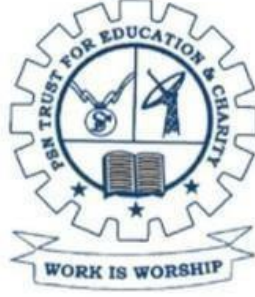




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**DEPARTMENT OF COMPUTER SCIENCE AND
ENGINEERING
NAANMUTHALVAN**

SALESFORCE DEVELOPER – ZONE 16

PROJECT TITLE: CRM application for jewel management

Submitted By
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Bonafide certificate

This is to certify that this skill training report "SB8067-SALESFORCE DEVELOPER" is the bonafide work of (Name & Reg. No who have carried out the tasks and project work under my supervision.

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Submitted for the viva voce examination held on

INTERNAL EXAMINER

EXTERNAL EXAMINER

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CRM APPLICATION FOR JEWEL MANAGEMENT

Project Definition

The Jewell 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. It also enables real-time monitoring of stock levels and generates detailed reports for better decision-making. The system helps reduce manual errors, save time, and enhance overall operational efficiency. Additionally, it ensures secure data handling and supports smooth communication between customers, suppliers, and management.

Abstract

The **CRM Application for Jewel Management** is a Salesforce-based project designed to automate and streamline the operations of a jewellery business. This application efficiently manages the inventory, sales, and customer data of jewellery stores and manufacturers within a single, cloud-based platform. It helps maintain detailed records of jewellery items such as gold, silver, diamond, and gemstone pieces, along with their weight, purity, and price. The system also simplifies day-to-day business tasks like purchase order tracking, supplier management, and sales processing, ensuring all business activities are well-organized and easily accessible.

Built using Salesforce features such as **Custom Objects, Record-Triggered Flows, Validation Rules, and Reports & Dashboards**, the system ensures accurate tracking of jewellery items, seamless sales transactions, and effective customer relationship management. It enables users to monitor stock levels in real-time, generate automated invoices, and analyze sales performance through interactive dashboards. Moreover, the use of **Automation and Approval Processes** helps reduce manual workload, while maintaining consistency and accuracy in operations.

By leveraging Salesforce automation and data management capabilities, the project enhances business productivity, minimizes manual effort, and improves decision-making. It supports role-based access, ensuring data security and controlled access for different users such as administrators, sales staff, and managers. Overall, the system provides a secure, scalable, and user-friendly CRM solution tailored to meet the specific operational needs of the jewellery industry, empowering businesses to deliver better customer service and achieve sustainable growth.

Objectives of the project

- To automate jewellery business operations using **Salesforce CRM**.
- To manage **inventory and track stock levels** in real-time.
- To streamline **sales transactions and automate billing** processes.

- To maintain accurate customer **records** and **enhance customer relationships**.
- To manage supplier details and monitor purchase order efficiently.
- To ensure **data accuracy, security, and controlled** user access.
- To generate analytical reports and dashboards for performance monitoring.
- To provide a **user-friendly interface** for easy system navigation.
- To create a scalable and **flexible solution** for future business growth.

Software requirements

Platform

- Salesforce CRM (Cloud-Based Platform)

Operating System:

- Windows 10 or above
- macOS
- Web Browser Access

Web Browser

- Google Chrome
- Mozilla Firefox, or Microsoft Edge (Latest Version)

Database

- Salesforce Standard Database (Objects, Fields, and Relationships)

Tools Used

- Salesforce Flow Builder
- Process Builder
- Validation Rules, Reports & Dashboards
- Salesforce Developer Console

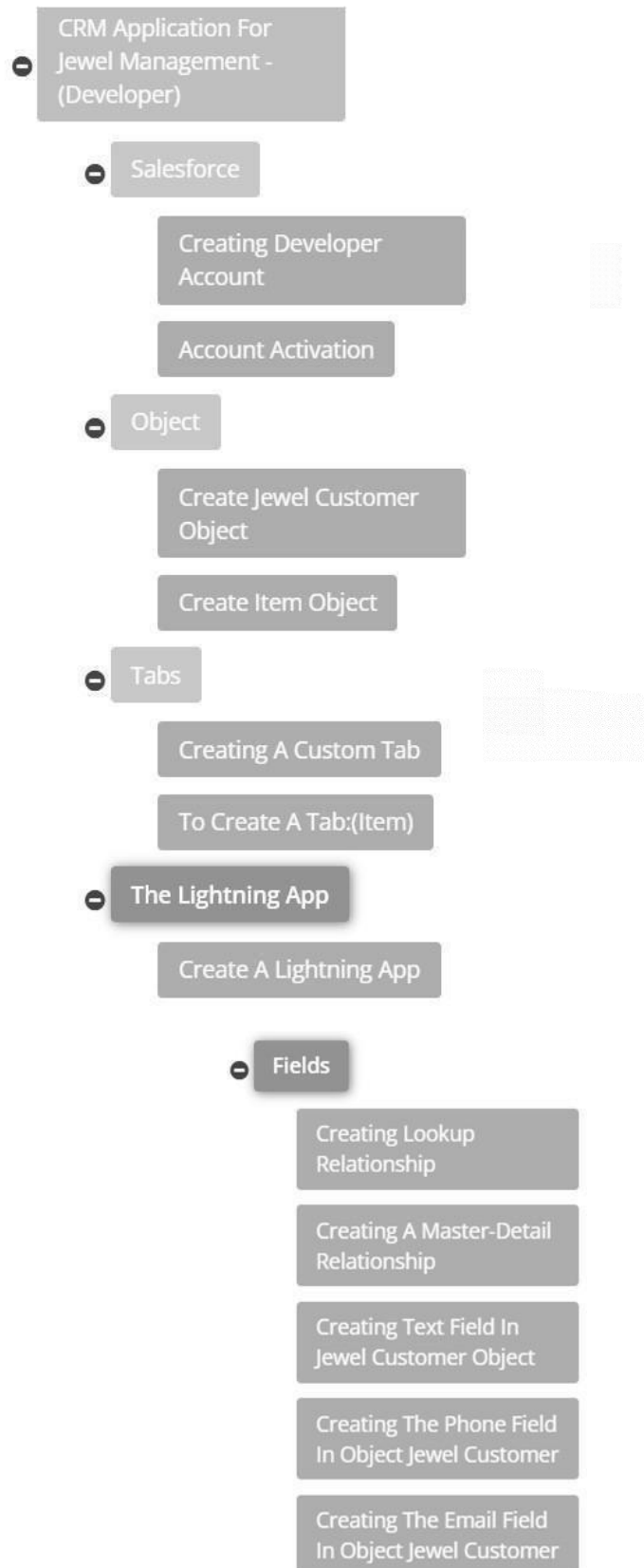
Programming Language:

