

**Customer Relationship Management**  
**Application for Jewel Management - (Developer)**

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**College Code:** brubw

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**Project Overview**

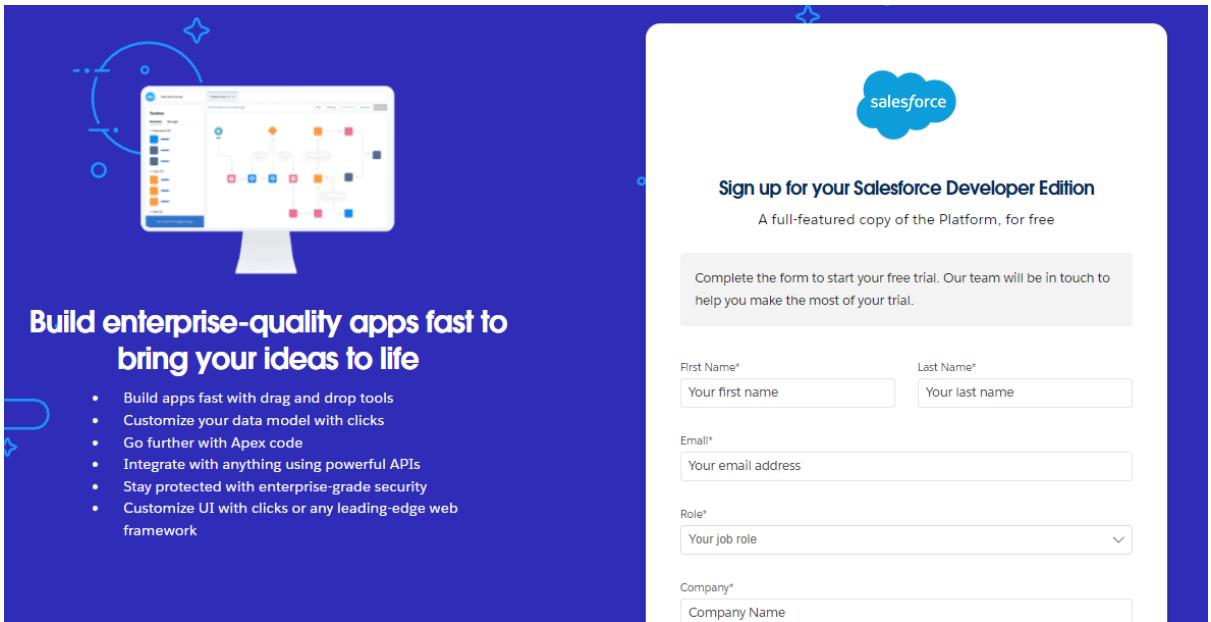
**The Jewel Inventory System is a comprehensive software Solution designed to streamline and manage the inventory and sales processes of a jewellery store or a jewellery manufacturer. The system aims to provide an efficient and user-friendly solution to track and control the inventory of various jewellery items, maintain accurate records, and facilitate seamless sales transactions.**

**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**

**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**

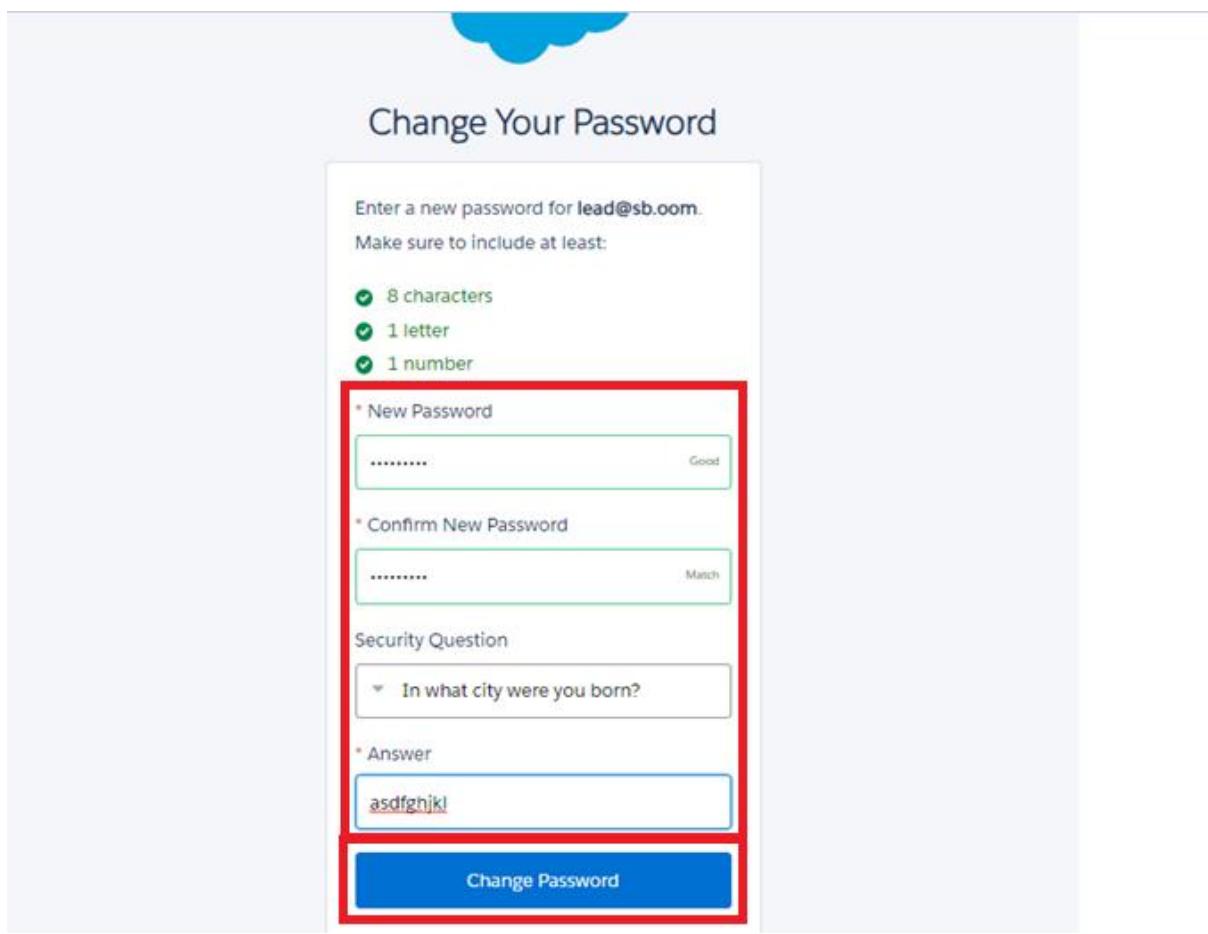
**Click on sign me up after filling these.**

**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.**

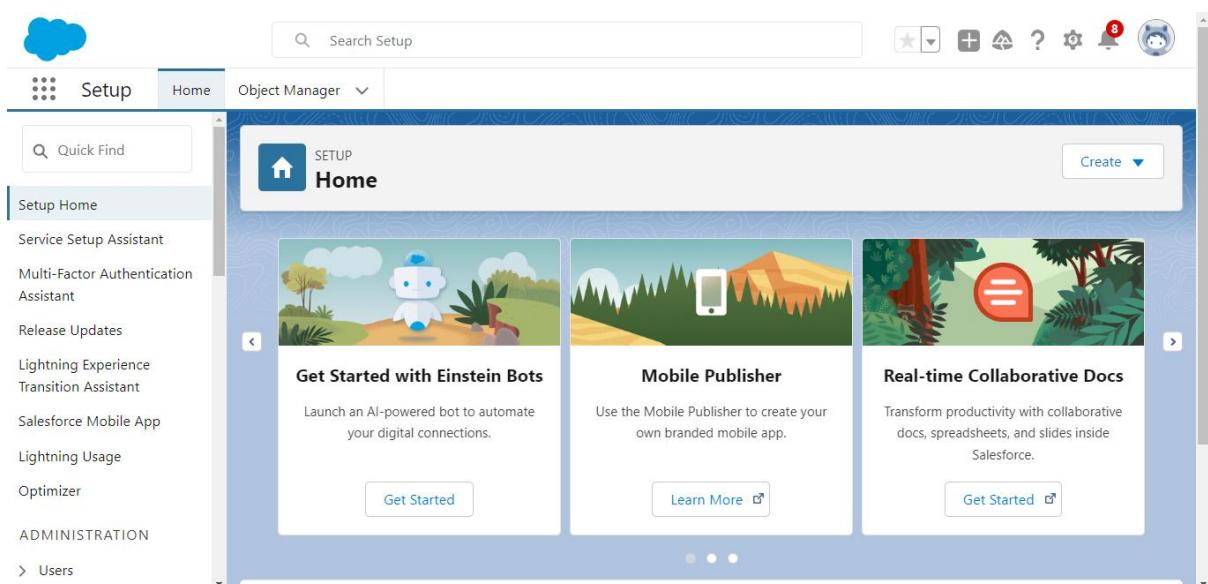
## **Account Activation**

1. Go to the inbox of the email that you used while signing up. Click on the Reset Password to activate your account. The email may take 5-10mins.
2. Click on Reset Password
3. Give a password and answer a security question and click on change password.



The image shows the Salesforce 'Change Your Password' page. At the top, it says 'Change Your Password'. Below that, it asks to enter a new password for 'lead@sb.oom' and lists requirements: 'Make sure to include at least:' with three items: '8 characters', '1 letter', and '1 number'. A red box highlights the password input fields. The 'New Password' field contains '.....' and is labeled 'Good'. The 'Confirm New Password' field also contains '.....' and is labeled 'Match'. Below these are 'Security Question' and 'Answer' fields. The 'Security Question' dropdown is set to 'In what city were you born?'. The 'Answer' field contains 'asdfghjkl'. At the bottom is a large blue 'Change Password' button.

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



The image shows the Salesforce Setup Home page. The left sidebar includes links for 'Setup Home', 'Service Setup Assistant', 'Multi-Factor Authentication Assistant', 'Release Updates', 'Lightning Experience Transition Assistant', 'Salesforce Mobile App', 'Lightning Usage', 'Optimizer', and 'ADMINISTRATION > Users'. The main content area features a 'SETUP Home' section with three cards: 'Get Started with Einstein Bots' (Launch an AI-powered bot to automate your digital connections), 'Mobile Publisher' (Use the Mobile Publisher to create your own branded mobile app), and 'Real-time Collaborative Docs' (Transform productivity with collaborative docs, spreadsheets, and slides inside Salesforce). Each card has a 'Get Started' button.

# Object

## What Is an Object?

Salesforce objects are database tables that permit you to store data that is specific to an organization. What are the types of Salesforce objects

Salesforce objects are of two types:

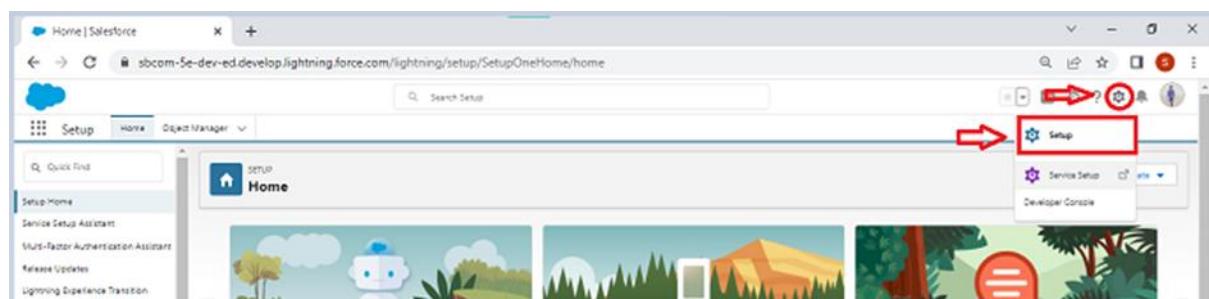
1. Standard Objects: Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.
2. Custom Objects: Custom objects are those objects that are created by users. They supply information that is unique and essential to their organization.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

## Use Case:

Creating an object in Salesforce organisation is essential for efficient data management and process automation. By defining custom objects, businesses can structure and store data specific to their needs, enabling streamlined workflows, personalized reporting, and enhanced user experiences. Objects serve as the foundation for organizing and leveraging critical information within Salesforce.

To Navigate to Setup page:

Click on gear icon >> click setup.



## Create Jewel Customer Object

The purpose of creating a Jewel Customer custom object is to store and manage information about Customer.

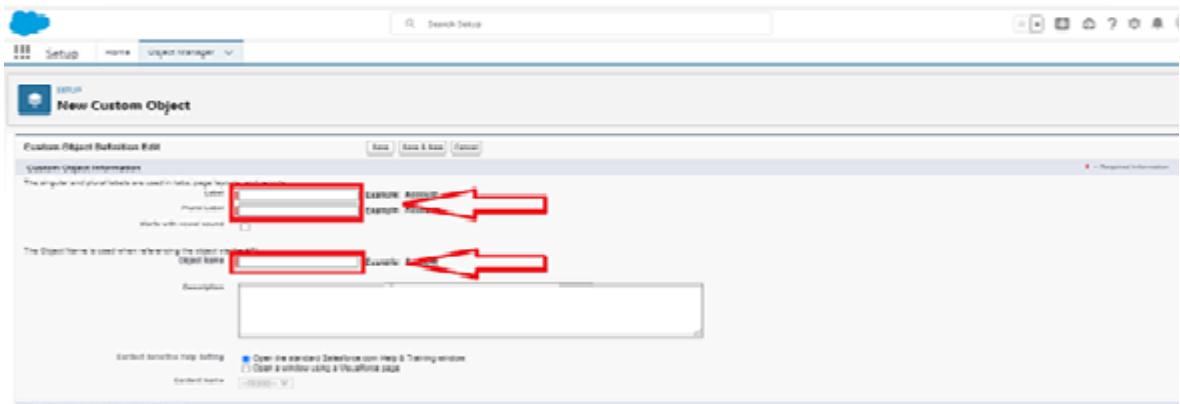
To create an object:

- 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**

Enter Record Name Label and Format

The Record Name appears in page layouts, key lists, related lists, lookups, and search results. For example, the Record Name for Account is "Account Name" and for Case it is "Case Number". Note that the Record Name field is always called "Name" when referenced via the API.

Record Name	Customer	Example: Account Name
Data Type	Text	

**Optional Features**

Allow Reports  
 Allow Activities  
 Track Field History  
 Allow in Chatter Groups  
 Enable Licensing

**Object Classification**

When these settings are enabled, this object is classified as an Enterprise Application object. When these settings are disabled, this object is classified as a Light Application object. [Learn more.](#)

Allow Sharing  
 Allow Bulk API Access  
 Allow Streaming API Access

**Deployment Status**

In Development  
 Deployed

- 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:**

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).**

### **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)

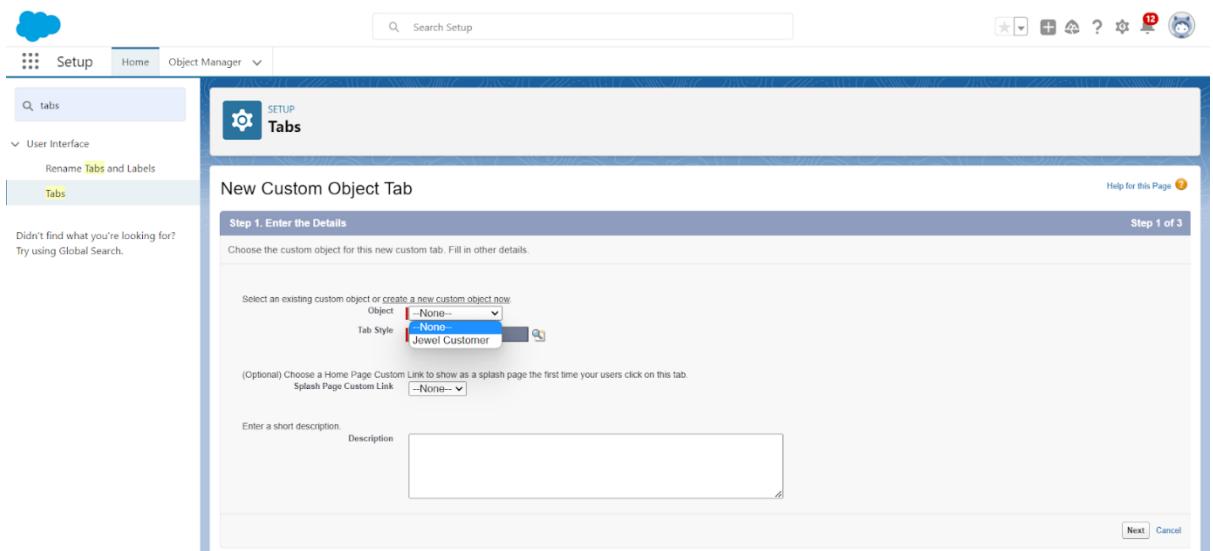
## Custom Tabs

You can create new custom tabs to extend Salesforce functionality or to build new application functionality.

