A CRM APPLICATION FOR JEWEL MANAGEMENT

By
D.Mounika Reddy
214g1a3358@srit.ac.in

PROJECT ABSTRACT

A CRM Application for Jewel Management

The "CRM Application for Jewel Management" project aims to develop a sophisticated Customer Relationship Management (CRM) system tailored specifically for the jewelry industry. This application is designed to streamline the management of customer interactions, sales, and inventory, providing jewelers with a comprehensive tool to enhance customer service and operational efficiency. By integrating features such as customer profiles, purchase history, and personalized communication channels, the CRM application enables jewelers to deliver a more personalized shopping experience and build stronger, long-term relationships with their clientele.

In addition to its customer-focused functionalities, the application offers robust inventory management capabilities, allowing jewelers to track stock levels, manage suppliers, and analyze sales trends. The system's reporting and analytics tools provide valuable insights into sales performance and market trends, empowering businesses to make data-driven decisions and optimize their strategies. Overall, the CRM Application for Jewel Management is poised to transform how jewelers interact with their customers and manage their operations, driving growth and enhancing the customer.

INDEX PAGE

1. Salesforce

INTRODUCTION :-

Are you new to Salesforce? Not sure exactly what it is, or how to use it? Don't know where you should start on your learning journey? If you've answered yes toany of these questions, then you're in the right place. This module is for you.
Welcome to Salesforce! Salesforce is game-changing technology, with a host of productivity-boosting features, that will help you sell smarter and faster. As youwork toward your badge for this module, we'll take you through these features and answer the question, "What is Salesforce, anyway?".

What Is Salesforce?
Salesforce is your customer success platform, designed to help you sell, service,market, analyze, and connect with your customers.
Salesforce has everything you need to run your business from anywhere. Using standard products and features, you can manage relationships with prospects and customers, collaborate and engage with employees and partners, and storeyour data securely in the cloud.
So what does that really mean? Well, before Salesforce, your contacts, emails, follow-up tasks, and prospective deals might have been organized something like this:
https://youtu.be/r9EX3lGde5k

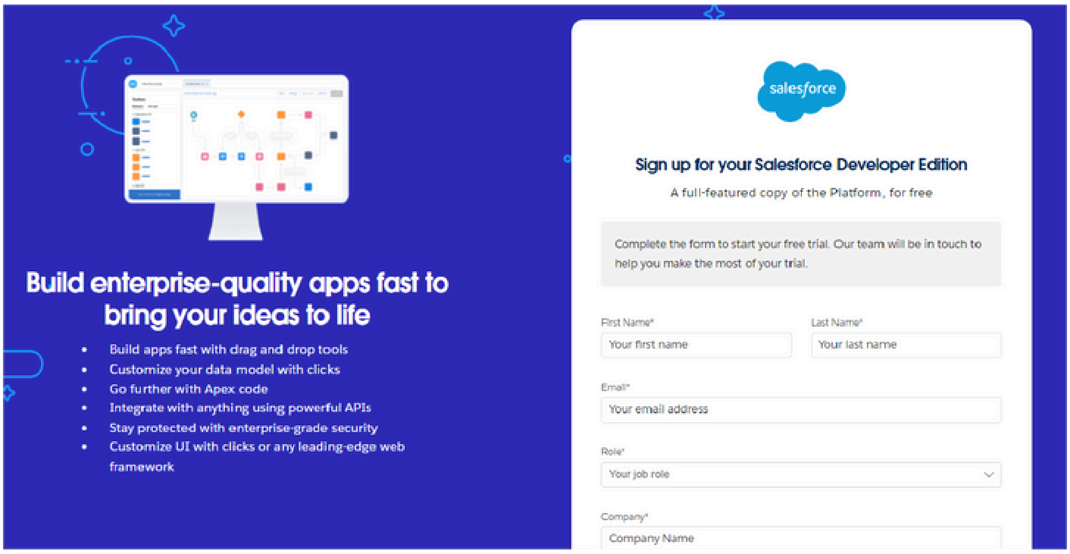
SALESFORCE:-

- ➤ Creating Developer Account
- ➤ Account Activation

TASK 1 :- Creating Developer Account

Creating a developer org in salesforce.
1. Go to https://developer.salesforce.com/signup

2. On the sign up form, enter the following details :

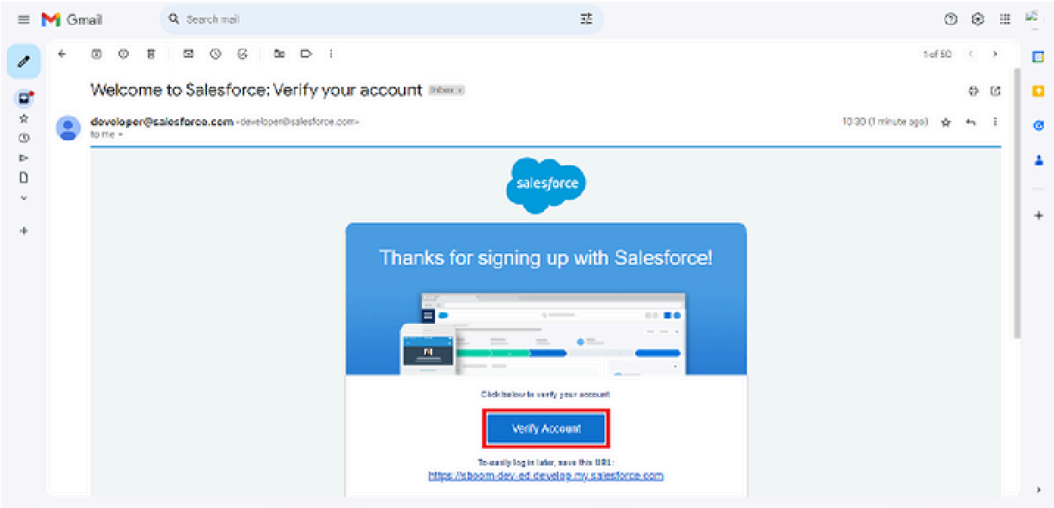


1. First name & Last name
2. Email
3. Role : Developer
4. Company : College Name
5. County : India
6. Postal Code : pin code

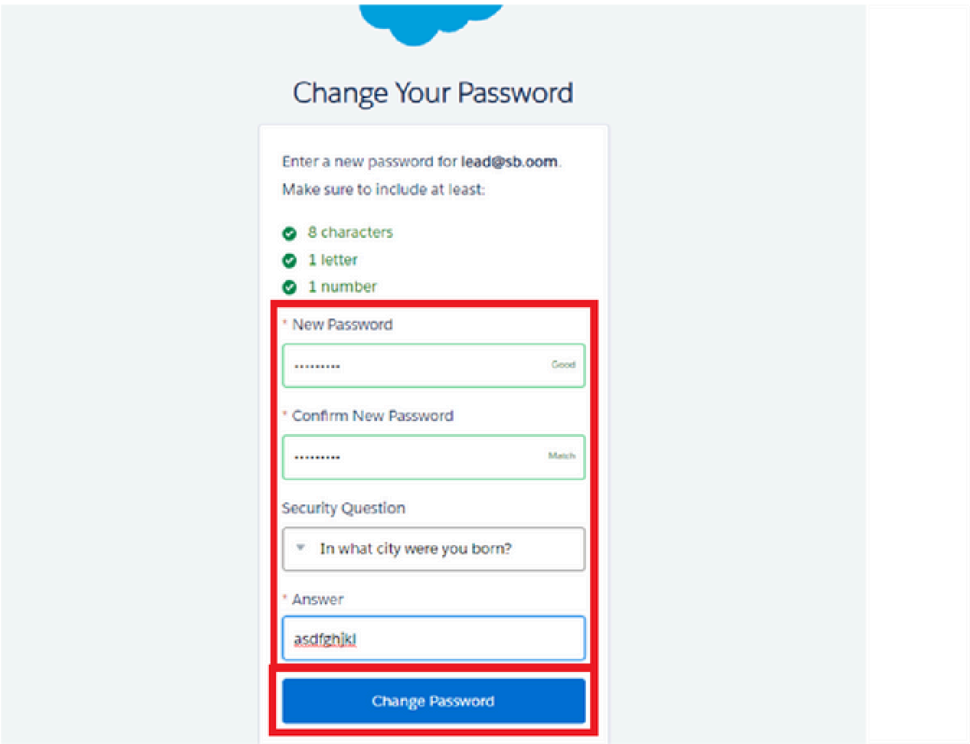
Username : should be a combination of your name and company
This need not be an actual email id, you can give anything in the format : username@organization.com
Click on sign me up after filling these.