- Apex (for custom logic) and SOQL (for queries)

User Interface

- Lightning App Builder and Salesforce Lightning Pages

Modules in the system:



Creating The Number
Field In Item Object

Creating Picklist Field In
Item Object

Creating Currency Field
In Price Object

Creating Formula
Field(Cross Object) In
Item Object

Creating Remaining
Fields In Objects

Schema Builder

Creating The Field
Dependencies

Creating The Validation
Rule

⊖ Users

Create User

Create User

⊖ Page Layouts

To Create A Gold Page
Layout

To Create A Silver Page
Layout

⊖ Record Types

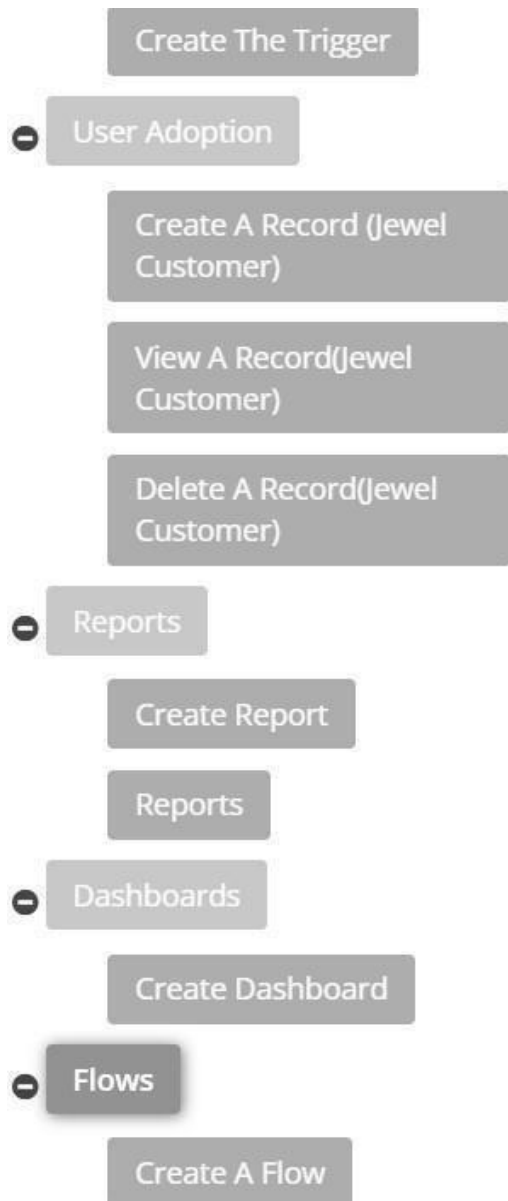
To Create A Record Type

⊖ Permission Sets

Creating Permission Set

⊖ Trigger

Create A Trigger Handler
Class



UserManagement:

ManagesdifferentuserroleslikeAdmin,GoldSmith,andWorkerJW.

CustomerManagement:

Storescustomerdetails,purchasehistory,and preferences.

ProductManagement:

HandlesjewelryitemdetailssuchasGold,Silver,Diamond,andrelatedproperties.

PriceBookManagement:

Maintainsproductpricingforvariouscategoriesandupdatesdiscounts.

OrderManagement:

Recordscustomerorders,payments,anddeliverystatus.

Reports&Dashboards:

Displaysvisualinsightsintosales,topcustomers,andperformance.

Automation&Workflows:

Handlesapprovalprocesses,reminders,andemailnotifications.

Implementationofthe model

1.CreateJewelCustomerObject

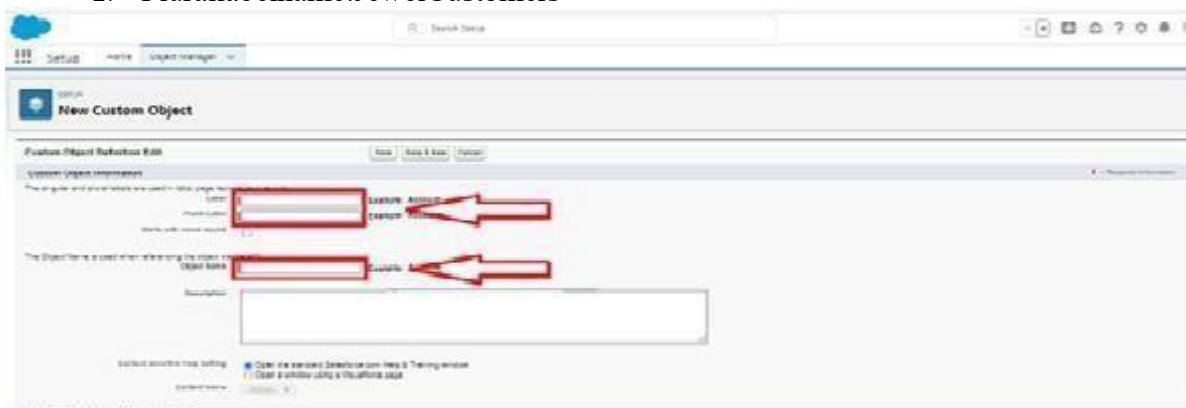
ThepurposeofcreatingaJewelCustomercustomobjectistostoreandmanageinformation about Customer.

