

CRM Application for Jewel Management

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Salesforce

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

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/r9EX3IGde5k>

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.

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.

Change Your Password

Enter a new password for lead@sb.oom.

Make sure to include at least:

- 8 characters
- 1 letter
- 1 number

* New Password

 Good

* Confirm New Password

 Match

Security Question

In what city were you born?

* Answer

 asdfghijkl

Change Password

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

The screenshot shows the Salesforce Setup Home page. At the top, there's a navigation bar with icons for Home, Object Manager, and a search bar labeled "Search Setup". Below the navigation is a main content area titled "SETUP Home". The content area features three cards: "Get Started with Einstein Bots", "Mobile Publisher", and "Real-time Collaborative Docs". The "Get Started with Einstein Bots" card includes a "Get Started" button. The "Mobile Publisher" card includes a "Learn More" button. The "Real-time Collaborative Docs" card includes a "Get Started" button. On the left side, there's a sidebar with links like "Setup Home", "Service Setup Assistant", "Multi-Factor Authentication Assistant", "Release Updates", "Lightning Experience Transition Assistant", "Salesforce Mobile App", "Lightning Usage", "Optimizer", and "ADMINISTRATION".

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:

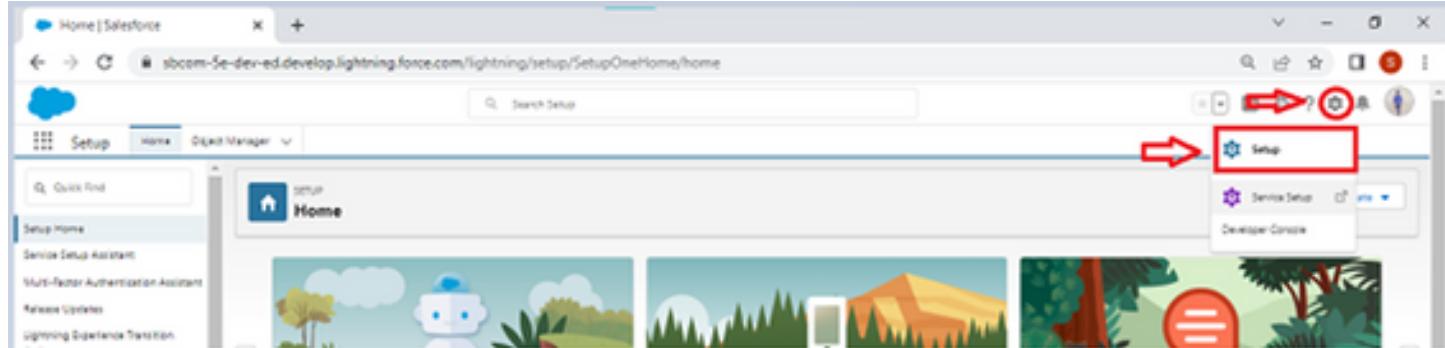
1. Standard Objects: Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.
2. Custom Objects: Custom objects are those objects that are created by users. They supply information that is unique and essential to their organization.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

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

Setup Home Object Manager ▾

Object Manager

SEARCH Setup

Object Manager

Quick Find Schema Builder Create

Custom Object

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED
			Custom Object from Spreadsheet	

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

Setup Home Object Manager ▾

New Custom Object

Object Information

The singular and plural labels are used in the page layout.

Label: JEWEL CUSTOMER

Plural Label: JEWEL CUSTOMERS

The Object Name is used when referencing the object in code.

Object Name: JEWEL CUSTOMER

Description:

Related Objects Help Setting

Open the standard Salesforce.com Help & Training website
Open & embed using a Visualforce page

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

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

1. Click on Allow reports.

2. 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.
2. Enter the label name >> Item
3. Plural label name >> Items
4. Enter Record Name Label and Format
 - Record Name >> Item Id
 - Data Type >> Auto Number
 - Display Format >> Item-{00}
 - Starting Number >> 1
5. Click on Allow reports.
6. 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.

1. 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.

1. 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.

1. Lightning Component Tabs

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

1. 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 content such as Visualforce pages. Lightning Component tabs allow you to add Lightning components to the navigation bar. Tabs let you add Lightning Pages to Lightning Experience and the mobile app.

1. 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.

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. A modal window titled 'New Custom Object Tab' is displayed, indicating 'Step 1 of 3'. The user is prompted to 'Choose the custom object for this new custom tab. Fill in other details.' A dropdown menu for 'Object' has 'Jewel Customer' selected. Another dropdown for 'Tab Style' also has 'Jewel Customer' selected. There is an optional field for a 'Splash Page Custom Link' which is currently set to 'None'. A text input field for 'Description' is empty. At the bottom right of the modal are 'Next' and 'Cancel' buttons.

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.

App Manager | Salesforce

sbcom-5e-dev-ed.lightning.force.com/lightning/setup/NavigationMenus/home

Setup Home Object Manager

Search Setup

Lightning Experience App Manager

Clone (appx beta)

New Lightning App

New Connected App

Don't find what you're looking for? Try using Global Search.

Enable App Cloning

App Name	Developer Name	Description	Last Modified	Type	VL
All Tabs	airTabSet		04/12/2023, 10:19 am	Classic	
Analytics Studio	Insights	Build CRM Analytics dashboards and apps	04/12/2023, 10:19 am	Classic	
App Launcher	AppLauncher	App Launcher tabs	04/12/2023, 10:19 am	Classic	
Bolt Solutions	LightningBolt	Discover and manage business solutions designed for your industry	04/12/2023, 10:19 am	Lightning	
Chatter Desktop	ChatterDesktop	Chatter Desktop is an Adobe AIR-based desktop application that lets Chatter users stay connected...	28/12/2022, 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...	28/12/2022, 4:05 pm	Connected (Managed)	
College Management System	hadeen	demo app	08/12/2022, 4:18 pm	Lightning	
Community	Community	Salesforce CRM Community	04/12/2023, 10:19 am	Classic	
Content	Content	Salesforce CRM Content	04/12/2023, 10:19 am	Classic	
Data Manager	DataManager	Use Data Manager to view trends, monitor usage, and manage records	04/12/2023, 10:19 am	Lightning	

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.

Welcome to Sales

stanley/4-dev-ed.lightning.force.com/lightning/setup/NavigationMenus/home

Search Setup

New Lightning App

App Details

* App Name: Jewelry Inventory System

* Developer Name: Jewelry_Inventory_System

Description: Elevate your look with elegance

App Branding

Image

Primary Color Hex Value: #007002

Org Theme Options Use the app's image and color instead of the org's custom theme

App Launcher Preview

JI Jewelry Inventory System
Elevate your look with elegance

Next

Queue Management QueueManagement Create and manage queues for your business. 18/07/2023, 12:25 pm Lightning ✓

Sales Sales The world's most popular sales force automation (SFA) solution. 18/07/2023, 12:25 pm Classic

Salesforce Branding

Salesforce Navigation

23°C Cloudy

Search

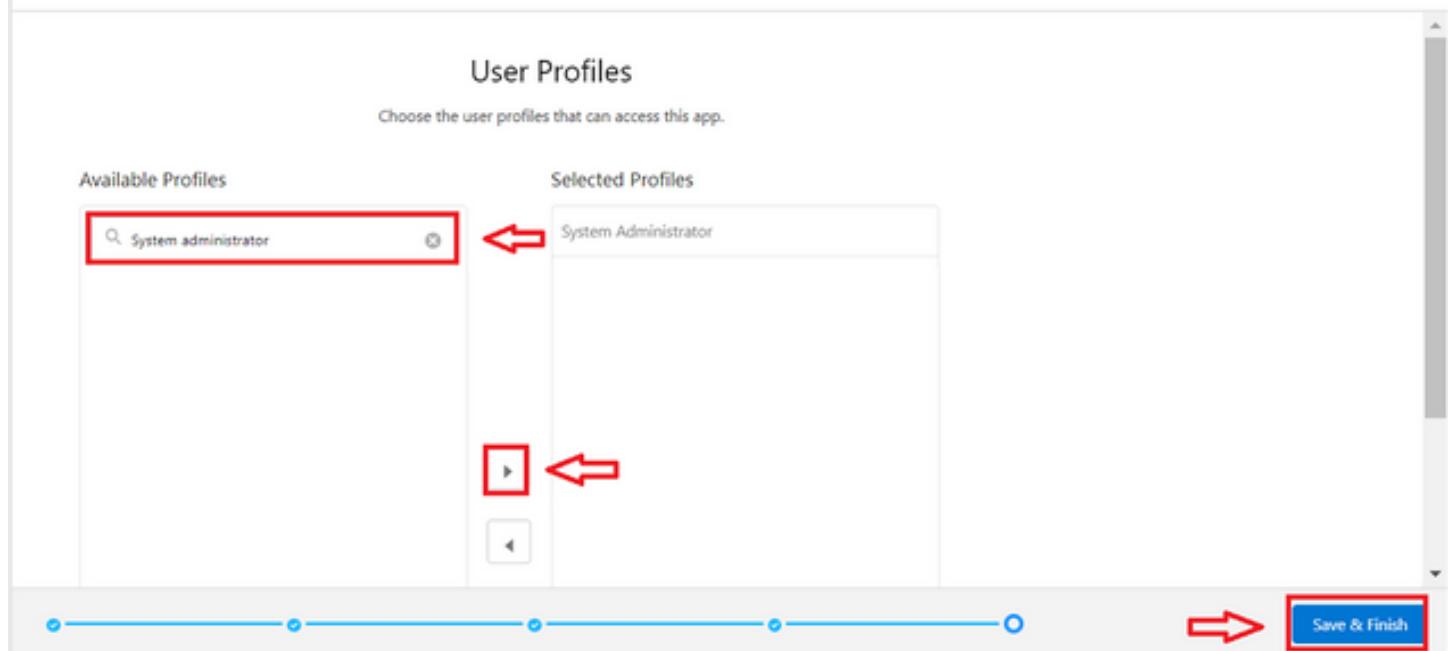
1. Then click Next > (App option page) Set Navigation Style as Console Navigation >> Next.