Custom Object tabs look and behave like the standard tabs provided with Salesforce. Web tabs allow you to embed external pages. Lightning Component tabs allow you to add Lightning components to the navigation bar. You can also allow you to add Lightning Pages to Lightning Experience and the mobile app.

The screenshot shows the Salesforce Setup interface with two main sections: 'Custom Object Tabs' and 'Web Tabs'. Both sections have a 'New' button highlighted with a red box. The 'Custom Object Tabs' section displays the message 'No Custom Object Tabs have been defined'. The 'Web Tabs' section displays the message 'No Web Tabs have been defined'.

- 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.**

## 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.

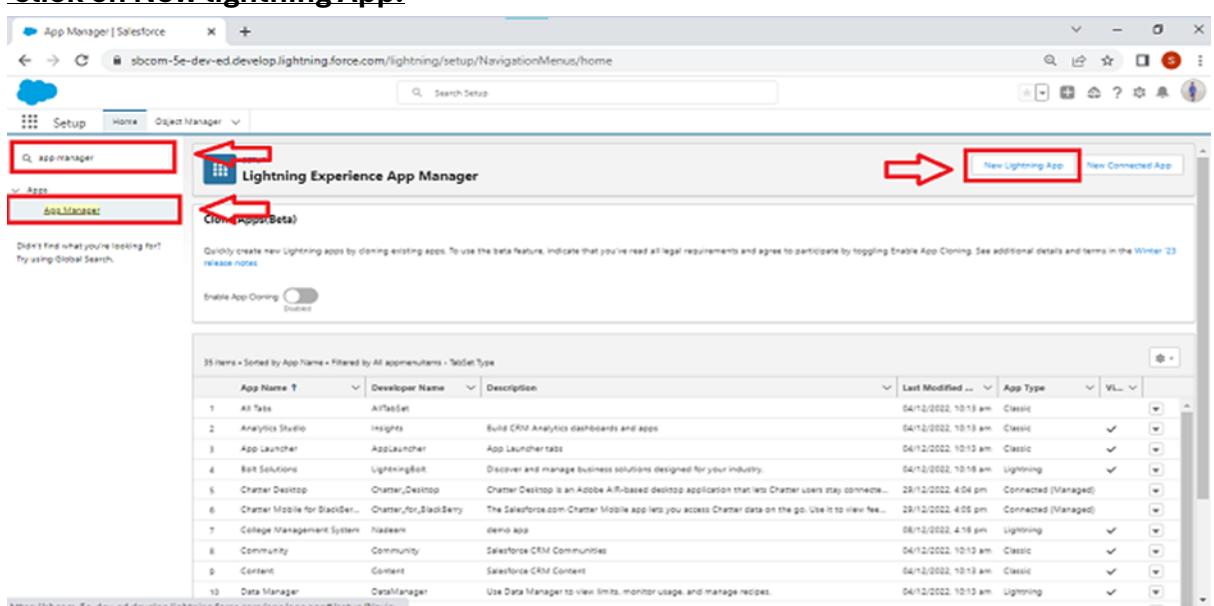
### Use Case:

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” >>
2. click on New lightning App.



The screenshot shows the Salesforce App Manager interface. At the top, there are several tabs: Setup, Home, Object Manager, and a search bar. Below the tabs, there are two red boxes highlighting the 'App Manager' tab and the 'Cloud (App) Beta' link. On the right side of the header, there is a red box around the 'New Lightning App' button. The main content area displays a list of 35 items, sorted by App Name. The columns include App Name, Developer Name, Description, Last Modified, App Type, and a checkbox column. The first few items in the list are:

App Name	Developer Name	Description	Last Modified	App Type	
All Tabs	AllTabSet		04/12/2022, 10:13 am	Classic	
Analytics Studio	Insights	Build CRM Analytics dashboards and apps	04/12/2022, 10:13 am	Classic	
App Launcher	AppLauncher	App Launcher tabs	04/12/2022, 10:13 am	Classic	
Bolt Solutions	LightningBolt	Discover and manage business solutions designed for your industry	04/12/2022, 10:13 am	Lightning	
Chatter Desktop	Chatter/Desktop	Chatter Desktop is an Adobe AIR-based desktop application that lets Chatter users stay connected	29/12/2022, 4:04 pm	Connected (Managed)	
Chatter Mobile for BlackBerry	ChatterForBlackBerry	The Salesforce.com Chatter Mobile app lets you access Chatter data on the go. Use it to view feed	29/12/2022, 4:05 pm	Connected (Managed)	
College Management System	Nadeem	demo app	08/12/2022, 4:18 pm	Lightning	
Community	Community	Salesforce CRM Communities	04/12/2022, 10:13 am	Classic	
Content	Content	Salesforce CRM Content	04/12/2022, 10:13 am	Classic	
Data Manager	DataManager	Use Data Manager to view limits, monitor usage, and manage recipes	04/12/2022, 10:13 am	Lightning	

**3. Fill the app name in app details and branding as follow**

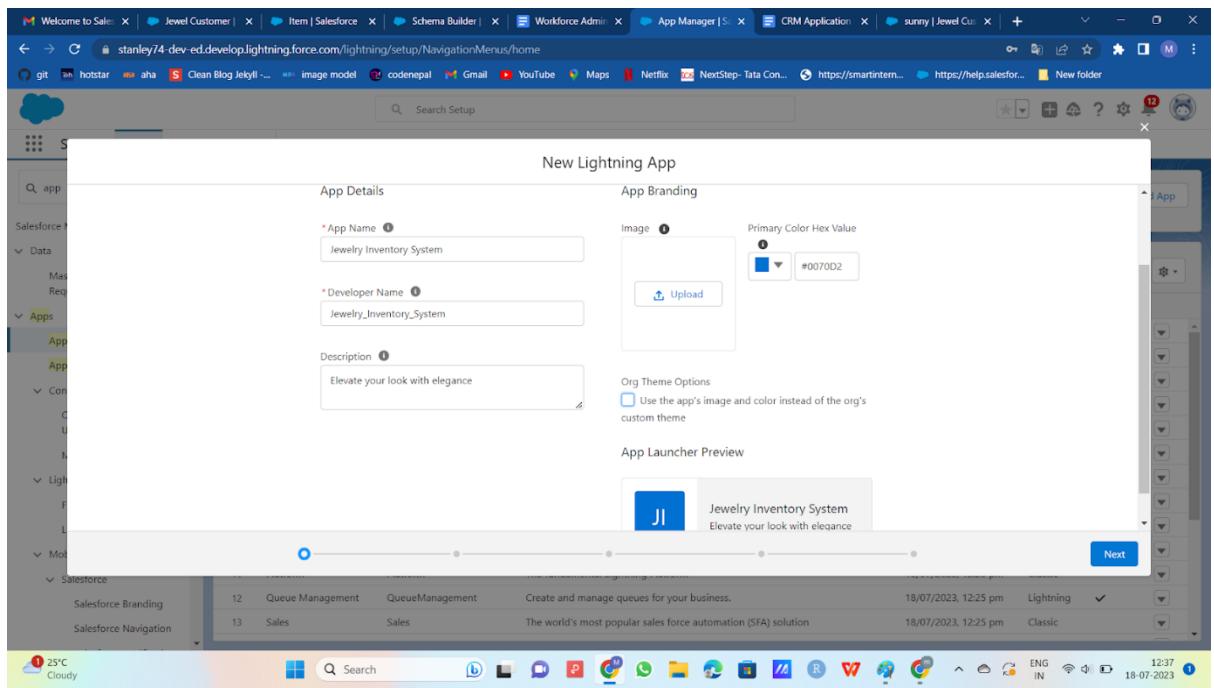
**App Name : Jewellery Inventory System.**

**Developer Name : This will auto populated**

**Description : Elevate your look with elegance**

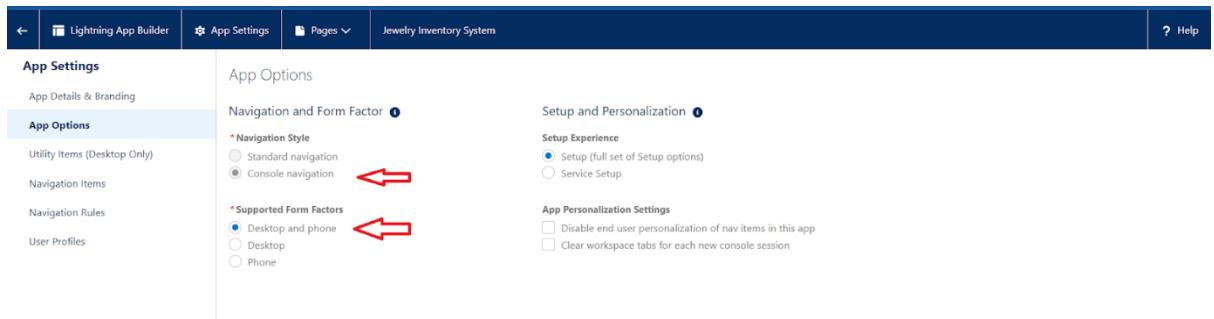
**Image : optional (if you want to give any image you can otherwise not mandatory)**

**Primary colour hex value : keep this default.**



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

**Navigation >> Next.**



**4. (Utility Items) keep it as default >> Next.**

## 5. To Add Navigation Items:

The screenshot shows the 'App Settings' section of the Lightning App Builder. On the left, a sidebar lists 'App Details & Branding', 'App Options', 'Utility Items (Desktop Only)', and 'Navigation Items' (which is selected). The main area is titled 'Navigation Items' and contains two panels: 'Available Items' and 'Selected Items'. The 'Available Items' panel lists various items like Accounts, Alert Settings, All Sites, etc., with a search bar at the top. The 'Selected Items' panel lists 'Jewel Customers', 'Items', 'Customer Orders', 'Prices', 'Billings', 'Reports', and 'Dashboards'. A large red arrow points from the 'Available Items' panel towards the 'Selected Items' panel.

**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:

The screenshot shows the 'User Profiles' configuration screen. It has two main sections: 'Available Profiles' and 'Selected Profiles'. In the 'Available Profiles' section, there is a search bar with 'System administrator' typed in. A red box highlights this search bar, and a red arrow points to the right towards the 'Selected Profiles' section. In the 'Selected Profiles' section, 'System Administrator' is listed. Below the profiles are two arrows: a right-pointing arrow (highlighted with a red box and arrow) and a left-pointing arrow. At the bottom right, there is a 'Save & Finish' button highlighted with a red box and arrow.

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

## 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.

#### **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.**

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 & relationship >> click on New.**
3. **Select “Lookup relationship” as data type and click Next.**
4. **Select the related object “Jewel Customer”.**
5. **Give Field Label as “Customer” and click Next.**
6. **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:**

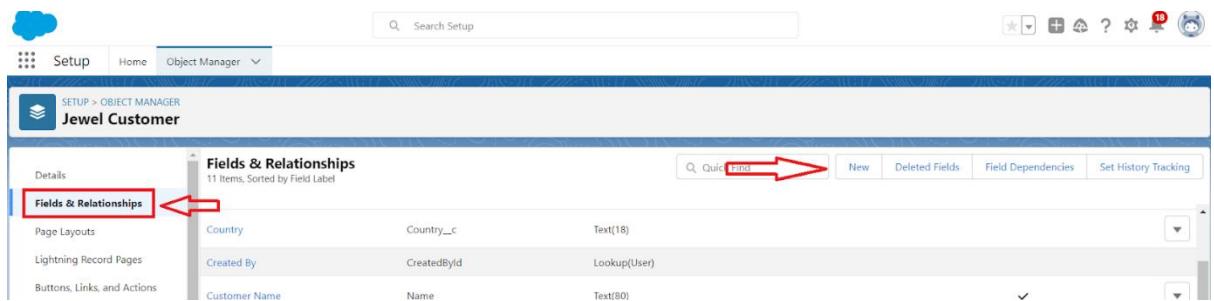
- 1. Go to setup >> click on Object Manager >> type object name(Jewel Customer) in quick find bar >> click on the object.**



The screenshot shows the Salesforce Object Manager. At the top, there's a search bar with the text 'jewel'. Below it, a table lists objects. The first row, 'Jewel Customer', has its label 'Jewel Customer' highlighted with a red box and a red arrow pointing to it. The table columns are labeled: LABEL, API NAME, TYPE, DESCRIPTION, LAST MODIFIED, and DEPLOYED.

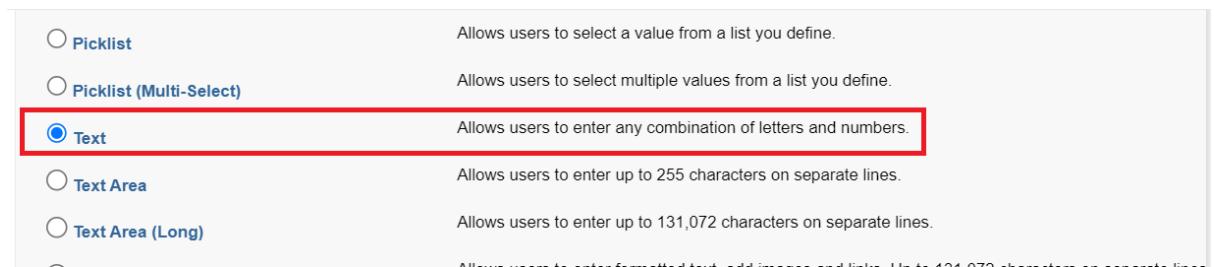
LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Jewel Customer	Jewel_Customer_c	Custom Object		7/18/2023	✓

- 2. Now click on “Fields & Relationships” >> New**



The screenshot shows the 'Fields & Relationships' section for the 'Jewel Customer' object. On the left, there are tabs for 'Details', 'Fields & Relationships' (which is selected and highlighted with a red box and a red arrow), 'Page Layouts', 'Lightning Record Pages', and 'Buttons, Links, and Actions'. On the right, there's a table of existing fields. At the top right of the table area, there's a 'New' button with a red arrow pointing to it.

