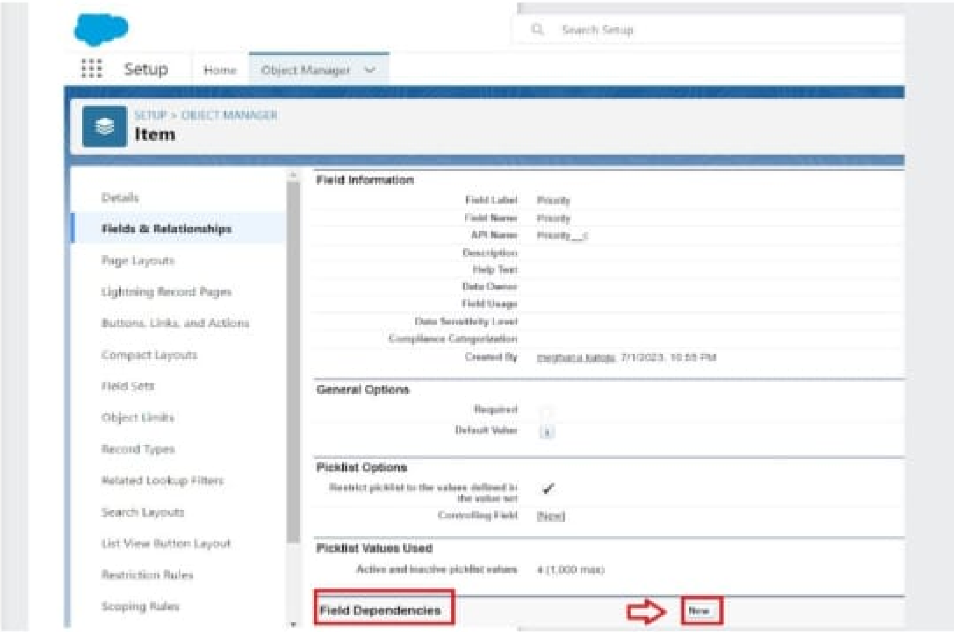


- click "Check Syntax" and Next >> Next >> Save & New.

Creating the Field Dependencie

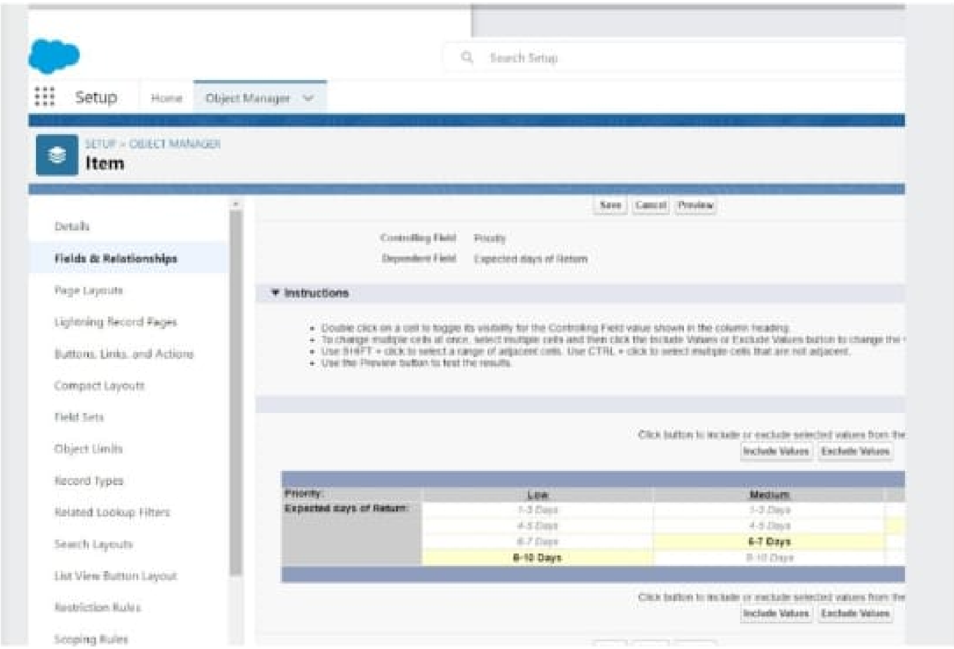
Use case:

- Field Dependencies are used to create relationships between fields within an object. They allow you to control the visibility and availability of fields based on the values selected in other fields.
- 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.



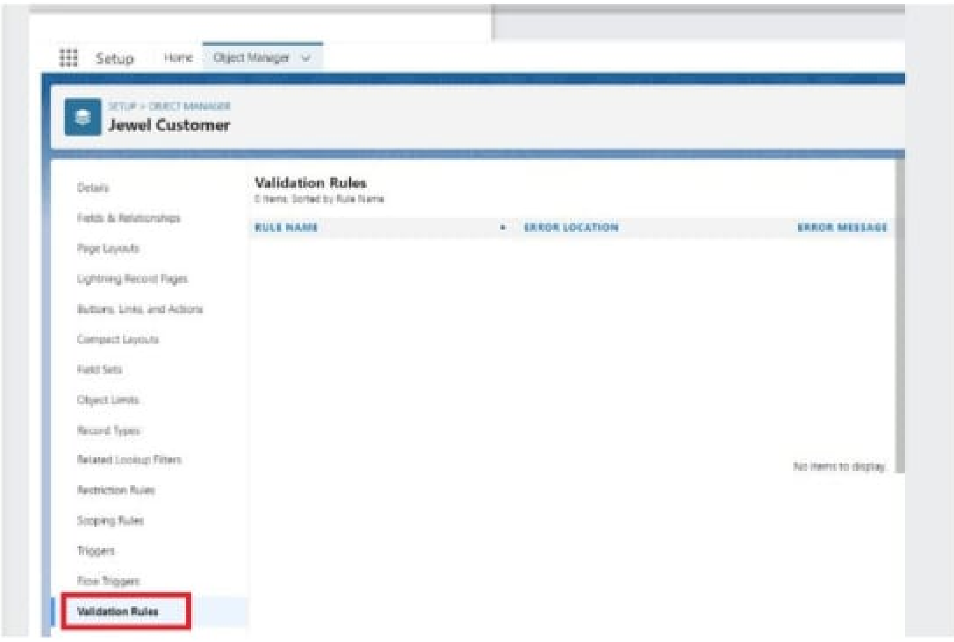
- **SELECT CONTROLLING FIELD AS "PRIORITY" AND DEPENDING FIELD AS "EXPECTED DAYS OF RETURN" >> CONTINUE.**

Select the "Expected Days of Return" values of related Priority values and Click on Include Values >> Save