The screenshot shows the 'App Options' section of the Lightning App Builder. Under 'Navigation and Form Factor', 'Console navigation' is selected (radio button highlighted). Under 'Supported Form Factors', 'Desktop and phone' is selected (radio button highlighted). Red arrows point from the text descriptions to the respective radio buttons.

1. (Utility Items) keep it as default >> Next.
2. To Add Navigation Items:

The screenshot shows the 'Navigation Items' section of the Lightning App Builder. On the left, the 'Navigation Items' tab is selected. The 'Available Items' list contains various navigation items like Accounts, Alert Settings, All Sites, etc. The 'Selected Items' list contains 'Jewel Customers', 'Items', 'Customer Orders', 'Prices', 'Billings', 'Reports', and 'Dashboards'. A search bar at the top of the available items list has 'Type to filter list...' placeholder text.

1. 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.
2. To Add User Profiles:



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 interface. At the top, there's a search bar with the placeholder "Search Setup". Below it, the "Object Manager" tab is selected. A red arrow points to the search bar, and another red arrow points to the "Jewel Customer" entry in the list. The list table has columns: Label, API Name, Type, Description, Last Modified, and Deployed. The "Jewel Customer" row is highlighted with a red border. The "API Name" column shows "Jewel_Customer__c". The "Type" column indicates it's a "Custom Object". The "Last Modified" column shows "7/18/2023".

1. Now click on “Fields & Relationships” >> New
2. Select Data type as “Text”.
3. Click on Next

The screenshot shows the "New Custom Field" setup page for the "Jewel Customer" object. On the left, there's a sidebar with options like Details, Fields & Relationships (which is selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, and Field Sets. The main area is titled "Step 2. Enter the details" and shows a "Field Label" input field containing "City", a "Length" input field set to "20", and a "Field Name" input field also containing "City". A red box highlights the "Field Label" field. The top navigation bar includes a "Search Setup" bar and various icons.

1. Fill the above as following:
 - Field Label: City
 - Length : 20
 - Field Name : gets auto generated
 - 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”.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes 'Setup', 'Home', 'Object Manager', and a search bar. The main title is 'SETUP > OBJECT MANAGER' followed by 'Jewel Customer'. On the left, a sidebar lists various setup categories like 'Details', 'Fields & Relationships', 'Page Layouts', etc. The 'Fields & Relationships' section is selected. The main content area is titled 'New Custom Field' and is on 'Step 2 of 4'. It shows a field label 'Phone' and a field name 'Phone'. There are also fields for 'Description' and 'Help Text'. A note says 'Required' and there are checkboxes for 'Always require a value in this field in order to save a record' and 'Add this field to existing custom report types that contain this entity'. A 'Default Value' button is at the bottom.

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:

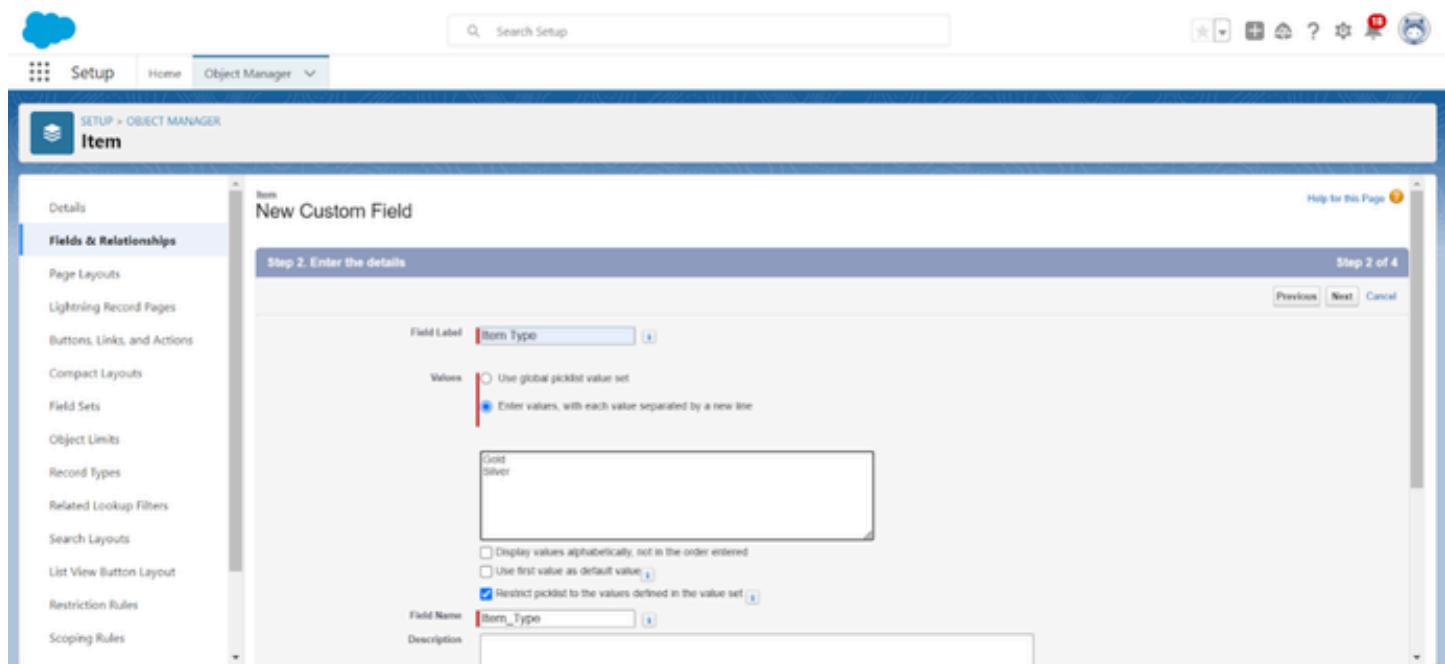
1. Go to setup >> click on Object Manager >> type object name(Item) in quick find bar? click on the object.
2. Now click on “Fields & Relationships” >> New
3. Select Data type as “Number” and click Next.
4. Given the Field Label as “ Purity” and length as “ 2 ”.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes 'Setup', 'Home', 'Object Manager', and a search bar. The main title is 'SETUP > OBJECT MANAGER' followed by 'Item'. On the left, a sidebar lists various setup categories like 'Details', 'Fields & Relationships', 'Page Layouts', etc. The 'Fields & Relationships' section is selected. The main content area is titled 'New Custom Field' and is on 'Step 2 of 4'. It shows a field label 'Purity' and a field name 'Purity'. There are fields for 'Length' (set to 2) and 'Decimal Places' (set to 0). A note says 'Please enter the length of the number and the number of decimal places. For example, a number with a length of 8 and 2 decimal places can accept values up to "12345678.90"'.

1. 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.



1. Click Next? Next ?Next ?Save .

Creating Currency Field in Price Object

To create fields in an object:

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

Setup > Object Manager > Price

Fields & Relationships

Field Label: Gold price

Length: 8

Decimal Places: 0

Field Name: Gold_price

Description:

Help Text:

1. Enter Field Label as “Gold Price” and length as “ 8”and decimal 0.Field name will be auto generated.
2. Click 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.

Setup > Object Manager > Item

Fields & Relationships

Field Label: Gold price

Field Name: Gold_price

Step 2. Choose output type

Formula Return Type

- None Selected
- Checkbox
- Currency
- Date
- DateTime
- Number

Select one of the data types below

Calculate a boolean value
Example: `[TODAY() > CloseDate]`

Calculate a dollar or other currency amount and automatically format the field as a currency amount
Example: `Gross Margin = Amount - Cost_c`

Calculate a date, for example, by adding or subtracting days to other dates
Example: `[Reminder Date + CloseDate - ?]`

Calculate a date/time, for example, by adding a number of hours or days to another date/time
Example: `[Next = NOW() + ?]`

Calculate a numeric value
Example: `[Fahrenheit = 1.8 * Celsius_c + 32]`

Under Advanced Formula write down the formula :Prices__r.Gold_price__c / 10.

Setup > OBJECT MANAGER
Item

Details

Fields & Relationships

- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types

Enter your formula and click Check Syntax to check for errors. Click the Advanced Formula subtab to use additional fields, operators, and functions.
Example: Gross Margin = Amount - Cost_c More Examples...

