CRM JWELLERY PROJECT

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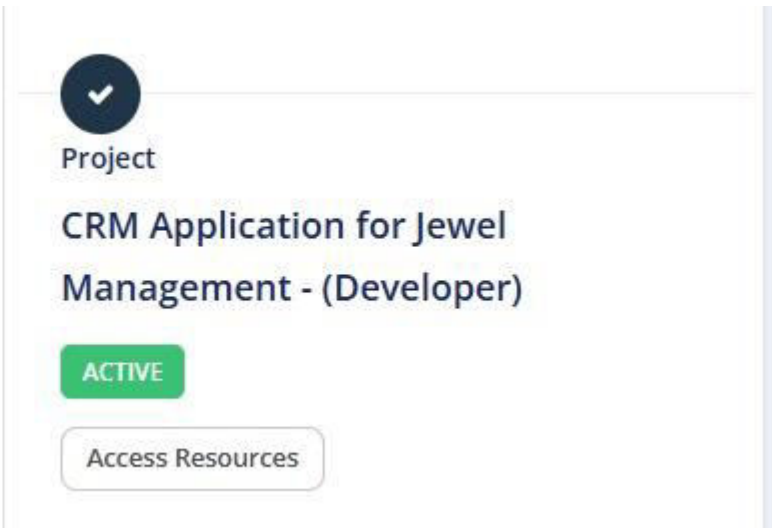
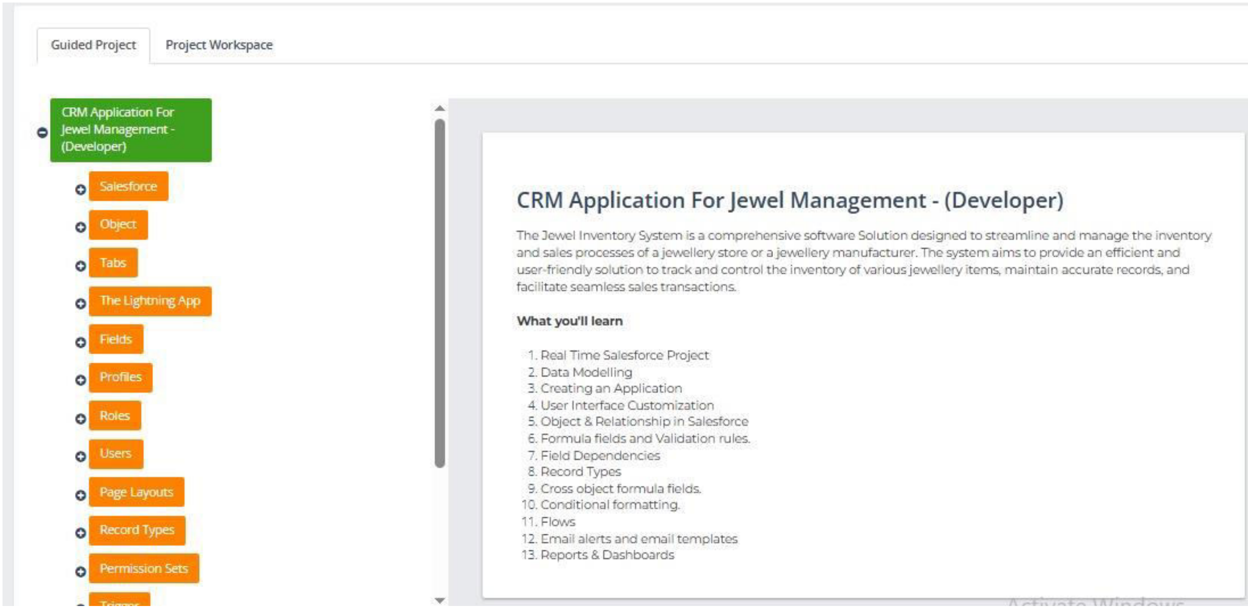
1.1 INTRODUCTION

The Lease Management System is a Salesforce-based application designed to streamline theprocesses associated with leasing real estate properties. It handles tenant management, leasecontracts, payments, and communication with automation features such as flows, approval processes, and email alerts.





Guided Project | Project Workspace

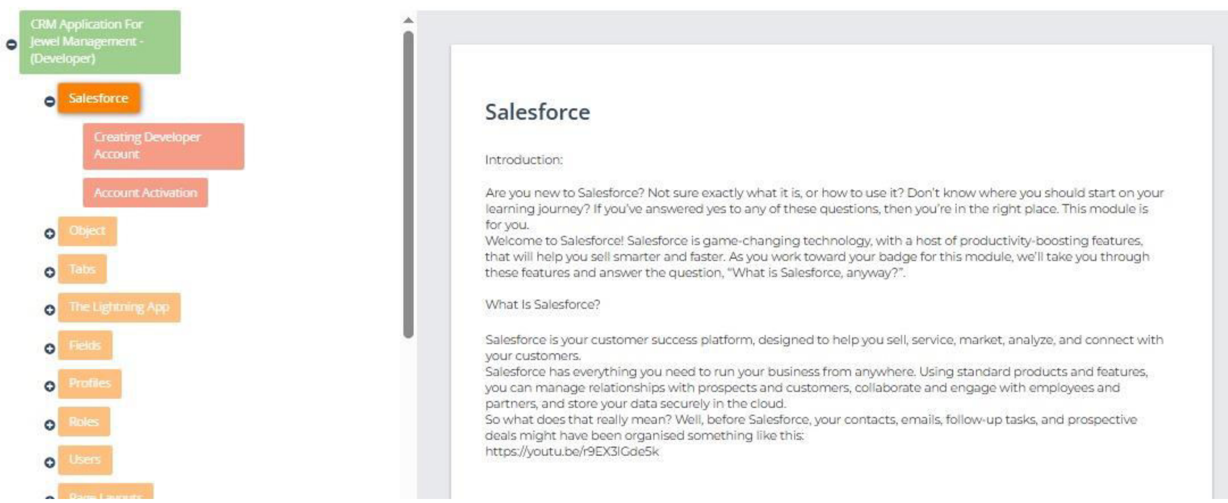
- CRM Application For Jewel Management - (Developer)
  - Salesforce
  - Object
  - Tabs
  - The Lightning App
  - Fields
  - Profiles
  - Roles
  - Users
  - Page Layouts
  - Record Types
  - Permission Sets

CRM Application For Jewel Management - (Developer)

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.

What you'll learn

1. Real Time Salesforce Project
2. Data Modelling
3. Creating an Application
4. User Interface Customization
5. Object & Relationship in Salesforce
6. Formula fields and Validation rules.
7. Field Dependencies
8. Record Types
9. Cross object formula fields.
10. Conditional formatting.
11. Flows
12. Email alerts and email templates
13. Reports & Dashboards



- CRM Application For Jewel Management - (Developer)
  - Salesforce
    - Creating Developer Account
    - Account Activation
  - Object
  - Tabs
  - The Lightning App
  - Fields
  - Profiles
  - Roles
  - Users

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 to any 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 you work toward your badge for this module, we'll take you through these features and answer the question, "What is Salesforce, anyway?".

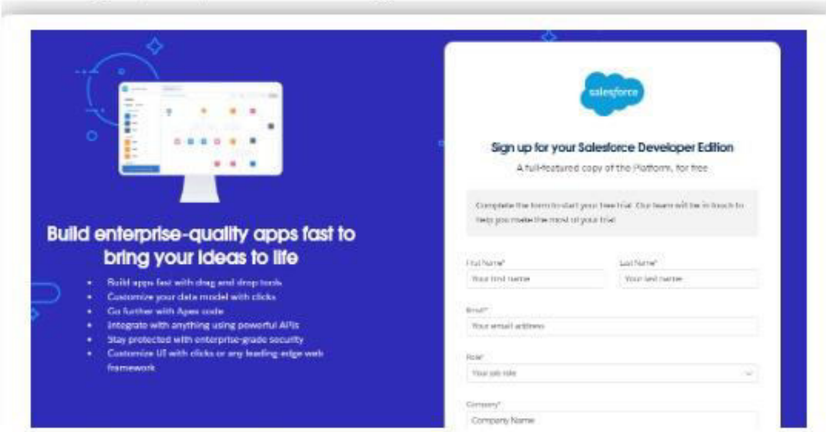
What Is Salesforce?

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 store your 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 organised something like this:
https://youtu.be/r9EX3lGde5k

Creating Developer Account

Creating a developer org in salesforce.

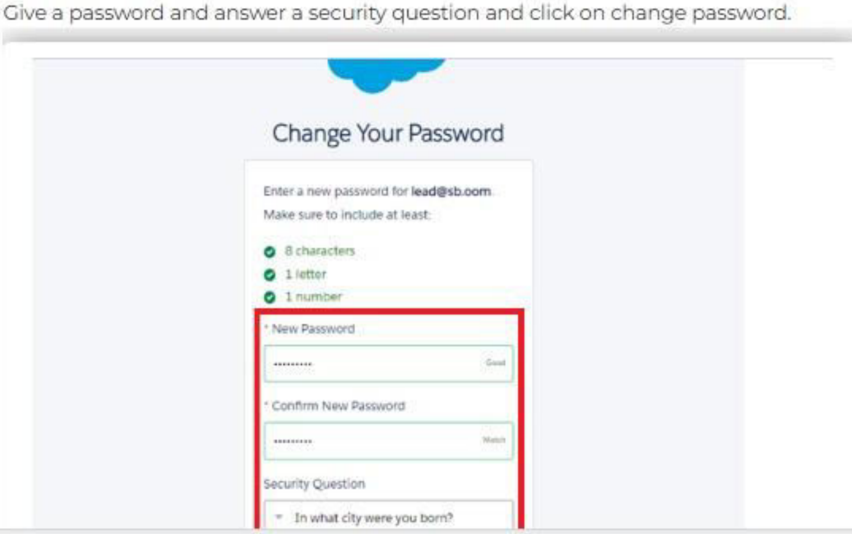
1. Go to https://developer.salesforce.com/signup
2. On the sign up form, enter the following details :



1. First name & Last name
2. Email
3. Role : Developer

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.