TASK 2 :- Account Activation

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



2. Click on Verify Account
3. Give a password and answer a security question and click on changepassword.



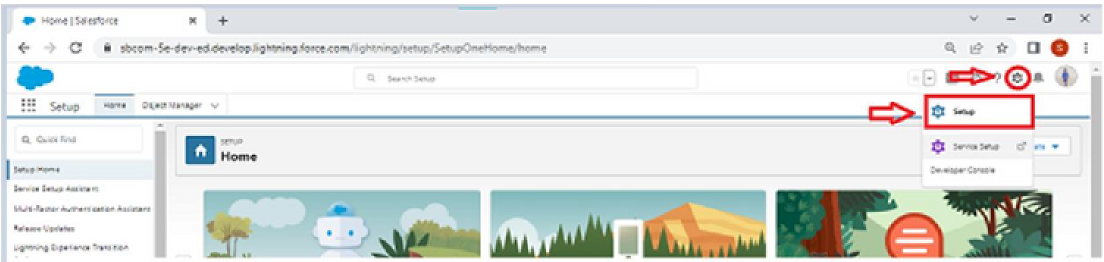
2. Object

INTRODUCTION :-

What Is an Object?
Salesforce objects are database tables that permit you to store data that isspecific to an organization. What are the types of Salesforce objects Salesforce objects are of two types:

1. Standard Objects: Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.
2. Custom Objects: Custom objects are those objects that are created by users. They supply information that is unique and essential to their organization. Theyare the heart of any application and provide a structure for sharing data.

To Navigate to Setup page: Click on
gear icon ? click setup.



Objects and fields involved in Co-Living:

OBJECT :-

- Create a custom object for Customer
- Create a custom object for Customer Order
- Create a custom object for Price
- Create a custom object for Billing

Create Item Object
The purpose of creating a Item object is to manage the inventory of gold and silver items.
To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
    1. Enter the label name >> Item
    2. Plural label name >> Items
    3. 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.

Note: Create 3 more objects with label names as Customer Order,Price,Billing
(Use “Auto Number” as a data type for Customer Order,Price,Billing).

Task-3:-Tabs

What is Tab: A tab is like a user interface that is used to build records for objects and to view the records in the objects.
Types of Tabs:
1.Custom Tabs

Custom object tabs are the user interface for custom applications that you build in salesforce.com. They look and behave like standard salesforce.com tabs such as accounts, contacts, and opportunities.
2.Web Tabs

Web Tabs are custom tabs that display web content or applications embedded in the salesforce.com window. Web tabs make it easier for your users to quickly access content and applications they frequently use without leaving the salesforce.com application.
3.Visualforce Tabs

Visualforce Tabs are custom tabs that display a Visualforce page. Visualforce tabs look and behave like standard salesforce.com tabs such as accounts, contacts, and opportunities.
4.Lightning Component Tabs

Lightning Component tabs allow you to add Lightning components to the navigation menu in Lightning Experience and the mobile app.
5.Lightning Page Tabs

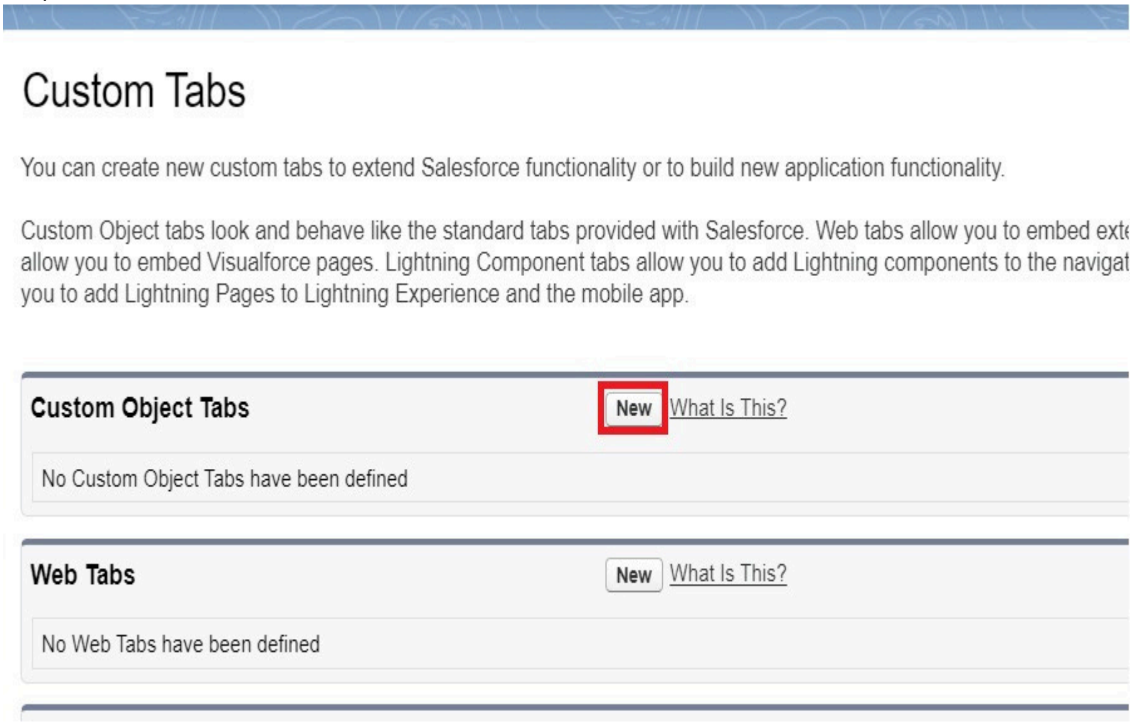
Lightning Page Tabs let you add Lightning Pages to the mobile app navigation menu. Lightning Page tabs don't work like other custom tabs. Once created, they don't show up on the All Tabs page when you click the Plus icon that appears to the right of your current tabs. Lightning Page tabs also don't show up in the Available Tabs list when you customize the tabs for your apps.
Use Case:

Creating Objects and storing Jewels data is the very first step in the requirements they want. Now to access the stored data by an Owner (Gold Smith) in the organisation Admin needs to create Tabs. By designing a dedicated Tab, businesses can improve user experience, simplify navigation, and provide quick access to critical information, enhancing productivity and ensuring efficient utilisation of Salesforce's capabilities.

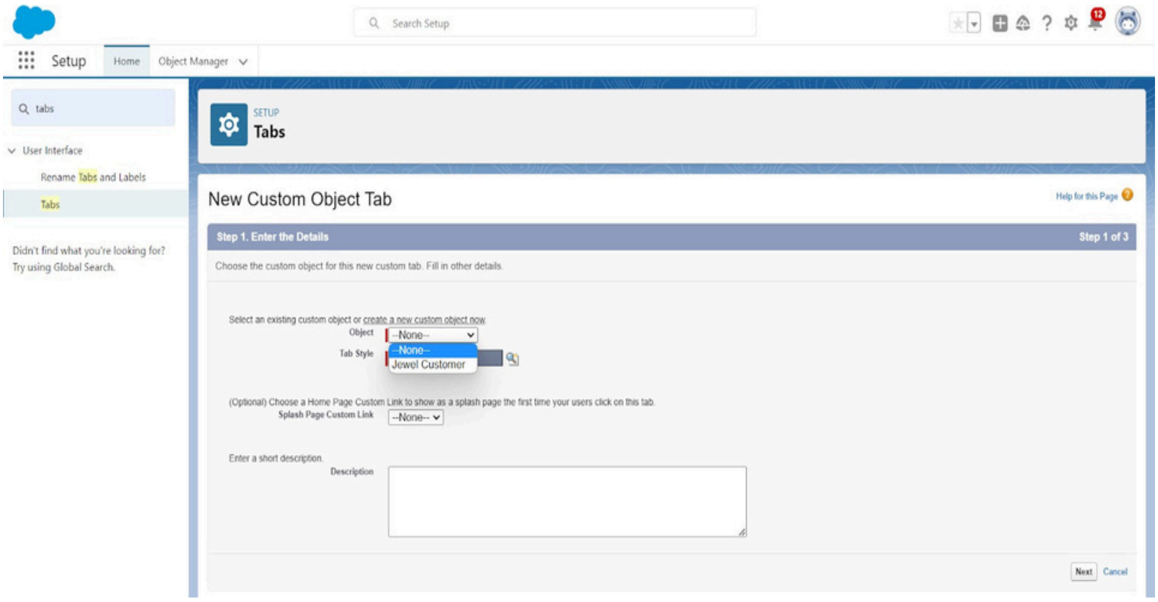
Creating a Custom Tab

To create a Tab:(Customer)

1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)



2. 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)

1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)
2. 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.

Note: Now create tabs for Customer Order, Price, Billing objects.