Simple Formula Advanced Formula

Insert Field Insert Operator

Gold price (Currency) =
Price__c.Gold_price__c / 10

Functions

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

Insert Selected Function

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

Creating Remaining Fields in Objects

Now create the remaining fields using the data types mentioned.

s.no	Object name	Fields
1	Jewel Customer	

2	Price	
---	-------	--

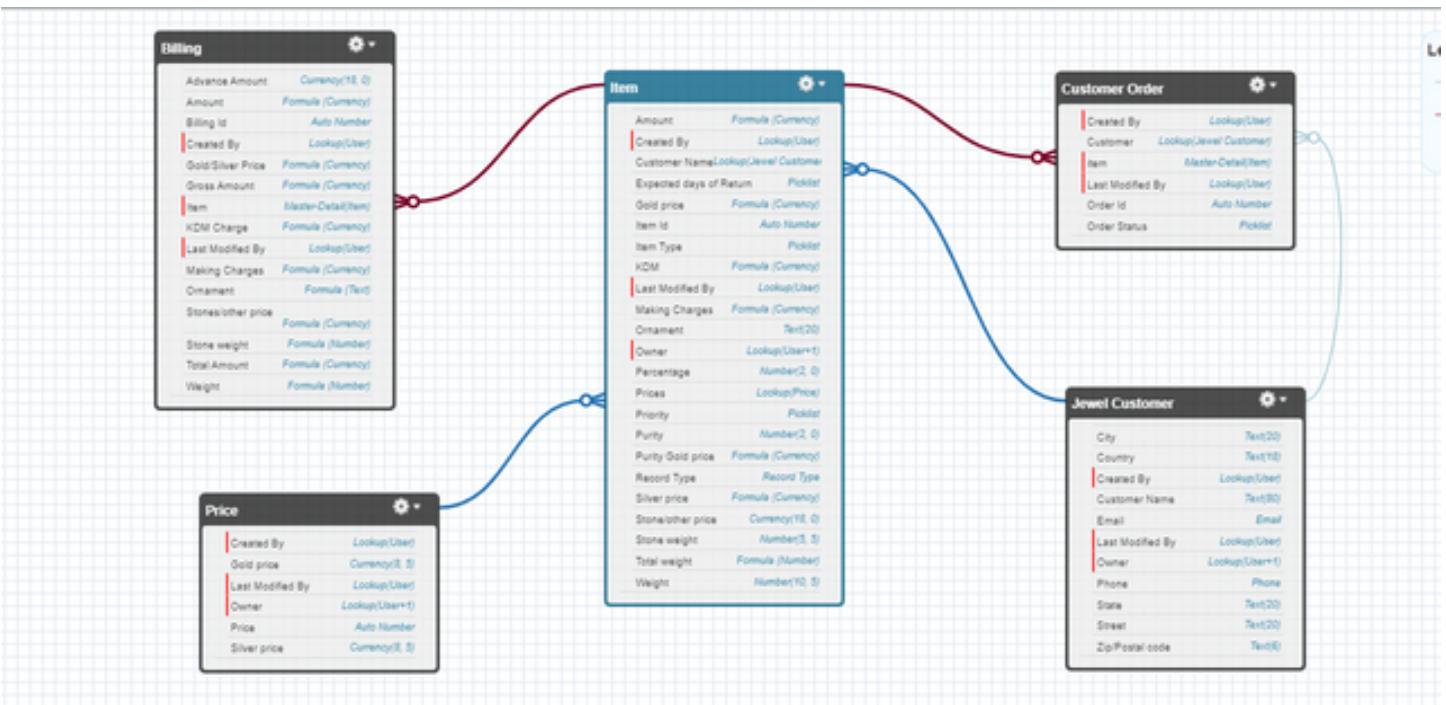
3	Item	
---	------	--

4	Customer Order	
---	----------------	--

5	<p>Now create the remaining fields using the data types mentioned.</p>
	<p>Billing</p>

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

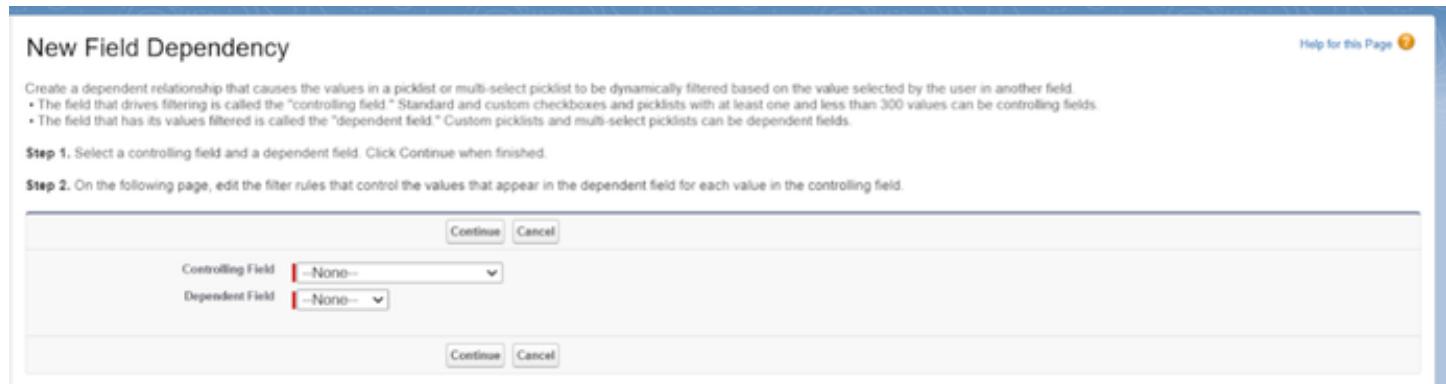
Use case:

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.

The screenshot shows the Salesforce Object Manager interface for the 'Item' object. The 'Fields & Relationships' tab is active. In the 'Field Dependencies' section, there is a red arrow pointing to the 'New' button, which is highlighted with a red border.

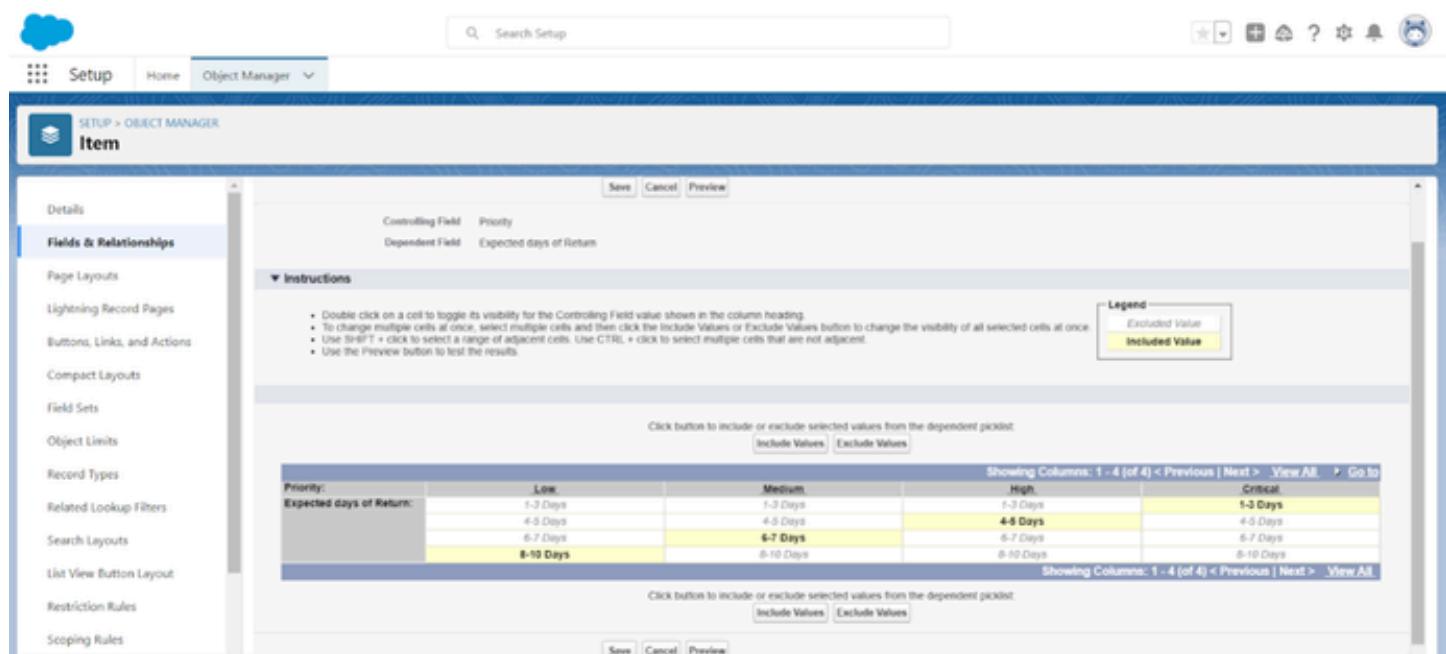
Select Controlling Field as "Priority" and Depending field as "Expected Days of Return" >> Continue.



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.

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



Controlling Field: Priority
Dependent Field: Expected days of Return

Legend:
Excluded Value
Included Value

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

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

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.

SETUP > OBJECT MANAGER
Jewel Customer

Details	Validation Rules	Items: Sorted by Rule Name	New
Fields & Relationships	RULE NAME	ERROR LOCATION	ERROR MESSAGE
Page Layouts	ACTIVE	MODIFIED BY	
Lightning Record Pages			
Buttons, Links, and Actions			
Compact Layouts			
Field Sets			
Object Limits			
Record Types			
Related Lookup Filters			
Restriction Rules			
Scoping Rules			
Triggers			
Flow Triggers			
Validation Rules			

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

SETUP > OBJECT MANAGER
Jewel Customer

Details	Validation Rule Edit	Save Save & New Cancel
Fields & Relationships	Rule Name: Postal_Code	
Page Layouts	Active: <input checked="" type="checkbox"/>	
Lightning Record Pages	Description:	
Buttons, Links, and Actions		
Compact Layouts		
Field Sets		
Object Limits		
Record Types		
Related Lookup Filters		
Restriction Rules		
Scoping Rules		
Triggers		
Flow Triggers		
Validation Rules		
Error Condition Formula		
<p>Example: Discount_Percent__c>0.30 More Examples...</p> <p>Display an error if Discount is more than 30%</p> <p>If this formula expression is true, display the text defined in the Error Message area</p>		
<p>Functions</p> <p>-- All Function Categories - ABS ACOS ADDMONTHS AND ASCII ASIN</p> <p>Insert Selected Function</p> <p>ABS(number) Returns the absolute value of a number, a number without its sign</p> <p>Help on this function</p>		
<pre>AND(OR(LEN(Zip_Postal_code__c) <> 6, NOT(REGEX(Zip_Postal_code__c, "[0-9]{6}"))), NOT(ISBLANK(Zip_Postal_code__c)))</pre>		
<p>Check Syntax: No errors found</p>		
Error Message		
<p>Example: Discount percent cannot exceed 30%</p> <p>This message will appear when Error Condition formula is true</p>		
<p>Error Message: Must contain 6 digits</p>		
<p>This error message can either appear at the top of the page or below a specific field on the page</p>		
<p>Error Location: <input type="radio"/> Top of Page <input checked="" type="radio"/> Field: Zip/Postal code</p>		
<p>Save Save & New Cancel</p>		

1. 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 “ValidationRuleForJewelCustomerObject ”.
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 “ValidationRuleFor 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.