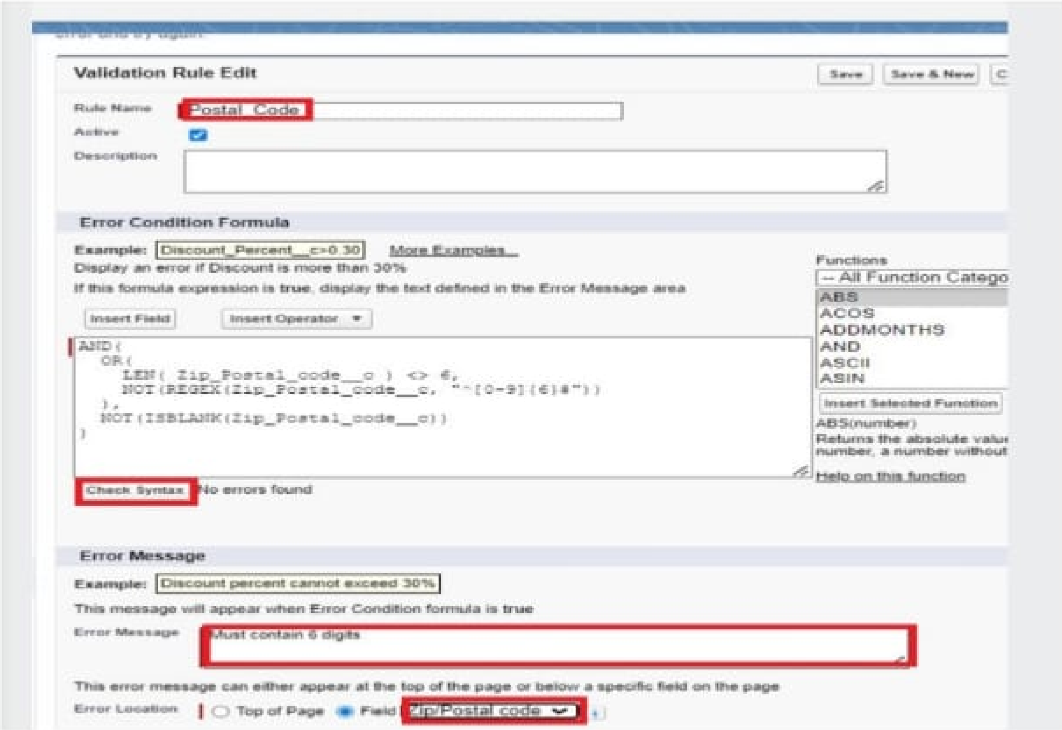


Creating the validation rule

- **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.**



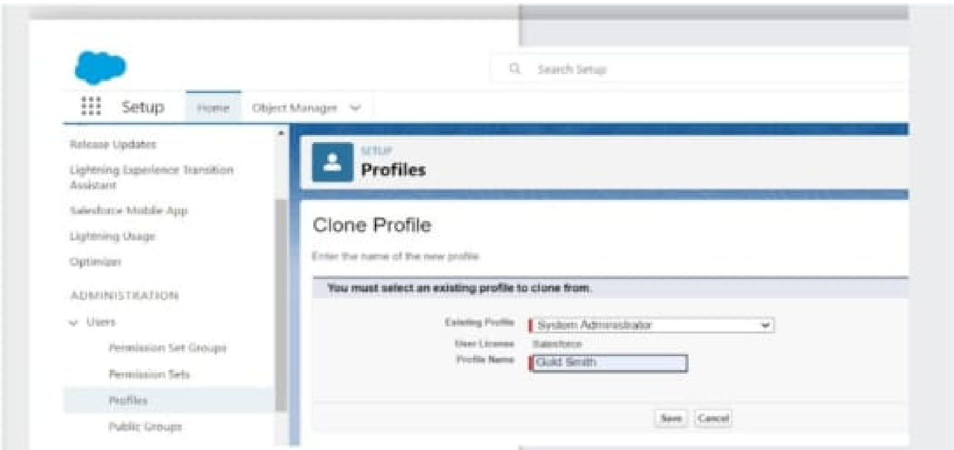
- Enter the Rule name as “Postal Code “.
- Insert the Error Condition Formula as : -
- Insert the Error Condition Formula as : -
- Insert the Error Condition Formula as : -
- AND(
- OR(
- LEN(Zip_Postal_code__c) <> 6, NOT(REGEX(Zip_Postal_code__c, "^[0-9]{6}$"))),
- NOT(ISBLANK(Zip_Postal_code__c))
-)
-)



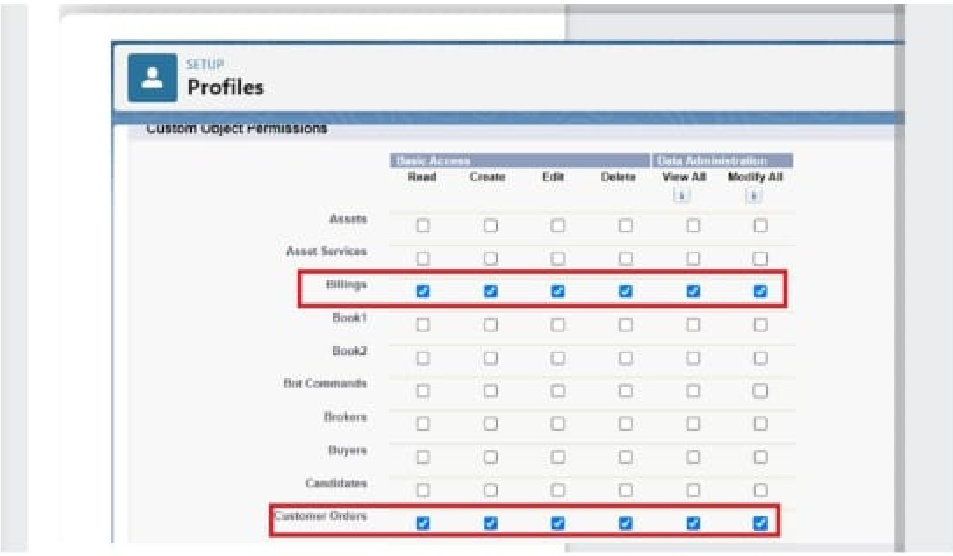
- Enter the Error Message as “Must contain 6 digits”, select the Error location as Field and select the field as “Zip/Postal code”, and click Save.

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.

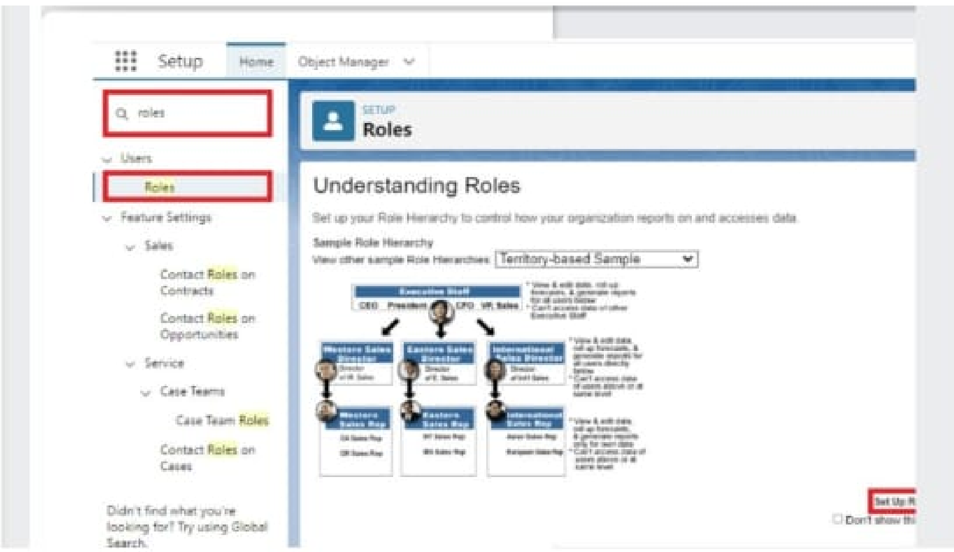
Worker Profile

- Go to setup >> type profiles in quick find box >> click on profiles >> clone the desired profile (Salesforce Platform User) >> enter profile name () >> Save.
- 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.

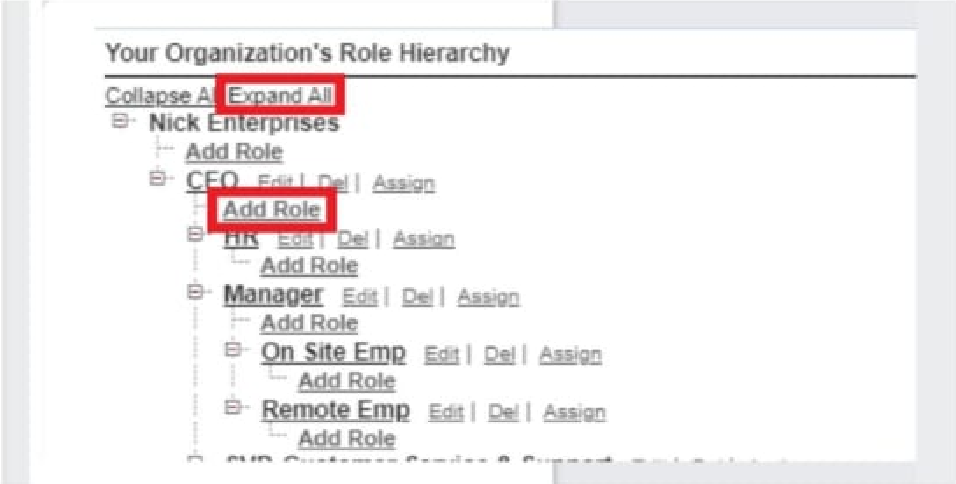
Roles

Creating Gold Smith Role

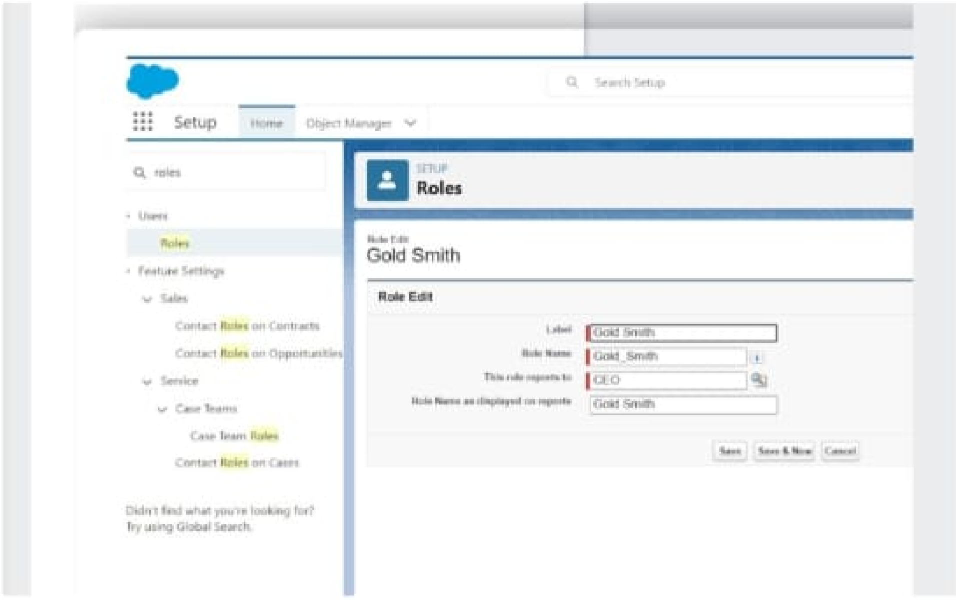
- From setup ,Go to quick find >> Search for Roles >> click on set up roles.