Task-4 : The Lightning App

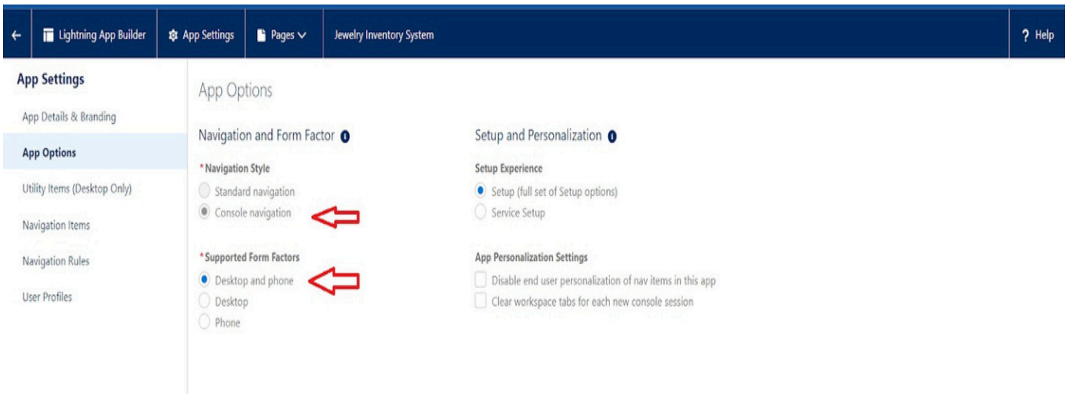
An app is a collection of items that work together to serve a particular function. In Lightning Experience, Lightning apps gives users access to sets of objects, tabs, and other items all in one convenient bundle in the navigation bar.
Lightning apps let you brand your apps with a custom color and logo. You can even include a utility bar and Lightning page tabs in your Lightning app. Members of your org can work more efficiently by easily switching between apps.

Use Case:

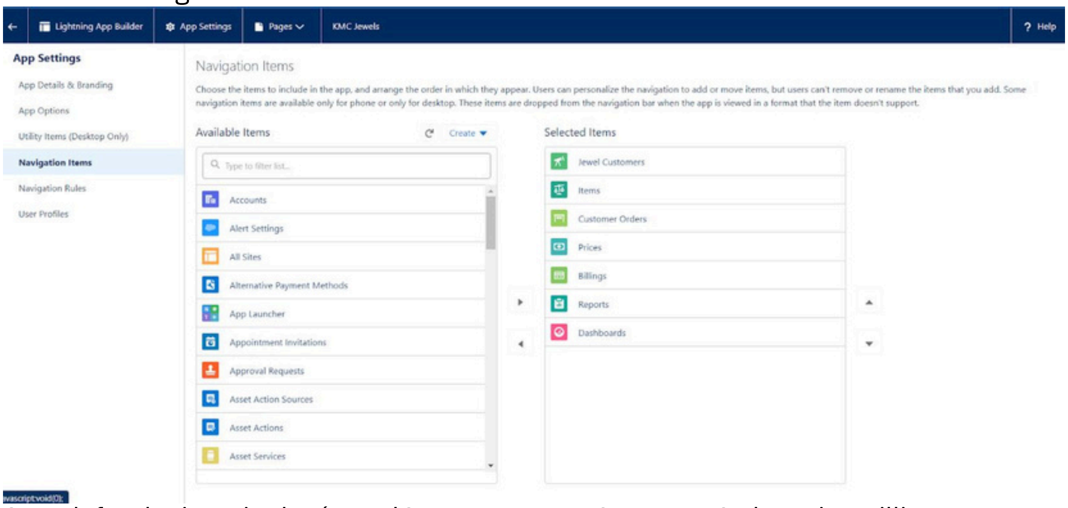
Well done you have reached close to your requirement by creating the objects to store the organization's data. Making a database for an organization is just not enough to reach out the requirements, the task is how the users at the organization can access the objects you have created for them. As an Admin for the organization it's your duty to make sure every user of the organization is able to access the data modelling structure.

Create a Lightning App
To create a lightning app page:

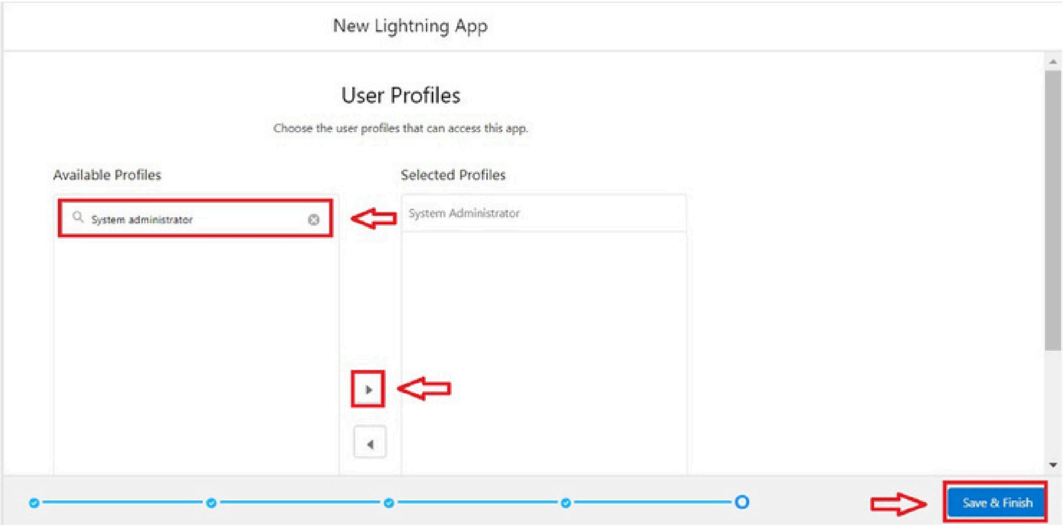
1. Go to setup page>>search "app manager" in quick find>>select "app manager">>click on New lightning App.



4.(Utility Items) keep it as default>>Next.
5.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.
6.To Add User Profiles:



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

Task5: Fields

When we talk about Salesforce, Fields represent the data stored in the columns of a relational database. It can hold any valuable information that you require for a specific object. Hence, the overall searching, deletion, and editing of the records become simpler and quicker.

Types of Fields :

1. Standard Fields
2. Custom Fields

Standard Fields:

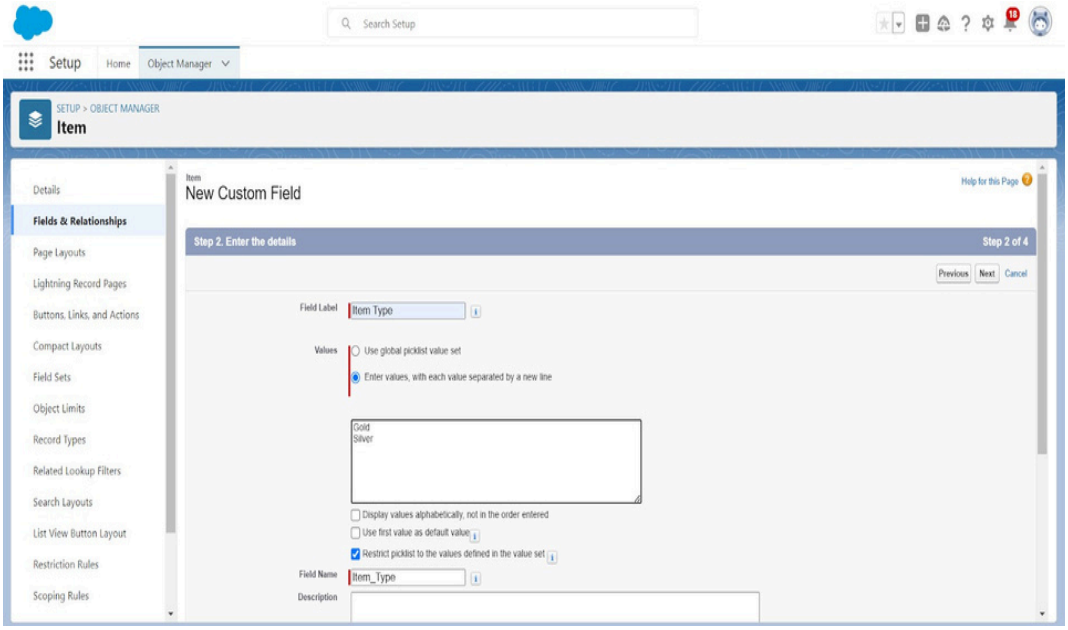
As the name suggests, the Standard Fields are the predefined fields in Salesforce that perform a standard task. The main point is that you can't simply delete a Standard Field until it is a non-required standard field. Otherwise, users have the option to delete them at any point from the application freely. Moreover, we have some fields that you will find common in every Salesforce application. They are,

>> Created By
>> Owner
>> Last Modified
>> Field Made During object Creation

Custom Fields: On the other side of the coin, Custom Fields are highly flexible, and users can change them according to requirements. Moreover, each organiser or company can use them if necessary. It means you need not always include them in the records, unlike Standard fields. Hence, the final decision depends on the user, and he can add/remove Custom Fields of any given form.

Use Case:

Now it's time for you to think out of the box for your organisation. You have successfully created the database objects for the organisation but now all eyes turn on you as you have to define what sort of information the objects store which you have created. As a life saver of your organisation you come up with the idea of creating fields to store different types of data.