1. 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.



The screenshot shows the Salesforce Setup interface. The left sidebar has sections for Release Updates, Lightning Experience Transition Assistant, Salesforce Mobile App, Lightning Usage, Optimizer, and ADMINISTRATION. Under ADMINISTRATION, 'Users' is expanded, showing 'Permission Set Groups', 'Permission Sets', 'Profiles' (which is selected and highlighted in blue), and 'Public Groups'. The main content area is titled 'Profiles' and shows a 'Clone Profile' form. It includes fields for 'Existing Profile' (set to 'System Administrator'), 'User License' (set to 'Salesforce'), 'Profile Name' (set to 'Gold Smith'), and buttons for 'Save' and 'Cancel'. A note at the top says 'You must select an existing profile to clone from.' and there is a 'Help for this Page' link.

1. While still on the profile page, then click Edit.
 2. Scroll down to Custom Object Permissions and Give access permissions for Jewel Customer,Item,CustomerOrder,Prices,Billings .

1. 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.

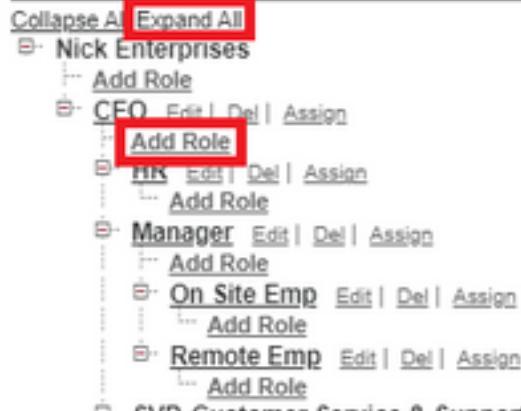
Creating Gold Smith Role

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

The screenshot shows the Salesforce Setup interface for managing Roles. The left sidebar includes links for 'Users', 'Feature Settings' (with 'Sales' expanded), and 'Case Teams'. The main content area displays a 'Role Hierarchy' diagram. At the top level is 'Executive Staff' with three members: 'CEO', 'President', and 'CFO'. Below them is 'VP_Sales'. The 'VP_Sales' member oversees three 'Sales Director' roles: 'Western Sales Director', 'Eastern Sales Director', and 'International Sales Director'. Each 'Sales Director' oversees multiple 'Sales Rep' roles: 'West Sales Rep' (under Western Sales Director), 'OR Sales Rep' (under Western Sales Director), 'NY Sales Rep' (under Eastern Sales Director), 'MA Sales Rep' (under Eastern Sales Director), 'Asian Sales Rep' (under International Sales Director), and 'European Sales Rep' (under International Sales Director). Each role level has associated permissions listed to its right. At the bottom right of the page, there is a red box around the 'Set Up Roles' button.

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

Your Organization's Role Hierarchy



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

The screenshot shows the Salesforce Setup Roles page. The left sidebar has 'Users' expanded, with 'Roles' selected. The main area shows a 'Role Edit' screen for 'Gold Smith'. The 'Label' field contains 'Gold Smith', and the 'Role Name' field contains 'Gold_Smith'. The 'This role reports to' dropdown is set to 'CEO'. The 'Role Name as displayed on reports' field also contains 'Gold Smith'. At the bottom are 'Save', 'Save & New', and 'Cancel' buttons.

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

Creating the Role Hierarchy

Help for this Page 

You can build on the existing role hierarchy shown on this page. To insert a new role, click Add Role.

Your Organization's Role Hierarchy

[Collapse All](#) [Expand All](#) [Show in tree view](#)

- Meghana
 - Add Role
 - CEO [Edit](#) [Del](#) [Assign](#)
 - Add Role
 - CFO [Edit](#) [Del](#) [Assign](#)
 - Add Role
 - COO [Edit](#) [Del](#) [Assign](#)
 - Add Role
 - Gold_Smith [Edit](#) [Del](#) [Assign](#)
 - Add Role
 - Worker [Edit](#) [Del](#) [Assign](#)
 - Add Role
 - HR [Edit](#) [Del](#) [Assign](#)
 - Add Role
 - Manager [Edit](#) [Del](#) [Assign](#)
 - Add Role
 - SVP_Customer_Service_&_Support [Edit](#) [Del](#) [Assign](#)
 - Add Role
 - SVP_Human_Resources [Edit](#) [Del](#) [Assign](#)
 - Add Role

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
3. First Name: Niklaus
4. Last Name: Mikaelson
5. Alias: Give a Alias Name
6. Email id: Give your Personal Email id
7. Username: Username should be in this form: text@text.text
8. Nick Name: Give a Nickname
9. Role: Gold Smith
10. User licence: Salesforce
11. Profiles: Gold Smith

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

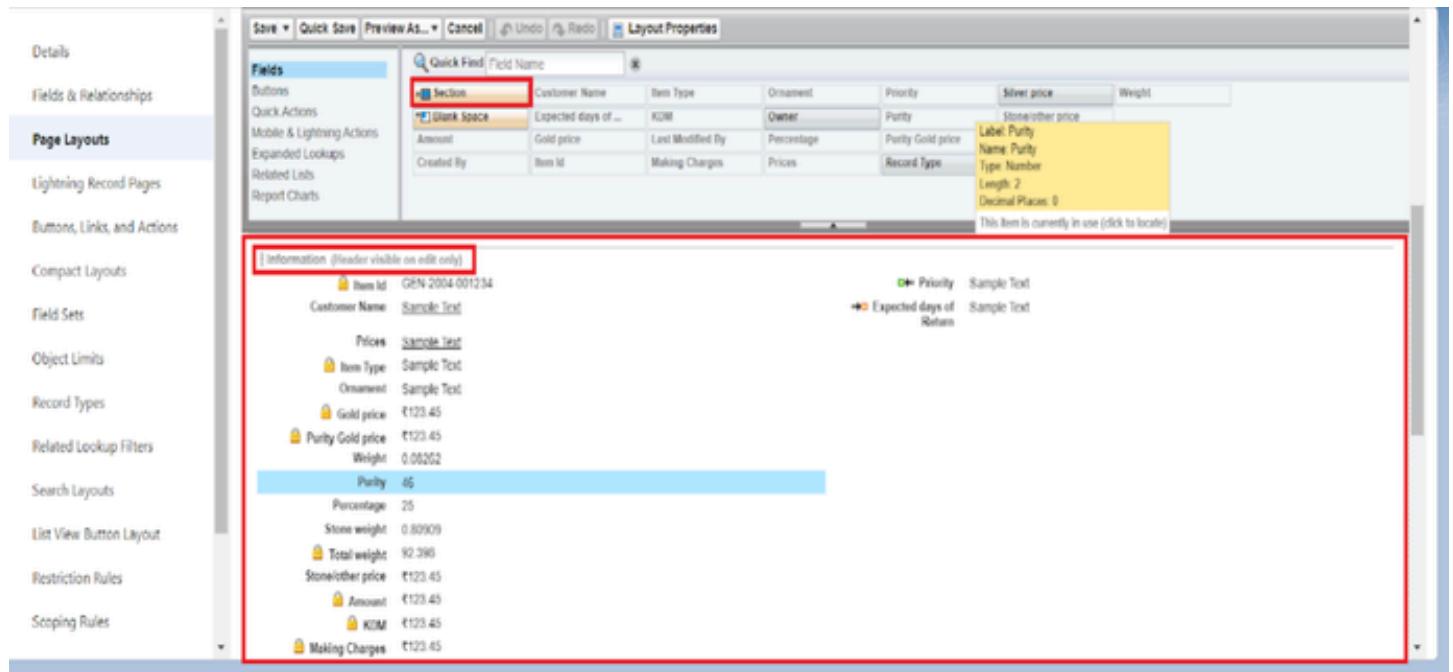
Page Layout in Salesforce allows us to customise the design and organise detail and edit pages of records in Salesforce. Page layouts can be used to control the appearance of fields, related lists, and custom links on standard and custom objects' detail and edit pages.

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.
- 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.

The screenshot shows the Salesforce Setup > Object Manager interface for the 'Item' object. The left sidebar lists various configuration options: Details, Fields & Relationships, Page Layouts (selected), Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types (highlighted), Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, and Scoping Rules. The main area displays the 'Layout Properties' for the 'Information' section of the page layout. This section includes fields like Item Id, Customer Name, Item Type, Ornament, Priority, Silver price, Weight, and several fields starting with 'Stone'. A red box highlights the 'Information' section, showing fields specific to the Gold record type.

Record Types

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

Use Case:

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

1. Go to setup >> click on Object Manager >> type object name(Item) in quick find bar? click on the object.
2. Click on the Record Types >> click New.
3. Select Existing Record as “Master”, Record type Label as “Gold”, Description as “Gold items information”.
4. Uncheck for “Make Available”.
5. Scroll down and check for the Gold Smith, Worker JW & System Administrator profile and click on Next.