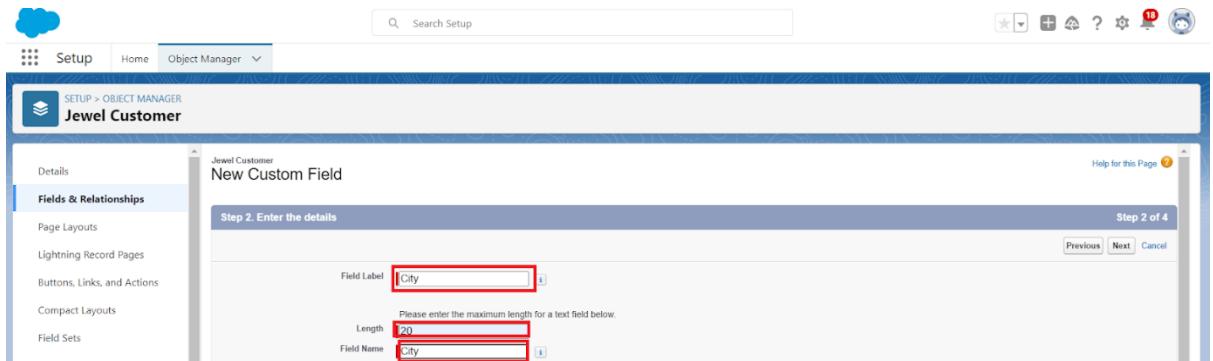
- 3. Select Data type as “Text”.**



The screenshot shows the 'Text' data type selection screen. It lists several options: 'Picklist', 'Picklist (Multi-Select)', 'Text' (which is selected and highlighted with a red box), 'Text Area', and 'Text Area (Long)'. Each option has a brief description to its right.

<input type="radio"/> Picklist	Allows users to select a value from a list you define.
<input type="radio"/> Picklist (Multi-Select)	Allows users to select multiple values from a list you define.
<input checked="" type="radio"/> Text	Allows users to enter any combination of letters and numbers.
<input type="radio"/> Text Area	Allows users to enter up to 255 characters on separate lines.
<input type="radio"/> Text Area (Long)	Allows users to enter up to 131,072 characters on separate lines.

- 4. Click on Next**



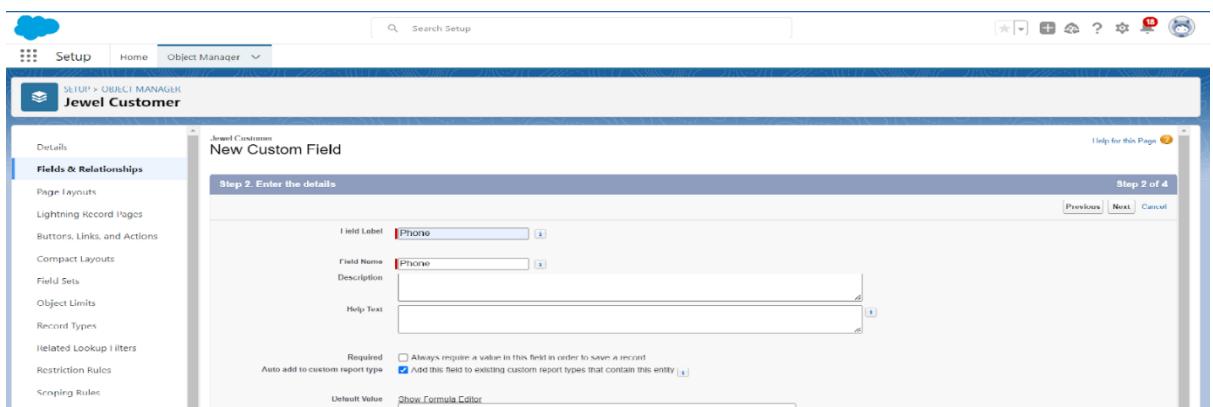
**5. Fill the above as following:**

- o **Field Label: City**
- o **Length : 20**
- o **Field Name : gets auto generated**
- o **Click on Next >> Next >> Save and new.**

**Creating the Phone field in object Jewel Customer**

**To create fields in an object:**

1. **Go to setup >> click on Object Manager >> type object name(Jewel Customer) in quick find bar >> click on the object.**
2. **Now click on “Fields & Relationships” >> New**
3. **Select Data type as “Phone” and click Next.**
4. **Given the Field Label as “ Phone”.**



1. **Field Name will be auto populated, and click on Next >> Next >> Save & new.**

**Creating the Email field in object Jewel Customer**

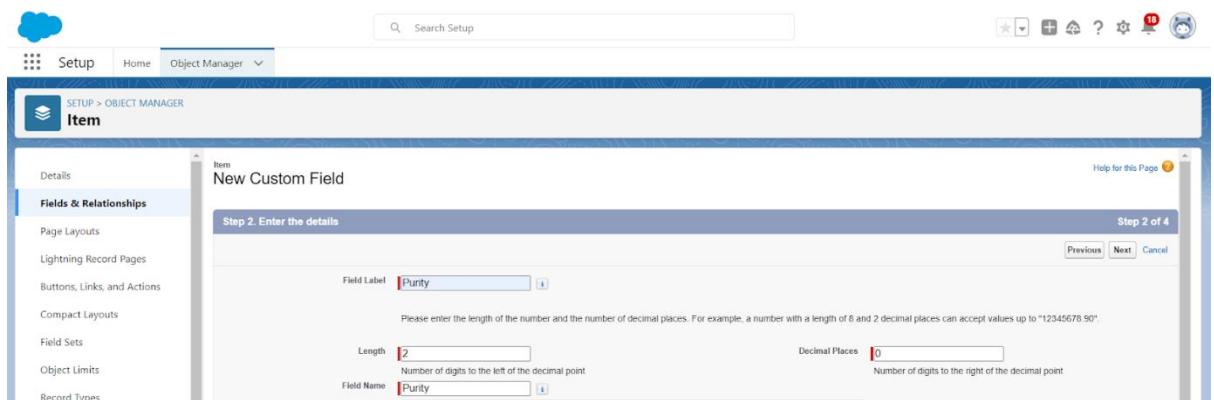
**To create fields in an object:**

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

**Creating the number field in Item object**

**To create fields in an object:**

1. **Go to setup >> click on Object Manager >> type object name(Item) in quick find bar? click on the object.**
2. **Now click on “Fields & Relationships” >> New**
3. **Select Data type as “Number” and click Next.**
4. **Given the Field Label as “ Purity” and length as “ 2 ”.**



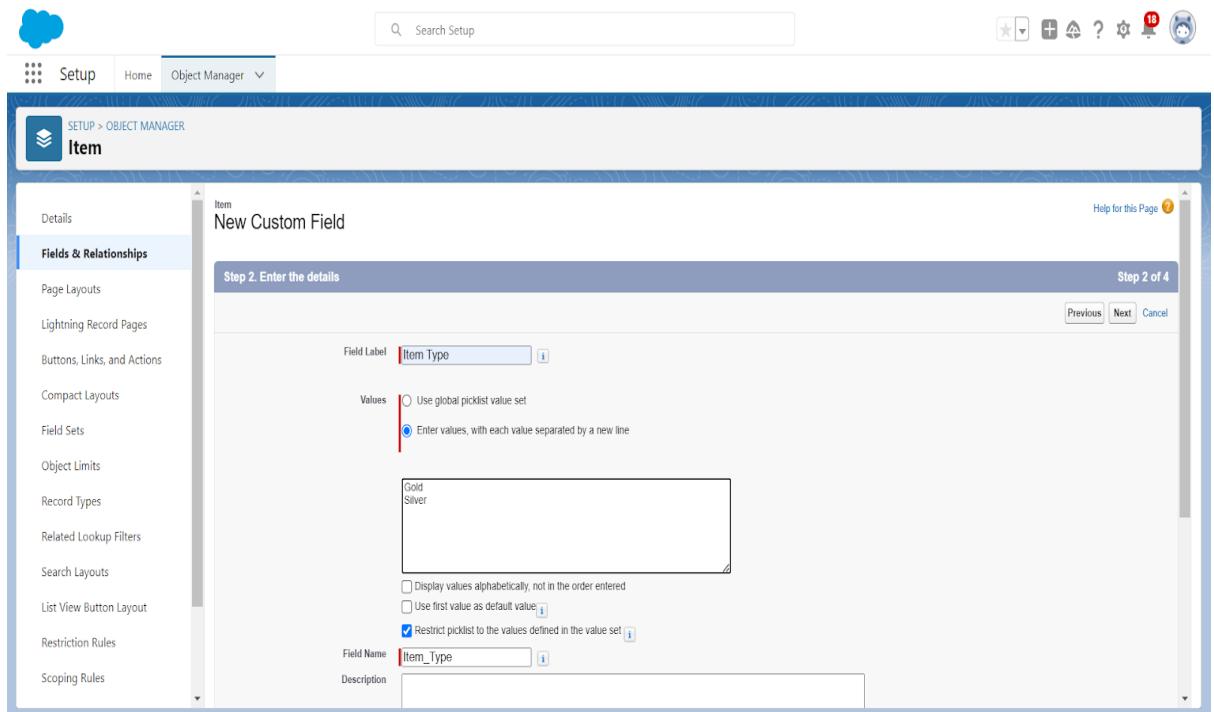
5. **Field Name will be auto populated, and click on Next >> Next >> Save.**

**Creating Picklist Field in Item Object**

**To create fields in an object:**

1. **Go to setup >> click on Object Manager >> type object name(Item) in quick find bar>> click on the object.**
2. **Now click on “Fields & Relationships” >> New.**

- 3. Select Data type as “Picklist” and click Next.**
- 4. Enter Field Label as “Item Type”.**
- 5. In values select “Enter values(Gold,Silver), with each value separated by a new line” and enter values as shown below.**



- 6. Click Next? 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.**

The screenshot shows the Salesforce Setup interface under the Object Manager tab. A new field is being created for the 'Price' object. The 'Fields & Relationships' tab is selected. The 'Field Label' is set to 'Gold price'. The 'Length' is set to 8, and 'Decimal Places' is set to 0. The 'Field Name' is automatically generated as 'Gold\_price'. There are also 'Description' and 'Help Text' fields, both currently empty.

- 4. Enter Field Label as “Gold Price” and length as “ 8”and decimal 0.Field name will be auto generated.**
- 5. Click Next > Next > Next > Next > Save .**

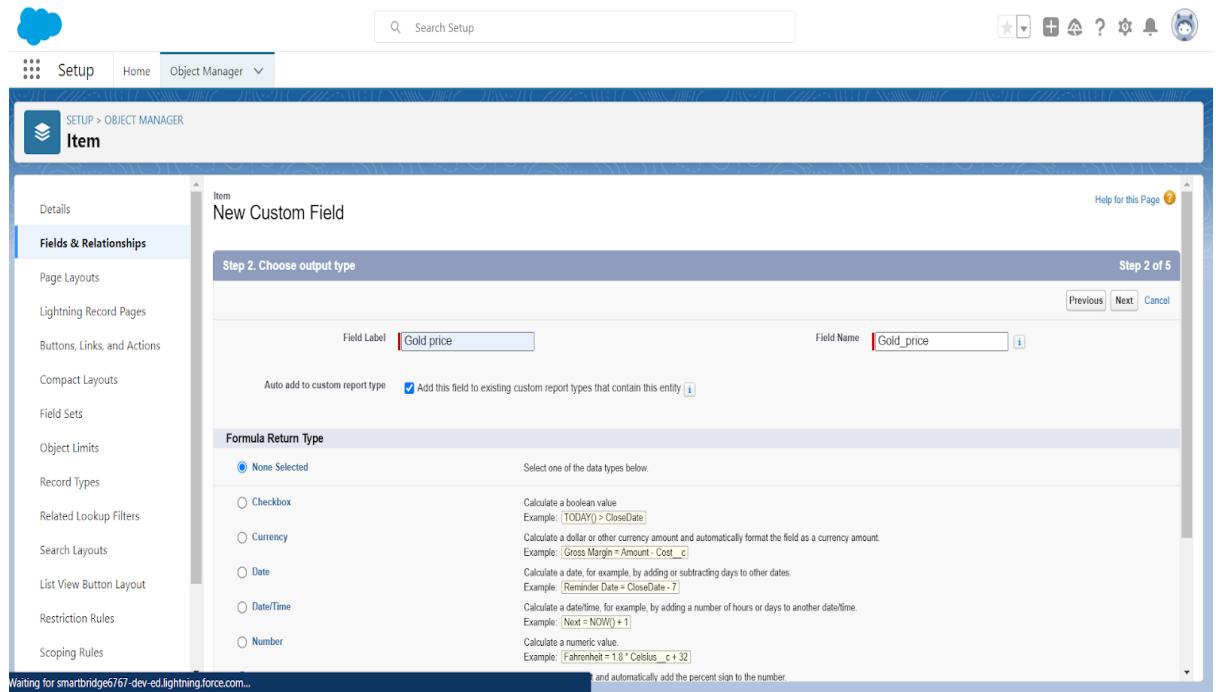
**Creating Formula Field(Cross Object) in Item Object**

**To create fields in an object:**

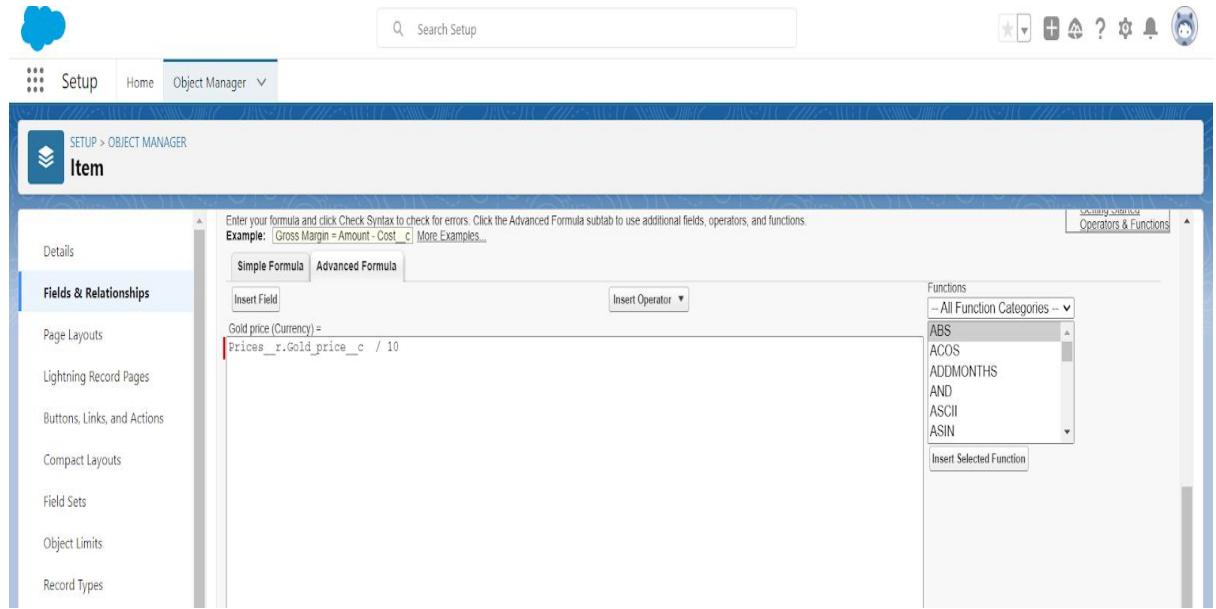
**(Note:Create a Lookup Relationship in Item Object to Price Object with Field Name:Prices)**

- 1. Go to setup >> click on Object Manager >> type object name(Item) in quick find bar? click on the object.**
- 2. Now click on “Fields & Relationships” >> New.**
- 3. Select Data type as “Formula” and click Next.**

- 4. Give Field Label and Field Name as “Gold Price” and select formula return type as “Currency” and click next.**



- 5. Under Advanced Formula write down the formula :`Prices__r.Gold_price_c / 10`.**



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

## 7. Creating Remaining Fields in Objects

8. Now create the remaining fields using the data types mentioned.  
9.

s.no	Object name	Fields	
1	Jewel Customer		
		Field Name	Data type
		State	Text(20)
		Street	Text(20)
		Country	Text(18)
		Zip/Postal code	Text(6)

10.