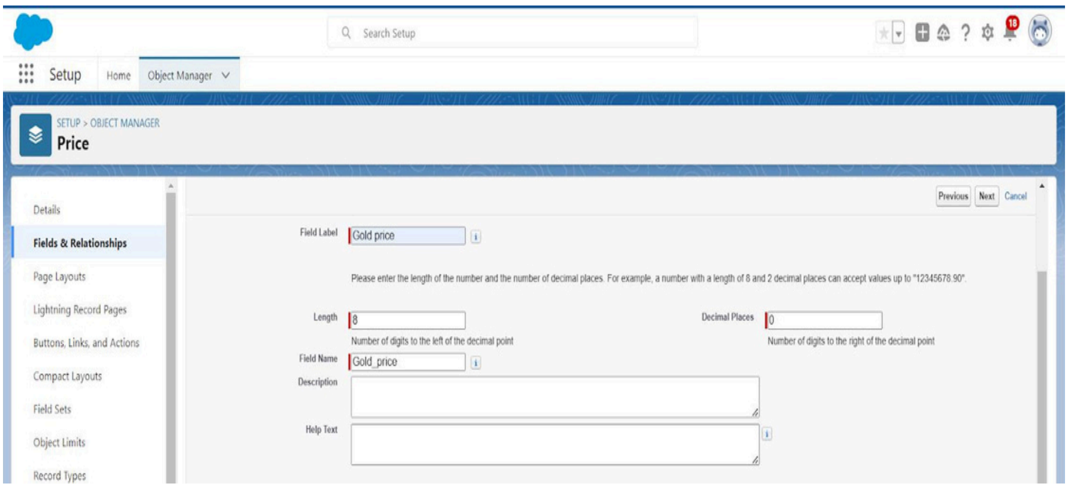


6. Click Next >> Next >> Next >> Save .

Creating Currency Field in Price Object

To create fields in an object:

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



3	Item	

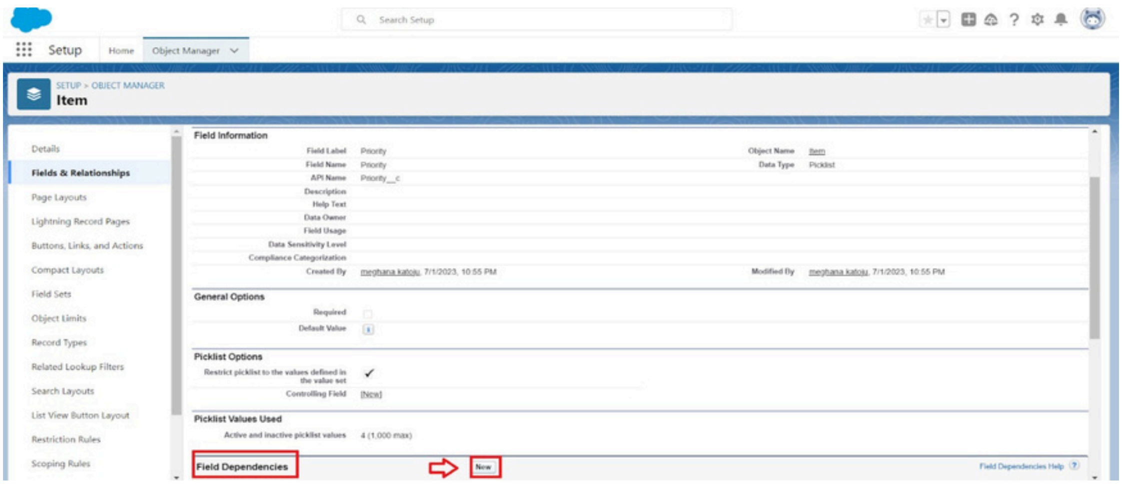
Field Label:Customer Name	Lookup Relationship with Jewel Customer Object
Ornament	Text(20)
Weight	Number (Length=8,Decimal=5)
Stone Weight	Number (Length=5,Decimal=5)
Percentage	Number (Length=2,Decimal=0)
Stone/Other Price	Currency (Length=8,Decimal=2)
Expected Days Of Return	Picklist 1-3 Days 4-5 Days 6-7 Days 8-10 Days
Priority	Picklist Low Medium High Critical
Silver Price	Formula (Return Type:Number) (Decimal=3) (Prices__r.Silver_price__c / 1000)
Purity Gold Price	Formula (Return Type:Currency) (Decimal=2) ((Prices__r.Gold_price__c * Purity__c) / 24) / 10

		Total Weight	Formula (Return Type:Number) (Decimal=3) (Weight__c - Stone_weight__c)
		Amount	Formula (Return Type:Currency) (Decimal=3) IF(ISPICKVAL(Item_Type__c ,"Gold"), Total_weight__c * Purity_Gold_price__c , Total_weight__c * Silver_price__c)
		KDM	Formula (Return Type:Currency) (Decimal=0) (Amount__c * Percentage__c) / 100
		Making Charges	Formula (Return Type:Currency) (Decimal=0) IF(ISPICKVAL(Item_Type__c ,"Gold"), Weight__c * 300 , Weight__c * 10)

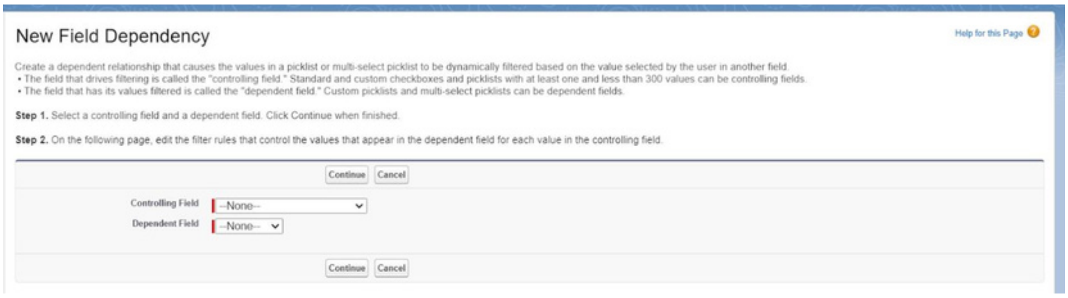
4	Customer Order	Order Status	Picklist Started Not Started On Hold Completed Not Completed

5	Billing	Field Label:Item	Lookup Relationship with Item Object

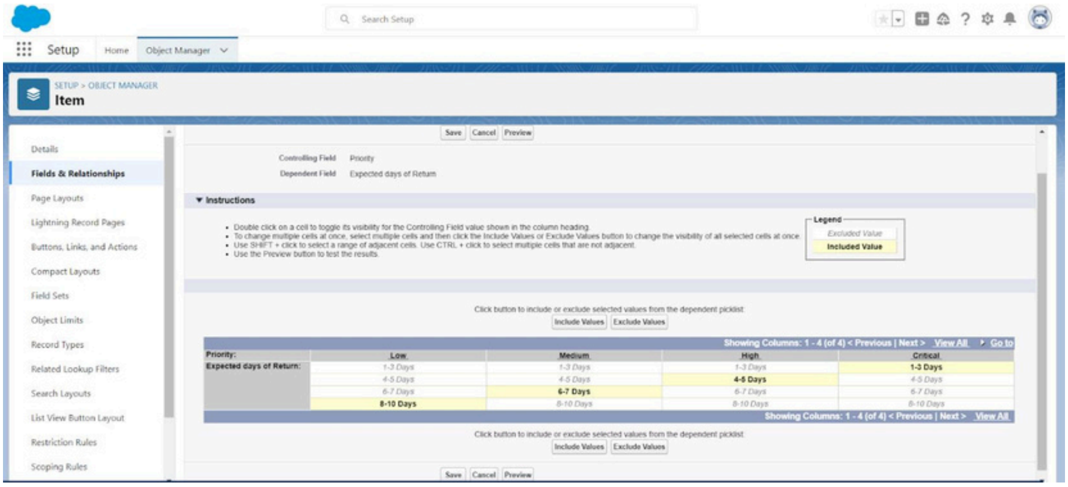
Ornament	Formula (Return Type:Text) Item__r.Ornament__c
Stone weight	Formula (Return Type:Number) (Decimal=2) Item__r.Stone_weight__c
Weight	Formula Return Type:Number (Decimal=2) Item__r.Total_weight__c
Amount	Formula (Return Type:Currency) (Decimal=2) Item__r.Amount__c
Gold/Silver Price	Formula (Return Type:Currency) (Decimal=2) IF(ISPICKVAL(Item__r.Item_Type__c ,"Gold"), Item__r.Gold_price__c , Item__r.Silver_price__c)
KDM Charge	Formula (Return Type:Currency) (Decimal=0) Item__r.KDM__c
Making Charges	Formula (Return Type:Currency) (Decimal=2) Item__r.Making_Charges__c
Stones/other price	Formula (Return Type:Currency) (Decimal=2) Item__r.Stone_other_price__c