The screenshot shows the Salesforce Setup interface with the following details:

Setup | **Home** | **Object Manager**

SETUP > OBJECT MANAGER

Item

Record Types

Profile	Page Layout	Action
Customer Portal Manager Standard		
External Apps Login User		
External Identity User		
Force.com - App Subscription User	Gold (Default), Silver	
Force.com - Free User	Gold (Default), Silver	
Gold Partner User	Gold (Default), Silver	
Gold Smith	Gold (Default), Silver	Selected
High Volume Customer Portal		
High Volume Customer Portal User		
HR	Gold (Default), Silver	
HR Recruiter	Gold (Default), Silver	
Identity User	Gold (Default), Silver	
Worker1	Gold (Default), Silver	Selected
Worker2	Gold (Default), Silver	Selected
WORKER3	Gold (Default), Silver	Selected
Manager	Gold (Default), Silver	
Marketing User	Gold (Default), Silver	
Minimum Access - Salesforce	Gold (Default), Silver	
Partner App Subscription User	Gold (Default), Silver	

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

Force.com - Free User	Item Layout
Gold Partner User	Item Layout
Gold smith	Page layout for Gold
High Volume Customer Portal	Item Layout
High Volume Customer Portal User	Item Layout
HR	Item Layout
HR Recruiter	Item Layout
Identity User	Item Layout
Manager	Item Layout
Marketing User	Item Layout
Minimum Access - Salesforce	Item Layout
Partner App Subscription User	Item Layout
Partner Community Login User	Item Layout
Partner Community User	Item Layout
Read Only	Item Layout
s1	Item Layout
Salesforce API Only System Integrations	Item Layout
Sales User	Item Layout
Sales User.	Item Layout
Silver Partner User	Item Layout
Solution Manager	Item Layout
Standard Platform User	Item Layout
Standard User	Item Layout
...	

Save & New

HR	Item Layout ▾
HR Recruiter	Item Layout ▾
Identity User	Item Layout ▾
Manager	Item Layout ▾
Marketing User	Item Layout ▾
Minimum Access - Salesforce	Item Layout ▾
Partner App Subscription User	Item Layout ▾
Partner Community Login User	Item Layout ▾
Partner Community User	Item Layout ▾
Read Only	Item Layout ▾
s1	Item Layout ▾
Salesforce API Only System Integrations	Item Layout ▾
Sales User	Item Layout ▾
Sales User.	Item Layout ▾
Silver Partner User	Item Layout ▾
Solution Manager	Item Layout ▾
Standard Platform User	Item Layout ▾
Standard User	Item Layout ▾
Support User	Item Layout ▾
Support User.	Item Layout ▾
System Administrator	Item Layout ▾
Work.com Only User	Item Layout ▾
Worker	Page layout for Gold ▾

Activity 2: Create another Record Type with name “Silver” following the steps from Activity 1.

Note: Use page layout for Silver.

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. The top navigation bar includes 'Setup', 'Home', 'Object Manager', and a search bar labeled 'Search Setup'. Below the navigation is a toolbar with icons for star, plus, minus, question mark, gear, and help. The main content area is titled 'Permission Sets' under the 'SETUP' tab. On the left, there's a sidebar with 'Permission sets' highlighted. The main pane displays a table of existing permission sets with columns for 'Action', 'Permission Set Label', 'Description', and 'License'. A red box highlights the 'New' button at the top left of the table. The table lists several permission sets like 'Adding Employee', 'Buyer', 'CRM User', etc., each with a brief description and associated license.

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

The screenshot shows the 'Clone: Per to Worker' permission set configuration screen. At the top, it says 'Permission Set' and 'Clone: Per to Worker'. Below that, a note says 'Enter a new label and description for the cloned permission set.' The main form has sections for 'Enter permission set information', 'Session Activation Required', and 'License'. The 'Label' field contains 'Per to Worker' and the 'API Name' field contains 'Per_to_Worker'. Both fields are highlighted with a red box. At the bottom of the form are 'Save' and 'Cancel' buttons, with 'Save' also highlighted with a red box.

- 3.Under Apps Select object settings.

Apps

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

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

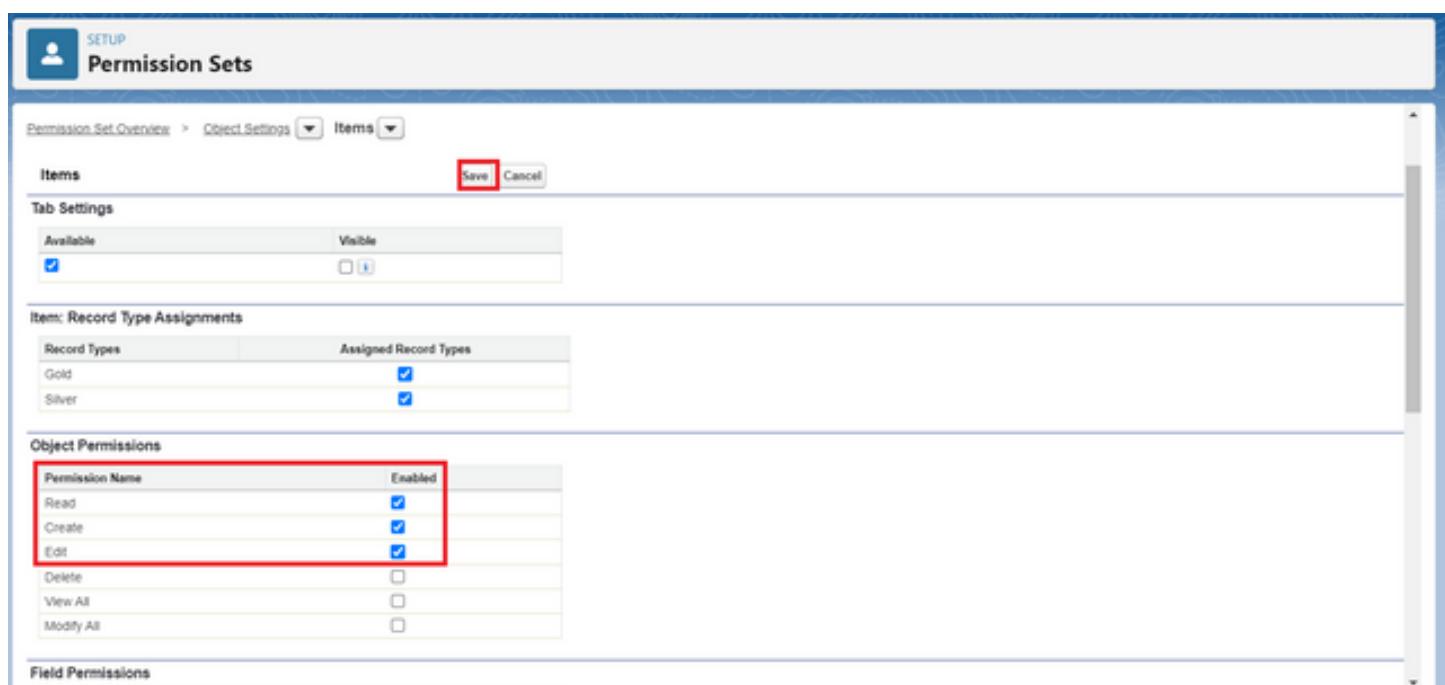
Permissions to access custom metadata types

Custom Setting Definitions

Permissions to access custom settings

Settings that apply to Salesforce apps, such as Sales, and custom apps built on the Lightning Platform
[Learn More](#)

4.Click on Items object ? click on Edit ? underItem:Record Type Assignments,enableGold,Silver ? Object permission check for read ,edit and create.



SETUP

Permission Sets

Permission Set Overview > Object Settings ▾ Items ▾

Items Save Cancel

Tab Settings

Available	Visible
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Item: Record Type Assignments

Record Types	Assigned Record Types
Gold	<input checked="" type="checkbox"/>
Silver	<input checked="" type="checkbox"/>

Object Permissions

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"/>

Field Permissions

1. Click on Save.
2. After saving the permission click on the Manage assignment
3. Now click on the Add Assignment.

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

Per to Worker

Select Users to Assign

All Users ▾

Full Name	Alias	Username	Role	Action	Profile
Chatter Expert	Chatter	chatty.00d5i000003ksyzea4.t4i5wtjrybt4@chatter.salesforce.com	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Chatter Free User
Integration User	integ	integration@00d5i000003ksyzea4.com	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Analytics Cloud Integration User
Mani deepak	mdeep	manideepak143@gmail.com	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Worker
Megha Katoju Site Guest User	guest	megha_katoju@00d5i000003ksyzea4.org.force.com	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Megha Katoju Profile
Meghana Katoj Site Guest User	guest	meghana_katoj@00d5i000003ksyzea4.org.force.com	<input checked="" type="checkbox"/>	<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.