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

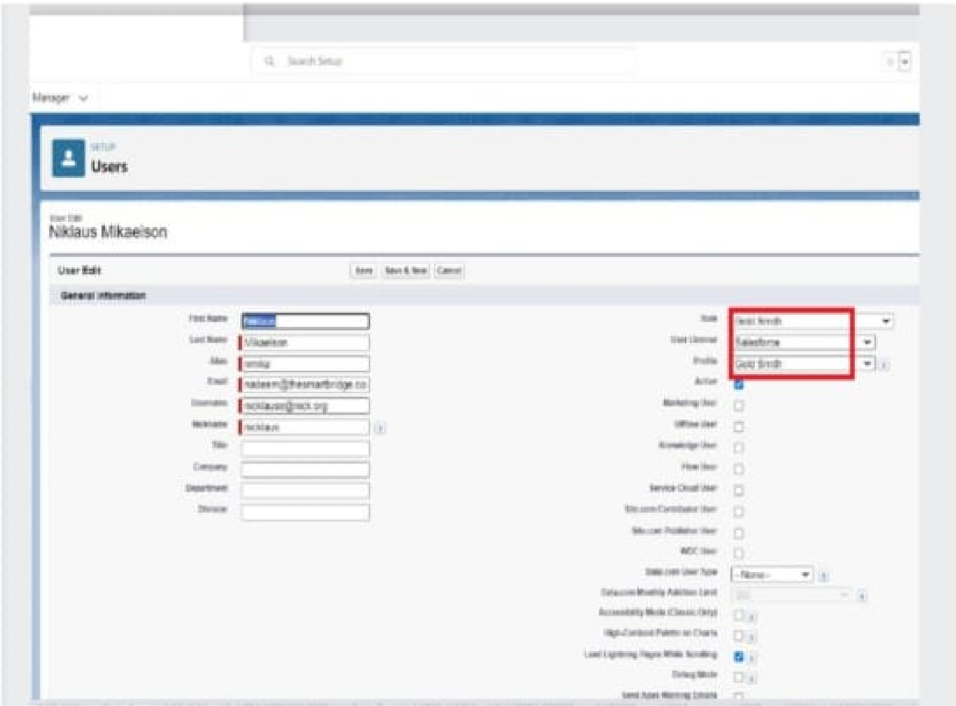


- Give Label as "Gold Smith" and Role name gets auto populated. Check to whom this role (Gold Smith) reports. Then click on Save.



USER
GO TO SETUP >> TYPE USERS IN QUICK FIND BOX >> SELECT USERS >> CLICK NEW USER.
FILL IN THE FIELDS

- FIRST NAME : NIKLAUSLAST
- LAST NAME : MIKAELSON
- ALIAS : GIVE A ALIAS NAME
- USERNAME : USERNAME SHOULD BE IN THIS FORM: TEXT@TEXT.TEXT
- NICK NAME : GIVE A NICKNAME
- ROLE : GOLD SMITH
- PROFILES : GOLD SMITH



Create User

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

Role : Worker

User licence : Salesforce Platforms

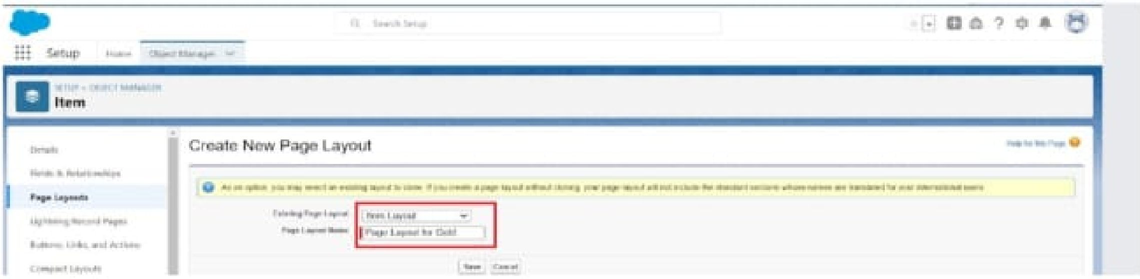
Profiles : Worker

page layout

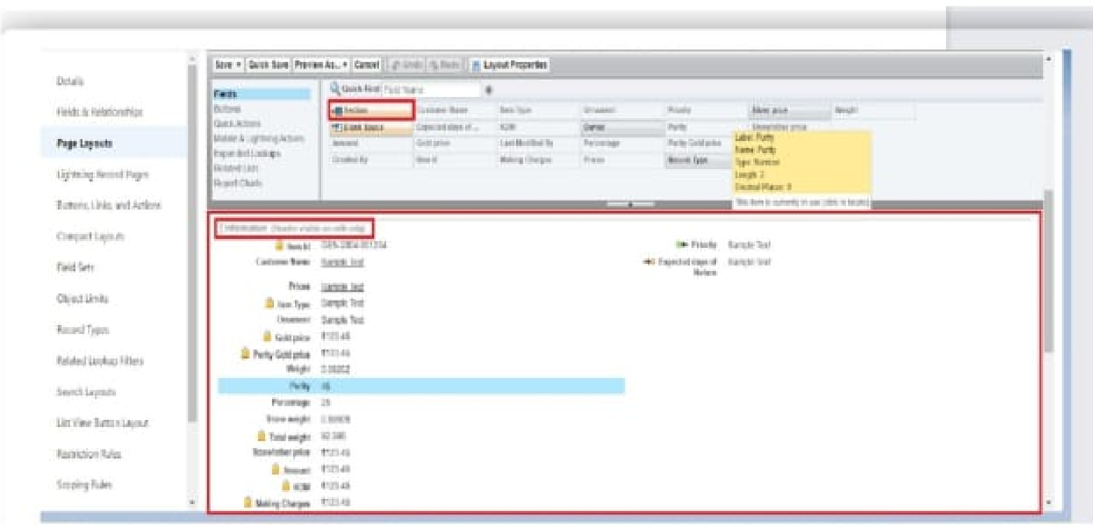
To Create a Gold Page layout

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.

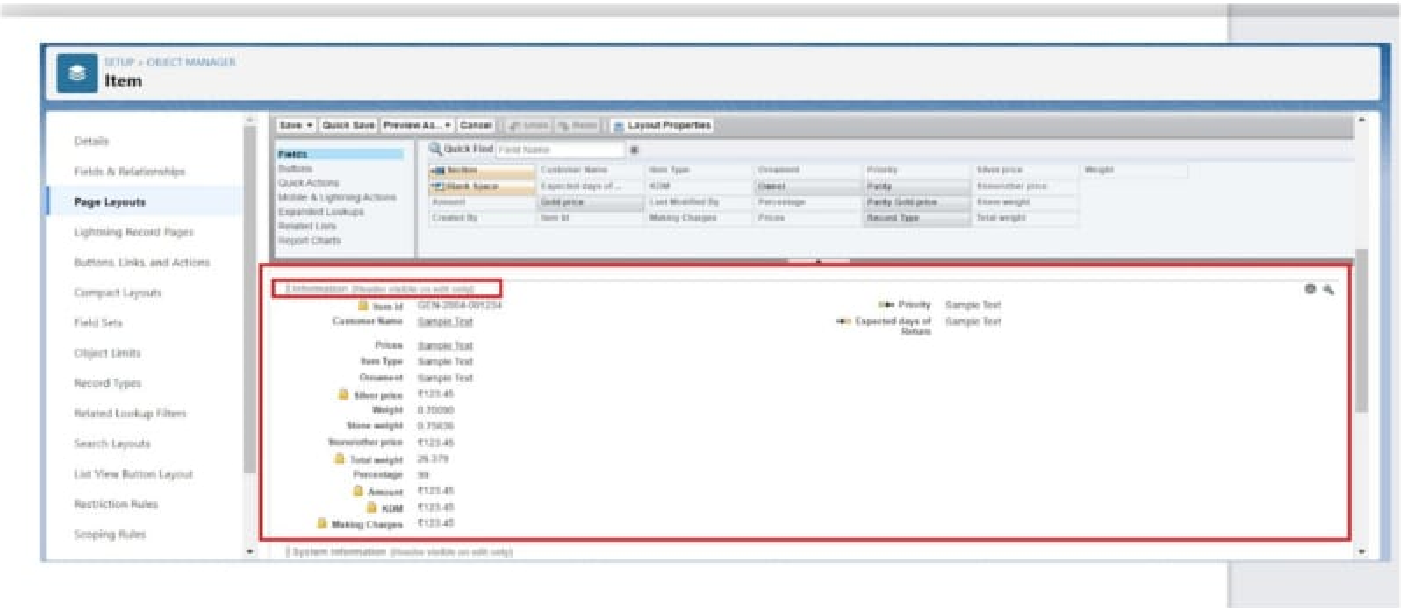
To Create a Silver Page layout

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.