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: JewelCustomer
2. Plural label name: JewelCustomers



3. Enter Record Name Label and Format
 - Record Name >> Customer name
 - Data Type >> Text

2. Click on Allow reports.

3. Allow search and click Save.

2. CreateItemObject

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 >> ItemId
 - Data Type >> Auto Number
 - Display Format >> Item- {00}
 - Starting Number >> 1
2. Click on Allow reports.
 3. Allow search >> Save.

3. 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. Lightning Page tabs allow you to add Lightning Pages to Lightning Experience and the mobile app.

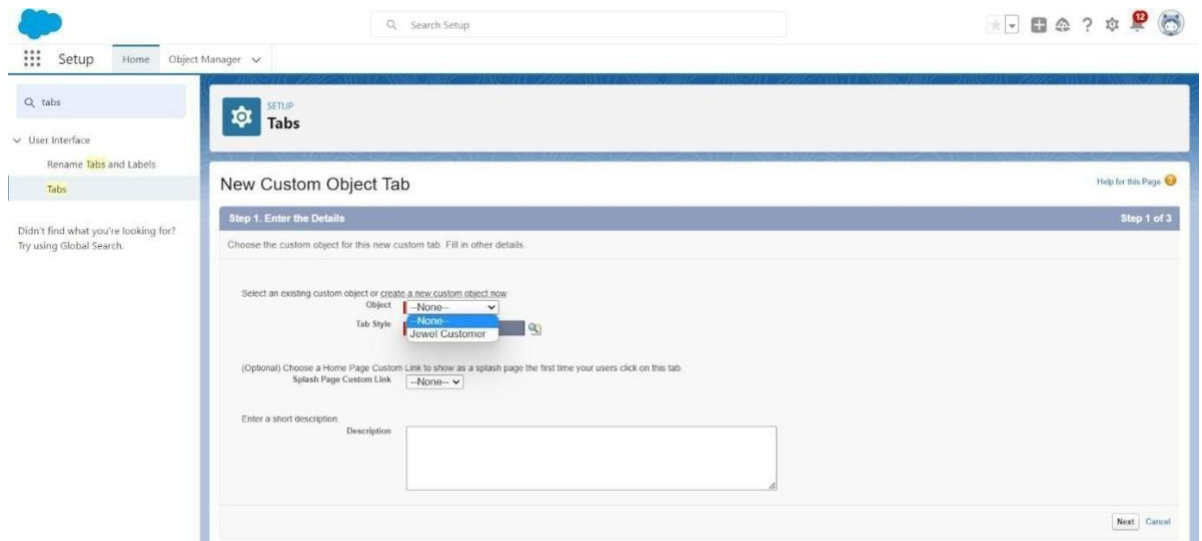
Custom Object Tabs [New](#) [What Is This?](#)

No Custom Object Tabs have been defined

Web Tabs [New](#) [What Is This?](#)

No Web Tabs have been defined

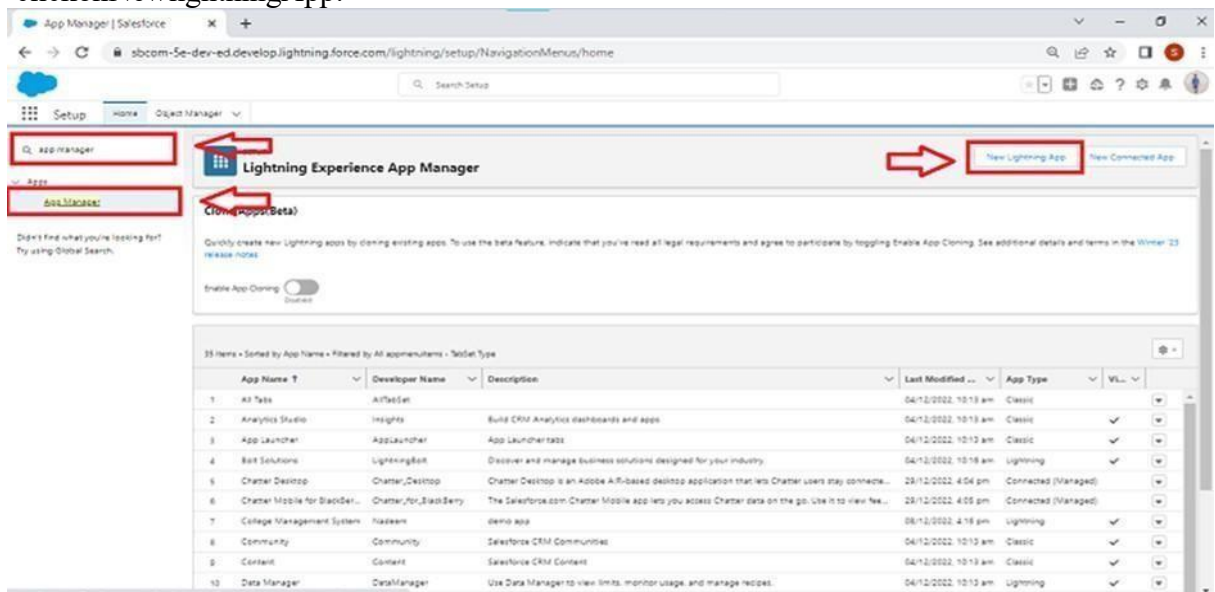
2. Select Object (Jewel Customer) >> Select any tab style >> Next (Add to profile page) keep it as default >> Next (Add to Custom App) keep it as default >> Save.