4. Select Controlling Field as “Priority” and Depending field as “Expected Days of Return”>>Continue.



5. Select the “Expected Days of Return” values of related Priority values and Click on Include Values >> Save.

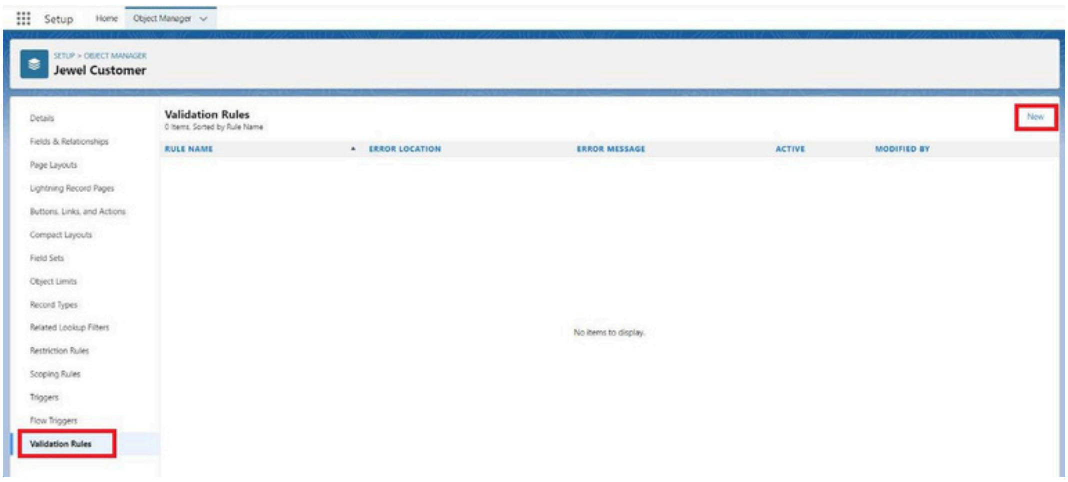


Creating the validation rule

Creating the validation rule for Postal Code field in Jewel Customer object

Note : check whether the fields mentioned in the formula field are created or not , if not go to activity 10 and create those fields mentioned in Jewel Customer object.

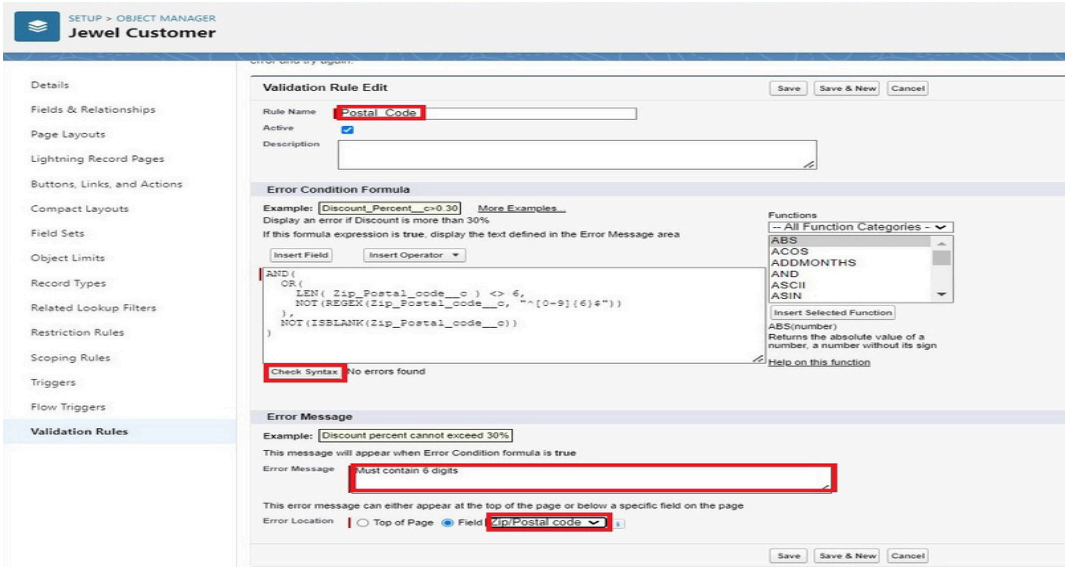
1. Go to setup >> click on Object Manager >> type object name(Jewel Customer) in quick find bar >> click on the object.
2. Click on the validation rule >> click New.