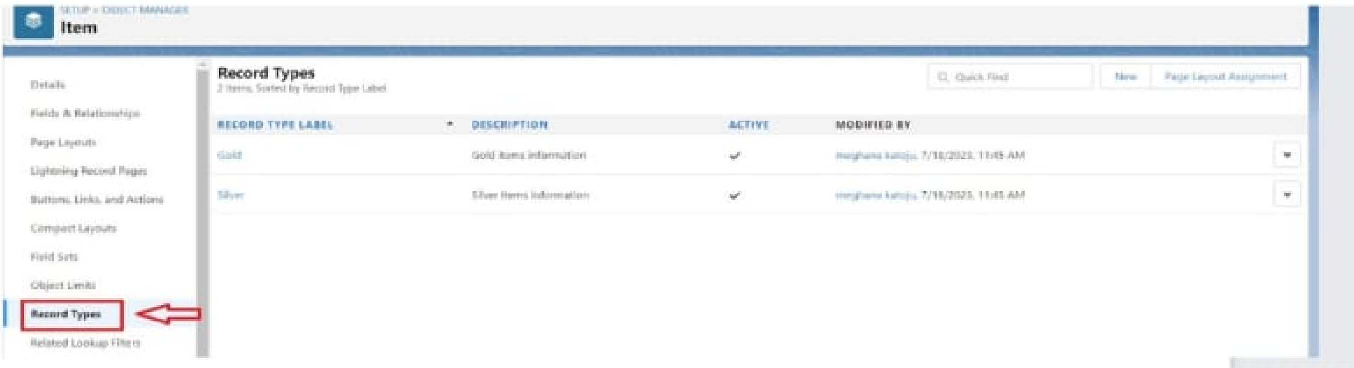
Record type

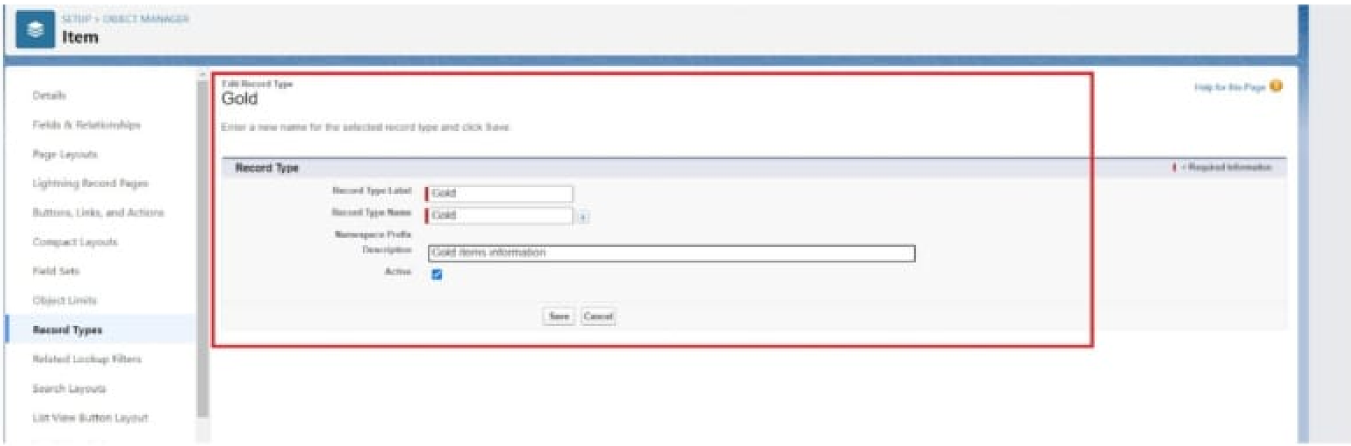
To create a Record Type

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.

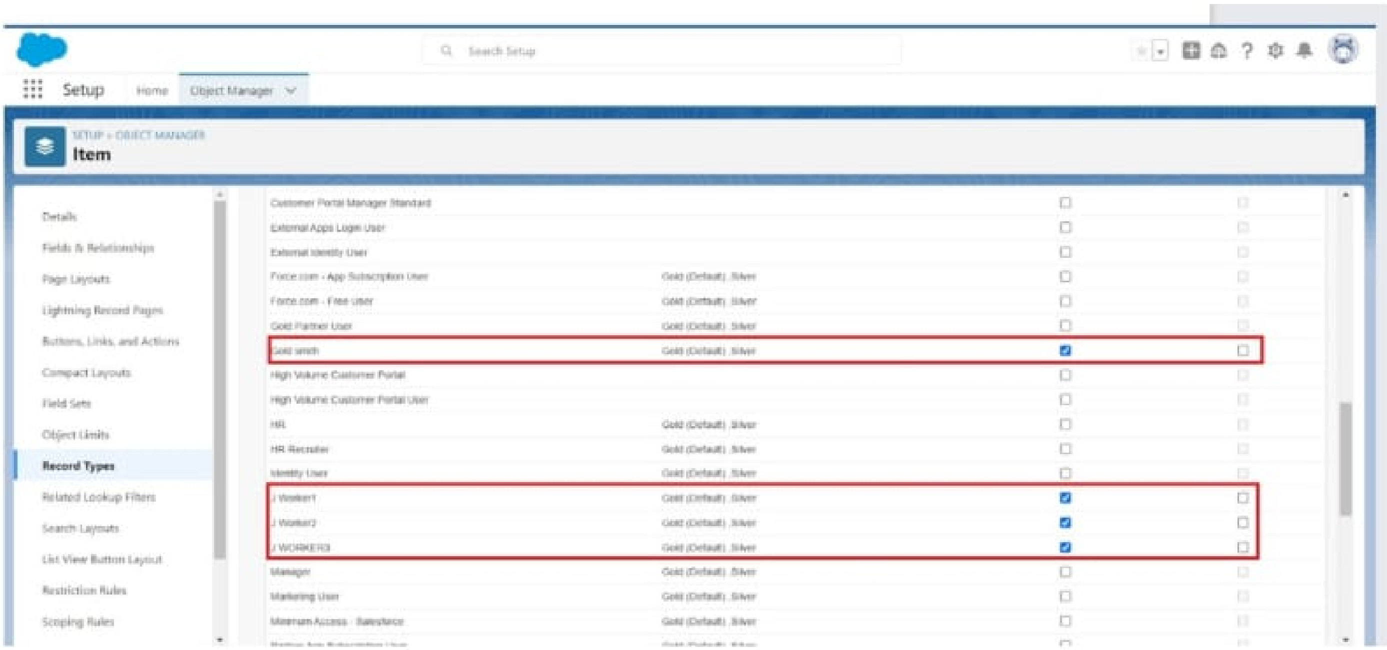
3.Select Existing Record as "Master",Record type Label as "Gold",Description as "Gold items information".