4. CreateaLightningApp

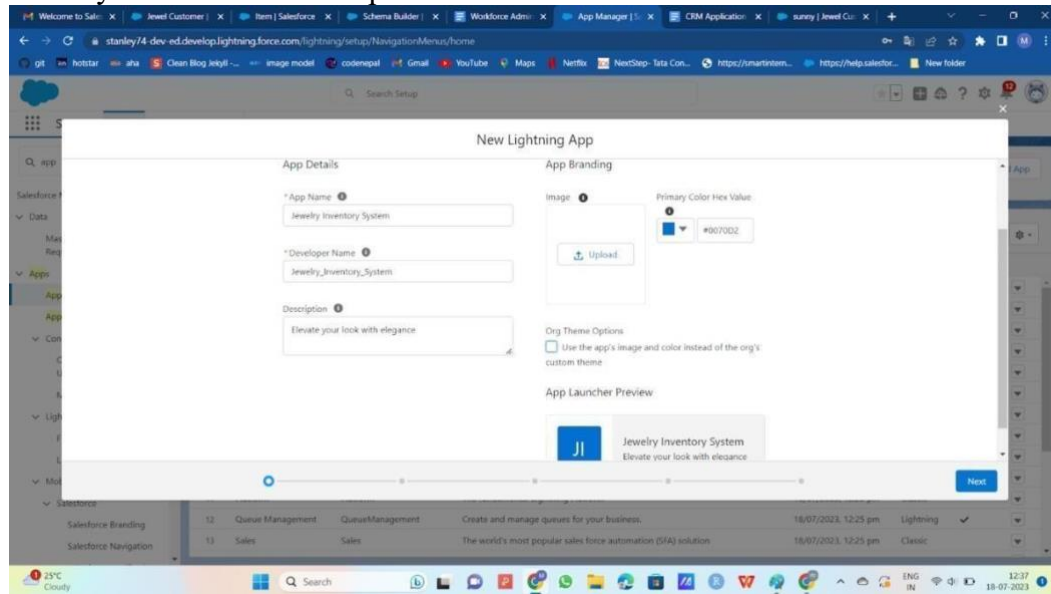
To create a lightning app page:

1. Goto setup page >> search "appmanager" in quick find >> select "appmanager" >>
2. click on New lightning App.

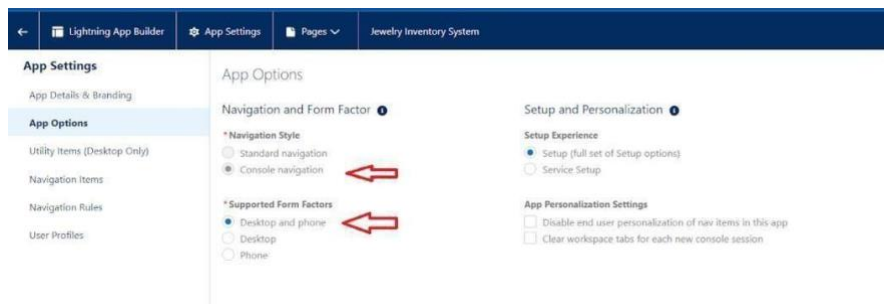


3. Fill the app name in app details and branding as follows:
 App Name : Jewellery Inventory System.
 Developer Name : This will auto populate
 Description: Elevate your look with elegance
 Image: optional (if you want to give any image you can otherwise not mandatory)

Primarycolourhexvalue :keepthisdefault.