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

Per to Worker

Select an Expiration Option For Assigned Users

No expiration date (1)

Specify the expiration date

1 Day	1 Week	30 Days	60 Days	Custom Date
-------	--------	---------	---------	-------------

Time Zone

Selected Users

Full Name	Role	Profile	Active	User License	Expires On
Mani deepak	Worker	Worker	<input checked="" type="checkbox"/>	Salesforce Platform	Never Expires

Cancel Back Assign

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:

```
triggerUpdatePaidAmountTrigger on Billing__c (before insert, before update) {  
    if (Trigger.isInsert) {  
        UpdatePaidAmountTriggerHandler.handleBeforeInsert(Trigger.new);  
    } else if (Trigger.isUpdate) {  
        UpdatePaidAmountTriggerHandler.handleBeforeUpdate(Trigger.oldMap, Trigger.new);  
    }  
}
```

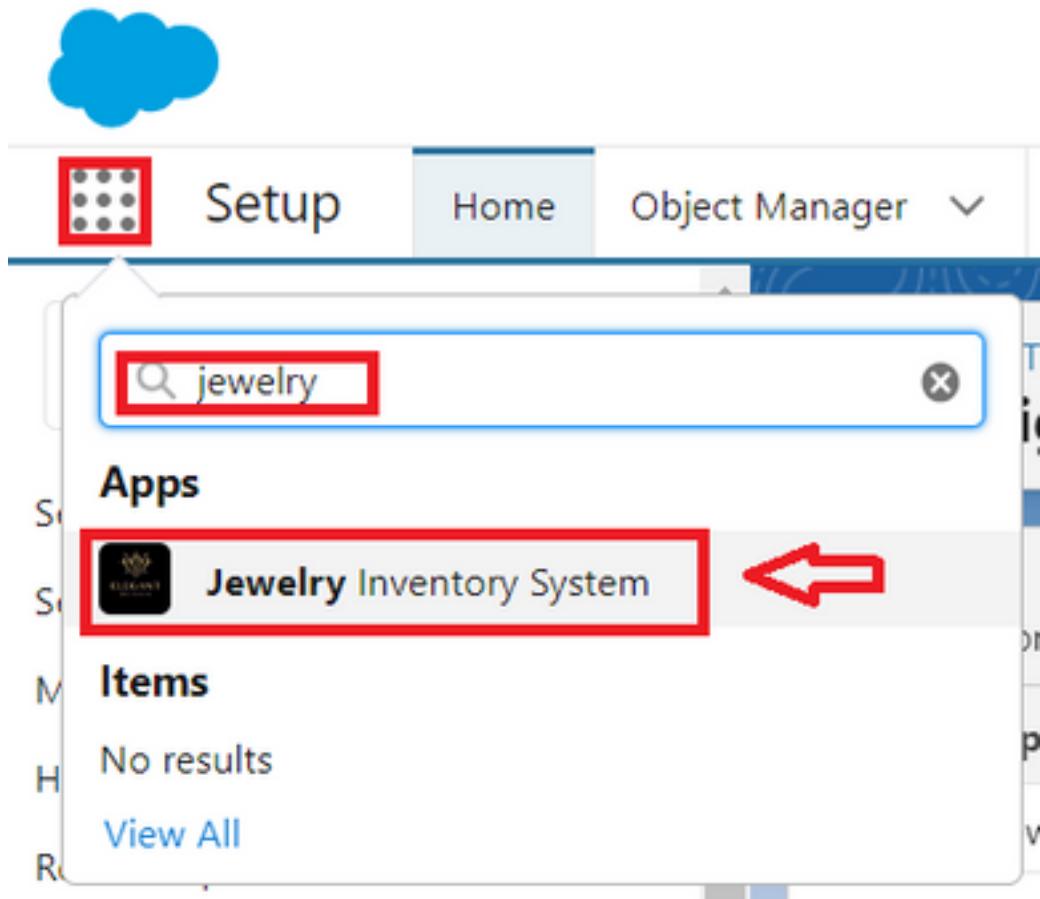
User Adoption

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.

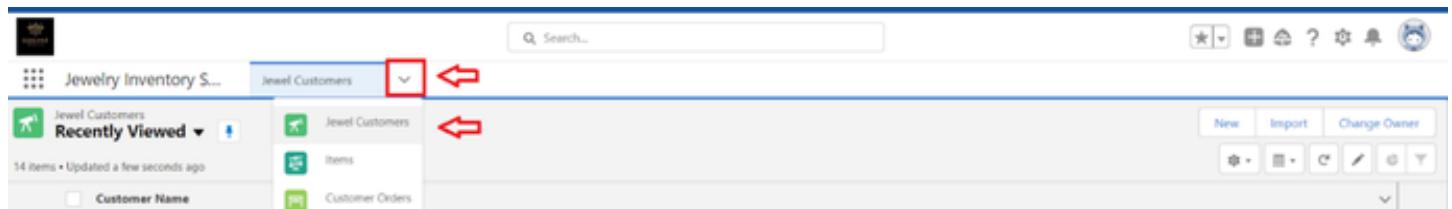
Create a Record (Jewel Customer)

- 1.Click on App Launcher on the left side of the screen.
- 2.SearchJewelry 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.

View a Record(Jewel Customer)

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

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.

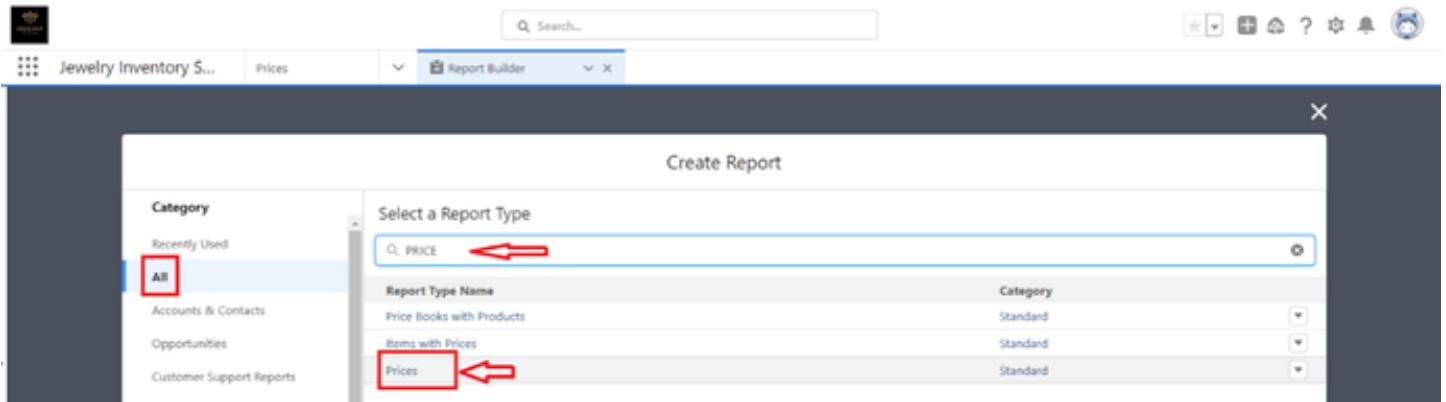
Create Report

1. Go to the app >> click on the reports tab

2. Click New Report.

Folder	Created By	Created On	Subscribed
Private Reports	meghana katoju	7/19/2023, 4:34 AM	
Private Reports	meghana katoju	7/19/2023, 4:30 AM	
DreamHouse Reports	meghana katoju	5/31/2022, 11:25 PM	
Private Reports	meghana katoju	7/12/2023, 8:45 PM	✓
Private Reports	meghana katoju	7/10/2023, 8:48 PM	
Private Reports	meghana katoju	7/12/2023, 12:03 AM	
Private Reports	meghana katoju	7/12/2023, 12:01 AM	
Private Reports	meghana katoju	7/11/2023, 11:49 PM	
Private Reports	meghana katoju	7/11/2023, 11:39 PM	
Private Reports	meghana katoju	6/20/2023, 11:19 PM	
Private Reports	meghana katoju	6/20/2023, 11:08 PM	

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 'New Prices Report' configuration screen. On the left, there's a 'Fields' pane with sections for 'Outline' (selected), 'Groups' (with 'Add group...'), and 'Columns' (with 'Add column...' highlighted with a red box). The 'Columns' section lists fields: 'Price: Price' (highlighted with a red box), '# Gold price', and '# Silver price'. To the right, there's a preview area showing a list of 10 items from 1 to 10, each with a price value starting with 'p-02'. At the top right, there are several buttons: 'Run' (highlighted with a red box), 'Save & Run', 'Save', 'Close', and 'Update Preview Automatically' (checkbox).

- Add fields from the left pane as shown below.

5. Save or run it.

The screenshot shows the 'Report Builder' interface within the 'Jewelry Inventory S...' application. The report is titled 'New Prices Report' and is categorized under 'Prices'. The preview area shows a table with 11 rows of data. The columns are labeled 'Price: Price', 'Gold price', and 'Silver price'. The data includes item codes like p-022, p-021, p-027, etc., and their respective prices.

	Price: Price	Gold price	Silver price
1	p-022	€60.000.00000	€71.000.00000
2	p-021	€63.000.00000	€72.000.00000
3	p-027	€62.350.00000	€70.200.00000
4	p-029	€58.700.00000	€69.000.00000
5	p-030	€66.000.00000	€78.000.00000
6	p-026	€62.000.00000	€70.000.00000
7	p-025	€58.000.00000	€69.000.00000
8	p-028	€59.900.00000	€73.000.00000
9	p-024	€62.000.00000	€73.000.00000
10	p-023	€58.000.00000	€69.000.00000
11		€609.950.00000	€714.200.00000