2	Price		
		Silver Price	Currency (Length=8,Decimal=5)

11.

3	Item		
	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)

	<p>Stone/Other Price</p> <p>Currency (Length=8,Decimal=2)</p>
	<p>Expected Days Of Return</p> <p>Picklist</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;">           1-3 Days            4-5 Days            6-7 Days            8-10 Days         </div>
	<p>Priority</p> <p>Picklist</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;">           Low            Medium            High            Critical         </div>
	<p>Silver Price</p> <p>Formula (Return Type:Number) (Decimal=3)</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <math display="block">(\text{Prices\_r.Silver\_price\_c} / 1000)</math> </div>
	<p>Purity Gold Price</p> <p>Formula (Return Type:Currency) (Decimal=2)</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <math display="block">((\text{Prices\_r.Gold\_price\_c} * \text{Purity\_c}) / 24) / 10</math> </div>
	<p>Total Weight</p> <p>Formula (Return Type:Number) (Decimal=3)</p>

		(Weight_c - Stone_weight_c)
	Amount	<p>Formula (Return Type:Currency) (Decimal=3)</p> <pre>IF(ISPICKVAL( Item_Type_c , "Gold"), Total_weight_c * Purity_Gold_price_c , Total_weight_c * Silver_price_c )</pre>
	KDM	<p>Formula (Return Type:Currency) (Decimal=0)</p> <pre>(Amount_c * Percentage_c ) / 100</pre>
	Making Charges	<p>Formula (Return Type:Currency) (Decimal=0)</p> <pre>IF(ISPICKVAL( Item_Type_c ,"Gold"), Weight_c * 300 , Weight_c * 10 )</pre>

12.

4	Customer Order	
	Order Status	Picklist

			<p>Started Not Started On Hold Completed Not Completed</p>
--	--	--	--

13.

5	Now create the remaining fields using the data types mentioned.												
	s. n o	Obj e ct nam e	Fields										
1	Jew el Cust omer		<table border="1"> <tr> <td>Field Name</td> <td></td> </tr> <tr> <td>State</td> <td></td> </tr> <tr> <td>Street</td> <td></td> </tr> <tr> <td>Country</td> <td></td> </tr> <tr> <td>Zip/Postal code</td> <td></td> </tr> </table>	Field Name		State		Street		Country		Zip/Postal code	
Field Name													
State													
Street													
Country													
Zip/Postal code													
2	Price		<table border="1"> <tr> <td>Silver Price</td> <td>(Lengt</td> </tr> <tr> <td></td> <td></td> </tr> </table>	Silver Price	(Lengt								
Silver Price	(Lengt												
			<p>Field Label:Item</p> <p>Lookup Relationship with Item Object</p> <p>Orn am ent</p> <p>Formula (Return Type:Text)</p> <p>Item__r.Ornament__c</p> <p>Stone weight</p> <p>Formula (Return Type:Number) (Decimal=2)</p> <p>Item__r.Stone_weight__c</p> <p>Weight</p> <p>Formula Return Type:Number (Decimal=2)</p> <p>Item__r.Total_weight__c</p> <p>Amount</p> <p>Formula (Return Type:Currency) (Decimal=2)</p>										

			<code>Item__r.Amount__c</code>
3 Item	Field Label:Customer Name	Lookup Relationship with Jewel Customer Object	
	Orname nt	Text(20)	
	Weight	Number (Length=8,Decimal=5 )	
	Stone Weight	Number (Length=5,Decimal=5 )	
	Percent age	Number (Length=2,Decimal=0 )	
	Stone/O ther Price	Currency (Length=8,Decimal=2 )	
	Expecte d Days Of Return	Picklist  1-3 Days 4-5 Days 6-7 Days 8-10 Days	
	Priority	Picklist  Low Medium High Critical	
	Gold/Silver Price	Formula (Return Type:Currency) (Decimal=2)  <code>IF(ISPICKVAL( Item__r .Item_Type__c , "Gold"), Item__r.Gold_price__c , Item__r.Silver_price__c )</code>	
	KD M Cha rge	Formula (Return Type:Currency) (Decimal=0)  <code>Item__r.KDM__c</code>	
	Mak ing Cha rge s	Formula (Return Type:Currency) (Decimal=2)  <code>Item__r.Making_Charge s__c</code>	
	Sto nes/o th er pric e	Formula (Return Type:Currency) (Decimal=2)  <code>Item__r.Stone_other_pri ce__c</code>	
	Total Am ount	Formula (Return Type:Currency) (Decimal=0)  <code>Amount__c + KDM_Charge__c + Stones_other_price__c + Making_Charges__c</code>	

Silver Price	<p>Formula (Return Type:Number) (Decimal=3)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <math display="block">(\text{Prices\_r.Silver\_price\_c} / 1000)</math> </div>
Purity Gold Price	<p>Formula (Return Type:Currency) (Decimal=2)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <math display="block">((\text{Prices\_r.Gold\_price\_c} * \text{Purity\_c}) / 24) / 10</math> </div>
Total Weight	<p>Formula (Return Type:Number) (Decimal=3)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <math display="block">(\text{Weight\_c} - \text{Stone_weight\_c})</math> </div>
Amount	<p>Formula (Return Type:Currency) (Decimal=3)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <math display="block">\text{IF}(\text{ISPICKVAL}(\text{Item_Type\_c}, "Gold"), \text{Total_weight\_c} * \text{Purity_Gold_price\_c},</math> </div>

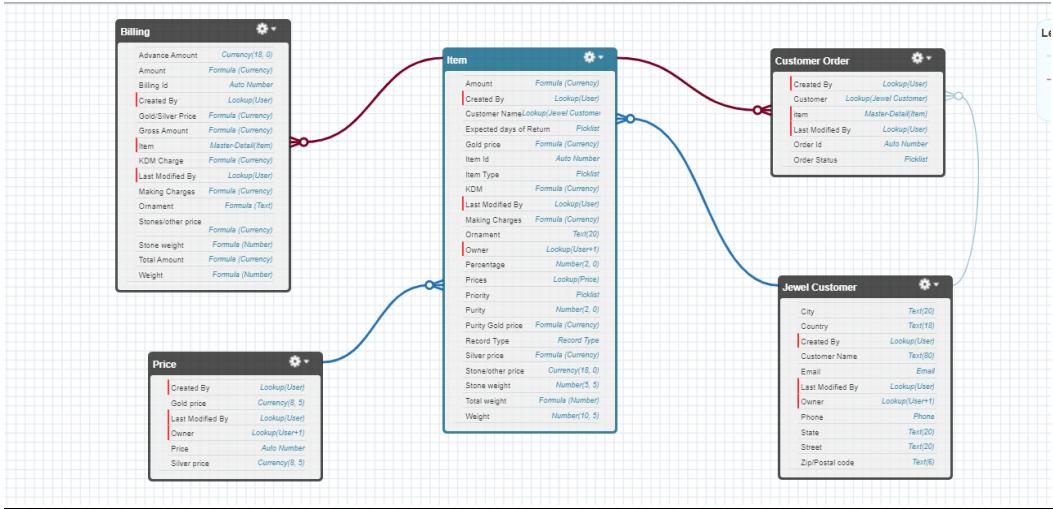
			Total_weight_c * Silver_price_c )	
	KDM	Formula (Return Type:Currency) (Decimal=0)		
	Making Charges	Formula (Return Type:Currency) (Decimal=0)		
		IF(ISPICKVAL( Item_Type_c ,"Gold"), Weight_c * 300 , Weight_c * 10 )		
4	Customer Order	Order Status		

5	B il li n g	Field Label:Item
		Lookup Relationship with Item Object
		Formula (Return Type:Text)
		Item__r.Ornament__c
		Formula (Return Type:Number) (Decimal=2)
		Item__r.Stone_weight__c
	W eigh t	Formula Return Type:Number (Decimal=2)
		Item__r.Total_weight__c
	Am oun t	Formula (Return Type:Currency) (Decimal=2)
		Item__r.Amount__c
	Gol d/Si lver Pric e	Formula (Return Type:Currency) (Decimal=2)
		IF(ISPICKVAL( Item__r .Item_Type__c , "Gold"),

			Item_r.Gold_price_c , Item_r.Silver_price_c )
KD M Cha rge	Formula (Return Type:Currency) (Decimal=0)	Item_r.KDM_c	
Mak ing Cha rge s	Formula (Return Type:Currency) (Decimal=2)	Item_r.Making_Charge s_c	
Sto nes/ oth er pric e	Formula (Return Type:Currency) (Decimal=2)	Item_r.Stone_other_pri ce_c	
Tot al Am oun t	Formula (Return Type:Currency) (Decimal=0)	Amount_c + KDM_Charge_c + Sto nes_other_price_c + Making_Charges_c	
Billing			

### Schema Builder

**Schema Builder is a powerful tool within Salesforce that allows you to visualise, explore, and design the relationships between objects in your Salesforce organisation. It provides a graphical representation of the data model, making it easier to understand the structure and connections between different objects.**

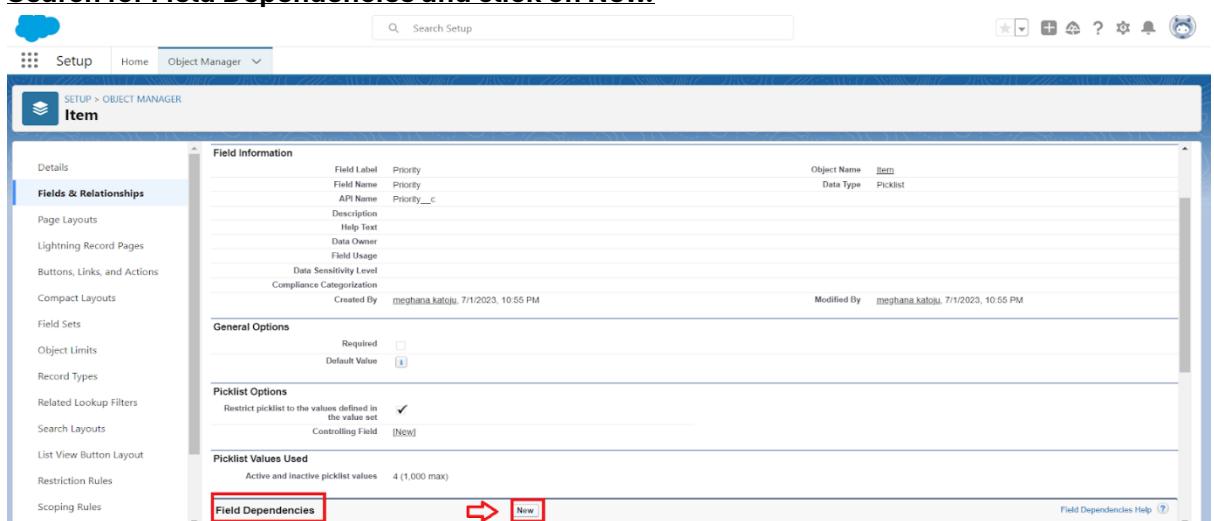


## Creating the Field Dependencies

### 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.

1. **Go to setup >> click on Object Manager >> type object name(Item) in quick find bar >> click on the object.**
2. **Click on Fields & Relationships and click on the Priority field.**
3. **Search for Field Dependencies and click on New.**



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

New Field Dependency

Create a dependent relationship that causes the values in a picklist or multi-select picklist to be dynamically filtered based on the value selected by the user in another field.

- The field that drives filtering is called the “controlling field.” Standard and custom checkboxes and picklists with at least one and less than 300 values can be controlling fields.
- The field that has its values filtered is called the “dependent field.” Custom picklists and multi-select picklists can be dependent fields.

**Step 1.** Select a controlling field and a dependent field. Click Continue when finished.

**Step 2.** On the following page, edit the filter rules that control the values that appear in the dependent field for each value in the controlling field.

Controlling Field	–None–
Dependent Field	–None–
<input type="button" value="Continue"/> <input type="button" value="Cancel"/>	

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

SETUP > OBJECT MANAGER Item

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Restriction Rules

Scoping Rules

Controlling Field: Priority  
Dependent Field: Expected days of Return

Instructions

Legend: Excluded Value (Grey), Included Value (Yellow)

Priority: Expected days of Return: Low Medium High Critical

Priority:	Low	Medium	High	Critical
Expected days of Return:	1-3 Days 4-5 Days 6-7 Days <b>8-10 Days</b>	1-3 Days 4-5 Days <b>6-7 Days</b> 8-10 Days	1-3 Days 4-5 Days 6-7 Days 8-10 Days	<b>1-3 Days</b> 4-5 Days 6-7 Days 8-10 Days

Showing Columns: 1 - 4 (of 4) < Previous | Next > View All Go to

Click button to include or exclude selected values from the dependent picklist.

Showing Columns: 1 - 4 (of 4) < Previous | Next > View All

Click button to include or exclude selected values from the dependent picklist.

Save Cancel Preview

## **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)))

)

**Validation Rule Edit**

**Rule Name:** Postal Code

**Active:**

**Description:**

**Error Condition Formula:**

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

**Check Syntax:** No errors found

**Functions:**

- All Function Categories -
- ABS
- ACOS
- ADDMONTHS
- AND
- ASCII
- ASIN

**Error Message:**

**Example:** Discount percent cannot exceed 30%

This message will appear when Error Condition formula is true

**Error Message:** Must contain 6 digits

This error message can either appear at the top of the page or below a specific field on the page

**Error Location:**  Top of Page  Field Zip/Postal code

**Save** **Save & New** **Cancel**

- 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.