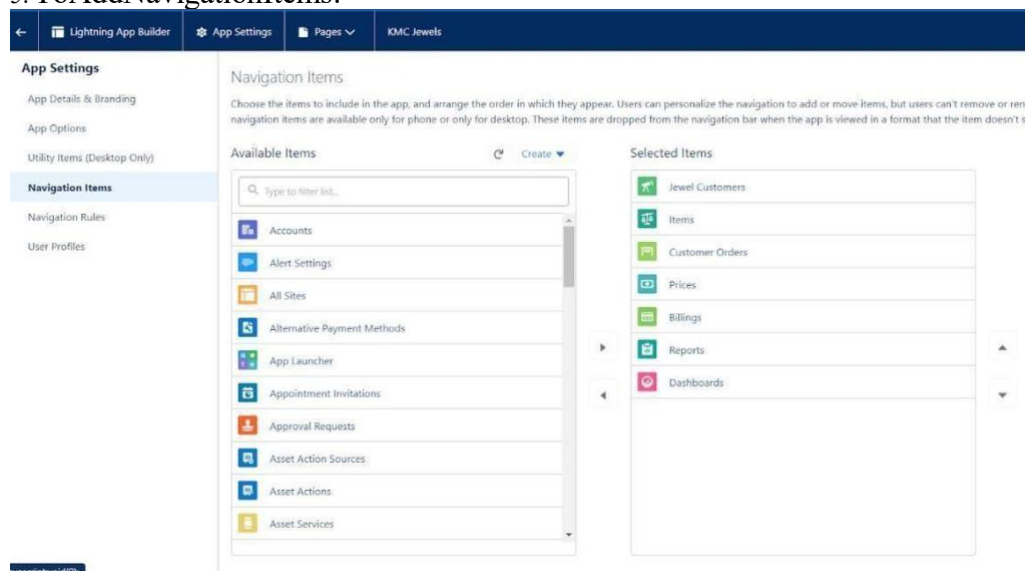


4. Then click Next >> (App option page) Set Navigation Style as Console Navigation >> Next.



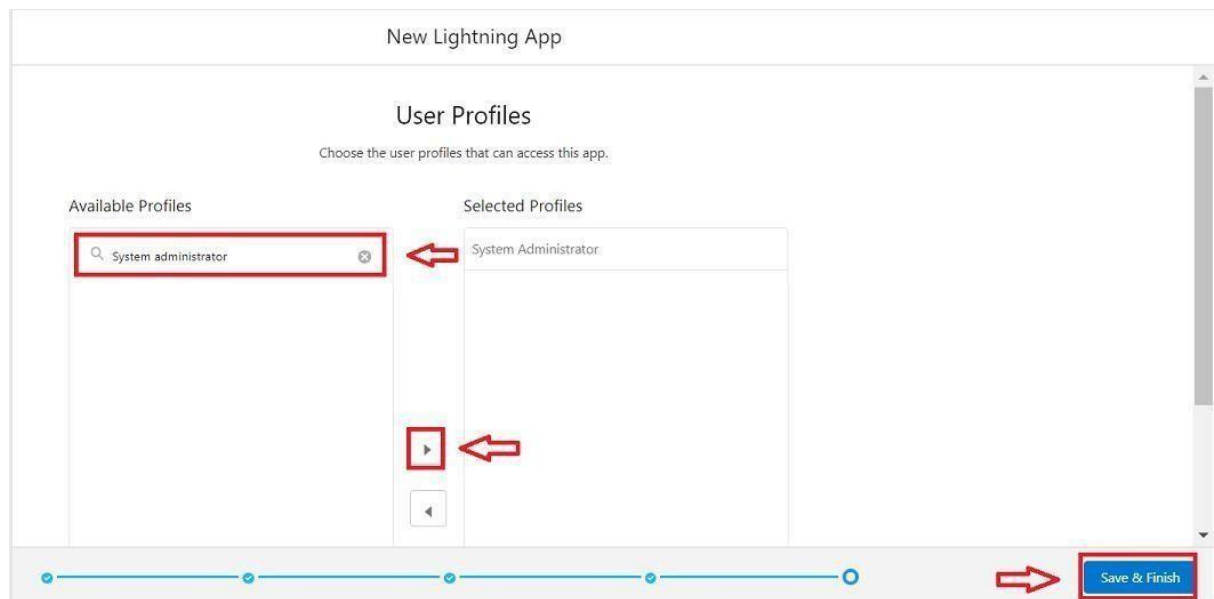
(UtilityItems) keep it as default >> Next.

5. To Add Navigation Items:



Search for the item in the (Jewel Customer, Item, Customer Order, Price, Billing, Reports, Dashboard) from the search bar and move it using the arrow button ? Next? Next.

6. ToAddUserProfiles:



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

5. Creating Lookup Relationship

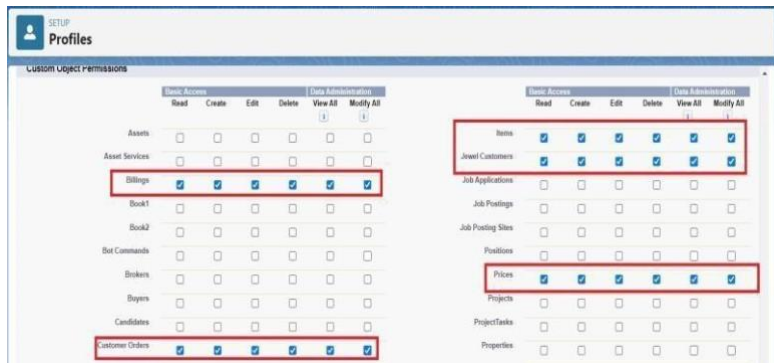
To Create a relationship between Jewel Customer & Customer Order Objects.

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.

6. GoldSmith 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.



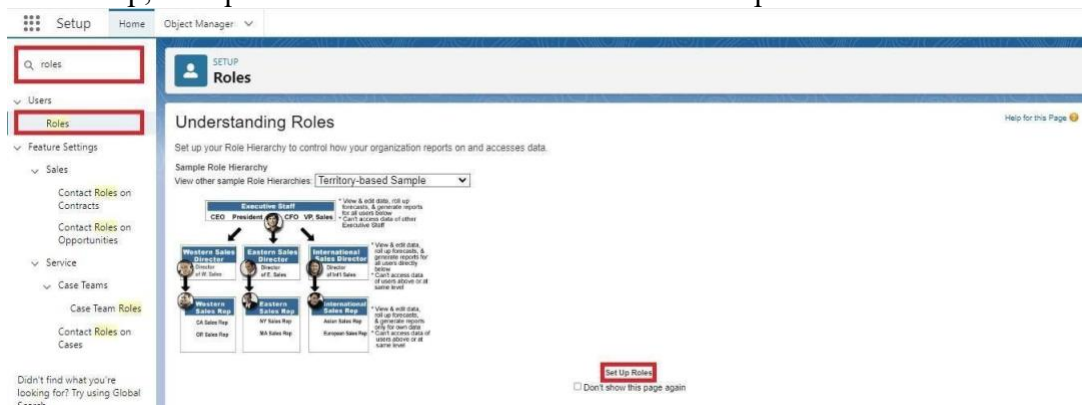
Scroll down and Click on Save.

1. Worker Profile

1. Goto 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.

2. Creating GoldSmith Role

1. From setup, Goto quick find >> Search for Roles >> click on setup roles.



2. Click on Expand All and click on add role under whom this role works.
3. Give Label as "GoldSmith" and Role name gets autopopulated. Check to whom this role (Gold Smith) reports. Then click on Save.



9. Create User

1. Goto 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 : Usernames should be in this form: text@text.text
 6. Nick Name : Give a Nickname
 7. Role : Gold Smith
 8. User licence : Salesforce
 9. Profiles : Gold Smith

The screenshot shows the Salesforce Setup interface. On the left, the 'Users' section is expanded under 'User Management Settings'. The main area displays the 'User Edit' form for 'Niklaus Mikaelson'. The 'General Information' tab is active. The 'Role' dropdown is set to 'Gold Smith', and the 'Profile' dropdown is set to 'Gold Smith'. The 'Save' button is highlighted in red. The 'Email' field is filled with 'niklaus@salesforce.com', and the 'Username' field is filled with 'niklaus@salesforce.com'.

10. Save

Create User

1. Goto 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: Usernames should be in this form: text@text.text
 - Nick Name: Give a Nickname
 - Role: Worker
 - User licence: Salesforce Platform
 - Profiles: Worker
3. Save.