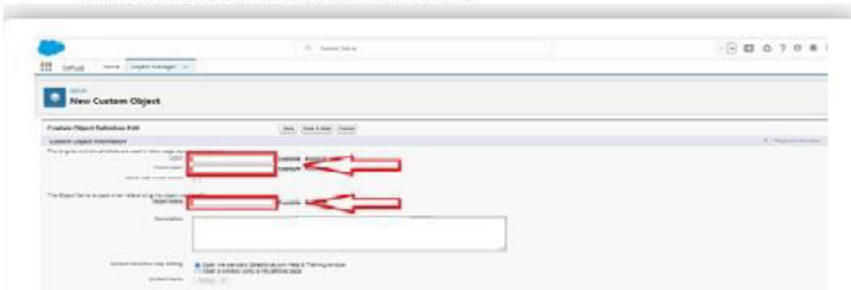


Create Jewel Customer Object

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

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

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



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.

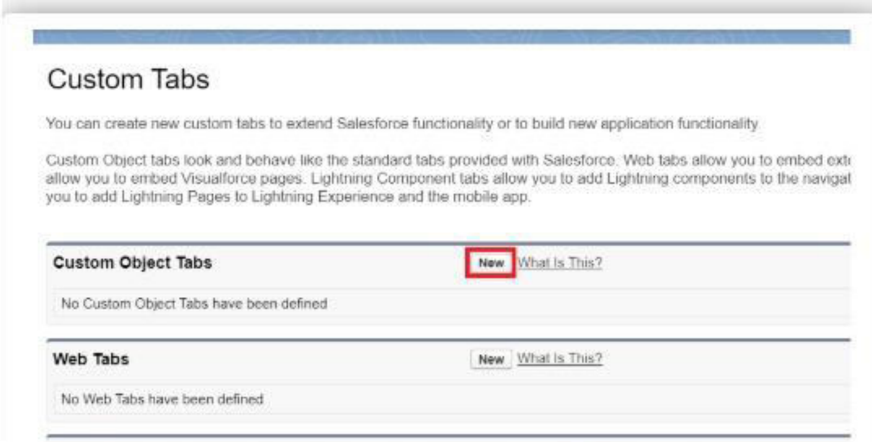
Types of Tabs:

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

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.

Create Jewel Customer Object

Create Item Object

Tabs

Creating A Custom Tab

To Create A Tab:(Item)

The Lightning App

Create A Lightning App

Fields

Profiles

Roles

Users

Page Layouts

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:

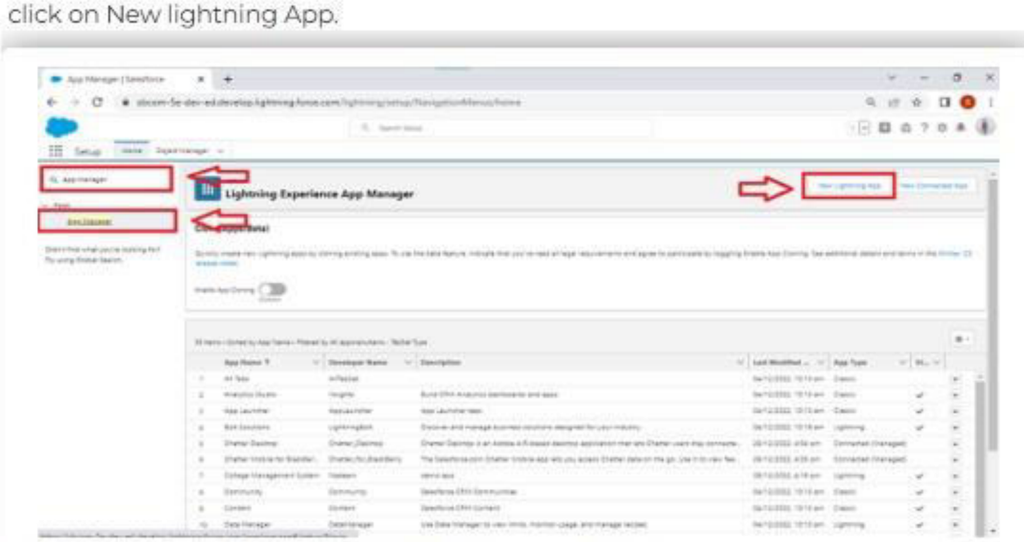
Well done you have reached close to your requirement by creating the objects to store the organization's data. Making a database for an organization is just not enough to reach out the requirements, the task is how the users at the organization can access the objects you have created for them. As an 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.



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

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.

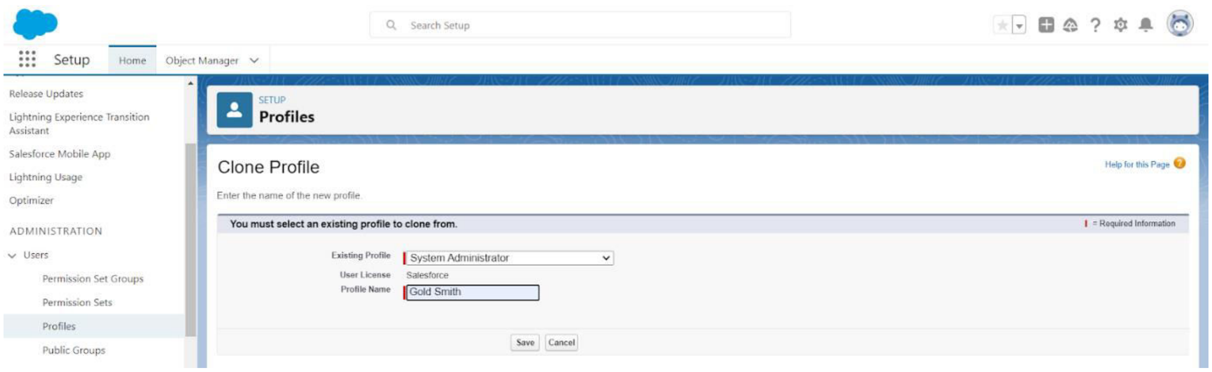
Use Case:

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.

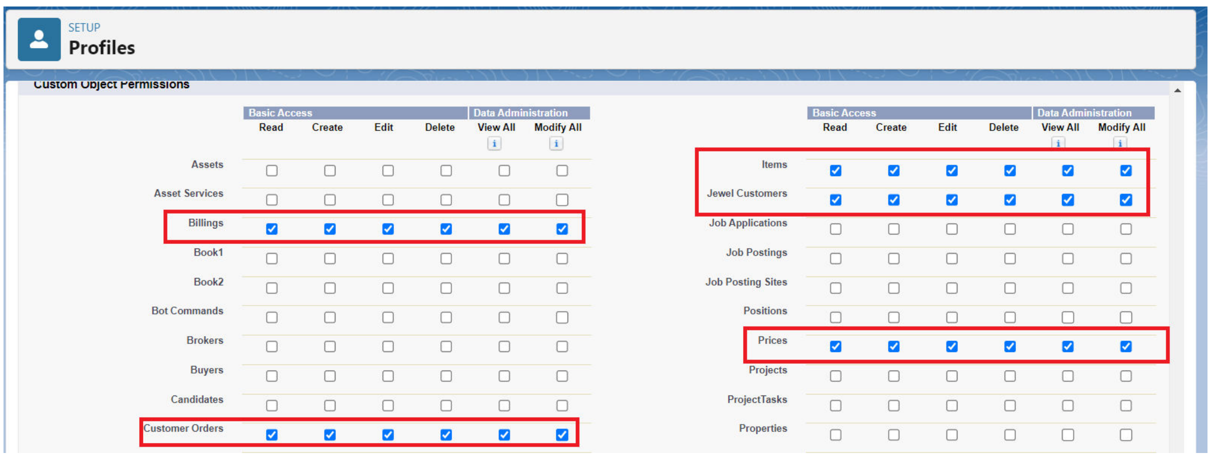
Gold Smith Profile

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 () >> 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.

Roles

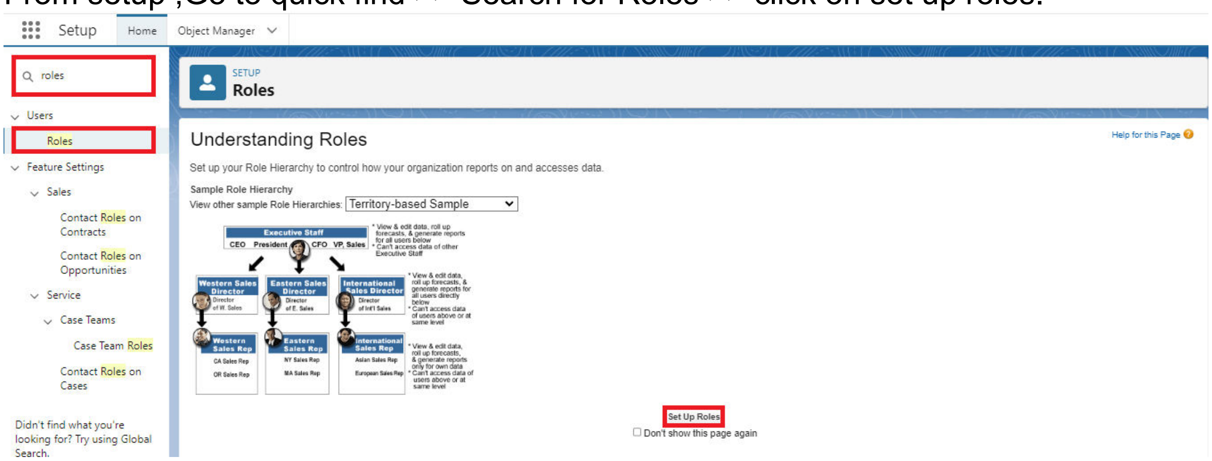
A role in Salesforce defines a user's visibility access at the record level. Roles may be used to specify the types of access that people in your Salesforce organisation can have to data. Simply put, it describes what a user could see within the Salesforce organisation.