3. Enter the Rule name as “Postal Code “.

4. 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))
)
```



5. 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.

NOTE:

Create One more Validation rule for Jewel Customer object.

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

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

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

Create Validation rule for Item object.

1. Enter Rule name as “ValidationRule For Item“.
2. 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))
3. Enter the Error Message as “Please fill Required fields”, select the Error location as Top of Page and click Save.

Task6: Profiles

A profile is a group/collection of settings and permissions that define what a user can do in salesforce. Profile controls “Object permissions, Field permissions, User permissions, Tab settings, App settings, Apex class access, Visualforce page access, Page layouts, Record Types, Login hours & Login IP ranges. You can define profiles by the user's job function. For example System Administrator, Developer, Sales Representative.

Types of profiles in salesforce

1. Standard profiles:

By default salesforce provides below standard profiles.

- Contract Manager
- Read Only
- Marketing User
- Solutions Manager
- Standard User
- System Administrator.

We cannot deleted standard ones

Each of these standard ones includes a default set of permissions for all of the standard objects available on the platform.

2. Custom Profiles:

Custom ones defined by us.

They can be deleted if there are no users assigned with that particular one.

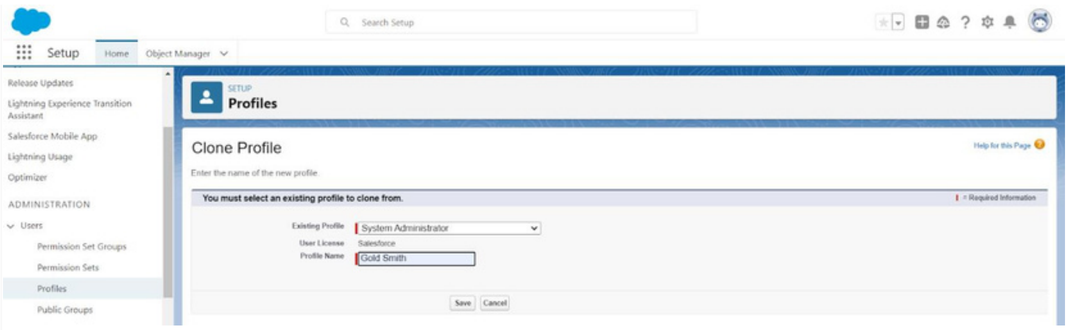
Use Case:

Great work Admin, you have done so good till now. The GoldSmith wants to differentiate the users based on their functionalities, position and based on this those users need to have the minimum access to the database object in the organisation. Now it's time to use your Admin skills to focus on the users, their functionality and position in the organisation in order to achieve the Goldsmith Smith requirements.

Gold Smith Profile

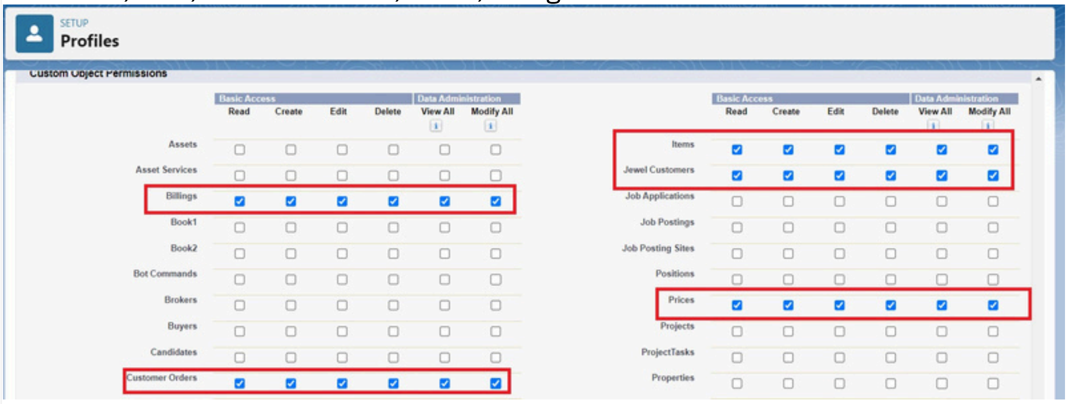
To create a new profile:

1. Go to setup >> type profiles in quick find box >> click on profiles >> clone the desired profile (System Administrator) >> enter profile name (Gold Smith) >> Save.



2. While still on the profile page, then click Edit.

3.	Scroll down to Custom Object Permissions and Give access permissions for Jewel Customer,Item,Customer Order,Prices,Billings .



4.	Scroll down and Click on Save.

Worker Profile

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

Task7: Roles

A role in Salesforce defines a user's visibility access at the record level. Roles may be used to specify the types of access that people in your Salesforce organisation can have to data. Simply put, it describes what a user could see within the Salesforce organisation.