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

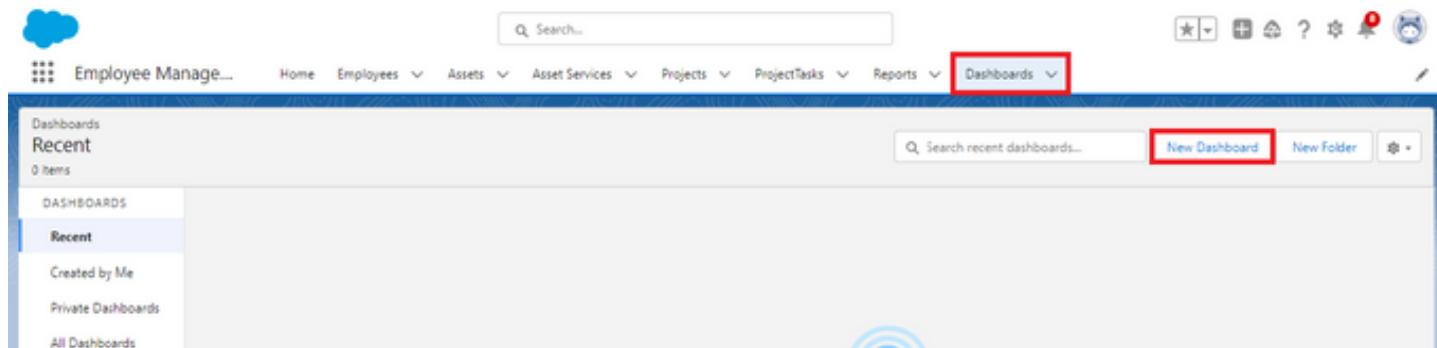
Dashboards help you visually understand changing business conditions so you can make decisions based on the real-time data you've gathered with reports. Use dashboards to help users identify trends, sort out quantities, and measure the impact of their activities. Before building, reading, and sharing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

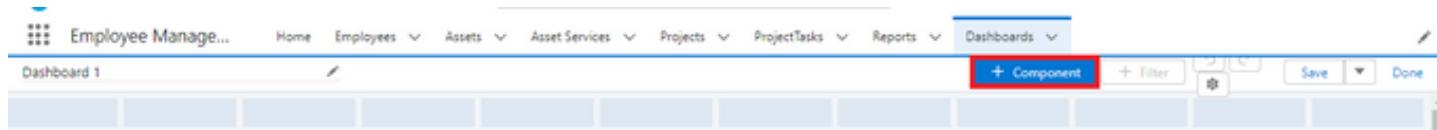
New Dashboard

* Name
Dashboard 1

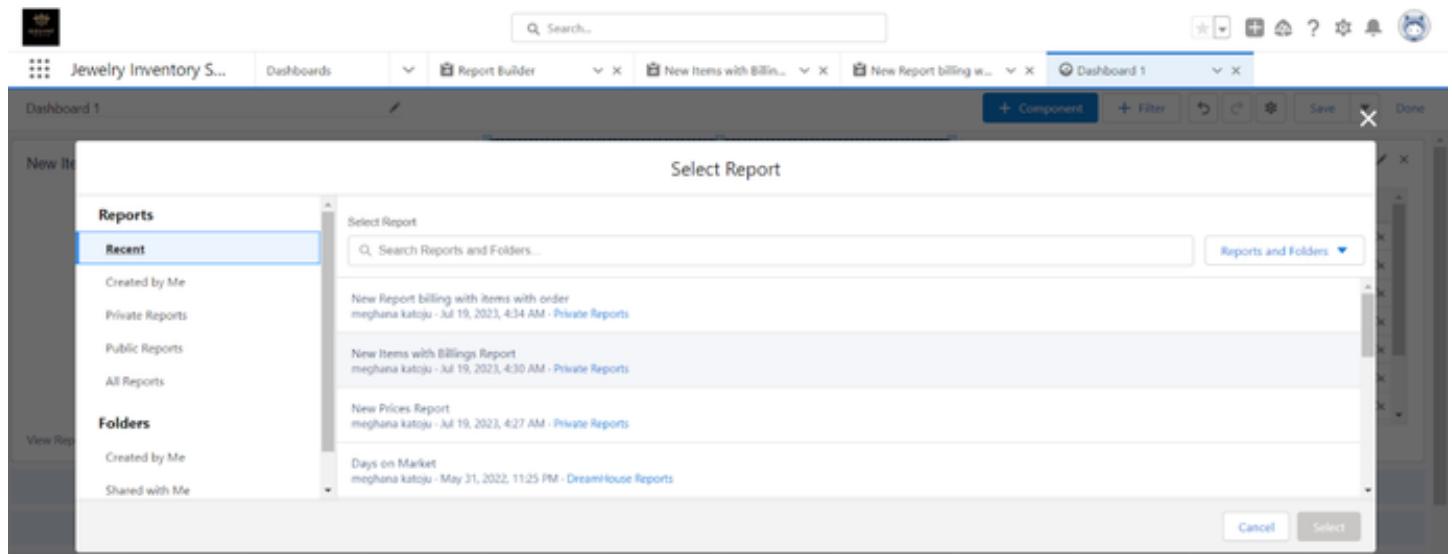
Description

Folder
Private Dashboards

3. Select add component.

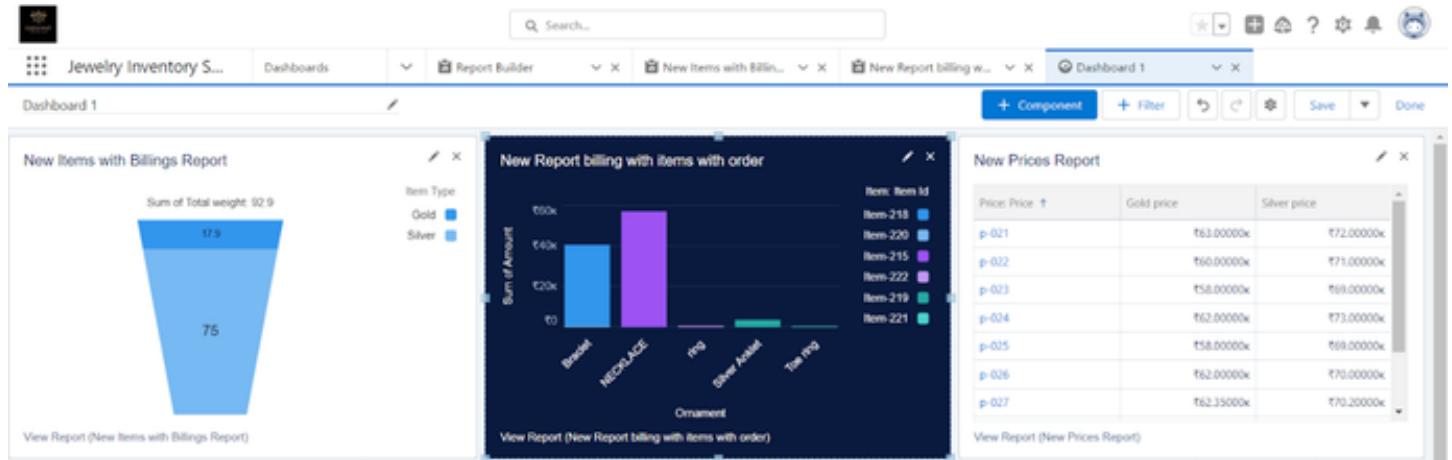


4. Select a Report and click on select.



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.

The screenshot shows the Salesforce Setup interface. On the left, there's a sidebar with a 'Q, Flows' button highlighted by a red box and labeled '1'. Below it are 'Process Automation' and 'Identity' sections. In the main area, the title is 'SETUP Flows' with a 'Flows' icon. A 'Flow Trigger Explorer' tab is open. At the top right is a 'New Flow' button highlighted by a red box and labeled '3'. The central part of the screen displays a table of 'Flow Definitions' under 'All Flows'. The columns include 'Flow Label', 'Process Type', 'Actions', 'Triggers', 'Package State', 'Paused', 'Last Modified By', and 'Last Modified Date'. Several flows are listed, such as 'Ac Amount update', 'Book Appointment from Invitation', 'Cancel Item Flow', etc.

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

The screenshot shows the 'New Flow' creation page. At the top, it says 'New Flow'. Below that, there's a 'Core' section with a 'All + Templates' link. The page lists four types of flows:

- Screen Flow**: Guides users through a business process that's launched from Lightning pages, Experience Cloud sites, quick actions, and more.
- Record-Triggered Flow**: (highlighted by a red box and labeled '1')
Launches when a record is created, updated, or deleted. This autolaunched flow runs in the background.
- Schedule-Triggered Flow**: Launches at a specified time and frequency for each record in a batch. This autolaunched flow runs in the background.
- Platform Event—Triggered Flow**: Launches when a platform event message is received. This autolaunched flow runs in the background.
- Autolaunched Flow (No Trigger)**: Launches when invoked by Apex, processes, REST API, and more. This autolaunched flow runs in the background.
- Record-Triggered Orchestration**: Launches when a record is created or updated. An orchestration lets you create a multi-step, multi-user process.

At the bottom right, there's a 'Create' button highlighted by a red box and labeled '2'.

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.