Use Case:

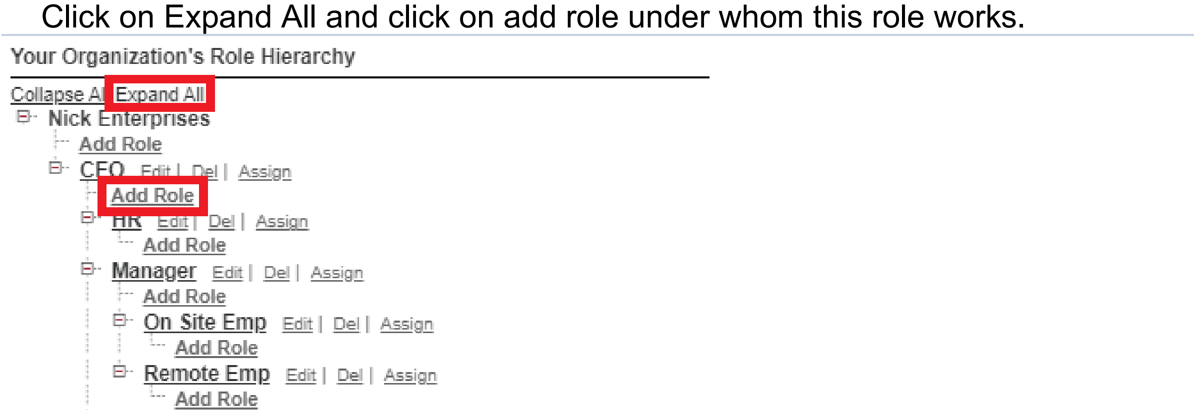
You have successfully fulfilled the 1st requirement i.e., differentiating the users based on the functionality. Now comes the 2nd task of differentiating the users based on their position, using your excellent admin skills and expanding the custom roles for the organisation and assigning it to the users.

Creating Gold Smith Role

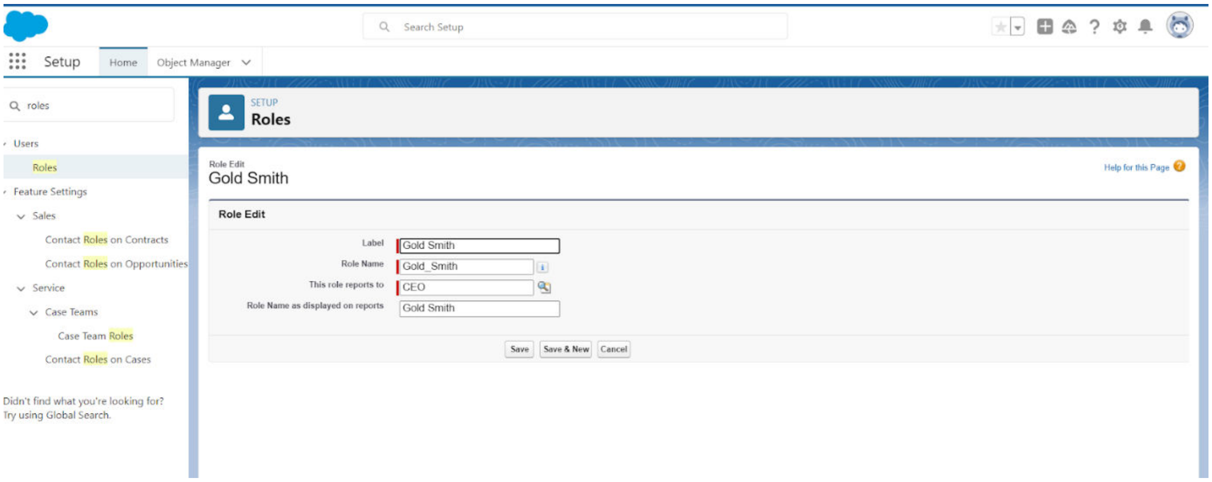
1. From setup ,Go to quick find >> Search for Roles >> click on set up roles.



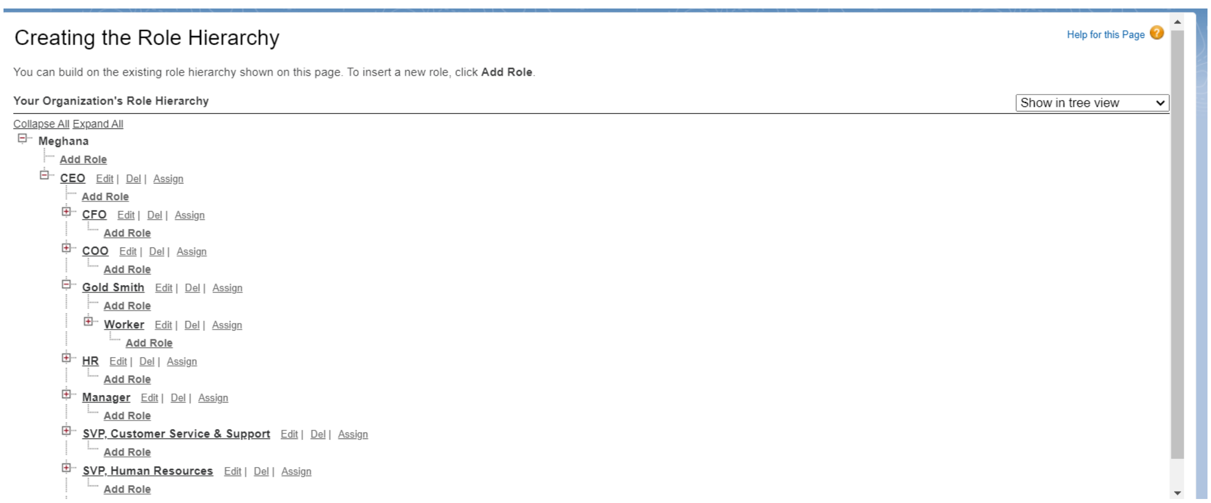
2. Click on Expand All and click on add role under whom this role works.



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



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



Users

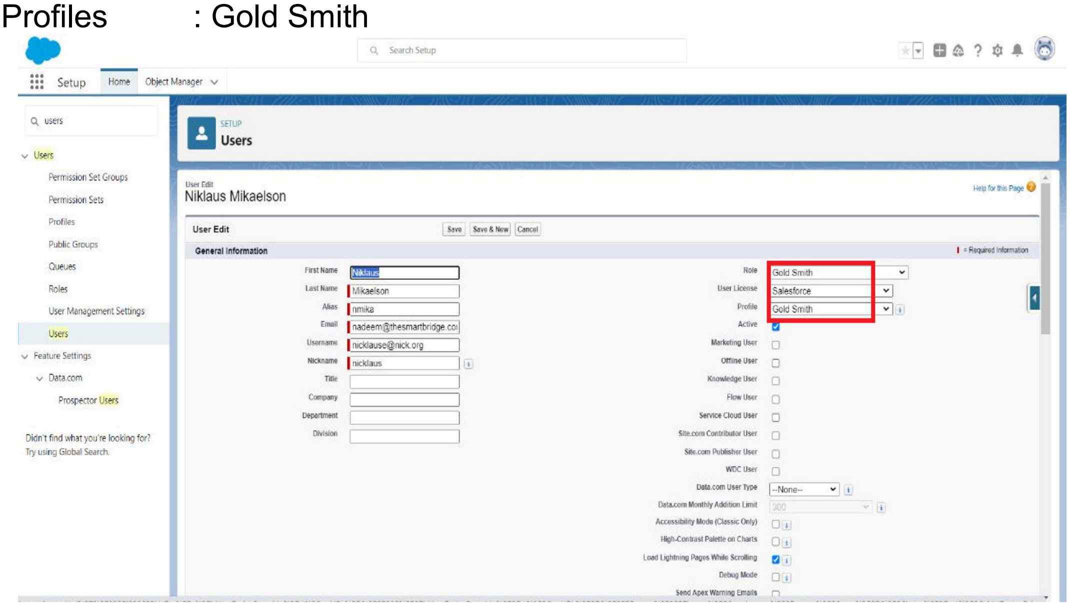
A user is anyone who logs in to Salesforce. Users are employees at your company, such as sales reps, managers, and IT specialists, who need access to the company's records. Every user in Salesforce has a user account. The user account identifies the user, and the user account settings determine what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



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.

Page layouts

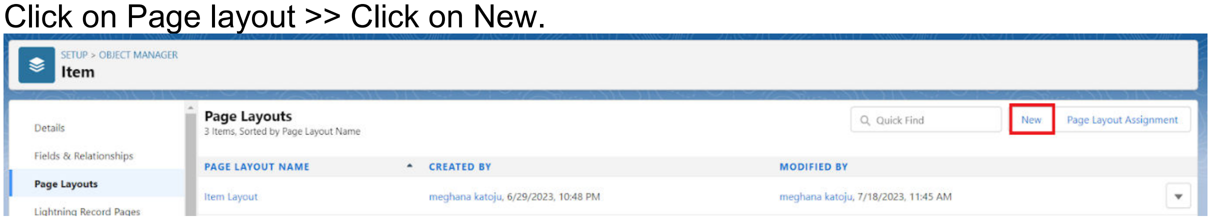
Page Layout in Salesforce allows us to customise the design and organise detail and edit pages of records in Salesforce. Page layouts can be used to control the appearance of fields, related lists, and custom links on standard and custom objects' detail and edit pages.