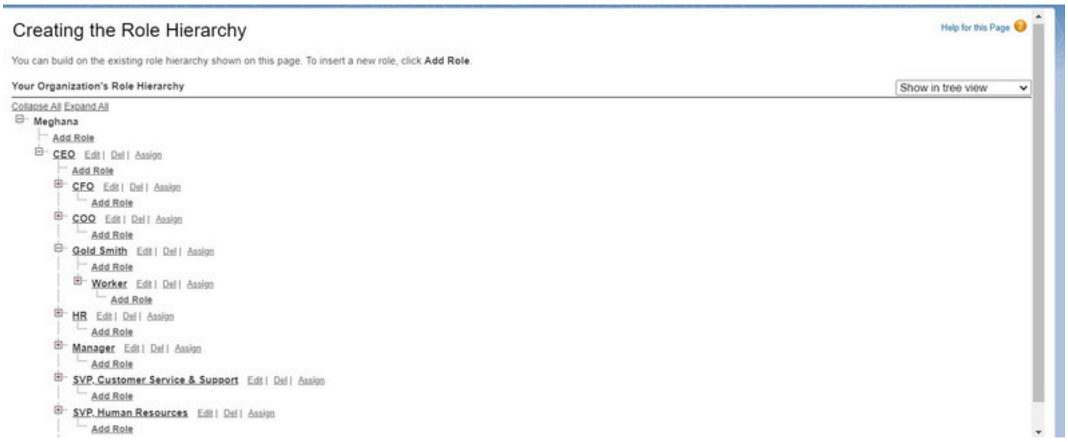
Use Case:

You have successfully fulfilled the 1st requirement i.e., differentiating the users based on the functionality. Now comes the 2nd task of differentiating the users based on their position, using your excellent admin skills and expanding the custom roles for the organisation and assigning it to the users.

Creating Gold Smith Role

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

Create one more role as Worker which reports to Gold Smith.



Task8: Users

A user is anyone who logs in to Salesforce. Users are employees at your company, such as sales reps, managers, and IT specialists, who need access to the company's records. Every user in Salesforce has a user account. The user account identifies the user, and the user account settings determine what features and records the user can access.

Every user in Salesforce has a user account. The user account identifies the user, and the user account settings determine what features and records the user can access. Each user account contains at least the following:

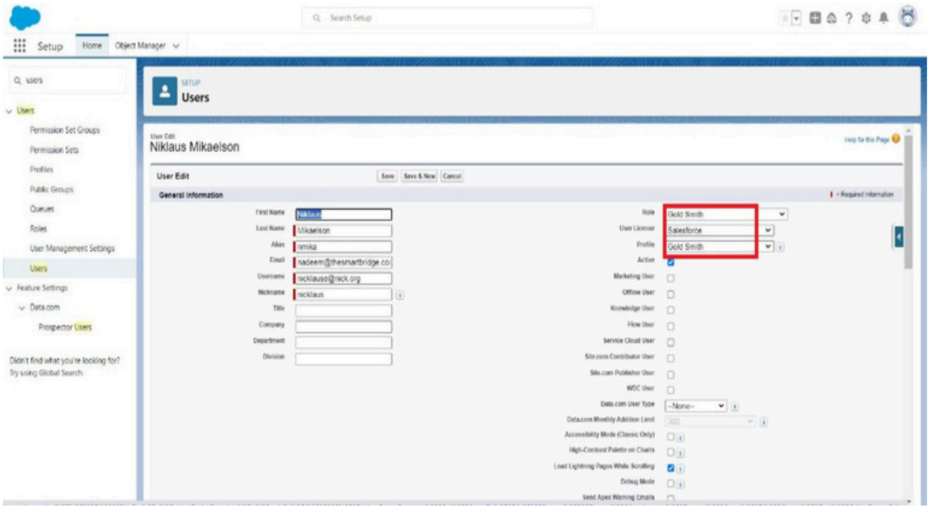
- Username
- Email Address
- User's First Name (optional)
- User's Last Name
- Alias
- Nickname
- Licence
- Profile
- Role (optional)

Create User

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

1. First Name : Niklaus
2. Last Name : Mikaelson
3. Alias : Give a Alias Name
4. Email id : Give your Personal Email id
5. Username : Username should be in this form: text@text.text

6. Nick Name : Give a Nickname
7. Role : Gold Smith
8. User licence : Salesforce
9. Profiles : Gold Smith



3. Save.

Create 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.

Note:

Create two more users as mentioned in activity 2 using the same profile.

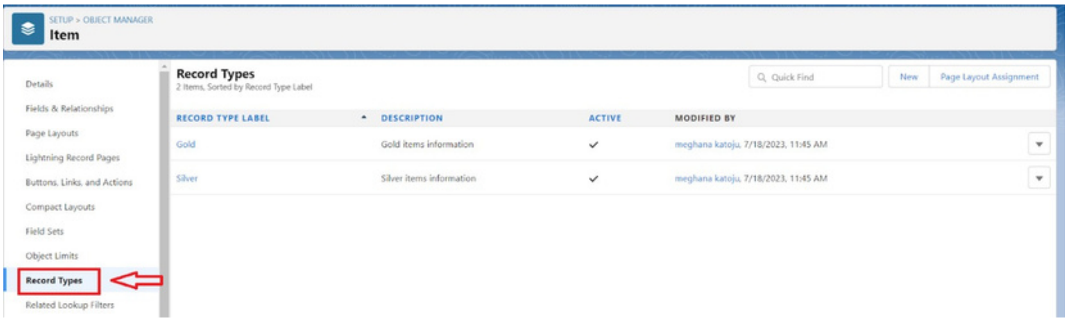
Record Types are a way of grouping many records of one type for that object. These can be applied to any standard or custom object, and allow you to have a different page layout, fields, required fields, and picklist values. Record types allow administrators to create a different page layout with custom picklist fields and values for the same business process and various business processes.

Use Case:

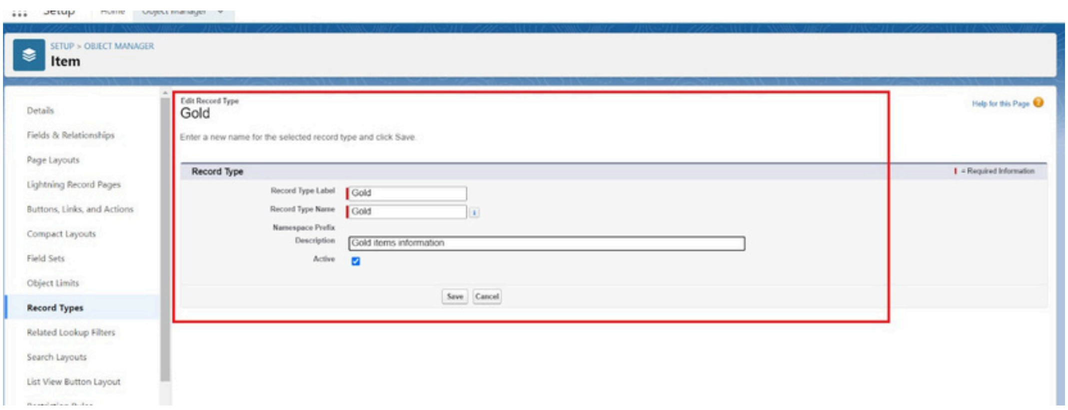
All things done for the organisation. But some of the organisations feel it difficult to fill up all the details while creating a record, so GoldSmith assigned you a task to create different forms for Gold and Silver records based on their mode of work. As an Admin, you know how to achieve this.

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.



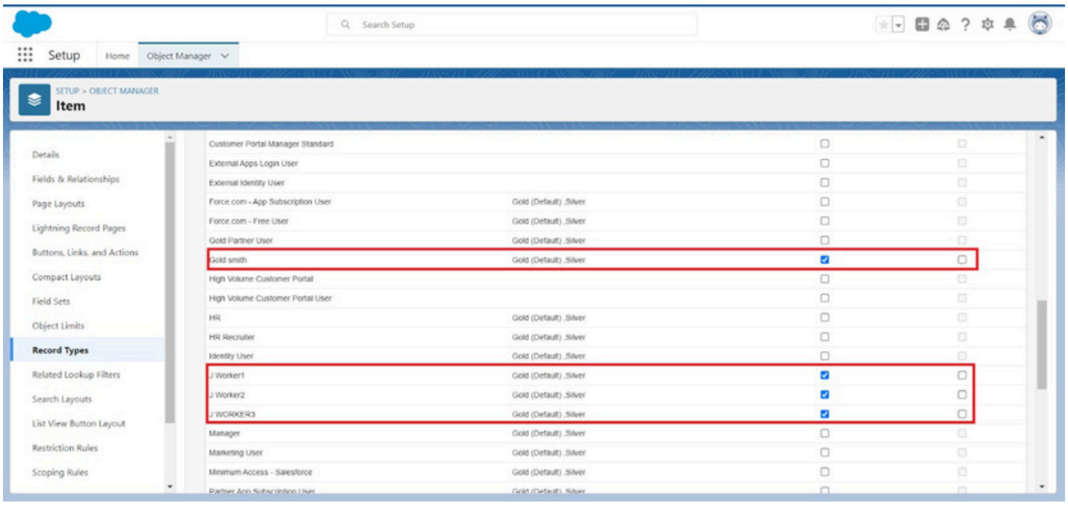
3. Select Existing Record as "Master",Record type Label as "Gold",Description as "Gold items information".