### **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:**

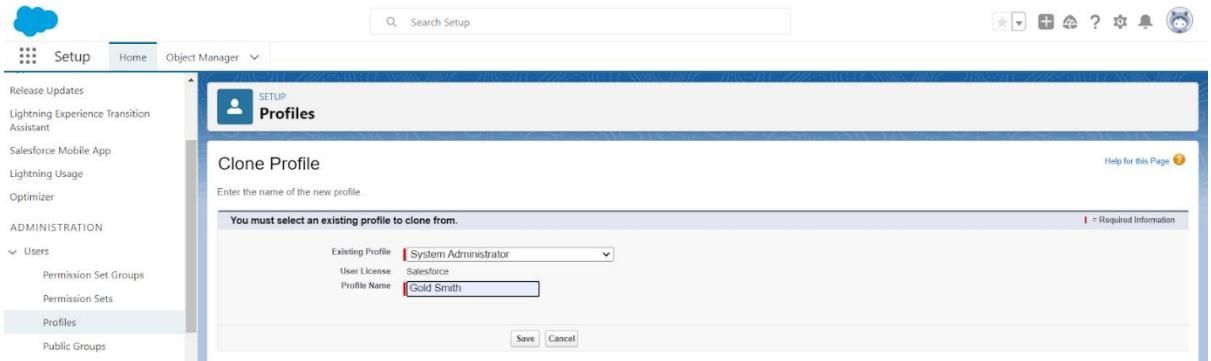
Great work Admin, you have done so good till now. The GoldSmith wants to differentiate the users based on their functionalities, position and based on this those users need to have the minimum access to the database object in the organisation. Now it's time to use your Admin skills to focus on the users,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



## **Gold Smith Profile**

**To create a new profile:**

- 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 .**

Custom Object Permissions						
	Basic Access			Data Administration		
	Read	Create	Edit	Delete	View All	Modify All
Assets	<input type="checkbox"/>					
Asset Services	<input type="checkbox"/>					
<b>Billings</b>	<input checked="" type="checkbox"/>					
Book1	<input type="checkbox"/>					
Book2	<input type="checkbox"/>					
Bot Commands	<input type="checkbox"/>					
Brokers	<input type="checkbox"/>					
Buyers	<input type="checkbox"/>					
Candidates	<input type="checkbox"/>					
<b>Customer Orders</b>	<input checked="" type="checkbox"/>					
Items	<input checked="" type="checkbox"/>					
Jewel Customers	<input checked="" type="checkbox"/>					
Job Applications	<input type="checkbox"/>					
Job Postings	<input type="checkbox"/>					
Job Posting Sites	<input type="checkbox"/>					
Positions	<input type="checkbox"/>					
<b>Prices</b>	<input checked="" type="checkbox"/>					
Projects	<input type="checkbox"/>					
Properties	<input type="checkbox"/>					

- 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**

**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**

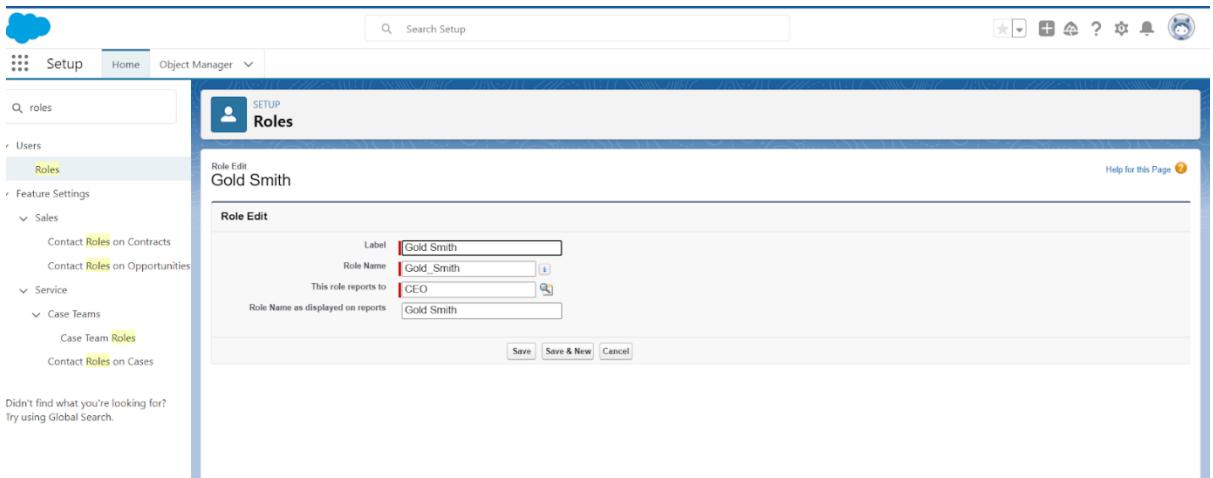
- 1. From setup ,Go to quick find > Search for Roles >> click on set up roles.**

The screenshot shows the Salesforce Setup interface. The left sidebar has a 'Setup' icon, 'Home' button, and 'Object Manager' dropdown. Under 'Users', the 'Roles' link is highlighted with a red box. Below it are sections for 'Feature Settings' (Sales, Service, Case Teams), 'Case Team Roles', and 'Contact Roles on Cases'. The main content area is titled 'Understanding Roles' with a sub-section 'Sample Role Hierarchy'. It shows a hierarchy starting from 'Executive Staff' (CEO, President, CFO, VP, Sales Director) who oversees 'Western Sales Director' (Director, OR Sales Rep, CA Sales Rep) and 'Eastern Sales Director' (Director, NY Sales Rep, MA Sales Rep). These directors oversee 'International Sales Director' (Director, Asian Sales Rep, European Sales Rep) who oversees 'Western Sales Rep' (OR Sales Rep) and 'Eastern Sales Rep' (NY Sales Rep, MA Sales Rep). A tooltip for the Sales Director role lists permissions: 'View & edit data, roll up forecasts, & generate reports for territories below them', 'Can't access data of other Executive staff', and 'Access data of users above or at same level'. At the bottom right of the content area is a 'Set Up Roles' button and a 'Don't show this page again' checkbox.

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

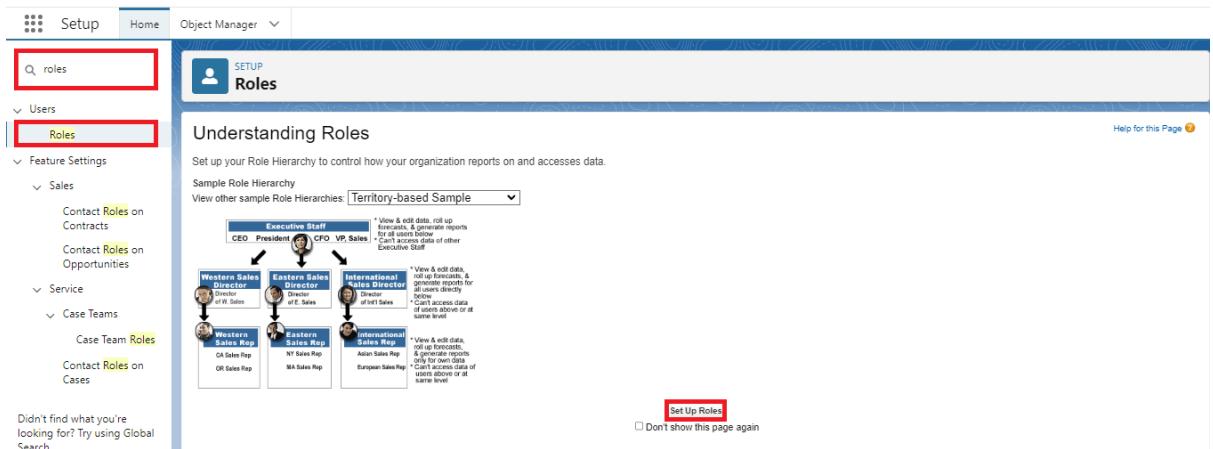
The screenshot shows the 'Your Organization's Role Hierarchy' page. At the top, there is a 'Collapse All' and 'Expand All' button, with 'Expand All' highlighted with a red box. The hierarchy tree starts with 'Nick Enterprises' which contains 'Add Role' links. Underneath are several roles: 'CEO' (with 'Edit | Del | Assign' buttons), 'HR' (with 'Edit | Del | Assign' buttons and an 'Add Role' link), 'Manager' (with 'Edit | Del | Assign' buttons and an 'Add Role' link), 'On Site Emp' (with 'Edit | Del | Assign' buttons and an 'Add Role' link), 'Remote Emp' (with 'Edit | Del | Assign' buttons and an 'Add Role' link), and 'CFO' (with 'Edit | Del | Assign' buttons and an 'Add Role' link). Each role also has its own 'Edit | Del | Assign' buttons.

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



## **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.**

## 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**

The screenshot shows the Salesforce Setup interface under the 'Users' section. On the left, there's a sidebar with various settings like Permission Set Groups, Profiles, and Roles. The main area is titled 'User Edit' for 'Niklaus Mikaelson'. It shows the following details:

- General Information:**
  - First Name: Niklaus
  - Last Name: Mikaelson
  - Alias: niklaus
  - Email: nadeem@thesmarbridge.co
  - Username: niklaus@nadeem@thesmarbridge.co
  - Nickname: niklaus
  - Title:
  - Company:
  - Department:
  - Division:
- Role:** Gold Smith (highlighted)
- User License:** Salesforce (highlighted)
- Profile:** Gold Smith (highlighted)
- Active:**
- Marketing User:**
- Office User:**
- Knowledge User:**
- Flow User:**
- Service Cloud User:**
- Sites.com Contributor User:**
- Sites.com Publisher User:**
- WDC User:**
- Data.com User Type:** -None- (dropdown menu)
- Data.com Monthly Addition Limit:** 300 (dropdown menu)
- Accessibility Mode (Classic Only):**
- High-Contrast Palette on Charts:**
- Load Lightning Pages While Scrolling:**
- Debug Mode:**
- Send Apex Warning Emails:**

- 1. 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.**

**Page layouts**

**Page Layout in Salesforce allows us to customise the design and organise detail and edit pages of records in Salesforce. Page layouts can be used to control the appearance of fields, related lists, and custom links on standard and custom objects' detail and edit pages.**

**Use Case:**

**Hurray!! you have completed the data model structure for your organisation but while looking at the detailed and edit pages it seems to be so clumsy, so decide to organise the page in a pleasant way for the sake of good and pleasant appearance and assemble all different kinds of information in different sections in order.**

**To Create a Gold Page layout**

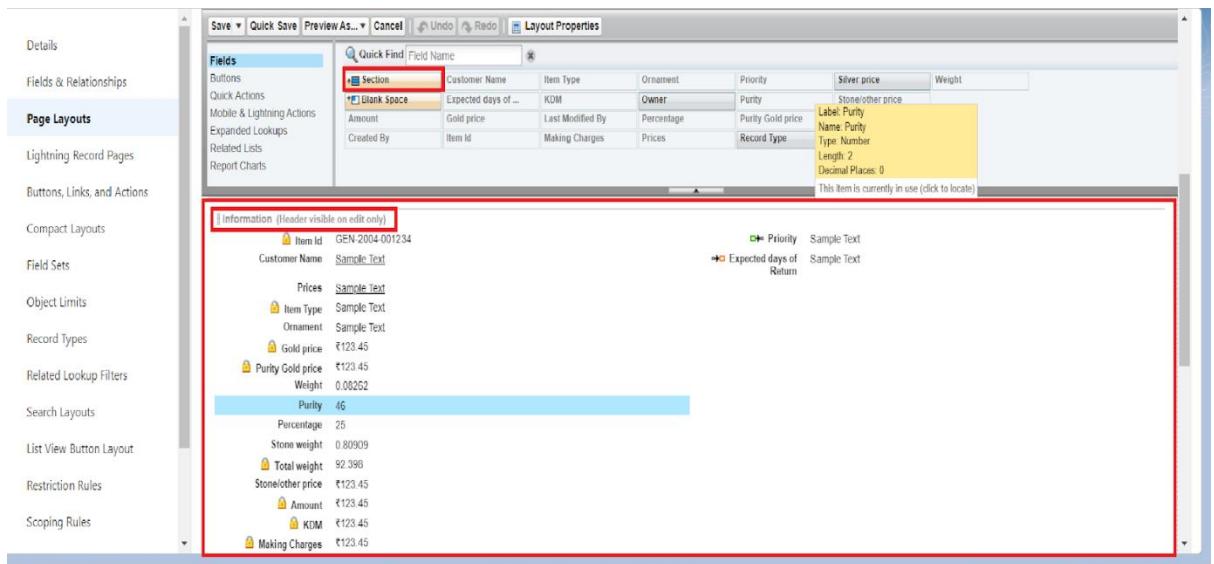
- 1. Go to Setup > Click on Object Manager > Search for the object (Item) > From drop down click on Edit.**
- 2. Click on Page layout > Click on New.**

The screenshot shows the Salesforce Object Manager for the 'Item' object. In the left sidebar, 'Page Layouts' is selected under 'Object Manager'. The main area displays a table with one row: 'Item Layout' by 'meghana katoju' created on 6/29/2023 at 10:48 PM and modified on 7/18/2023 at 11:45 AM. At the top right of the table, there is a 'New' button, which is highlighted with a red box.

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

The screenshot shows the 'Create New Page Layout' dialog in the Salesforce setup. The 'Page Layout Name' field is highlighted with a red box and contains 'Page Layout for Gold'. The dialog also includes a note about cloning existing layouts and buttons for 'Save' and 'Cancel'.

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

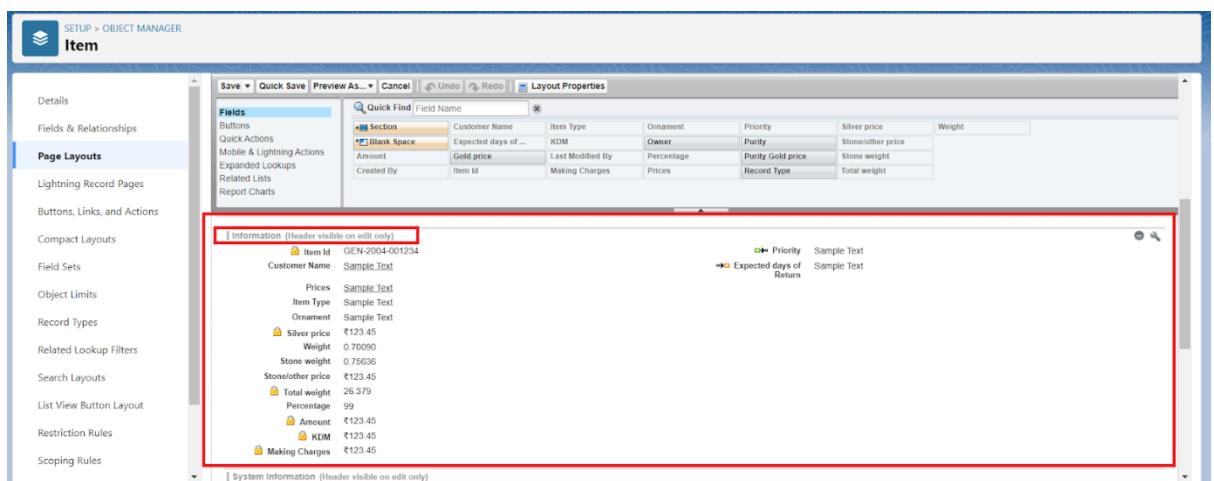


- 5. Click Save.**

- 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 Types

5. **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:

6. 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.

### 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.

The screenshot shows the Salesforce Setup interface with the 'Permission Sets' page open. The top navigation bar includes 'Setup' and 'Home'. On the left, there are links for 'Permission sets', 'Users', and 'Permission Sets'. A message at the bottom left says ' Didn't find what you're looking for? Try using Global Search.' The main content area has a heading 'Permission Sets' and a sub-section 'Permission Sets'. It contains a table with columns for 'Action', 'Permission Set Label', 'Description', and 'License'. The table lists several permission sets, such as 'Buyer', 'Buyer Manager', 'CRM User', 'Commerce Admin', 'Contact Center Admin', and 'Contact Center Agent'. The 'New' button in the top-left corner of the table is highlighted with a red box.

Action	Permission Set Label	Description	License
<input type="checkbox"/>	Adding Employee	Allows access to the store. Lets users see products and categories, ...	B2B Buyer Permission Set One Seat
<input type="checkbox"/>	Buyer	Includes all Buyer capabilities, and allows access to manage carts a...	B2B Buyer Manager Permission Set One Seat
<input type="checkbox"/>	Buyer Manager		
<input type="checkbox"/>	CRM User	Denotes that the user is a Sales Cloud or Service Cloud user.	CRM User
<input type="checkbox"/>	Commerce Admin	Allow access to commerce admin features.	Commerce Admin Permission Set License Seat
<input type="checkbox"/>	Contact Center Admin	Manage Service Cloud Voice contact centers that use Amazon Conn...	Service Cloud Voice User
<input type="checkbox"/>	Contact Center Agent	Access agent features in Service Cloud Voice contact centers that u...	Service Cloud Voice User

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

The screenshot shows the 'Permission Sets' page in the Salesforce setup. A new permission set is being created with the following details:

- Label:** Per to Worker
- API Name:** Per\_to\_Worker
- Description:** (empty)
- Session Activation Required:** (unchecked)
- License:** (empty)

The 'Save' button at the bottom left is highlighted with a red box. The top right corner has a 'Help for this Page' link.