Use Case:

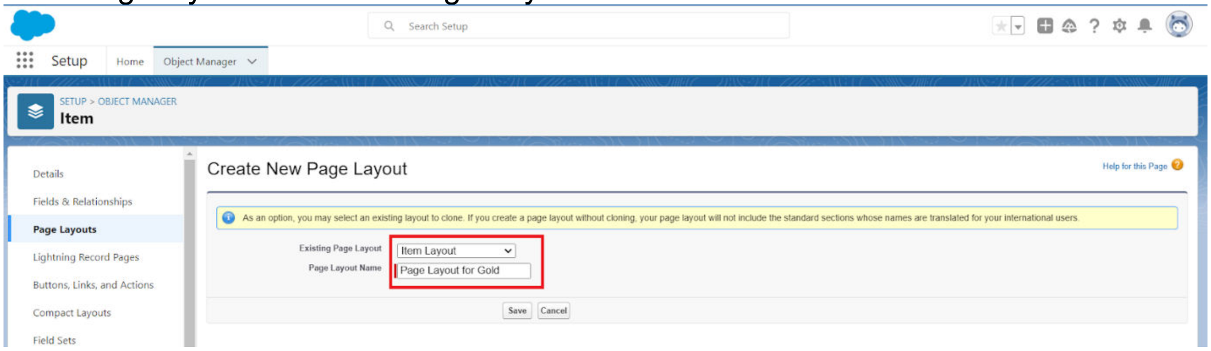
Hurray!! you have completed the data model structure for your organisation but while looking at the detailed and edit pages it seems to be so clumsy, so decide to organise the page in a pleasant way for the sake of good and pleasant appearance and assemble all different kinds of information in different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

To Create a Gold Page layout

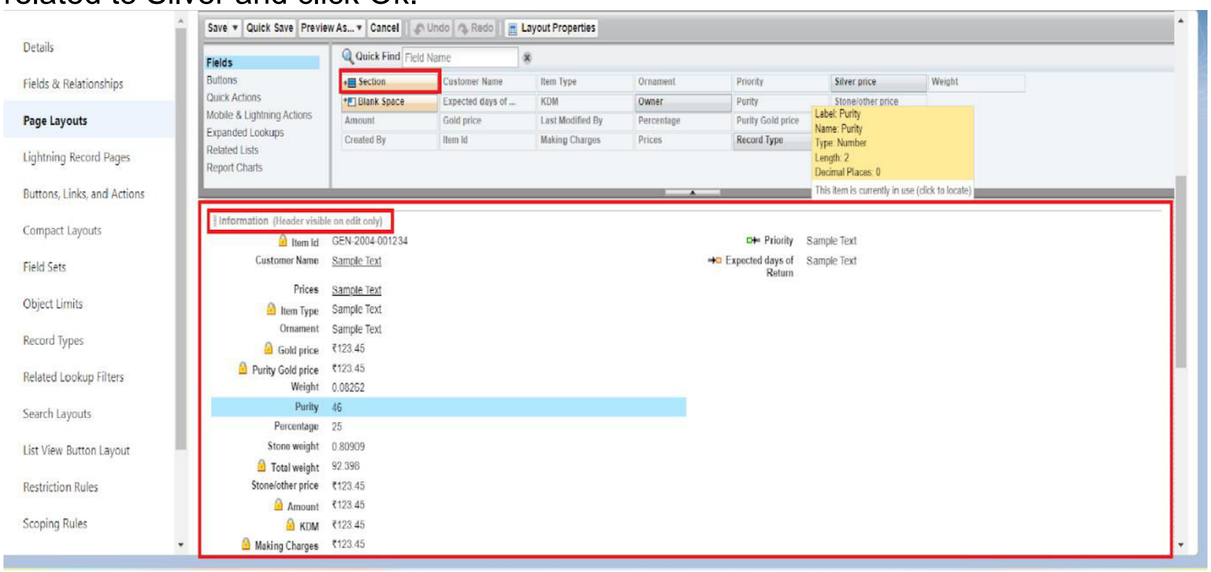
1. Go to Setup >> Click on Object Manager >> Search for the object (Item) >> From drop down click on Edit.
2. Click on Page layout >> Click on New.



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



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

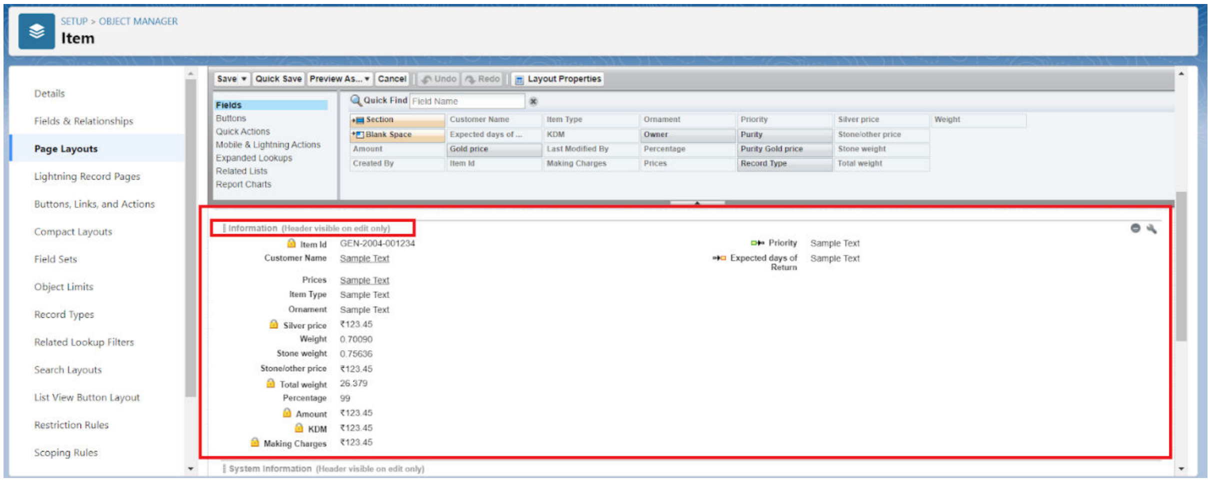


5. Click Save.
6. Make sure your page layout looks like the picture above.

To Create a Silver Page layout

1. Go to Setup >> Click on Object Manager >> Search for the object (Item) >> From drop down click on Edit.
2. Click on Page layout >> Click on New.
3. Give Page layout Name as “Page Layout for Silver” and click on Save.