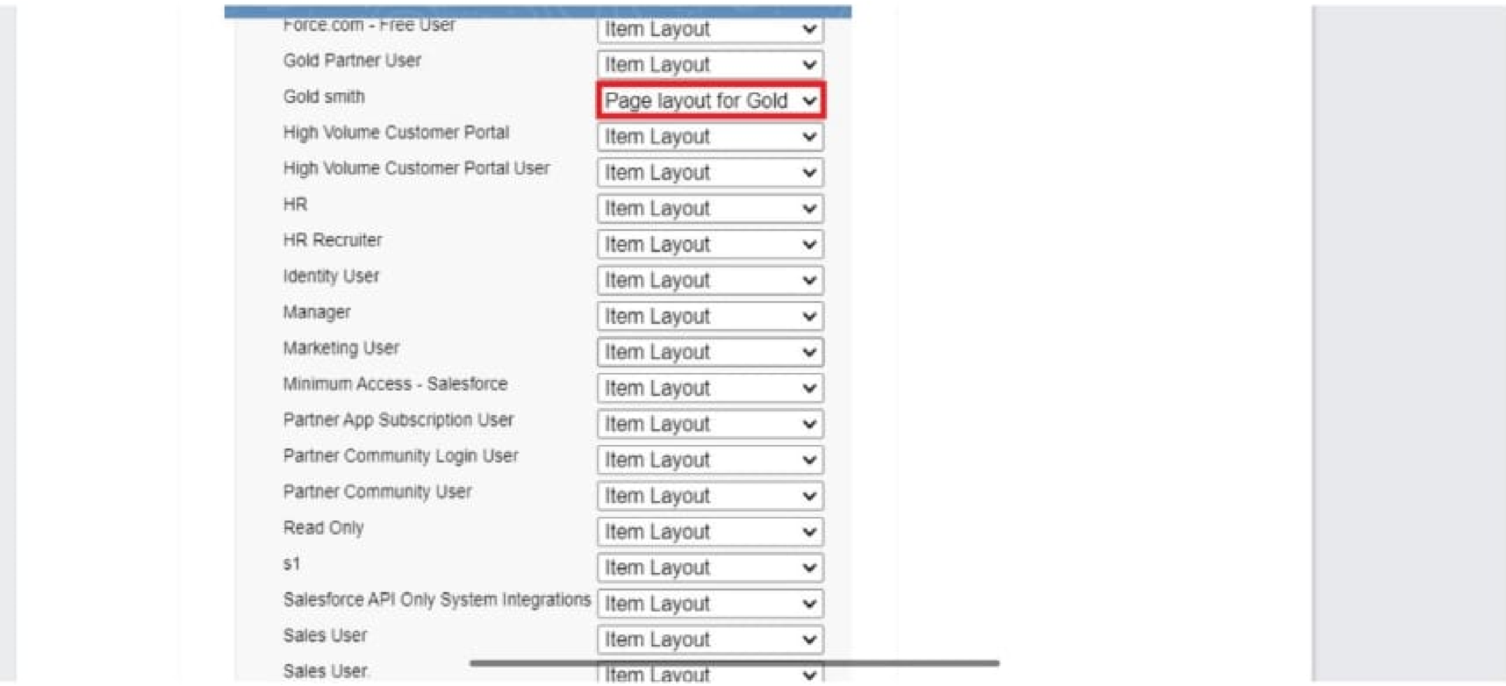


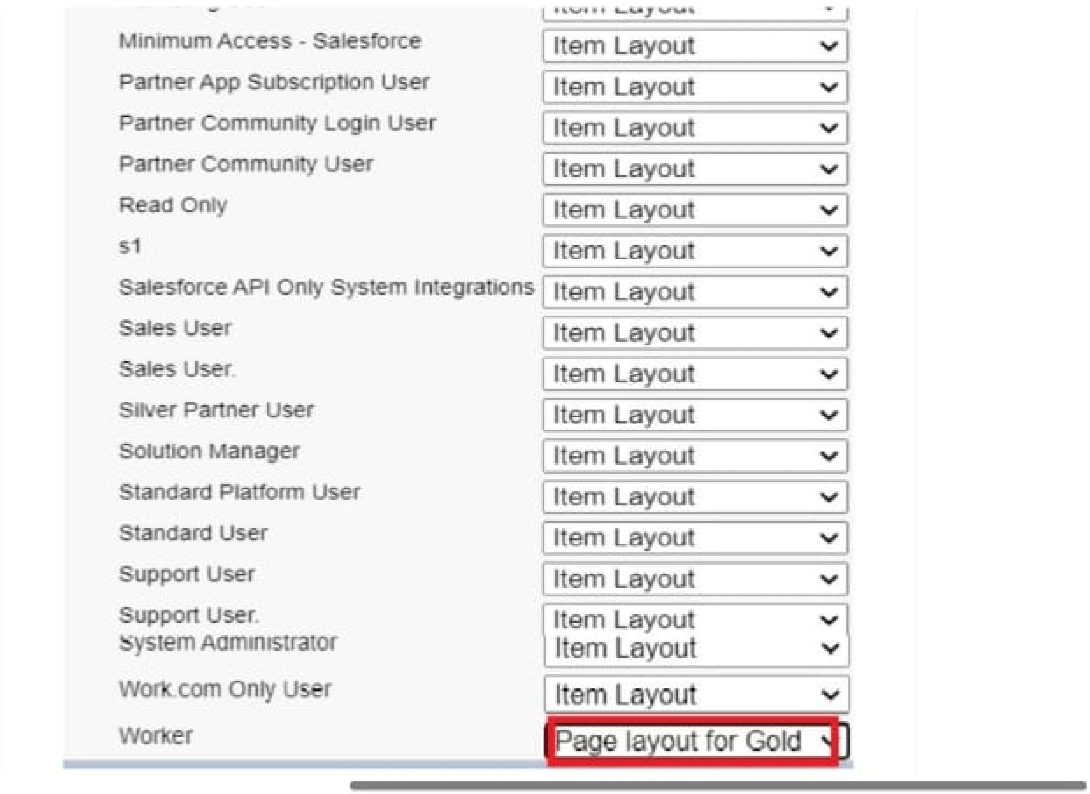
4.Uncheck for “Make Available”.

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.





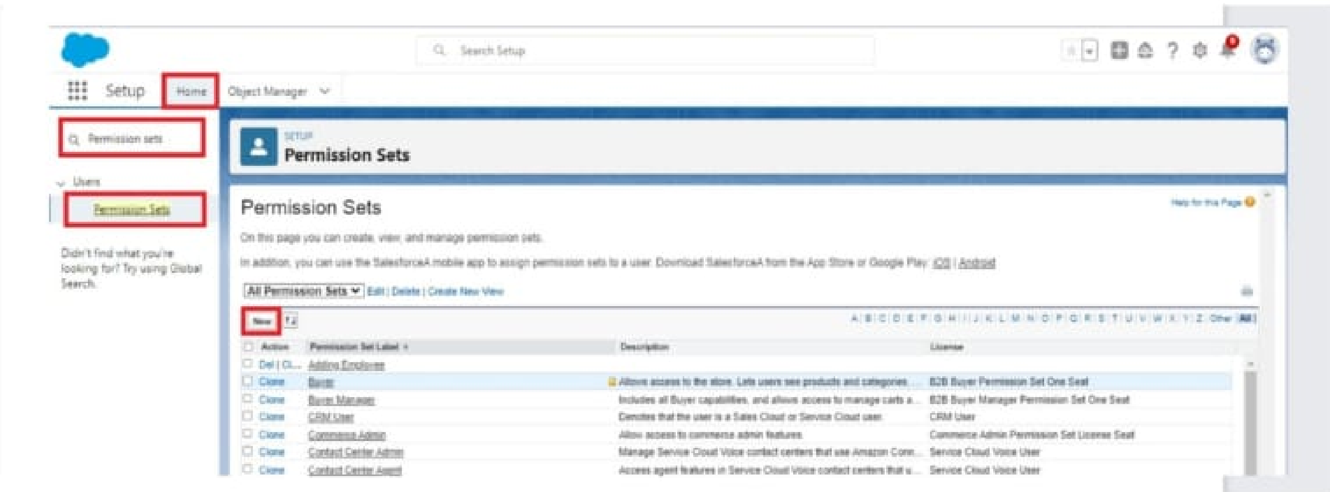
Activity 2:Create another Record Type with name "Silver" following the steps from Activity1.

permission set

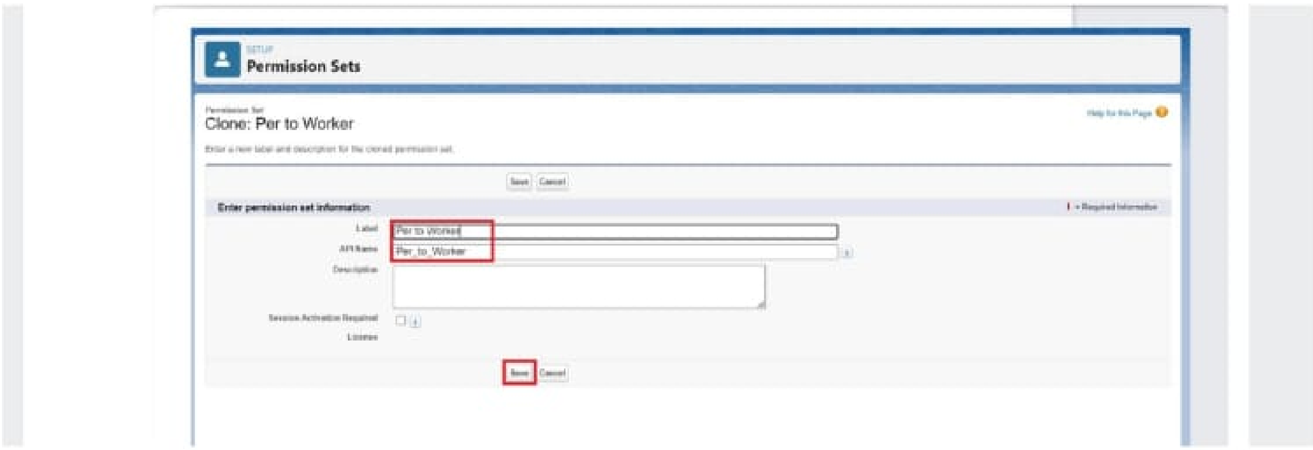
Creating permission set

A permission set is a collection of settings and permissions that giv
access to various tools and functions. Permission sets extend users' fu
access without changing their profiles. Users can have only one profile
depending on the Salesforce edition, they can have multiple permissio

1.Go to setup >> type “permission sets” in quick search >> select permi
sets >> New.

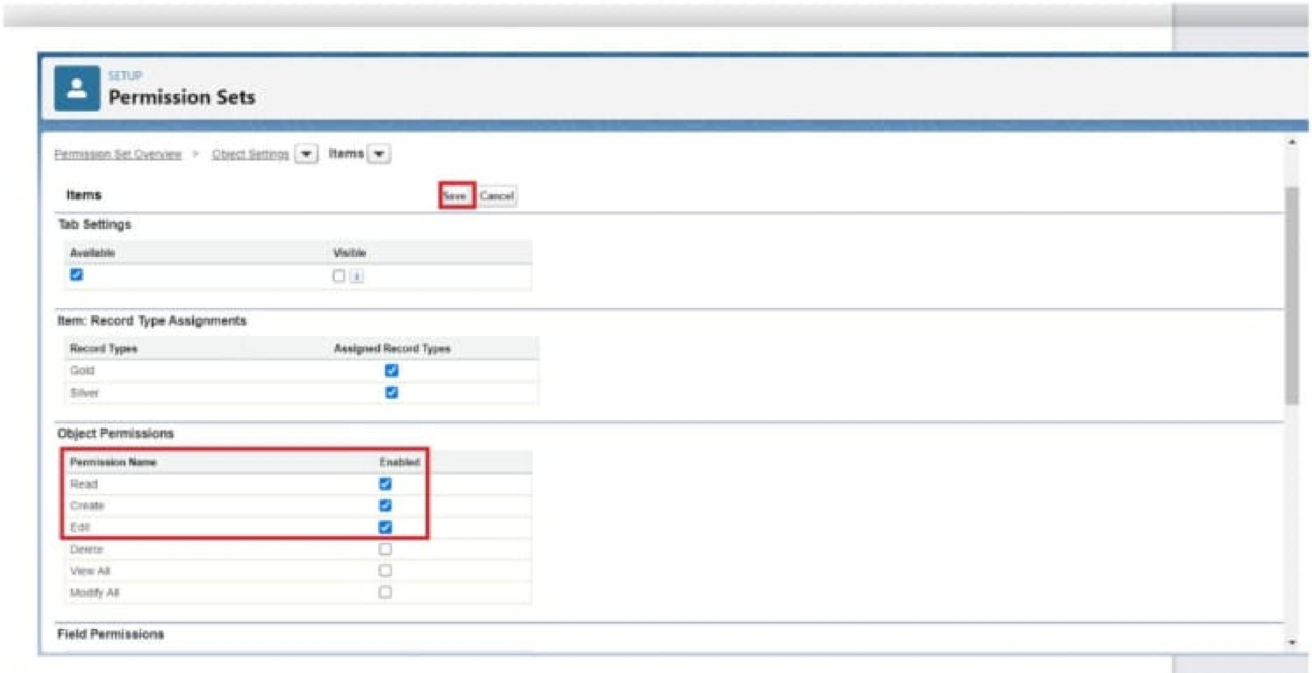


2.Enter the label name as “Per to Worker”, API will be auto populated ?



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.