Note:

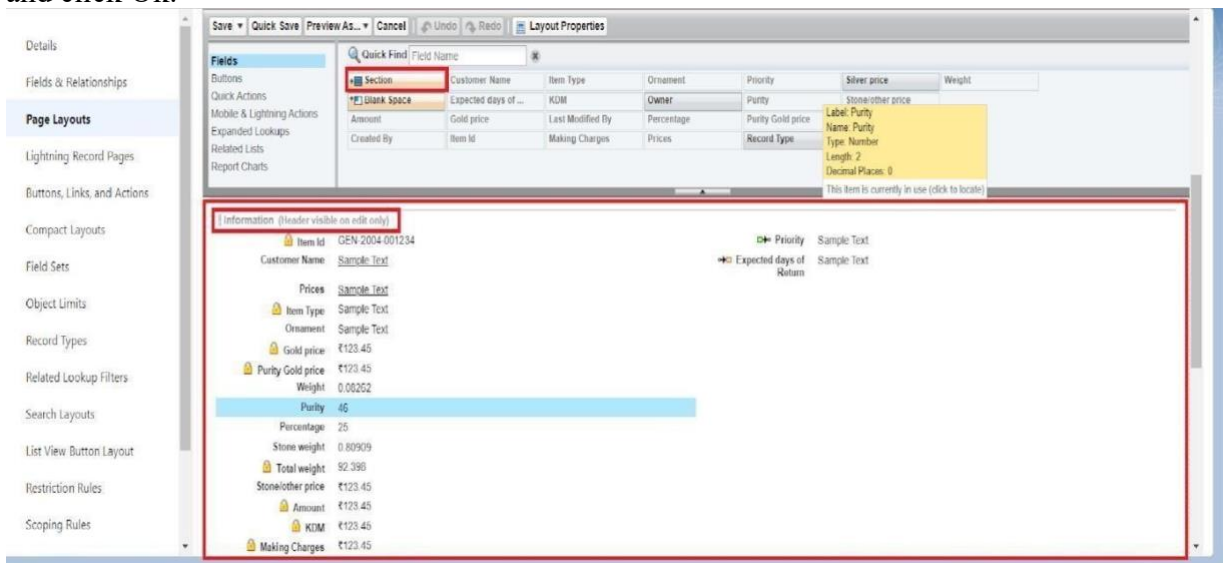
Create two more users as mentioned in activity 2 using the same profile.

10. To Create a Gold Page Layout

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



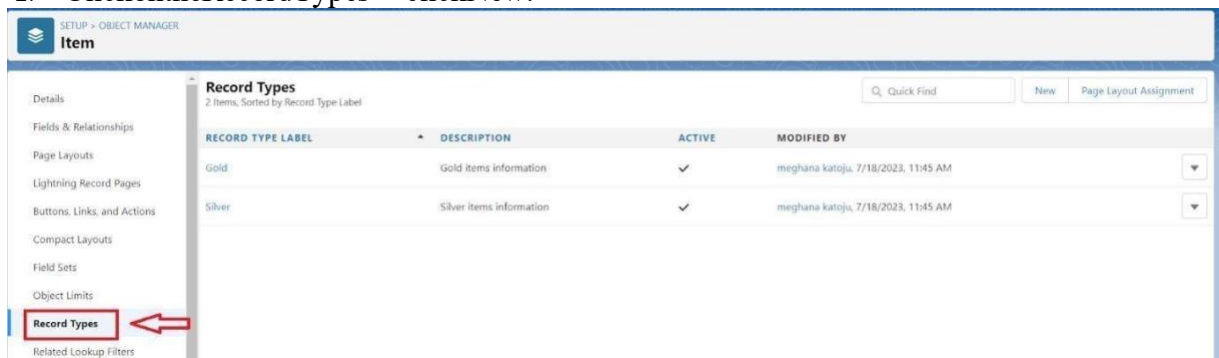
3. Arrange the fields as shown in the Information Section, remove fields which are related to Silver and click Ok.



4. Click Save.
5. Make sure your page layout looks like the picture above. Like this creates same for silver page layout.

11. To create a Record Type

1. Goto 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”.

Profile Name	Record Types Currently Available	<input type="checkbox"/> Make Available	<input type="checkbox"/> Make Default
Analytics Cloud Integration User		<input type="checkbox"/>	<input type="checkbox"/>
Analytics Cloud Security User		<input type="checkbox"/>	<input type="checkbox"/>
Chatter External User		<input type="checkbox"/>	<input type="checkbox"/>
Chatter Free User		<input type="checkbox"/>	<input type="checkbox"/>

5. Scroll down and check for the GoldSmith, Worker JW & System Administrator profile and click on Next.

Setup

Home

Object Manager

Search Setup

</

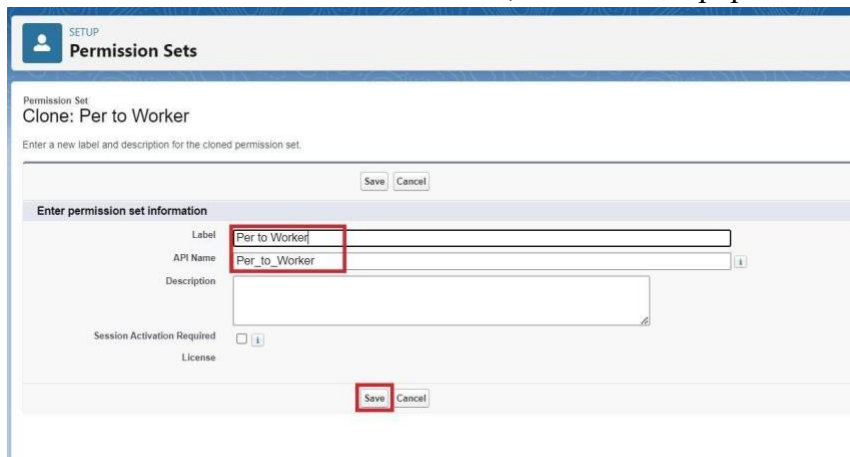
6. Select “Apply a different layout for each profile”, and change page layout to “Page Layout for Gold” for GoldSmith, Worker and System Administrator? save & new.

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

Note: Use page layout for Silver.

11. Creating permission set

1. Go to setup >> type “permission sets” in quick search >> select permission sets >> New.
2. Enter the label name as “Per to Worker”, API will be auto populated? save.



SETUP
Permission Sets

Permission Set
Clone: Per to Worker

Enter a new label and description for the cloned permission set.