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



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);
    }
}
```

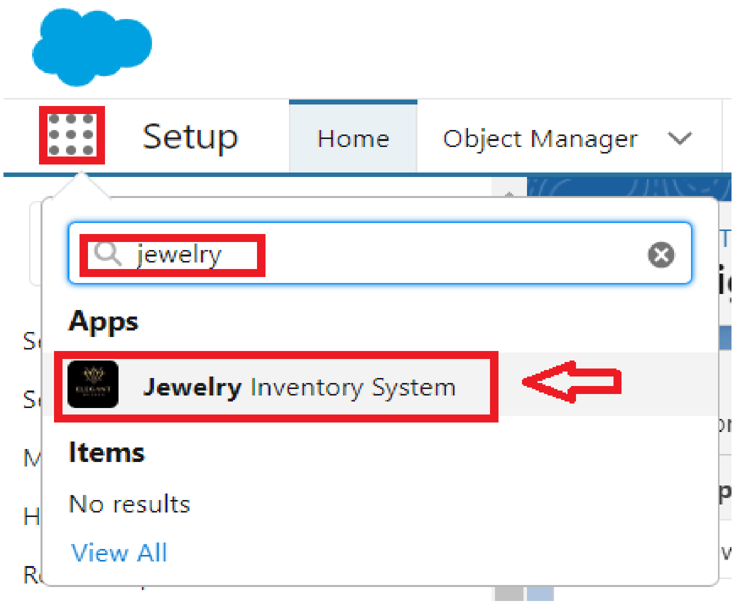
User Adoption

Use Case:

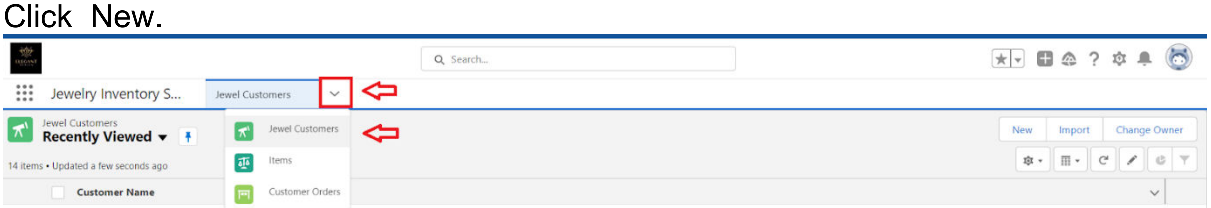
As a new Administrator, you perform user management tasks like creating and editing users, resetting passwords, granting permissions, configuring data access, and much more. In this unit, you will learn about users and how you add users to your Salesforce org.

Create a Record (Jewel Customer)

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



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



5. Fill the Details and click on Save.

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

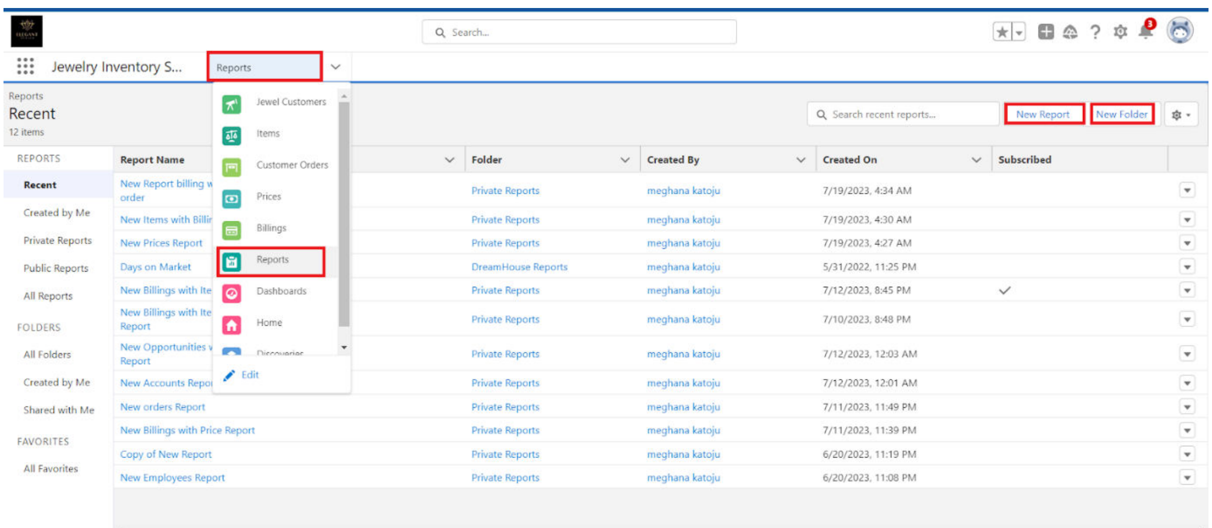
1. Tabular
2. Summary
3. Matrix
4. Joined Reports

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.

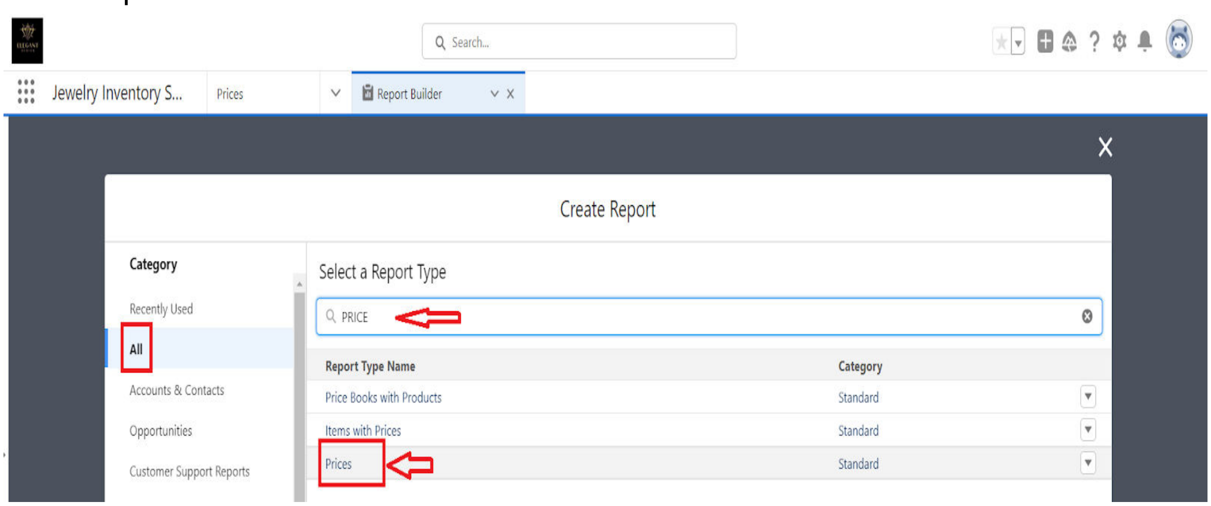
Let’s create a Report.

Create Report

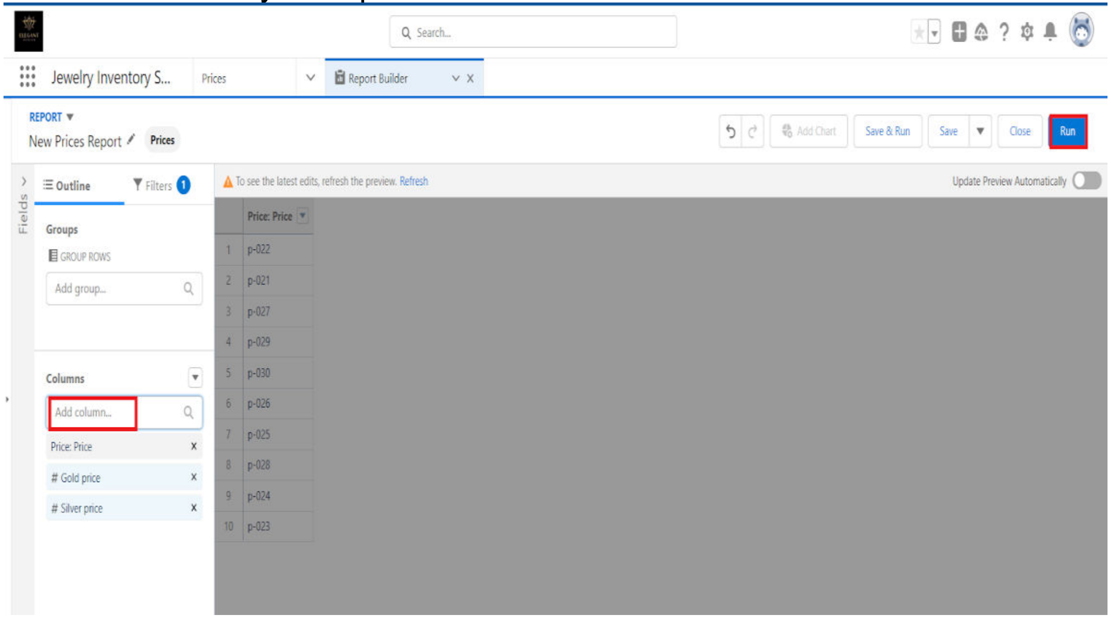
1. Go to the app >> click on the reports tab
2. Click New Report.



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

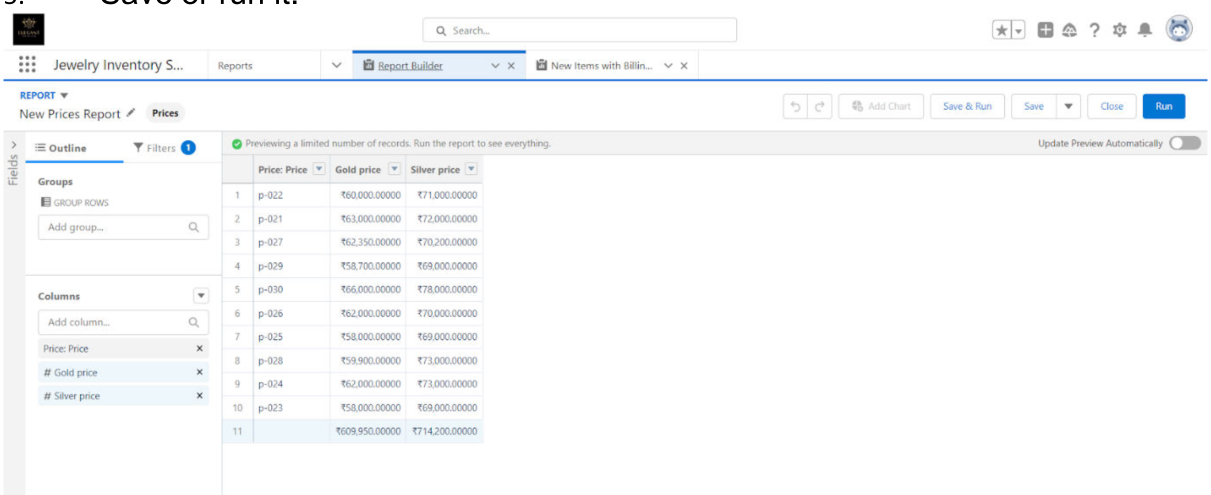


4. Customise your report



- Add fields from the left pane as shown below.

5. Save or run it.



Dashboards

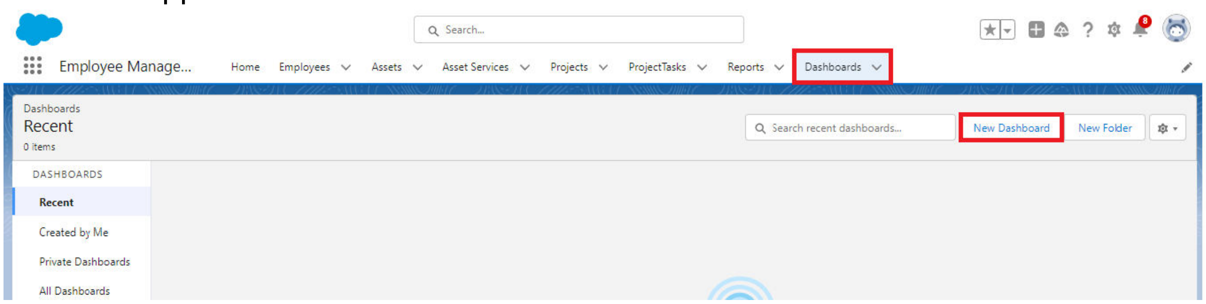