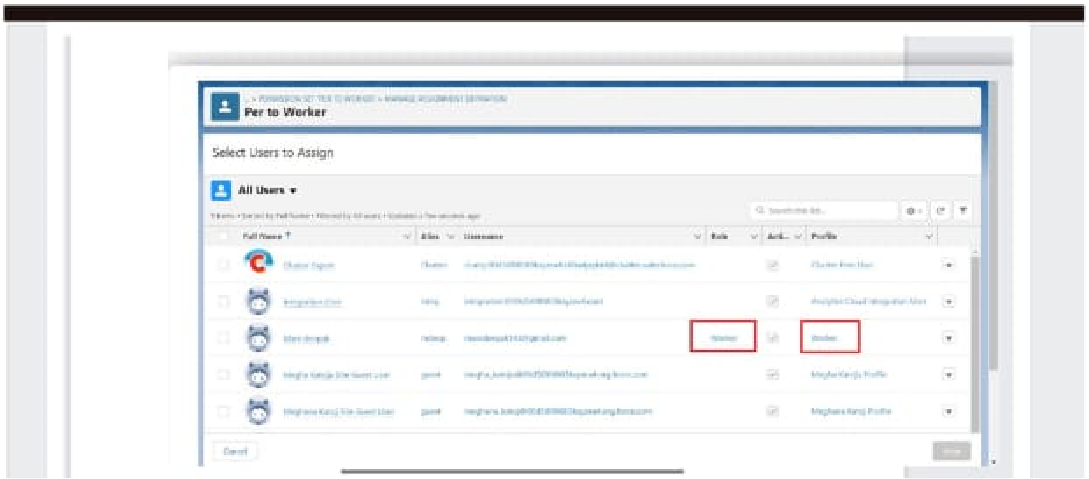
5.Click on Save.

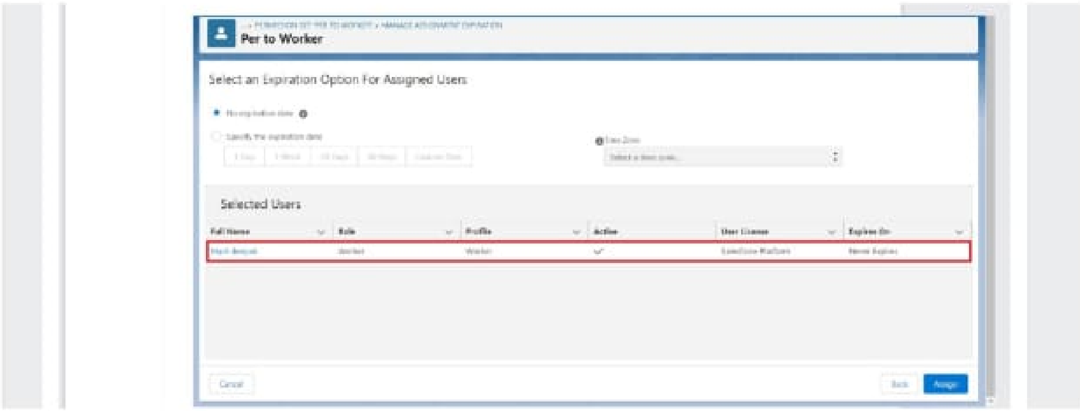
6.After saving the permission click on the Manage assignment

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.


Current Assignments


Per to Worker
Select Users to Assign
All Users


Per to Worker
Select an Expiration Option For Assigned Users
Selected Users

Trigger

Create a Trigger Handler class

Trigger handler

A trigger handler is a design pattern that organises trigger logic into separate classes. This helps in keeping code organised, reusable, and easier to maintain. The trigger handler class contains methods that handle the specific logic for different trigger events, improving code structure and readability. This approach is particularly useful for complex triggers or projects with multiple triggers, as it promotes modular coding practices and reduces the chances of code duplication.

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;

    }

  }

}
```

Create the trigger

CODE:

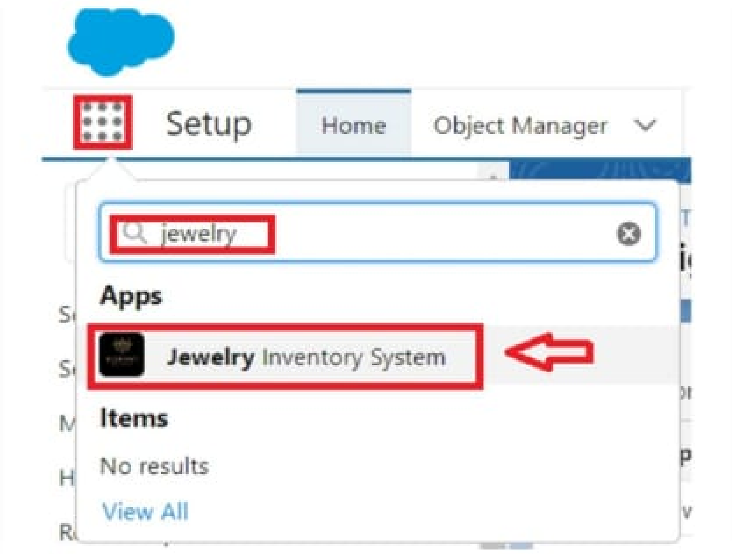
```
trigger UpdatePaidAmountTrigger on Billing_c (before insert,
before update) {

    if (Trigger.isInsert) {

UpdatePaidAmountTriggerHandler.handleBeforeInsert(Trigger
.new);

    } else if (Trigger.isUpdate) {

UpdatePaidAmountTriggerHandler.handleBeforeUpdate(Trigg
er.oldMap, Trigger.new);