Save Cancel

Enter permission set information

Label

API Name

Description

Session Activation Required ☐

License

Save Cancel

3. UnderAppsSelectobjectsettings.

Permission Sets

Permission Set Overview | Object Settings | Items

Items

Tab Settings

Available: ☒ Visible: ☐ [X]

Item: Record Type Assignments

Record Type	Assigned Record Type
Quick	<input checked="" type="checkbox"/>
Static	<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.

Per to Worker

Select Users to Assign

All Users ▼

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

	Full Name ↑	Alias	Username	Role	Acti...
<input type="checkbox"/>	Chatter Expert	Chatter	chatty.00d5i000003ksyzea4.1415wtjeyb4@chatter.salesforce.com		<input checked="" type="checkbox"/>
<input type="checkbox"/>	Integration User	integ	integration@00d5i000003ksyzea4.com		<input checked="" type="checkbox"/>
<input type="checkbox"/>	Mani deepak	mdeep	manideepak143@gmail.com	Worker	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Megha Katoju Site Guest User	guest	megha_katoju@00d5i000003ksyzea4.org.force.com		<input checked="" type="checkbox"/>
<input type="checkbox"/>	Meghana Katoju Site Guest User	guest	meghana_katoj@00d5i000003ksyzea4.org.force.com		<input checked="" type="checkbox"/>

Cancel

Per to Worker

Select an Expiration Option For Assigned Users

☒ No expiration date ⓘ

☐ Specify the expiration date:

1 Day 1 Week 30 Days 60 Days Custom Date

Time Zone: Select a time zone...