Dashboards help you visually understand changing business conditions so you can make decisions based on the real-time data you've gathered with reports. Use dashboards to help users identify trends, sort out quantities, and measure the impact of their activities. Before building, reading, and sharing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

Use Case:

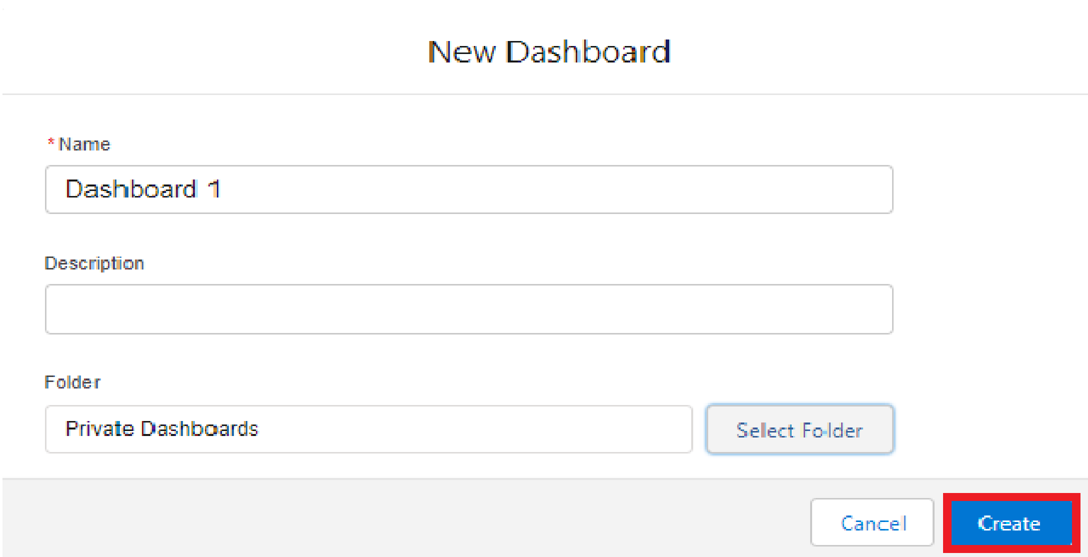
As an Admin for the organisation you keep pushing yourself to reach out the business requirements to take the organisation to peak heights and all your superiors are very much impressed with your efforts and work dedication. In addition with reports you make an ease for the GoldSmith in viewing the reports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

Create Dashboard

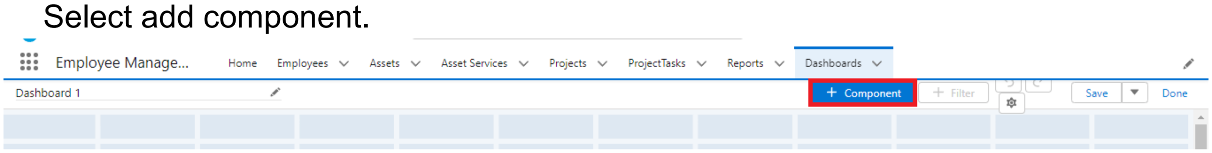
1. Go to the app >> click on the Dashboards tabs.



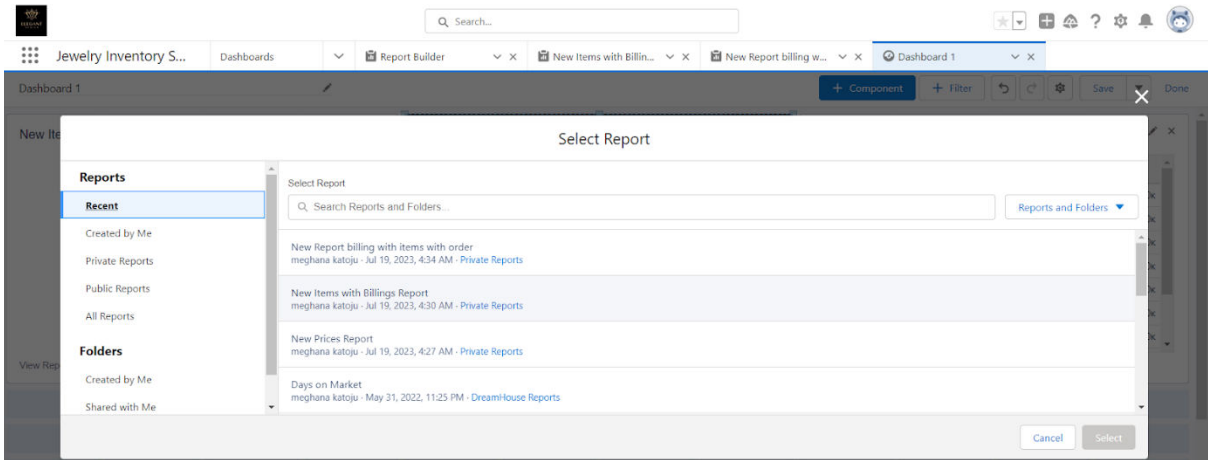
2. Give a Name and click on Create.



3. Select add component.

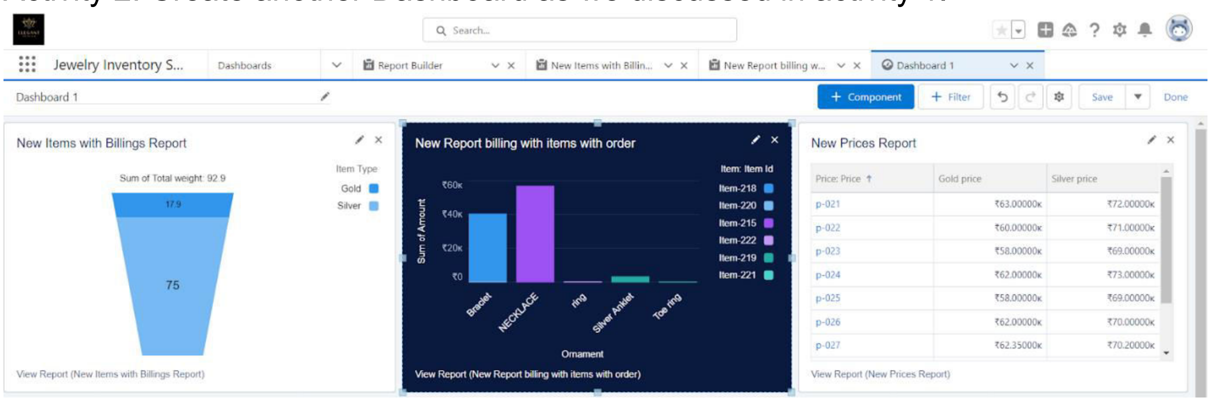


4. Select a Report and click on select.



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

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



Flows

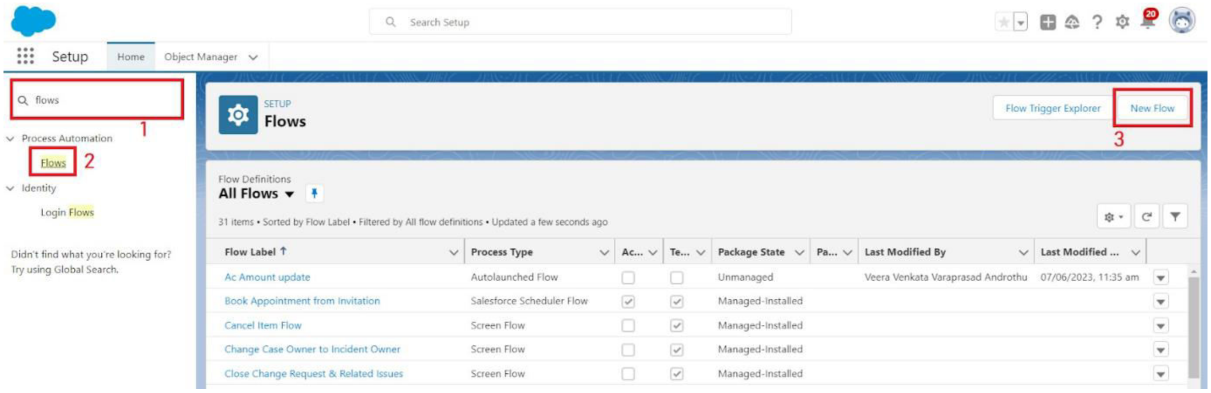
In Salesforce, a flow is a powerful tool that allows you to automate business processes, collect and update data, and guide users through a series of screens or steps. Flows are built using a visual interface and can be created without any coding knowledge.

Use Case:

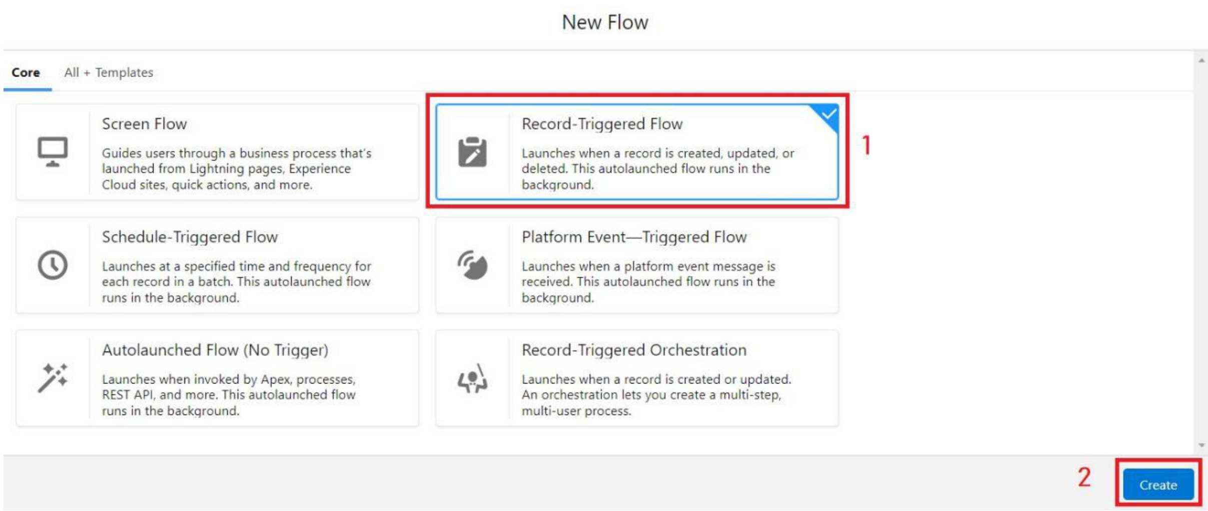
Flows, also known as Salesforce Flows or Visual Flows, are powerful declarative automation tools in Salesforce that allow users to create and manage complex business processes without the need for code. Flows are designed using a drag-and-drop interface, making them easy to use for both administrators 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

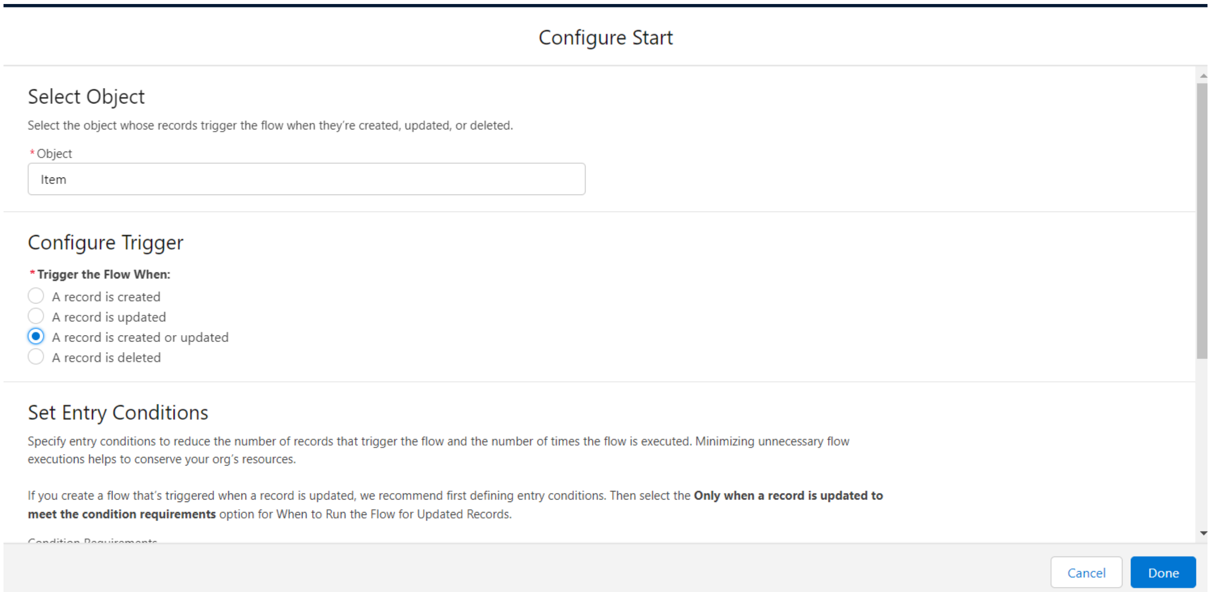
1. Go to setup >> type Flow in quick find box >> Click on the Flow and Select the New Flow.



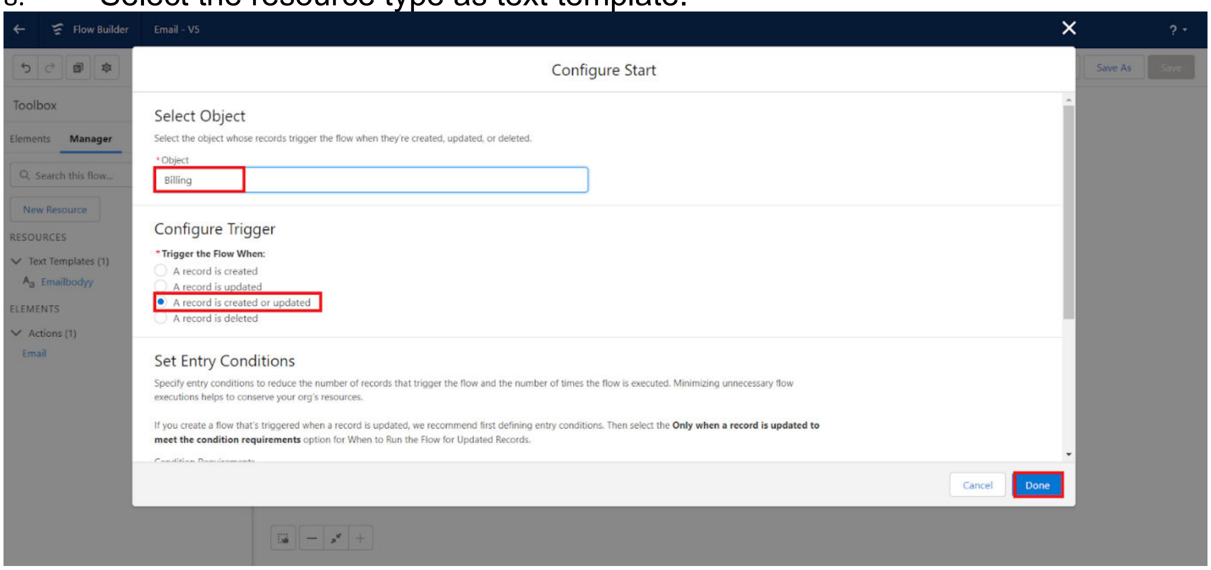
2. Select the Record-triggered flow and Click on Create.

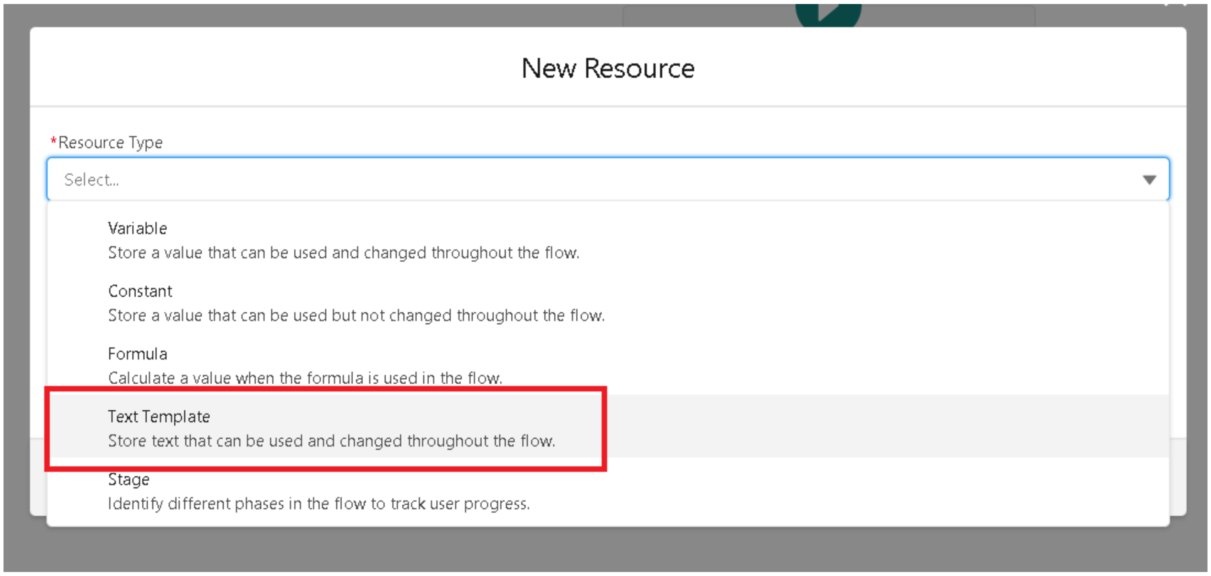


3. Select the Object as a “Billing” in the Drop down list.
4. Select the Trigger Flow when: “A record is Created or Updated”.
5. Select the Optimise the flow for: “Actions and Related Records” and Click on Done.

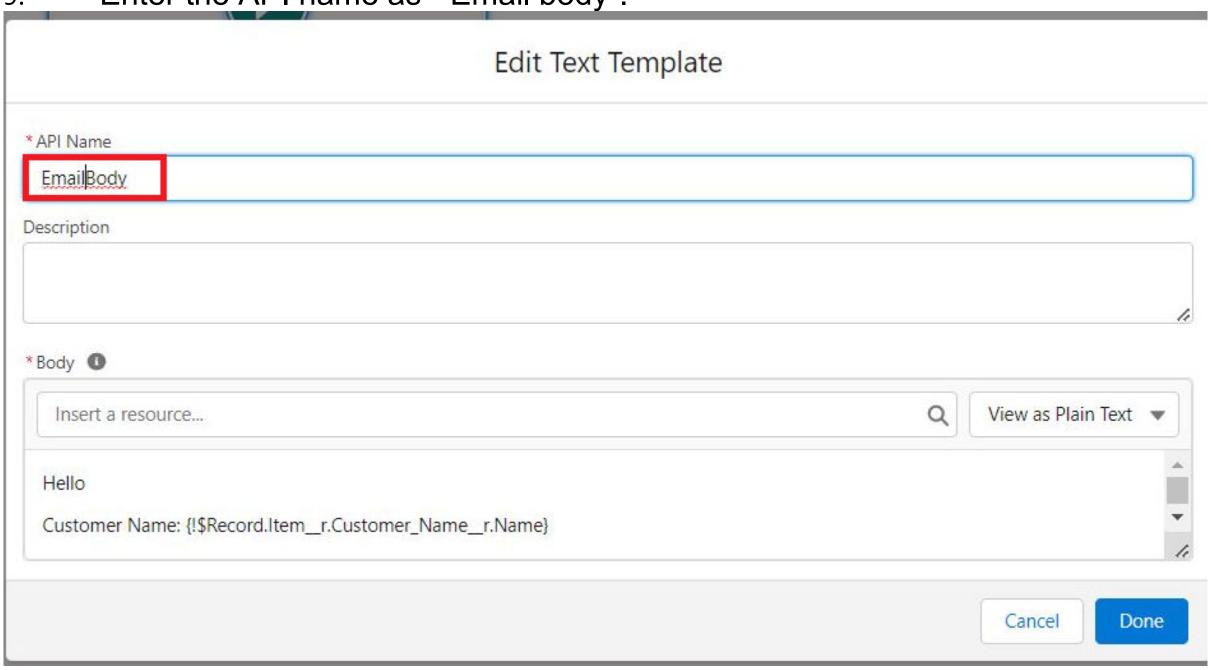


6. Now change the mode form Auto-layout to free-form.
7. Now select the manger option in the toolbox, click New resource.
8. Select the resource type as text template.



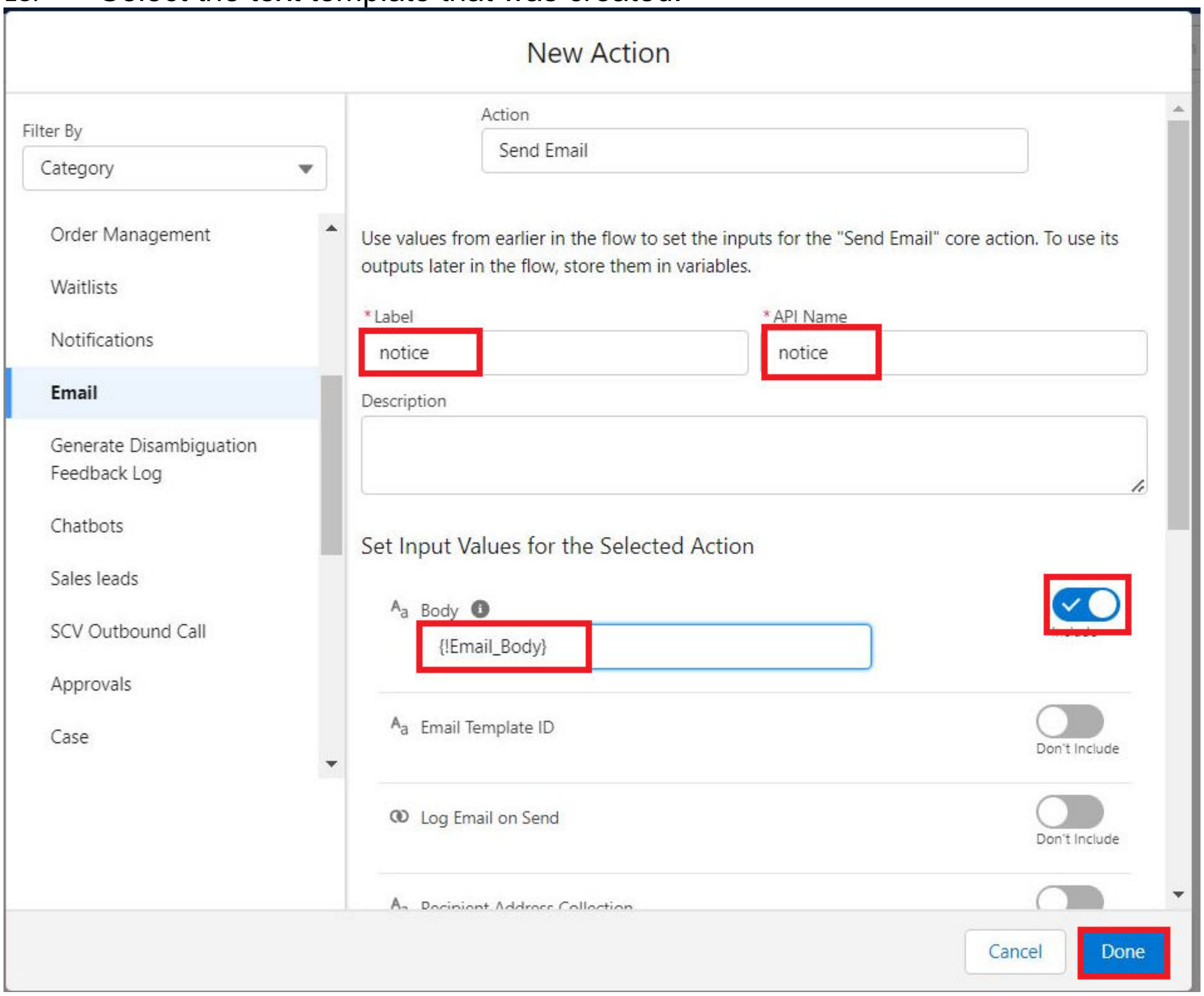


9. Enter the API name as “ Email body”.

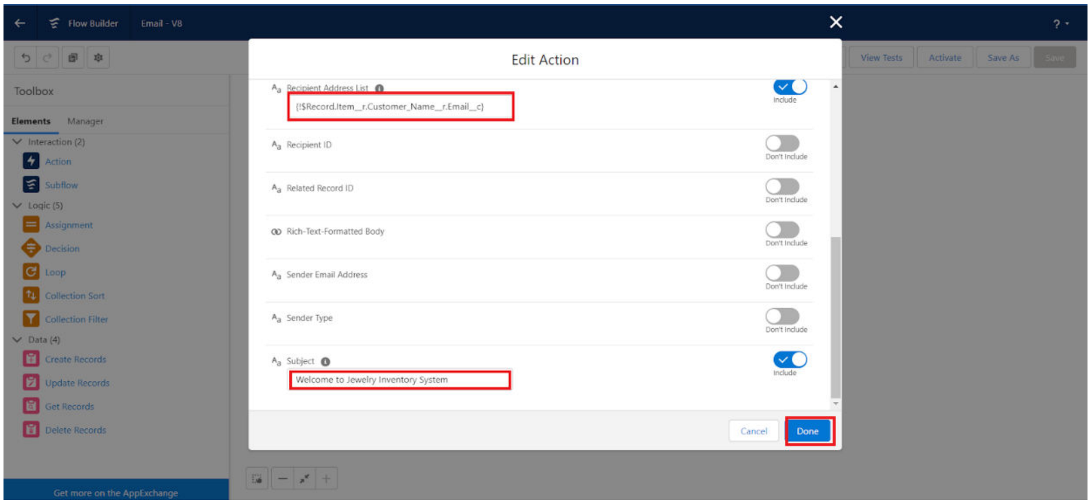


10. Change the view as Rich Text ? View to Plain Text.
11. In the body field paste the syntax that is given below.
    Hello
    Customer Name: {!$Record.Item__r.Customer_Name__r.Name}