    }

}
```

User Adoption

Create a Record (Jewel Customer)

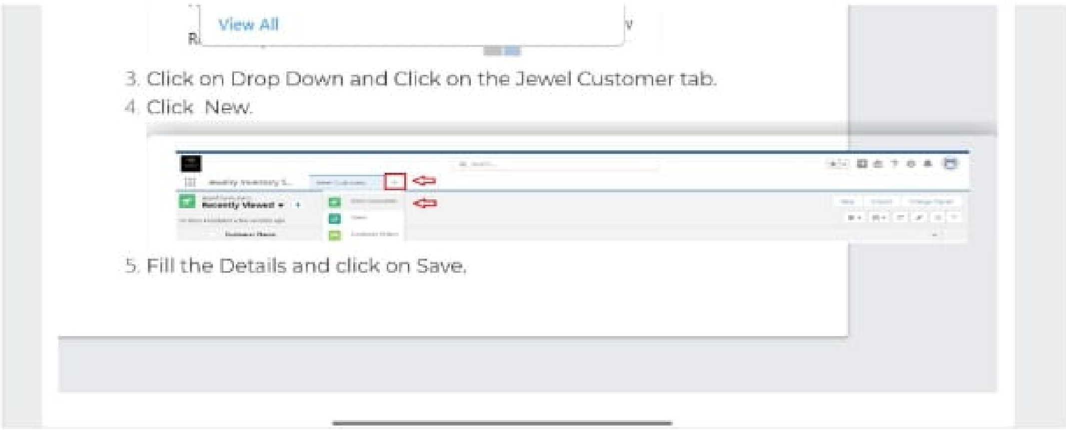
1. Click on App Launcher on the left side of the screen.

2.Search Jewelry Inventory System & click on it.



3.Click on Drop Down and Click on the Jewel Customer tab.

4.Click New.

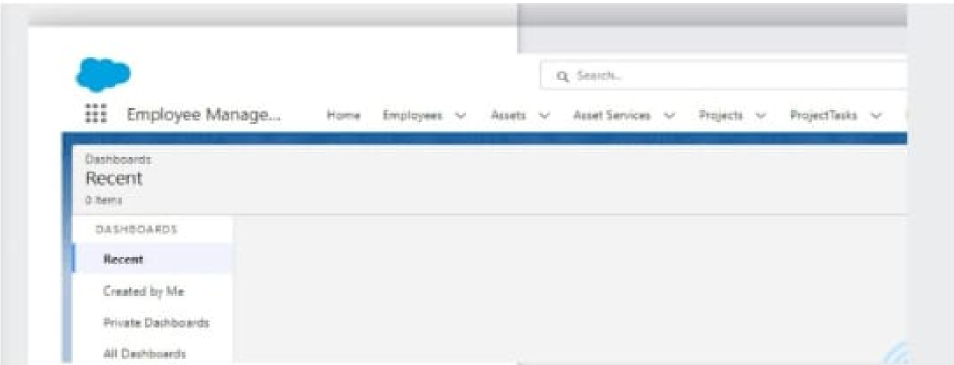


5.Fill the Details and click on Save.

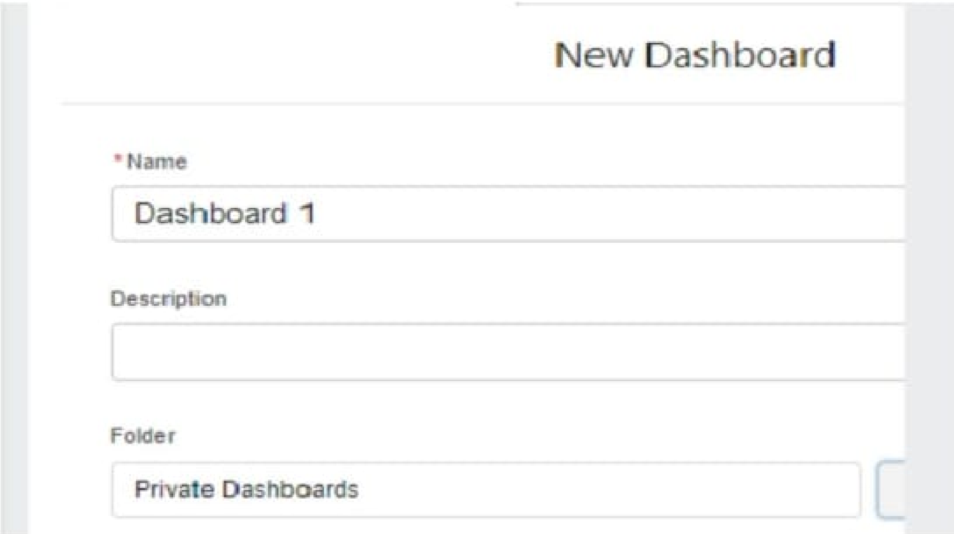
DASHBOARDS

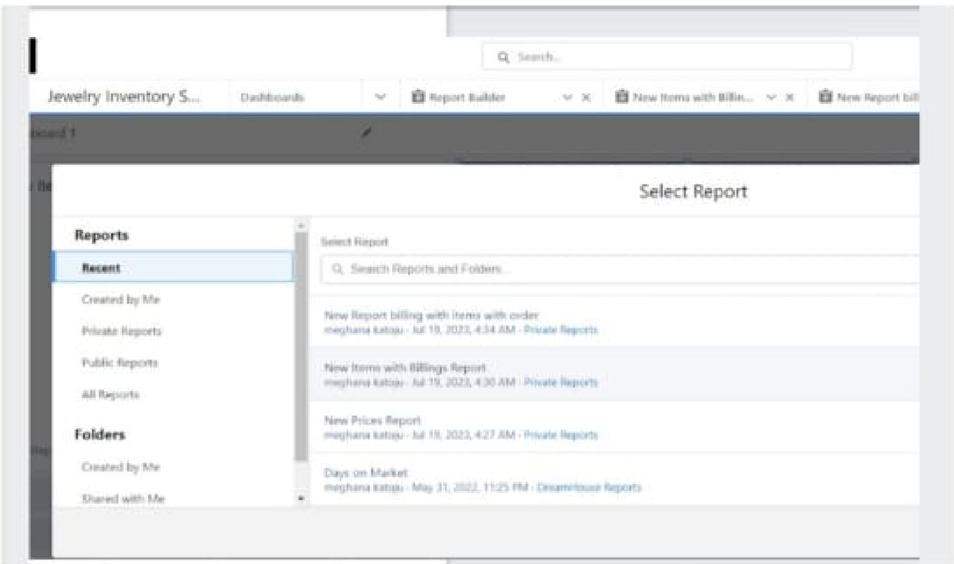
CREATE DASHBOA

- Go to the app >> click on the Dashboards tabs.

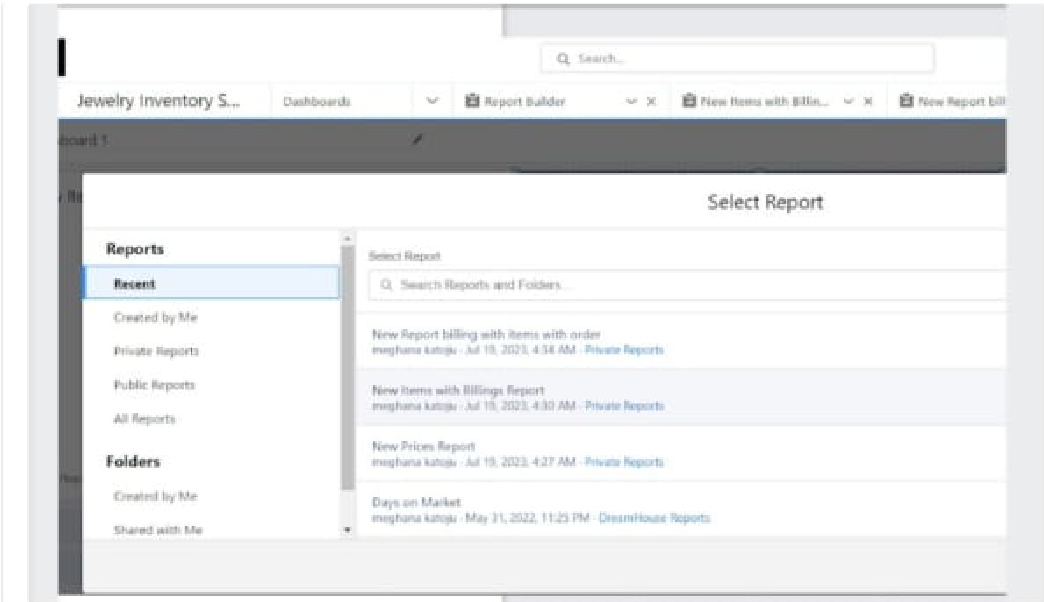


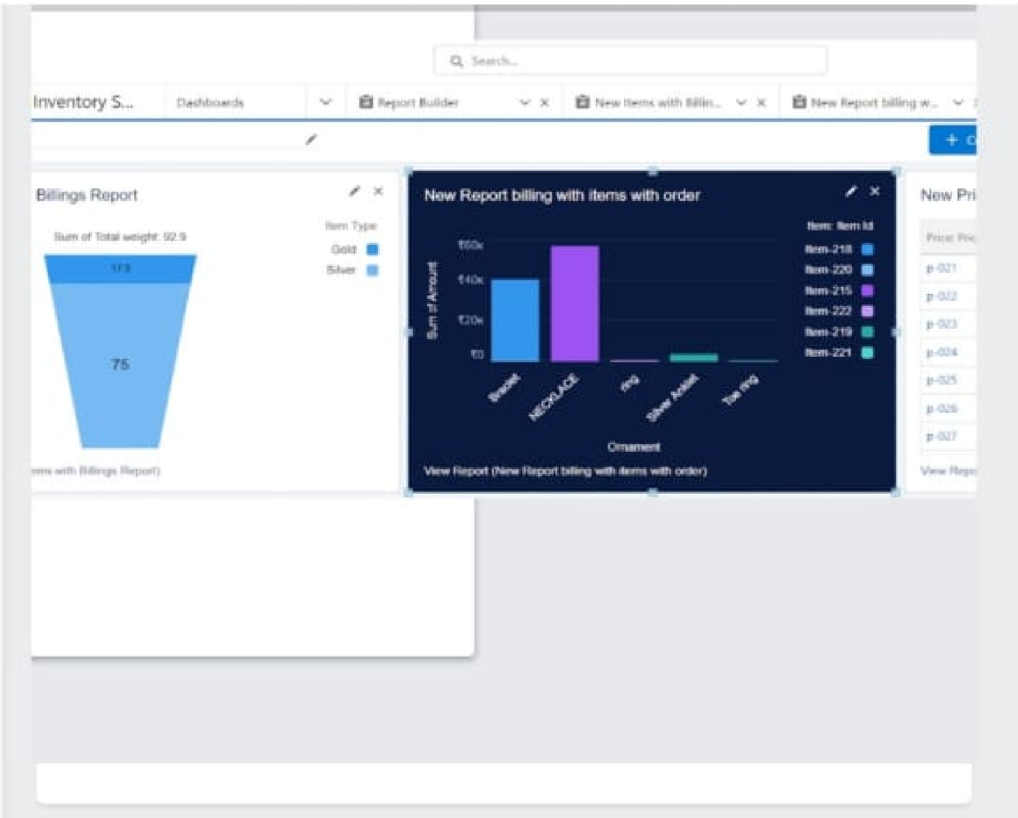
Give a Name and click on Create.





ACTIVITY 2: CREATE ANOTHER DASHBOARD AS WE DISCUSSED IN ACTIVITY 1.

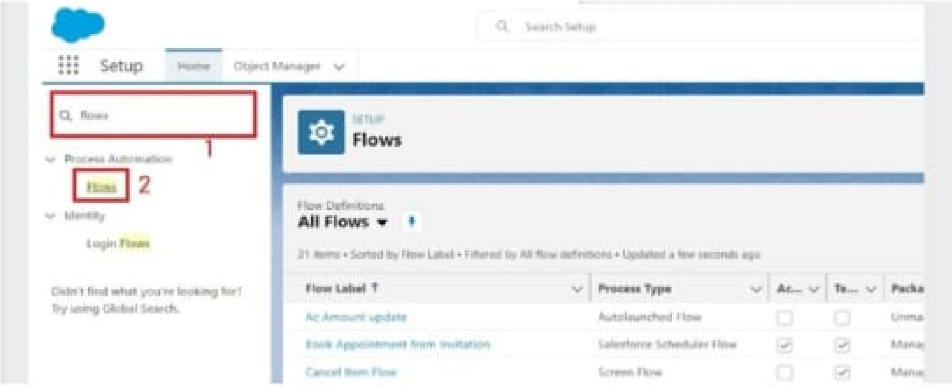




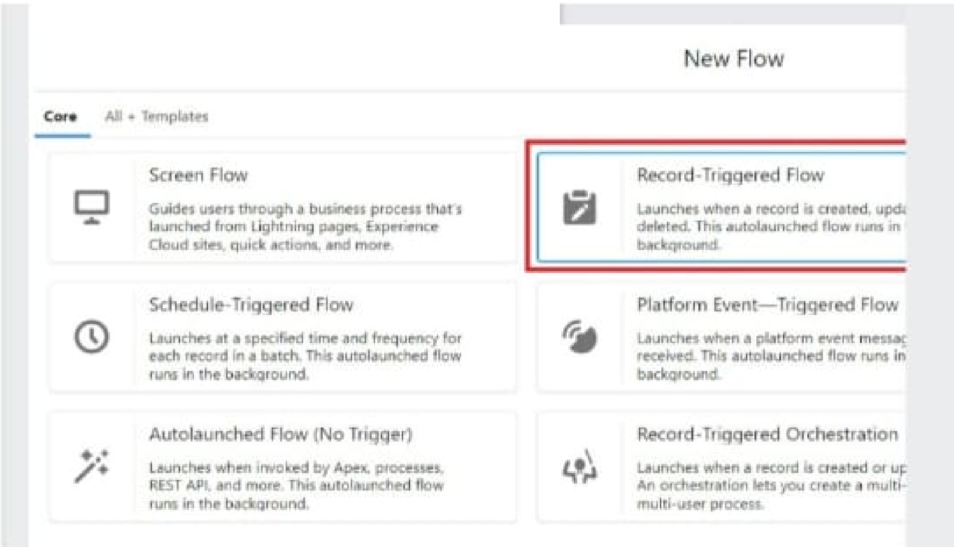
FLOWS

Create a Flow

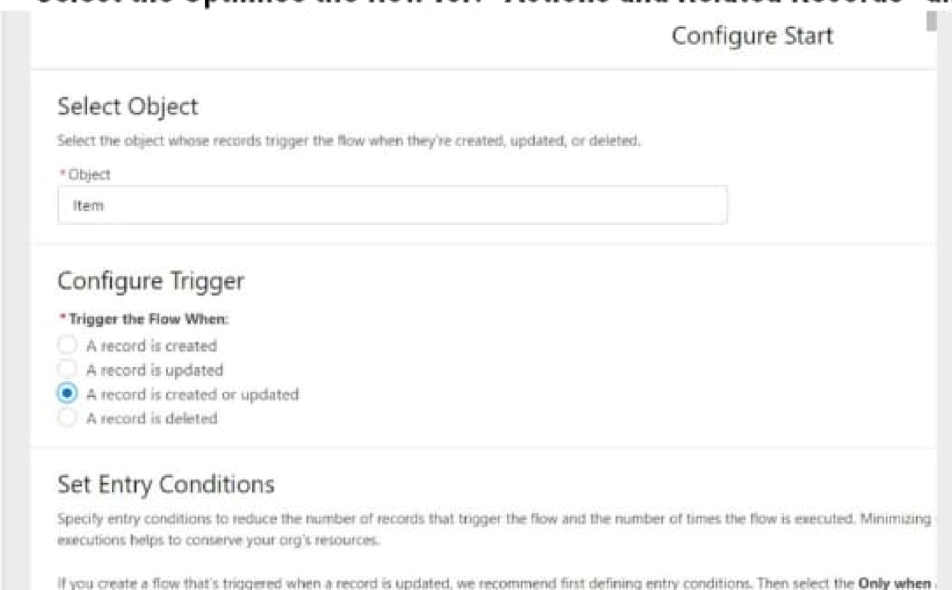
- Go to setup >> type Flow in quick find box >> Click on the Flow and Select the New Flow.