**3. Under Apps Select object settings.**

The screenshot shows the 'Apps' page in the Salesforce setup. The 'Object Settings' section is highlighted with a red box. Other sections listed include:

- Assigned Apps**: Settings that specify which apps are visible in the app menu.
- Assigned Connected Apps**: Settings that specify which connected apps are visible in the app menu.
- Object Settings**: Permissions to access objects and fields, and settings such as tab availability. This section is highlighted with a red box.
- App Permissions**: Permissions to perform app-specific actions, such as "Manage Call Centers".
- Apex Class Access**: Permissions to execute Apex classes.
- Visualforce Page Access**: Permissions to execute Visualforce pages.
- External Data Source Access**: Permissions to authenticate against external data sources.
- Flow Access**: Permissions to execute Flows.
- Named Credential Access**: Permissions to authenticate against named credentials.
- Custom Permissions**: Permissions to access custom processes and apps.
- Custom Metadata Types**: Permissions to access custom metadata types.
- Custom Setting Definitions**: Permissions to access custom 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.**

**SETUP**

## Permission Sets

Permission Set Overview > Object Settings > Items

Items															
<b>Tab Settings</b> <table border="1"> <tr> <td>Available</td> <td>Visible</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/> </td> </tr> </table>		Available	Visible	<input checked="" type="checkbox"/>	<input type="checkbox"/> 										
Available	Visible														
<input checked="" type="checkbox"/>	<input type="checkbox"/> 														
<b>Item: Record Type Assignments</b> <table border="1"> <thead> <tr> <th>Record Types</th> <th>Assigned Record Types</th> </tr> </thead> <tbody> <tr> <td>Gold</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Silver</td> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </table>		Record Types	Assigned Record Types	Gold	<input checked="" type="checkbox"/>	Silver	<input checked="" type="checkbox"/>								
Record Types	Assigned Record Types														
Gold	<input checked="" type="checkbox"/>														
Silver	<input checked="" type="checkbox"/>														
<b>Object Permissions</b> <table border="1"> <thead> <tr> <th>Permission Name</th> <th>Enabled</th> </tr> </thead> <tbody> <tr> <td>Read</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Create</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Edit</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Delete</td> <td><input type="checkbox"/></td> </tr> <tr> <td>View All</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Modify All</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>		Permission Name	Enabled	Read	<input checked="" type="checkbox"/>	Create	<input checked="" type="checkbox"/>	Edit	<input checked="" type="checkbox"/>	Delete	<input type="checkbox"/>	View All	<input type="checkbox"/>	Modify All	<input type="checkbox"/>
Permission Name	Enabled														
Read	<input checked="" type="checkbox"/>														
Create	<input checked="" type="checkbox"/>														
Edit	<input checked="" type="checkbox"/>														
Delete	<input type="checkbox"/>														
View All	<input type="checkbox"/>														
Modify All	<input type="checkbox"/>														
<b>Field Permissions</b>															

**Save** **Cancel**

5. **Click on Save.**
6. **After saving the permission click on the Manage assignment**
7. **Now click on the Add Assignment.**

**Current Assignments**

  **Add Assignment**

... > PERMISSION SET 'PER TO WORKER' > MANAGE ASSIGNMENT EXPIRATION

### Per to Worker

Select Users to Assign

**All Users**

9 items • Sorted by Full Name • Filtered by All users • Updated a few seconds ago

Full Name ↑	Alias	Username	Role	Act...	Profile
Chatter Expert	Chatter	chatty.00d5i000003ksyzea4.t4i5wtjeybt4@chatter.salesforce.com	<input checked="" type="checkbox"/>	Chatter Free User	
Integration User	integ	integration@00d5i000003ksyzea4.com	<input checked="" type="checkbox"/>	Analytics Cloud Integration User	
Mani deepak	mdeep	manideepak143@gmail.com	<input checked="" type="checkbox"/>	Worker	
Megha Katoju Site Guest User	guest	megha_katoju@00d5i000003ksyzea4.org.force.com	<input checked="" type="checkbox"/>	Megha Katoju Profile	
Meghana Katoj Site Guest User	guest	meghana_katoj@00d5i000003ksyzea4.org.force.com	<input checked="" type="checkbox"/>	Meghana Katoj Profile	

**Cancel** **Next**

**8. Now select the users which you have created in user milestone, using Worker profile and click on Next ? Assign? Done.**

Full Name	Role	Profile	Active	User License	Expires On
Mani deepak	Worker	Worker	✓	Salesforce Platform	Never Expires

## **Trigger**

### **Use Case:**

**Trigger and Trigger handler is designed to handle scenarios where we used to update the "Paid Amount" field on a custom object called "Billing" based on the value in a field named "Paying Amount" during both record insertion and update operations. It Calculates and updates the "Paid Amount" field based on the existing "Paid Amount" and the new "Paying Amount" during record updates. This approach ensures that the "Paid Amount" accurately reflects the payments made by customers and provides a history of changes to the "Paid Amount" over time.**

### **Trigger :**

**A trigger is a piece of Apex code that automatically runs before or after specific events, like record insertion, update, or deletion. Triggers are used to customise and automate actions in response to these events.**