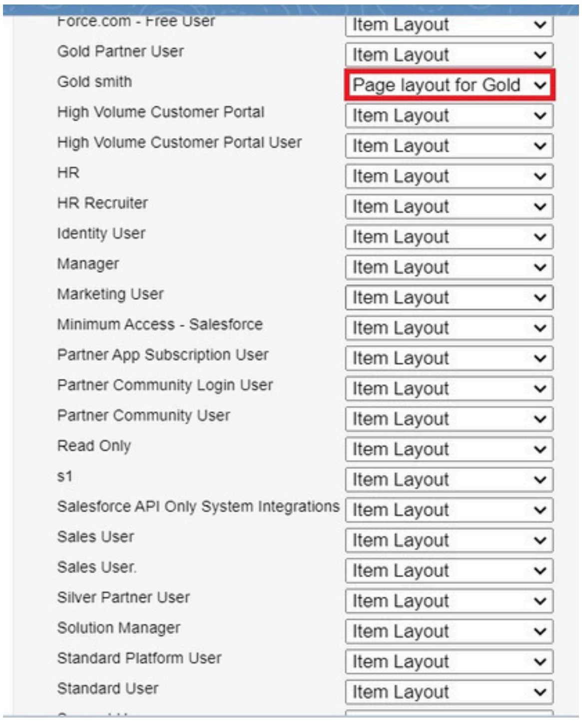


4.   Uncheck for “Make Available”.

5.Scroll down and check for the Gold Smith,Worker & 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.





Note: Create another Record Type with name "Silver" following the steps from Activity1(Use page layout for Silver).

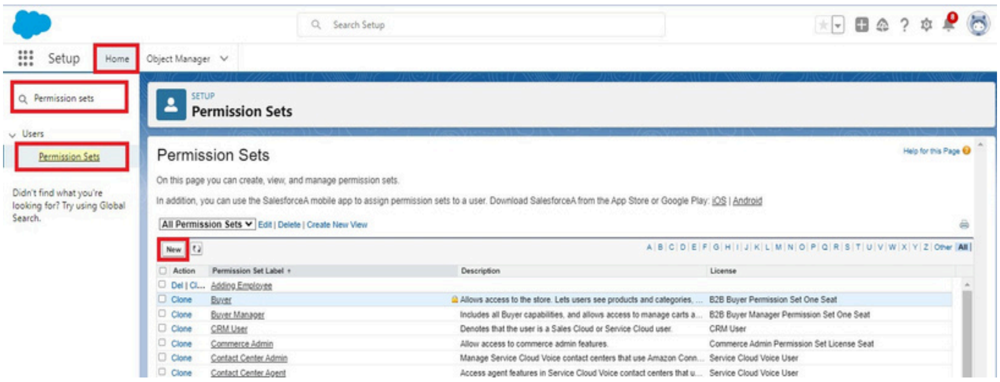
Task11: Permission sets

A standard permission set consists of a group of common permissions for a particular feature associated with a permission set licence. Using a standard permission set saves you time and facilitates administration because you don't need to create the custom permission set.

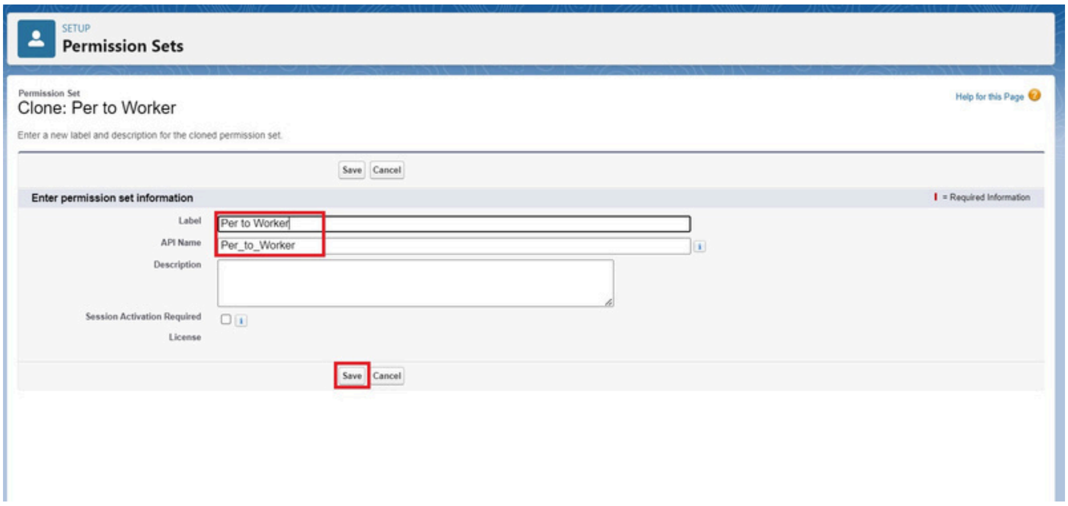
Creating permission set

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

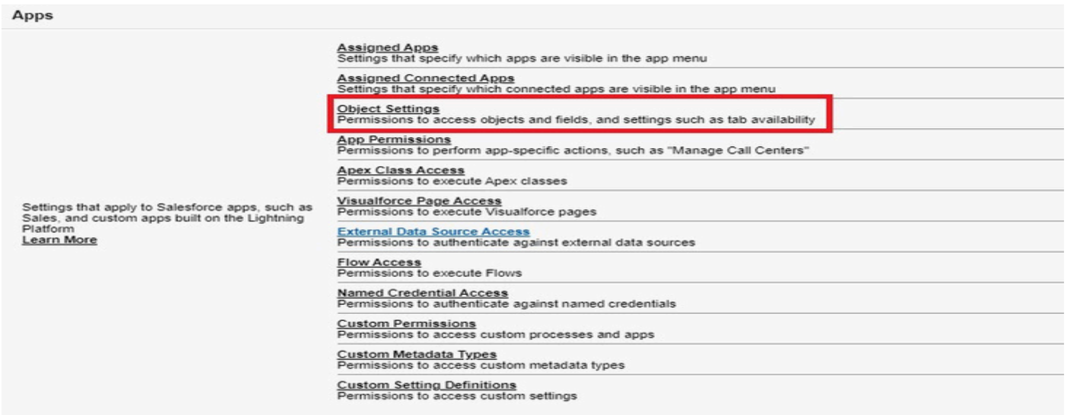
1. Go to setup >> type "permission sets" in quick search >> select permission sets >> New.



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



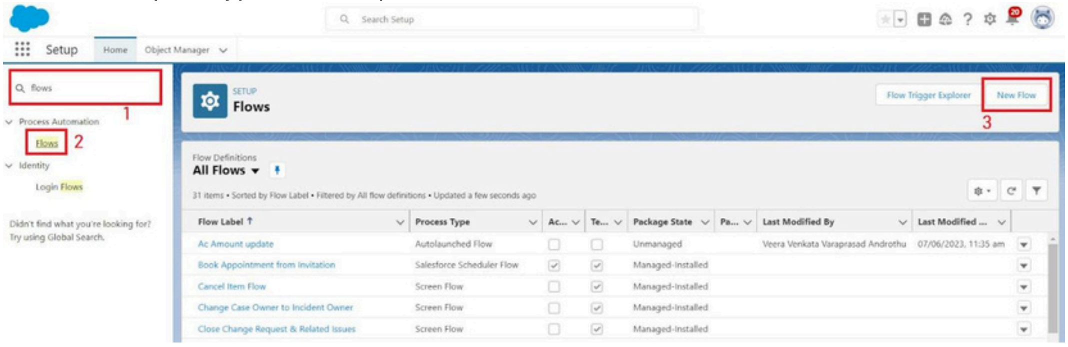
3. Under Apps Select object settings.



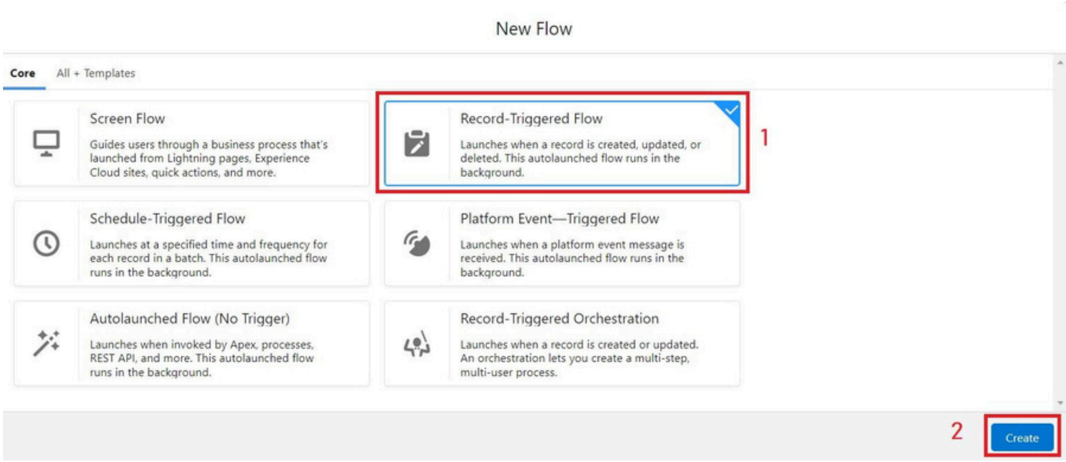
administrators and developers. They can be used for various automation tasks like email triggers including data entry, record updates, and guided user interactions.

Create a Flow

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



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



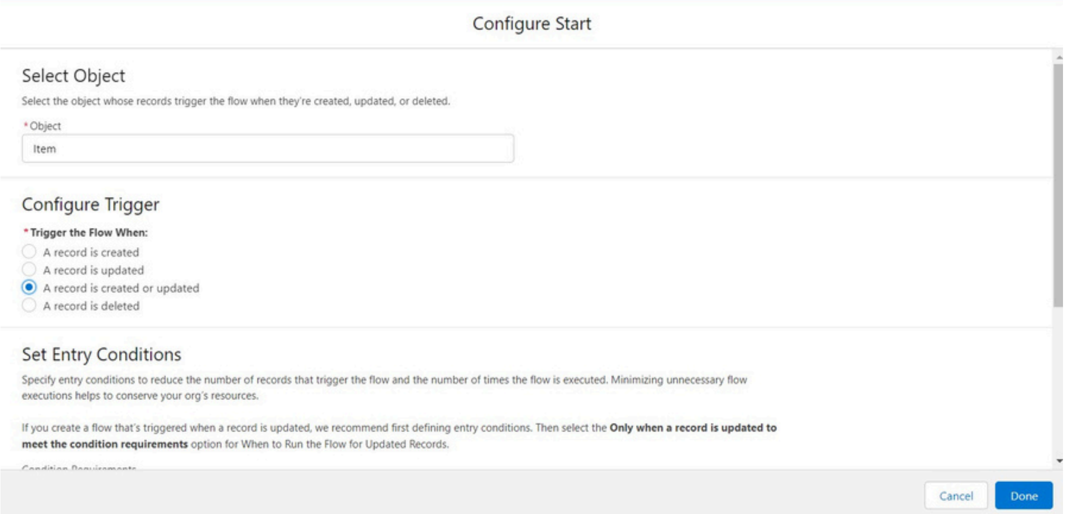
3.Select the Object as a “Billing” in the Drop down list.

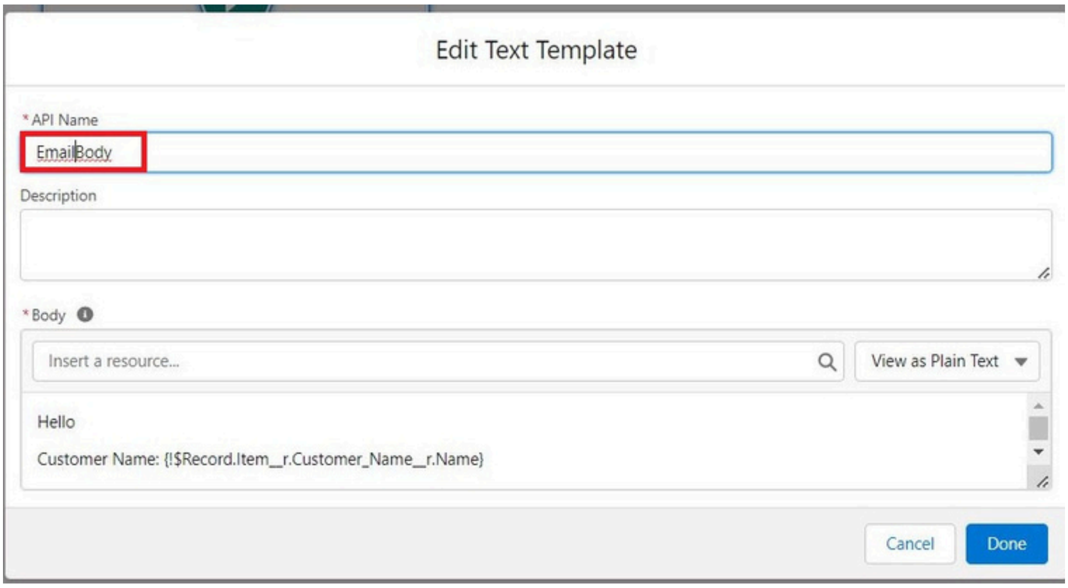
4.Select the Trigger Flow when: “A record is Created or Updated”.

5.Select the Optimize the flow for: “Actions and Related Records” and Click on Done.

6.Now change the mode form Auto-layout to free-form.

7.Now select the manger option in the toolbox, click New resource.





10.Change the view as Rich Text>>View to Plain Text.

11.In the body field paste the syntax that is given below.

Hello

Customer Name: {!$Record.Item__r.Customer_Name__r.Name}

Here are the details for the item you purchased with Jewelry Inventory System

Item Type: {!$Record.Item__r.Item_Type__c}

Ornament: {!$Record.Ornament__c}

Weight: {!$Record.Weight__c}grams

Amount: {!$Record.Amount__c}

12.Click done.

13.Now click on elements, and drag the action element into the preview pane.

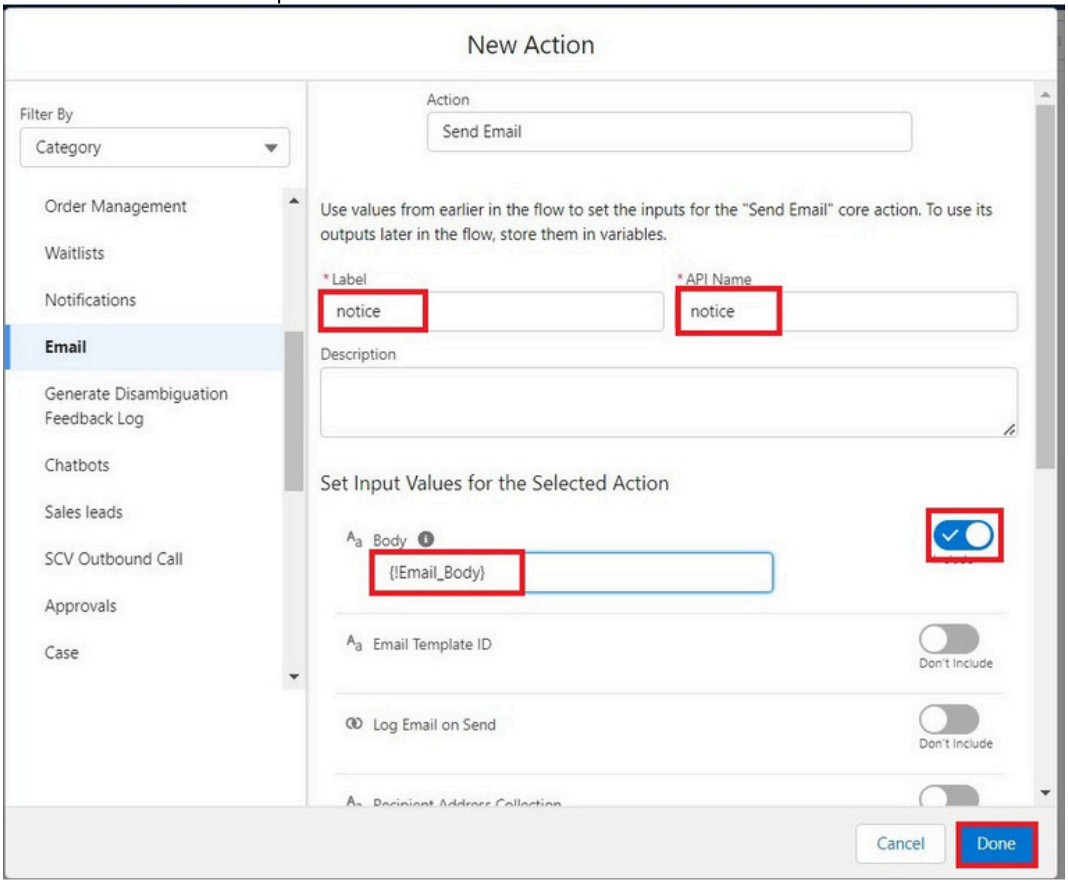
14.Their action bar will be opened in that search for " send email " and click on it.

15.Give the label name as " notice"

16.API name will be auto populated.

17.Enable the body in set input values for the selected action.

18.Select the text template that was created.



19.Include Recipient Address list, select the email form the record.

({!$Record.Item_r.Customer_Namer.Email_c})

20.Include the subject as “Welcome to Jewelry Inventory System ”.

THANK YOU