    Here are the details for the item you purchased with Jewellery Inventory System
    Item Type: {!$Record.Item__r.Item_Type__c}
    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.

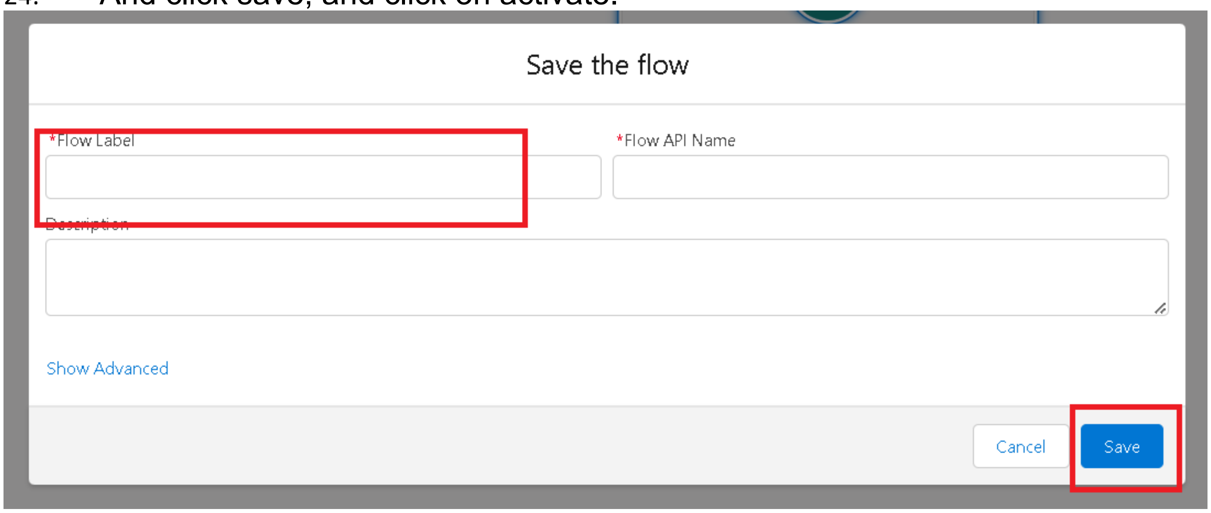
15. Give the label name as “ notice”
16. API name will be auto populated.
17. Enable the body in set input values for the selected action.
18. Select the text template that was created.

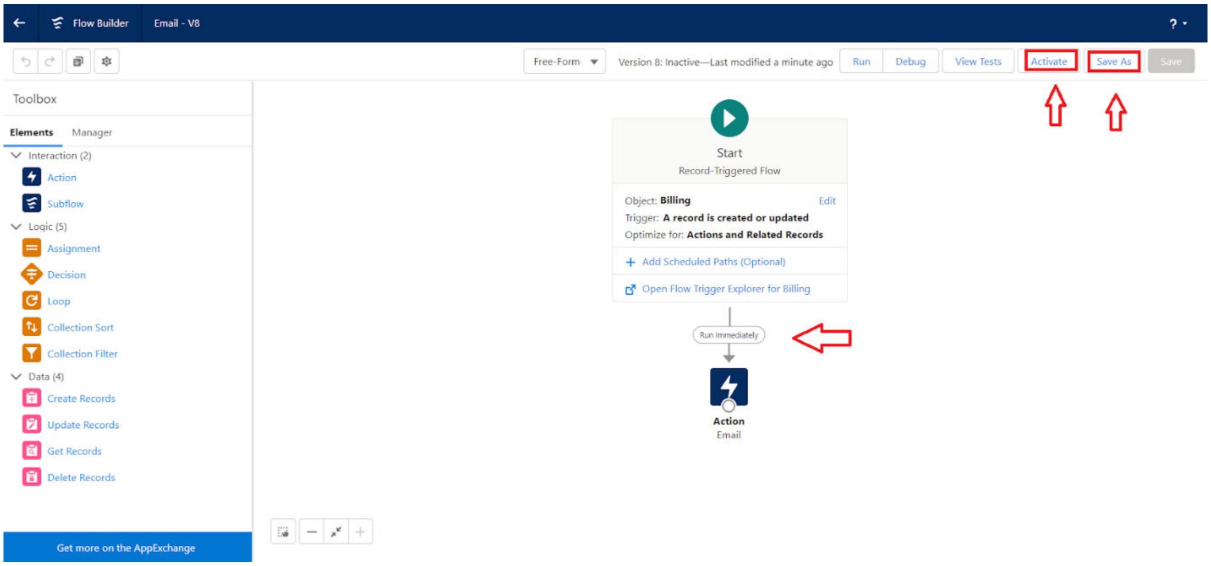


19. Include Recipient Address list, select the email form the record. ({!$Record.Item_r.Customer_Namer.Email_c})
20. Include the subject as “Welcome to Jewelry Inventory System ”.
21. Click done.



22. Now drag the path from the start to the action element.
23. Click on save. Given the Flow label , Flow Api name will be auto populated.
24. And click save, and click on activate.




Flow Builder
Email - V8
Free-Form
Version 8: Inactive—Last modified a minute ago
Run
Debug
View Tests
Activate
Save As
Save
Toolbox
Elements
Manager
Interaction (2)
Action
Subflow
Logic (5)
Assignment
Decision
Loop
Collection Sort
Collection Filter
Data (4)
Create Records
Update Records
Get Records
Delete Records
Get more on the AppExchange
Start
Record-Triggered Flow
Object: Billing
Edit
Trigger: A record is created or updated
Optimize for: Actions and Related Records
Add Scheduled Paths (Optional)
Open Flow Trigger Explorer for Billing
Run Immediately
Action
Email