### **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(Trigger.oldMap,  
Trigger.new);  
    }  
}
```

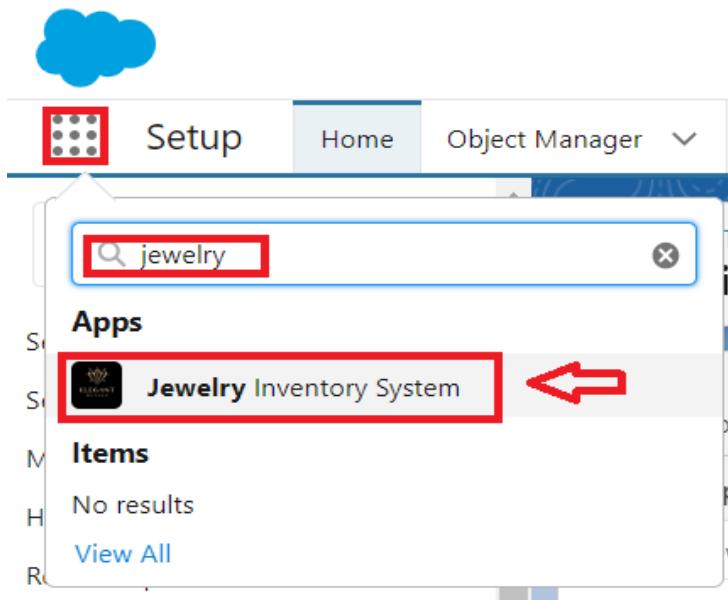
**User Adoption**

### **Use Case:**

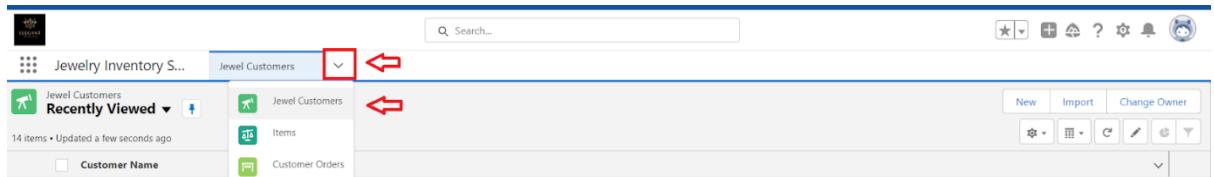
**As a new Administrator, you perform user management tasks like creating and editing users, resetting passwords, granting permissions, configuring data access, and much more. In this unit, you will learn about users and how you add users to your Salesforce org.**

#### **Create a Record (Jewel Customer)**

- Click on App Launcher on the left side of the screen.**
- Search Jewelry Inventory System & click on it.**



- Click on Drop Down and Click on the Jewel Customer tab.**
- Click New.**



- Fill the Details and click on Save.**

#### **View a Record(Jewel Customer)**

- Click on App Launcher on the left side of the screen.**
- Search Jewelry Inventory System & click on it.**
- Click on the Jewel Customer Tab.**

4. **Click on any record name. you can see the details of the Jewel Customer.**

#### **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.**

**Note:Create at least 10 records for each of the objects: Jewel Customer,Price,Item,Customer Order and Billing.**

#### **Reports**

**Reports give you access to your Salesforce data. You can examine your Salesforce data in almost infinite combinations, display it in easy-to-understand formats, and share the resulting insights with others. Before building, reading, and sharing reports, review these reporting basics.**

#### **Types of Reports in Salesforce**

1. **Tabular**
2. **Summary**
3. **Matrix**
4. **Joined Reports**

#### **Use Case:**

**The GoldSmith of an organisation wants to have a brief data on Gold Items,Silver Items,Customer Orders and Billings. So he can have a clear picture of his organisation and be able to make any decisions required based on this data. So he calls you on this task and wants you to represent the data in an appropriate way.**

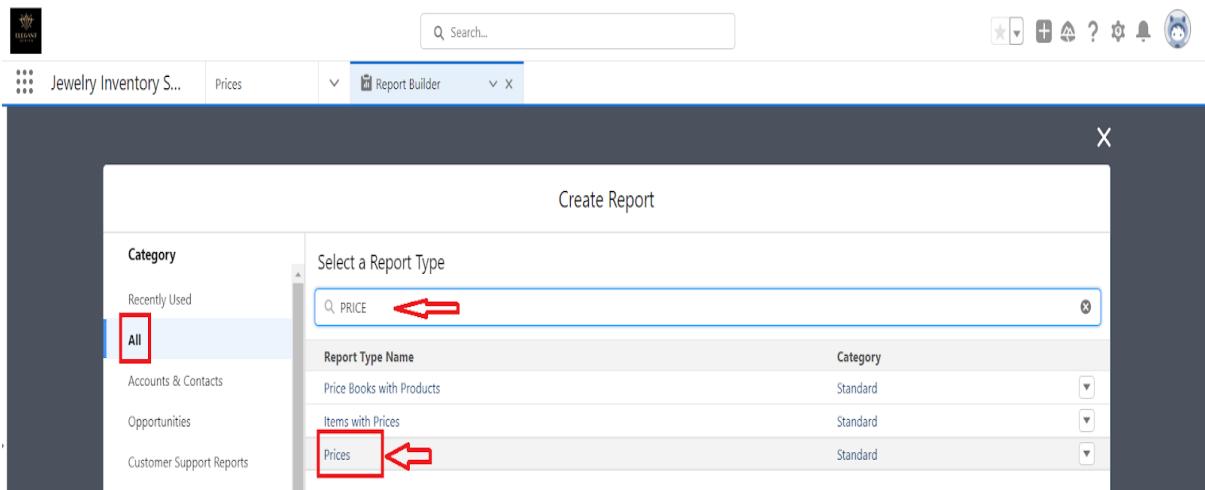
#### **Let's create a Report.**

#### **Create Report**

1. **Go to the app >> click on the reports tab**
2. **Click New Report.**

The screenshot shows a software application window titled "Jewelry Inventory S...". On the left, there is a sidebar with categories like "REPORTS", "FOLDERS", and "FAVORITES". The "REPORTS" section is expanded, showing "Recent" reports such as "New Report billing w/ order", "New Items with Billir...", "New Prices Report", etc. Below this is a "Report Name" input field and a dropdown menu with icons for "Jewel Customers", "Items", "Customer Orders", "Prices", "Billings", and "Reports". The "Reports" icon is highlighted with a red box. To the right of the sidebar is a main content area with a search bar at the top. A table lists reports based on "Folder", "Created By", "Created On", and "Subscribed" status. The table includes rows for "Private Reports" by meghana katoju on various dates. At the bottom right of the main area are buttons for "New Report" and "New Folder".

**3. Select report type from category or from report type panel or from search panel ?  
click on start report.**



#### 4. Customise your report

The screenshot shows the 'Outline' pane of the Report Builder. It includes sections for 'Fields' (Groups and Columns), 'Filters' (1), and a preview area. The 'Columns' section has an 'Add column...' button highlighted with a red box. The preview area shows a table with 10 rows labeled 1 to 10, each containing a price value starting with 'p-'. A red arrow points to the 'Add column...' button. The top navigation bar shows 'Jewelry Inventory S...', 'Prices', 'Report Builder', and a 'Run' button.

- **Add fields from the left pane as shown below.**

## 5. Save or run it.

The screenshot shows the Report Builder interface with the following details:

- REPORT** dropdown: New Prices Report
- Fields** section:
  - Outline** (selected)
  - Groups**: GROUP ROWS, Add group...
  - Columns**: Add column...
  - Price: Price (highlighted in blue)
  - # Gold price
  - # Silver price
- Filters**: 1 filter applied (highlighted in blue)
- Preview**: Previewing a limited number of records. Run the report to see everything.

	Price: Price	Gold price	Silver price
1	p-022	₹60,000.0000	₹71,000.0000
2	p-021	₹63,000.0000	₹72,000.0000
3	p-027	₹62,350.0000	₹70,200.0000
4	p-029	₹58,700.0000	₹69,000.0000
5	p-030	₹66,000.0000	₹78,000.0000
6	p-026	₹62,000.0000	₹70,000.0000
7	p-025	₹58,000.0000	₹69,000.0000
8	p-028	₹59,900.0000	₹73,000.0000
9	p-024	₹62,000.0000	₹73,000.0000
10	p-023	₹58,000.0000	₹69,000.0000
11		₹609,950.0000	₹714,200.0000
- Buttons**: Add Chart, Save & Run, Save, Close, Run
- Settings**: Update Preview Automatically (checkbox)

**Note: Reports may get varied from the above pictures as the data might be different.**

### Reports

1. **Create a report with report type: “Item with Billings”.**
2. **Create a report with report type: “Billings with item and Customer order”.**

### Dashboards

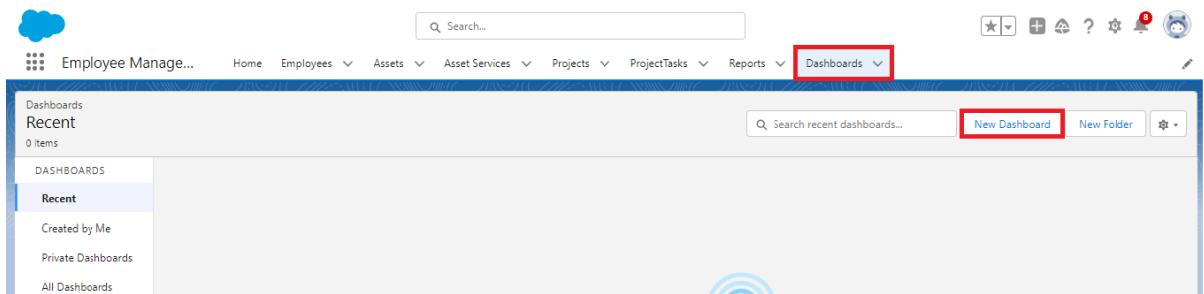
**Dashboards help you visually understand changing business conditions so you can make decisions based on the real-time data you've gathered with reports. Use dashboards to help users identify trends, sort out quantities, and measure the impact of their activities. Before building, reading, and sharing dashboards, review these dashboard basics.**

### Use Case:

**As an Admin for the organisation you keep pushing yourself to reach out the business requirements to take the organisation to peak heights and all your superiors are very much impressed with your efforts and work dedication. In addition with reports you make an ease for the GoldSmith in viewing the reports with data visualisation. So he doesn't have to search for the data he wants to check.**

### Create Dashboard

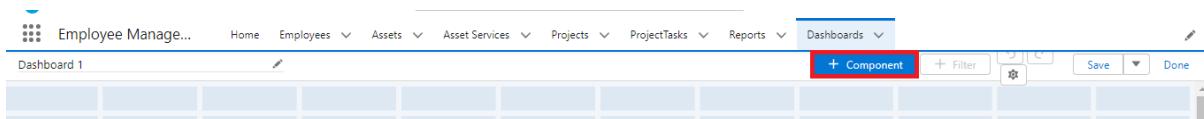
1. **Go to the app >> click on the Dashboards tabs.**



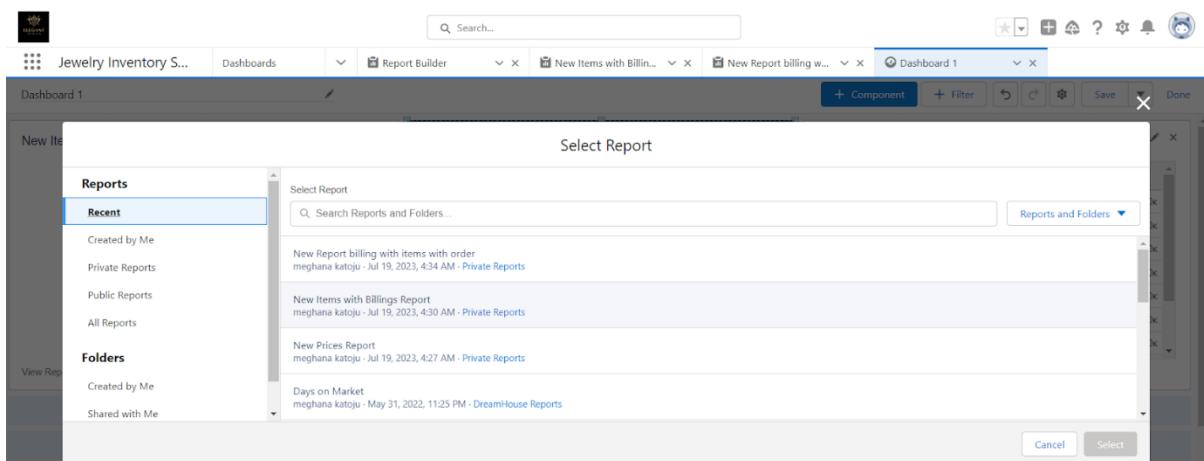
**2. Give a Name and click on Create.**

A screenshot of the 'New Dashboard' dialog. It has fields for 'Name' (containing 'Dashboard 1'), 'Description' (empty), 'Folder' (set to 'Private Dashboards'), and 'Select Folder' (button). At the bottom right are 'Cancel' and 'Create' buttons, with 'Create' highlighted with a red box.