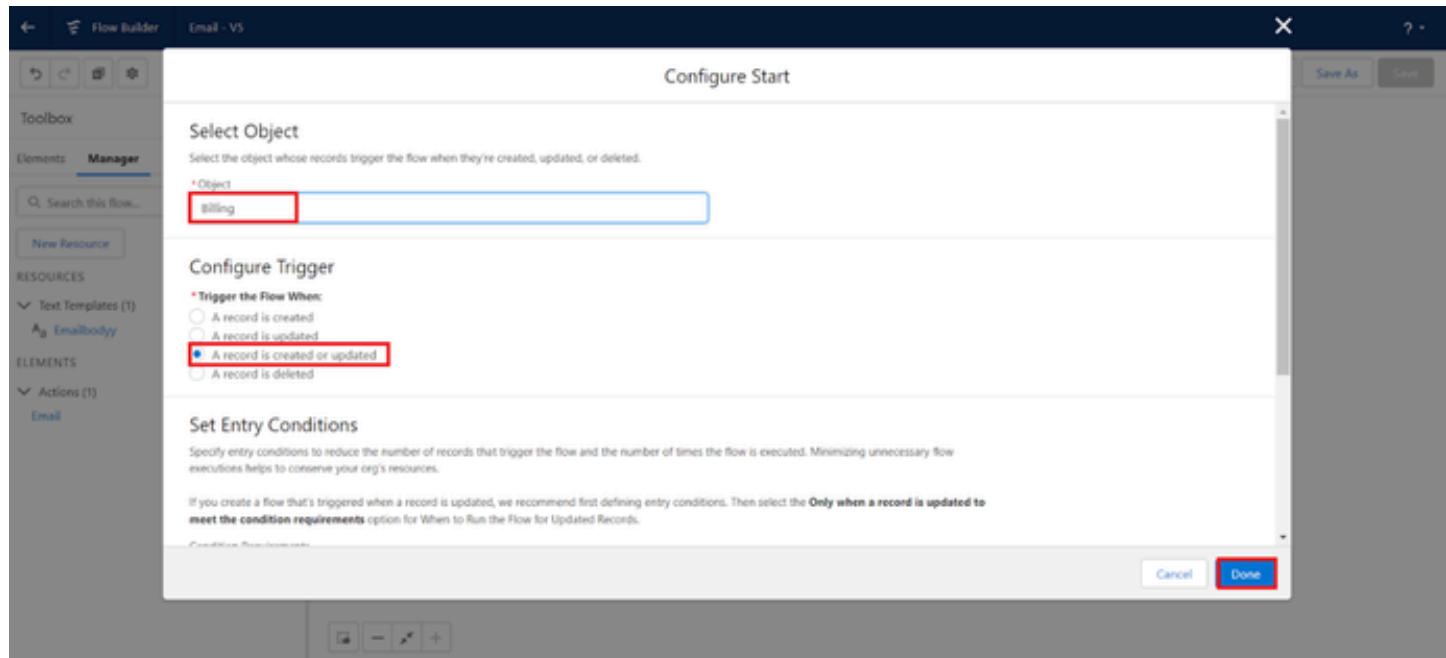
Cancel

Done

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

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

8. Select the resource type as text template.



New Resource

*Resource Type

Select...

Variable

Store a value that can be used and changed throughout the flow.

Constant

Store a value that can be used but not changed throughout the flow.

Formula

Calculate a value when the formula is used in the flow.

Text Template

Store text that can be used and changed throughout the flow.

Stage

Identify different phases in the flow to track user progress.

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

Edit Text Template

* API Name

EmailBody

Description

* Body

Insert a resource...



View as Plain Text ▾

Hello

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

Cancel

Done

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.

New Action

Action: Send Email

Filter By: Category

Order Management

Waitlists

Notifications

Email

Generate Disambiguation

Feedback Log

Chatbots

Sales leads

SCV Outbound Call

Approvals

Case

* Label: notice

* API Name: notice

Description:

Set Input Values for the Selected Action

A_a Body: {!Email_Body}

A_a Email Template ID Don't Include

Log Email on Send Don't Include

A_a Recipient Address Collection

Cancel Done

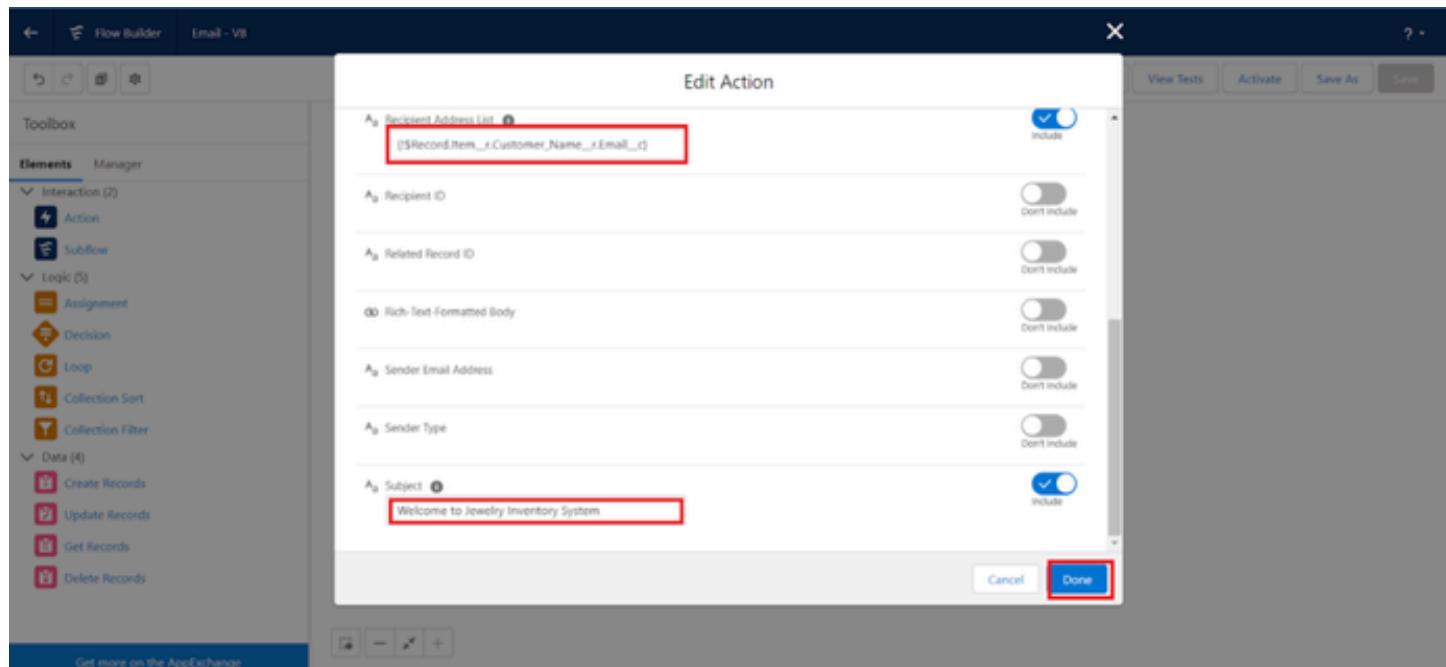
The screenshot shows the configuration of a 'Send Email' action. The 'Label' field is set to 'notice', and the 'API Name' field is also set to 'notice'. The 'Body' input value is '{!Email_Body}', which is highlighted with a red box. The 'Body' input has a checked checkbox next to it. The 'Email Template ID' input has a 'Don't Include' toggle switch. The 'Log Email on Send' input has a 'Don't Include' toggle switch. The 'Recipient Address Collection' input has a 'Don't Include' toggle switch. The 'Done' button at the bottom right is highlighted with a red box.

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

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

20. Include the subject as "Welcome to Jewelry Inventory System".

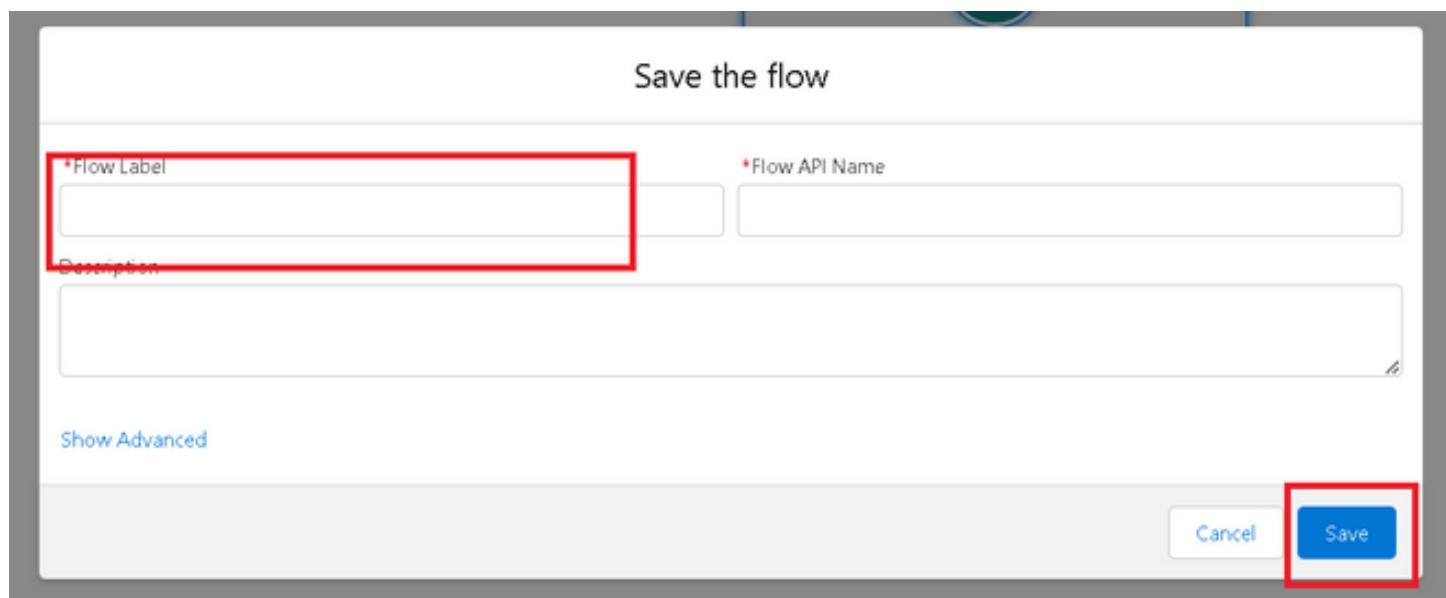
21. Click done.



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 - VB

Free-Form Version B: Inactive—Last modified a minute ago Run Debug View Tests Activate Save As Save

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

Action Email

Run immediately

Get more on the AppExchange

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

Diagram tools: Undo, Redo, Cut, Copy, Paste, Insert, Delete, Find, Replace, Align, Center, Fit, Zoom.

```
graph TD; Start((Start)) --> Run[Run immediately]; Run --> ActionEmail[Action Email];
```