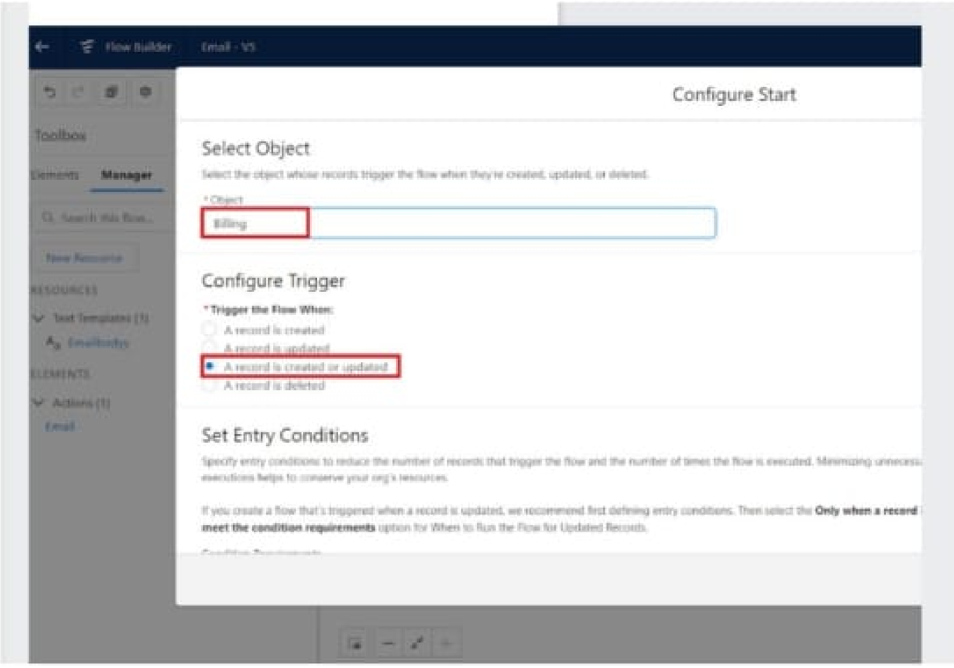
- **Select the Record-triggered flow and Click on Create.**

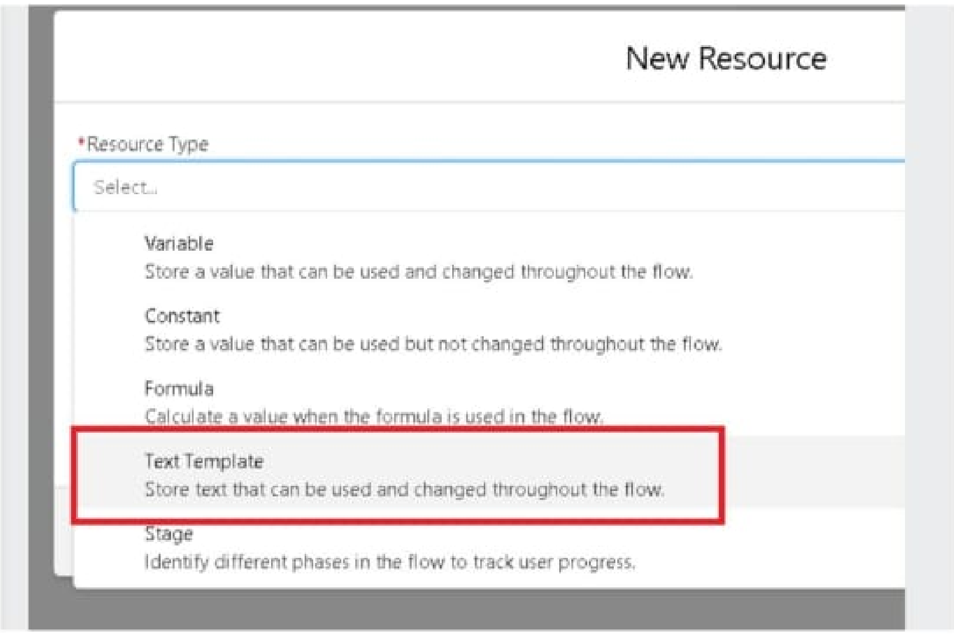


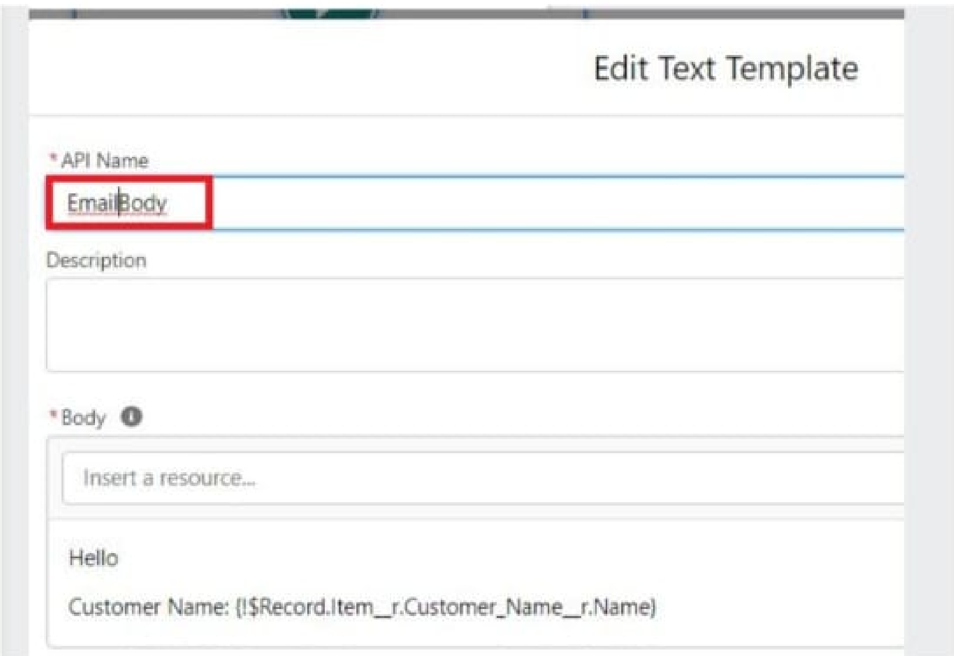
- **Select the Object as a "Billing" in the Drop down list.**
- **Select the Trigger Flow when: "A record is Created or Updated".**
- **Select the Optimise the flow for: "Actions and Related Records" and Click on Done**



- Now change the mode form Auto-layout to free-form.
- Now select the manger option in the toolbox, click New resource.
- Select the resource type as text template.







- Change the view as Rich Text ? View to Plain Text.
- In the body field paste the syntax that is given below.
- Now click on elements, and drag the action element into the preview pane.
- Give the label name as “ notice”
- Enable the body in set input values for the selected action
- Select the text template that was created.