**3. Select add component.**

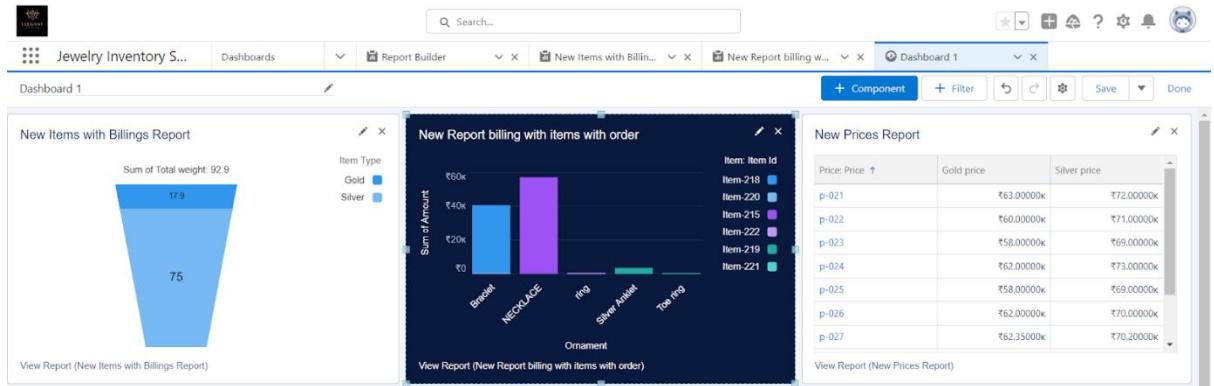


**4. Select a Report and click on select.**



**5. Click Add then click on Save and then click on Done.**

## **Activity 2: Create another Dashboard as we discussed in activity 1.**



## **Flows**

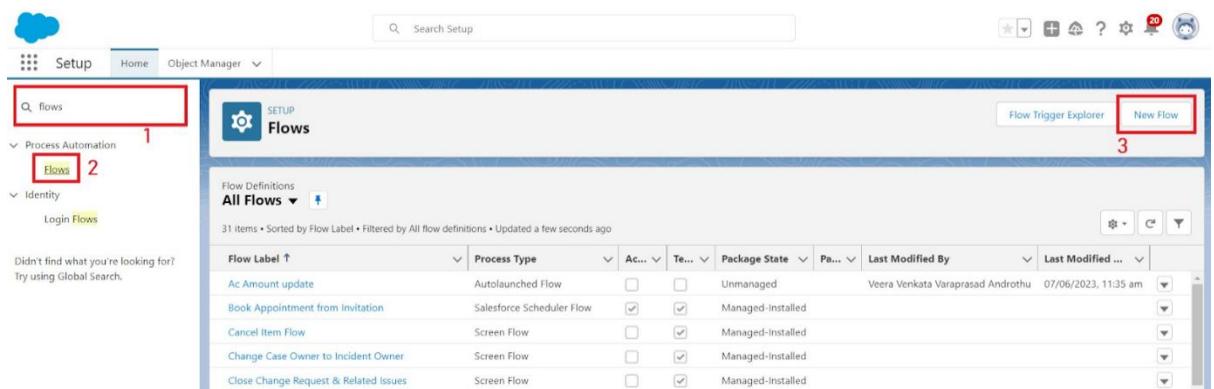
**In Salesforce, a flow is a powerful tool that allows you to automate business processes, collect and update data, and guide users through a series of screens or steps. Flows are built using a visual interface and can be created without any coding knowledge.**

### **Use Case:**

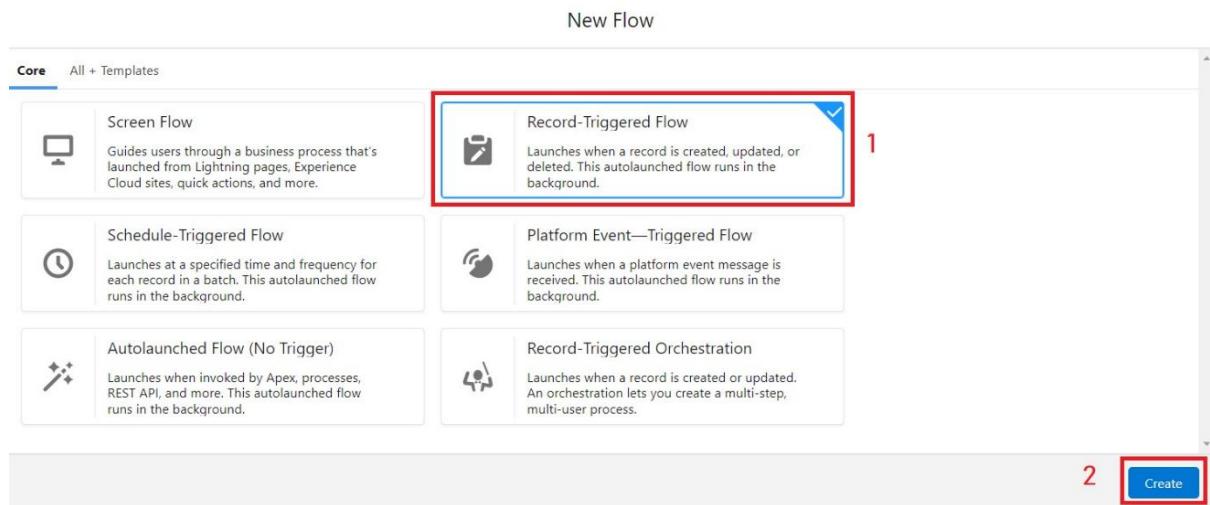
**Flows, also known as Salesforce Flows or Visual Flows, are powerful declarative automation tools in Salesforce that allow users to create and manage complex business processes without the need for code. Flows are designed using a drag-and-drop interface, making them easy to use for both administrators 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 Optimise the flow for: “Actions and Related Records” and Click on Done.**

Configure Start

Select Object

Select the object whose records trigger the flow when they're created, updated, or deleted.

\* Object  
Item

Configure Trigger

\* Trigger the Flow When:

- A record is created
- A record is updated
- A record is created or updated
- A record is deleted

Set Entry Conditions

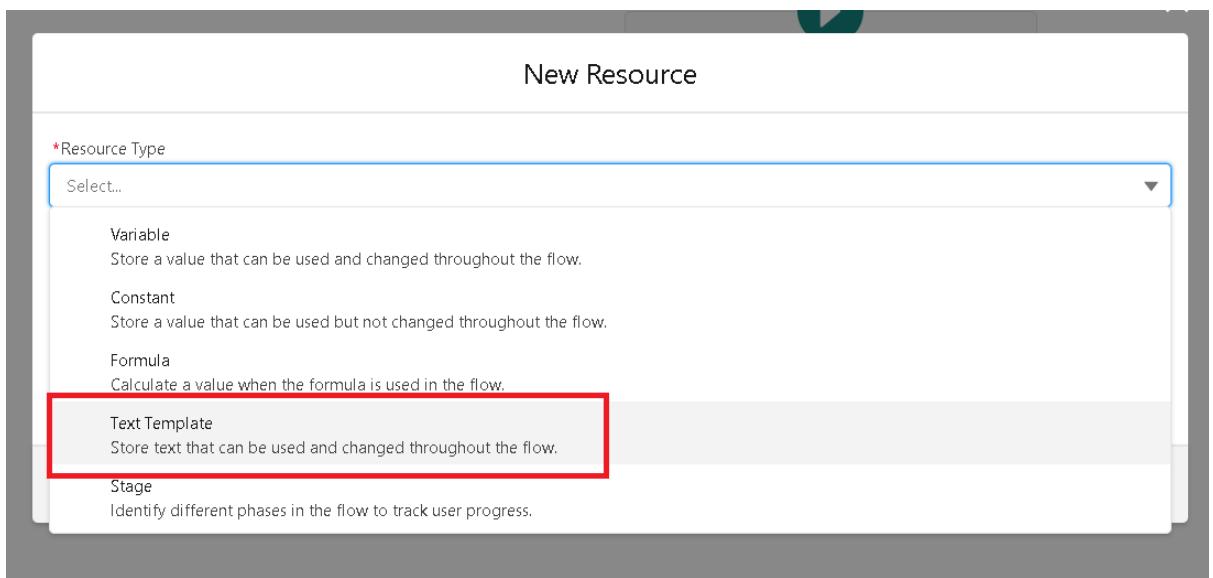
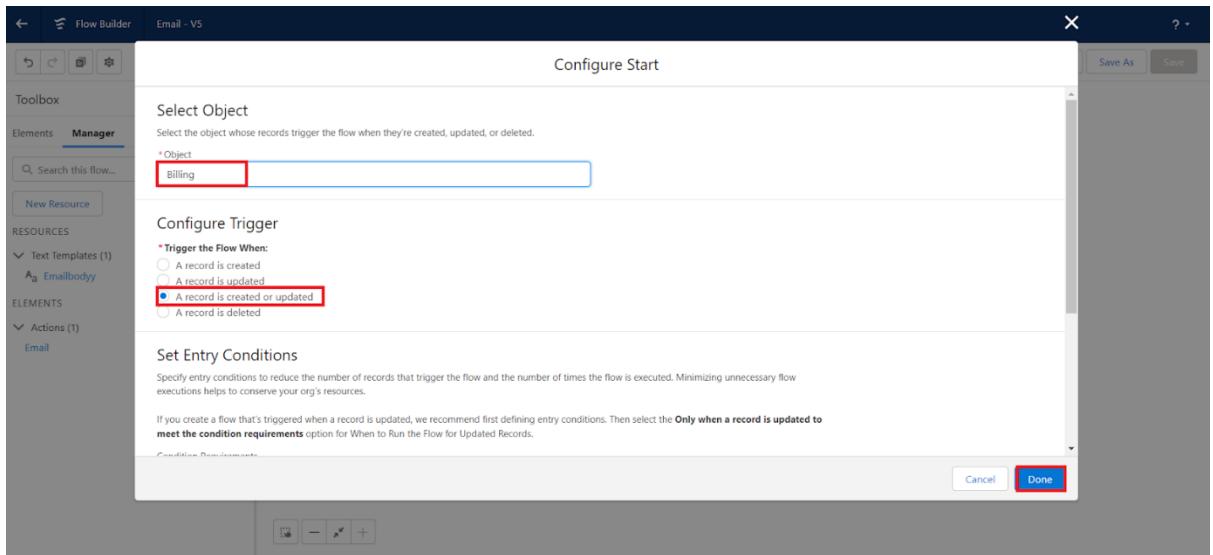
Specify entry conditions to reduce the number of records that trigger the flow and the number of times the flow is executed. Minimizing unnecessary flow executions helps to conserve your org's resources.

If you create a flow that's triggered when a record is updated, we recommend first defining entry conditions. Then select the **Only when a record is updated to meet the condition requirements** option for When to Run the Flow for Updated Records.

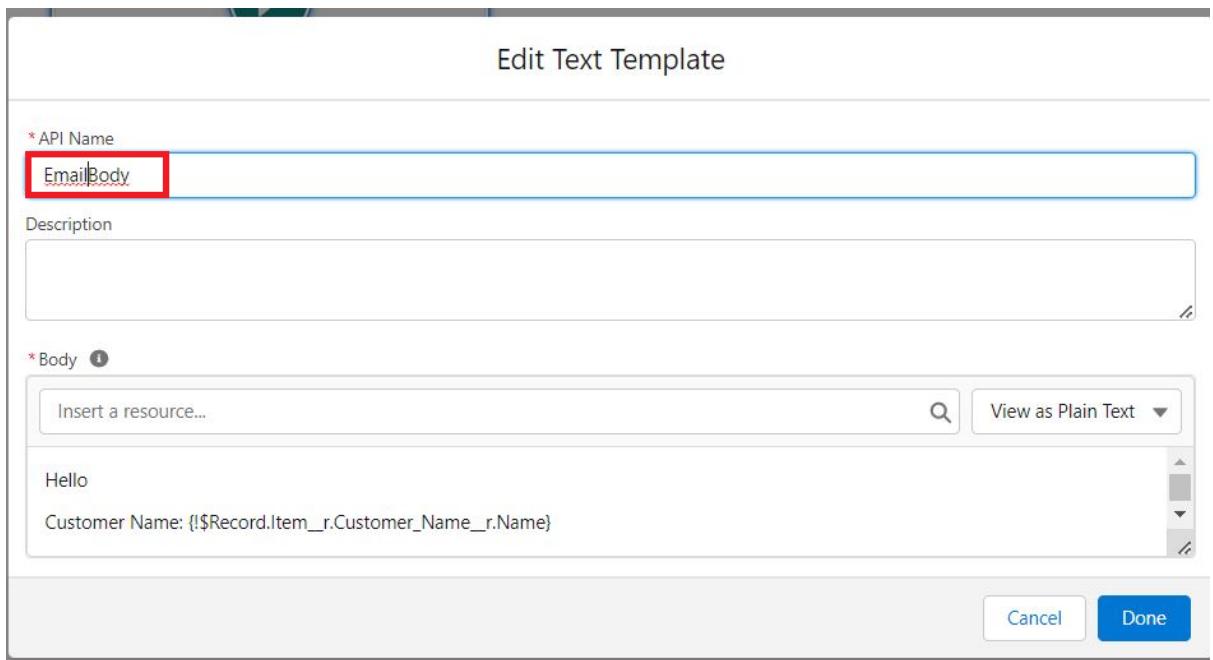
Condition Requirements

Cancel Done

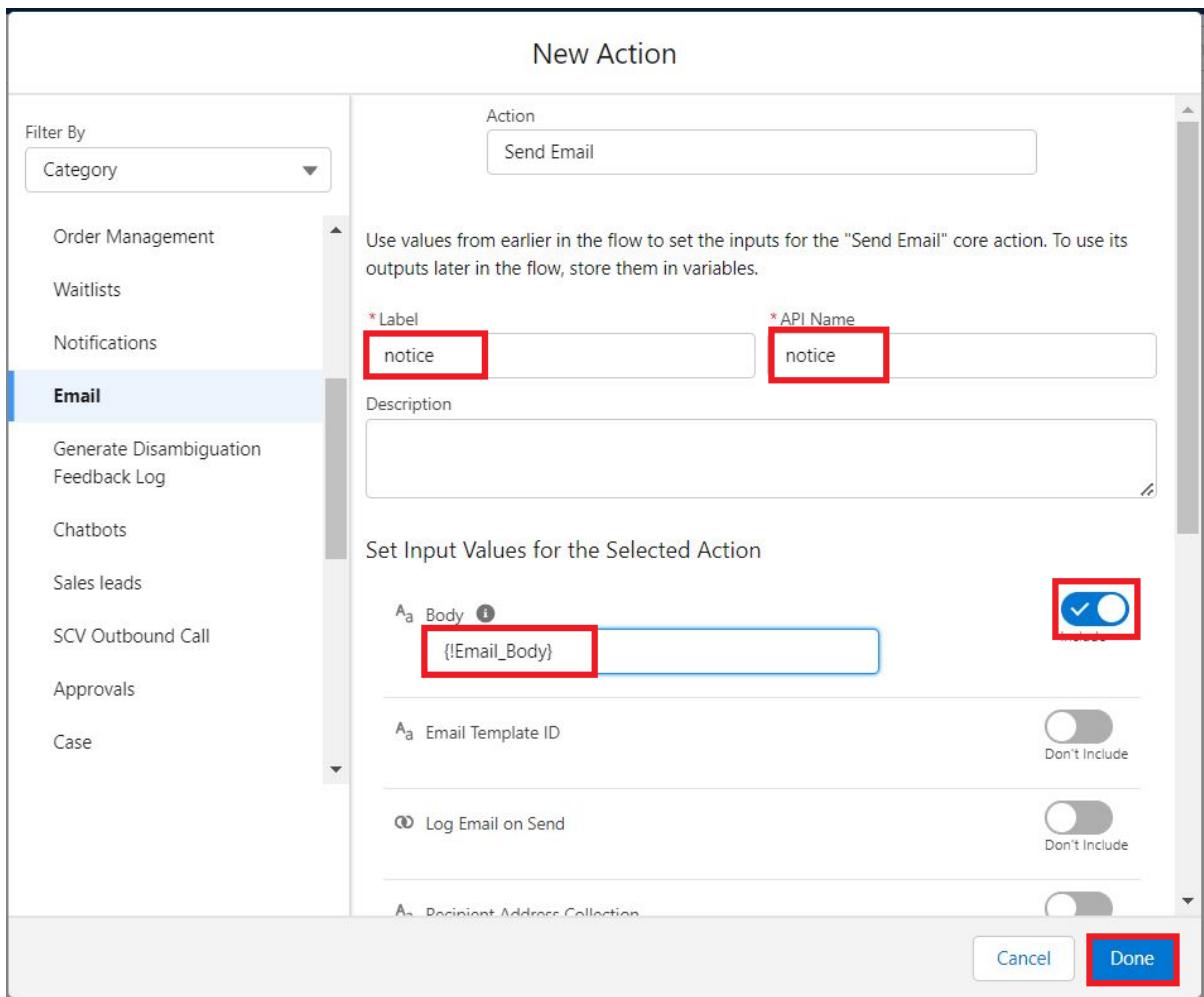
- 6. Now change the mode form Auto-layout to free-form.**
- 7. Now select the manger option in the toolbox, click New resource.**
- 8. Select the resource type as text template.**



**9. Enter the API name as “ Email body”.**



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 Jewellery 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.

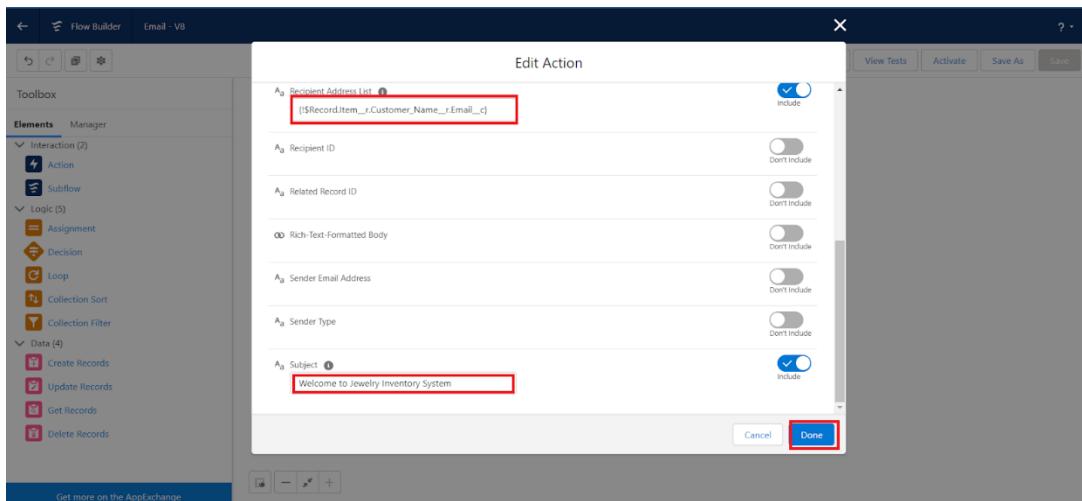


**19. Include Recipient Address list, select the email form the record.**

**({!!\$Record.Item\_r.Customer\_Namer.Email\_c})**

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

**21. Click done.**

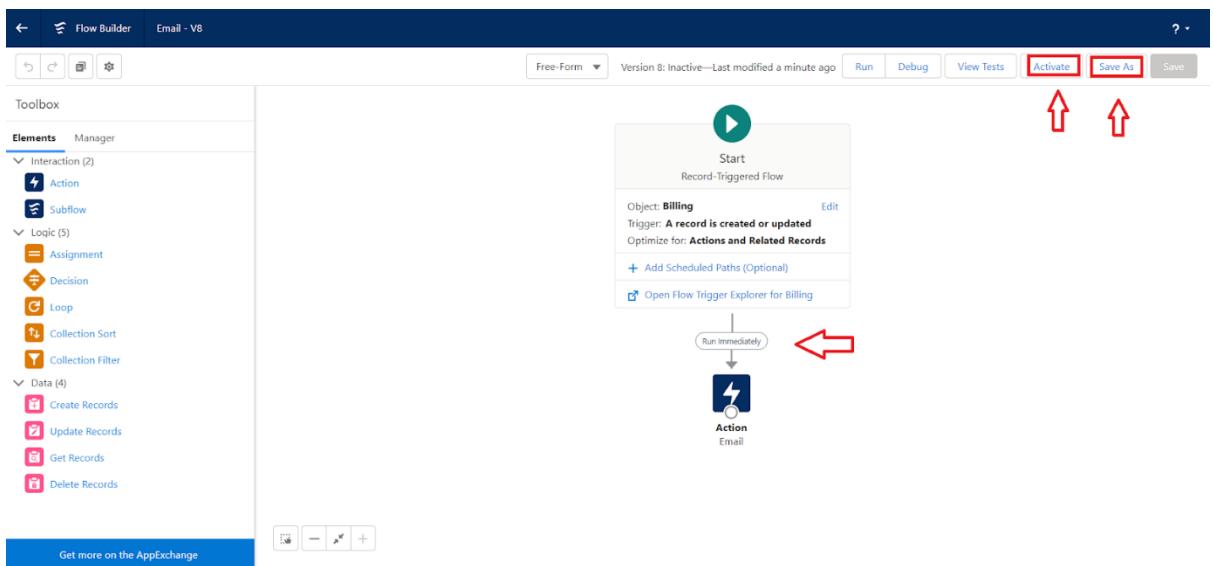
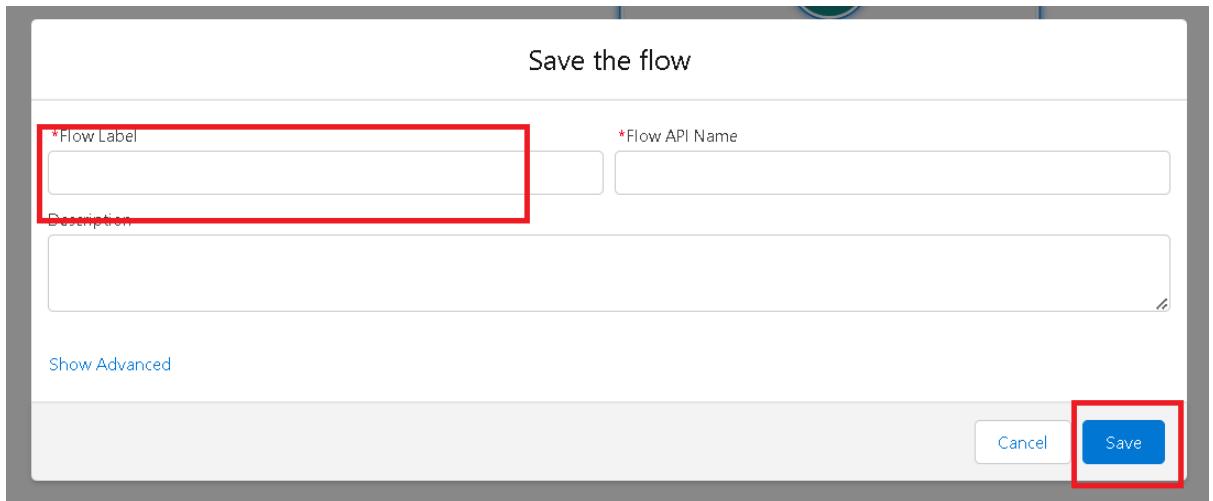


**22. Now drag the path from the start to the action element.**

23.

24. **Click on save. Given the Flow label , Flow Api name will be auto populated.**

25. **And click save, and click on activate.**



## Final output

The screenshot shows the Salesforce Setup interface under the 'Tabs' section. It displays four categories of tabs:

- Custom Object Tabs:** Shows tabs for Billing, Customer\_Orders, Items, Jewel\_Customers, and Prices. Each tab has a 'Label' (e.g., 'Balls'), a 'Tab Style' icon, and a 'Description' column.
- Web Tabs:** Shows a message: "No Web Tabs have been defined".
- Visualforce Tabs:** Shows a message: "No Visualforce Tabs have been defined".
- Lightning Component Tabs:** Shows a message: "No Lightning component tabs have been defined".

The screenshot shows the Salesforce Object Manager for the 'Jewel Customer' object. The left sidebar lists various configuration options:

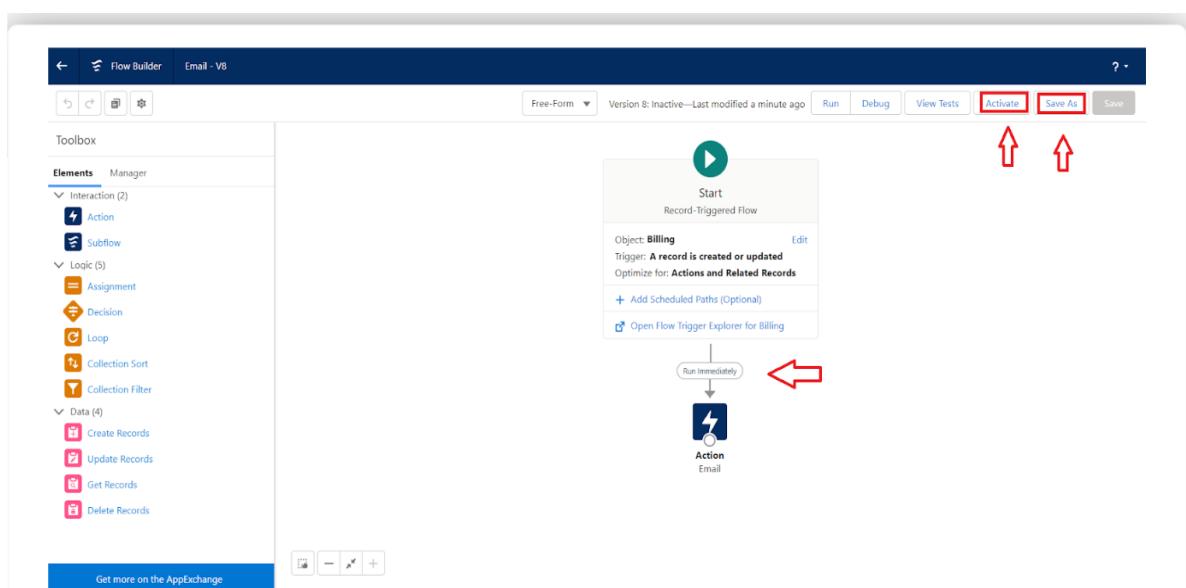
- Fields & Relationships
- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters
- Search Layouts
- List View Button Layout
- Restriction Rules
- Scoping Rules
- Object Access
- Triggers

The main 'Details' tab is selected, showing the following fields:

Description	Enable Reports
API Name Jewel_Customer_c	✓
Custom	✓
Singular Label Jewel Customer	Track Activities
Plural Label Jewel Customers	Track Field History
	Deployment Status Deployed
	Help Settings Standard salesforce.com Help Window

At the top right of the main area are 'Edit' and 'Delete' buttons.

7	Community	Community	Salesforce CRM Communities	8/20/2025, 12:45 AM	Classic	✓	▼
8	Content	Content	Salesforce CRM Content	8/20/2025, 12:45 AM	Classic	✓	▼
9	Data Cloud	Audience360	Build a thorough and complete understanding of your customers.	8/20/2025, 12:45 AM	Lightning	✓	▼
10	Data Manager	DataManager	Use Data Manager to view limits, monitor usage, and manage recipes.	8/20/2025, 12:45 AM	Lightning	✓	▼
11	Digital Experiences	SalesforceCMS	Manage content and media for all of your sites.	8/20/2025, 12:45 AM	Lightning	✓	▼
12	Jewellery Inventory System	Jewellery_Inventory_System	Elevate your look with elegance	8/26/2025, 2:14 AM	Lightning	✓	▼
13	Lightning Usage App	LightningInstrumentation	View Adoption and Usage Metrics for Lightning Experience	8/20/2025, 12:45 AM	Lightning	✓	▼
14	Marketing CRM Classic	Marketing	Track sales and marketing efforts with CRM objects.	8/20/2025, 12:45 AM	Classic	✓	▼
15	My Service Journey	MSJApp	Discover new customer service capabilities.	8/20/2025, 12:45 AM	Lightning	✓	▼
16	Platform	Platform	The fundamental Lightning Platform	8/20/2025, 12:45 AM	Classic		▼



Jewelry Inventory S... Reports Report Builder New Items with Billin... New Prices Report Prices

REPORT ▾ New Prices Report Prices

Outline Filters 1 Previewing a limited number of records. Run the report to see everything.

Groups GROUP ROWS Add group...

Columns Add column...

Price: Price # Gold price # Silver price

	Price: Price	Gold price	Silver price
1	p-022	₹60.000.0000	₹71.000.0000
2	p-021	₹63.000.0000	₹72.000.0000
3	p-027	₹62.350.0000	₹70.200.0000
4	p-029	₹58.700.0000	₹69.000.0000
5	p-030	₹66.000.0000	₹78.000.0000
6	p-026	₹62.000.0000	₹70.000.0000
7	p-025	₹58.000.0000	₹69.000.0000
8	p-028	₹59.900.0000	₹73.000.0000
9	p-024	₹62.000.0000	₹73.000.0000
10	p-023	₹58.000.0000	₹69.000.0000
11		₹609.950.0000	₹714.200.0000

Update Preview Automatically