Selected Users

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

Cancel Back Assign

12. 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;
        }
    }
}
```

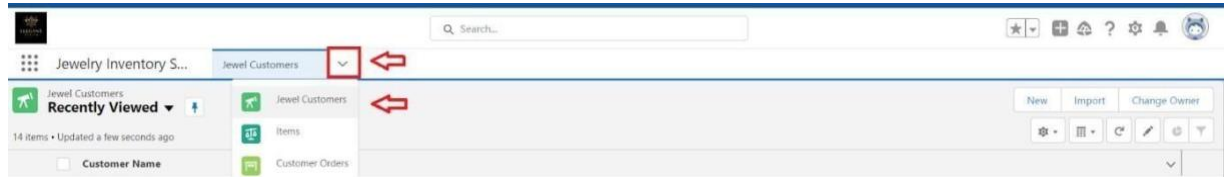
13. Create a Record (Jewel Customer)

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.

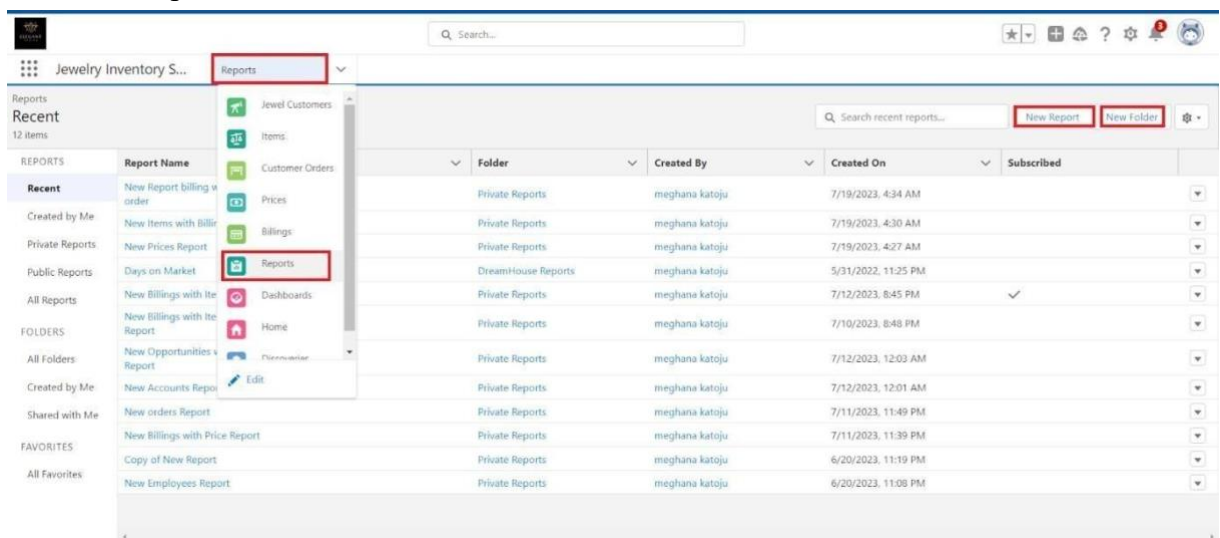
- Click New.



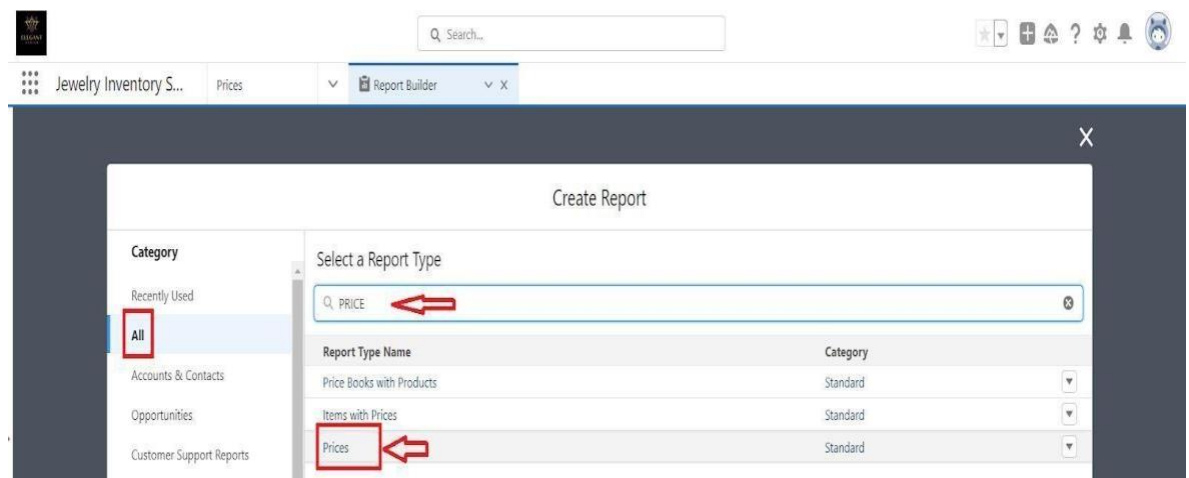
- Fill the details and click on Save.

14. Create Report

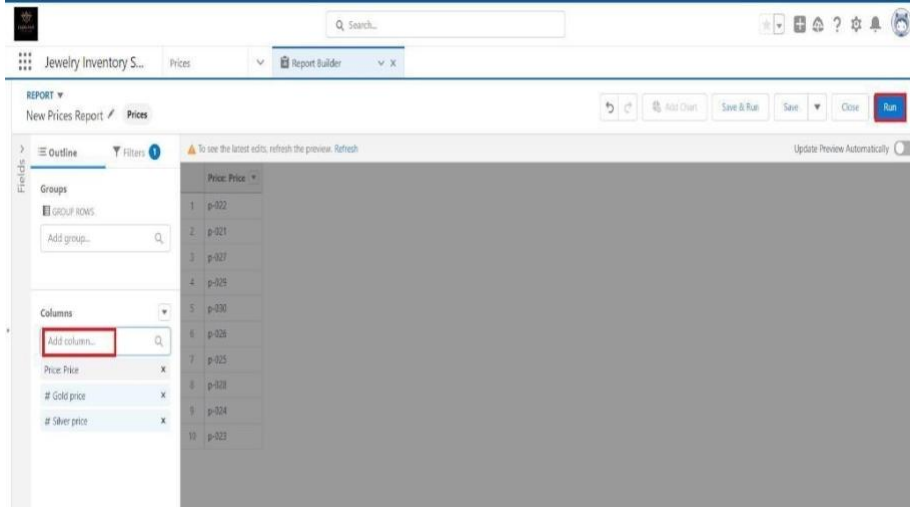
- Goto the app >> click on the report tab
- Click New Report.



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

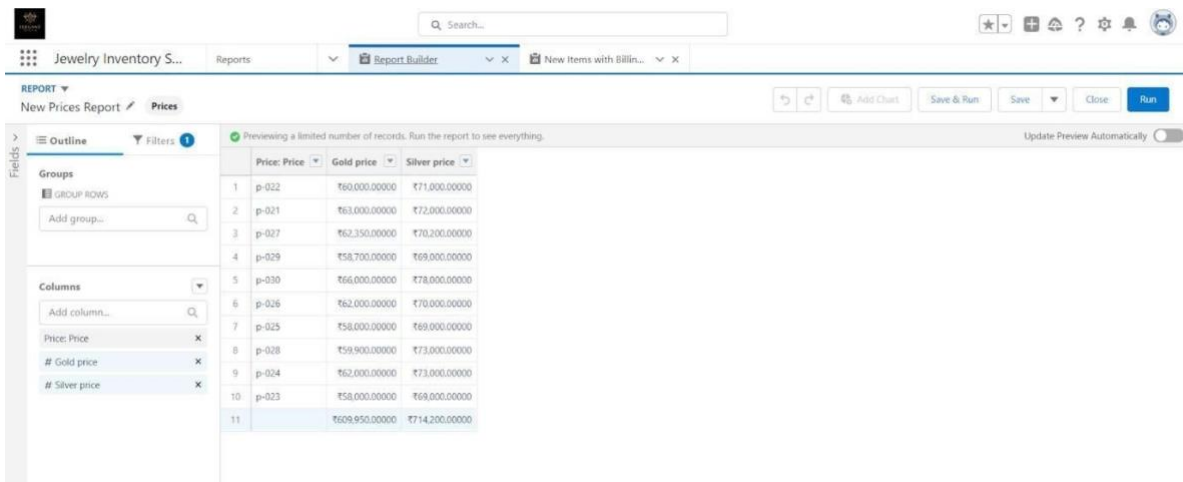


4. Customise your report



- Add fields from the left pane as shown below.

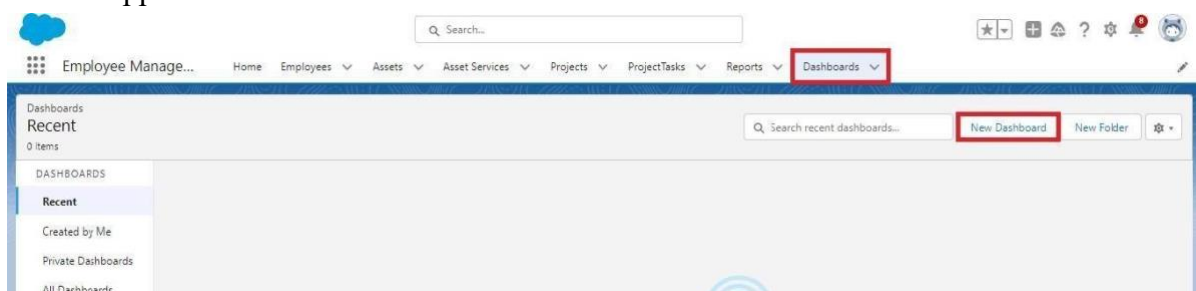
5. Save or run it.



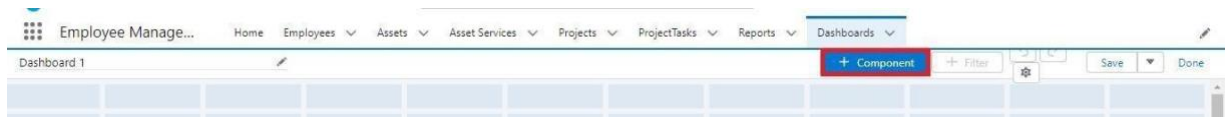
Note: Reports may get varied from the above pictures as the data might be different

15. Create Dashboard

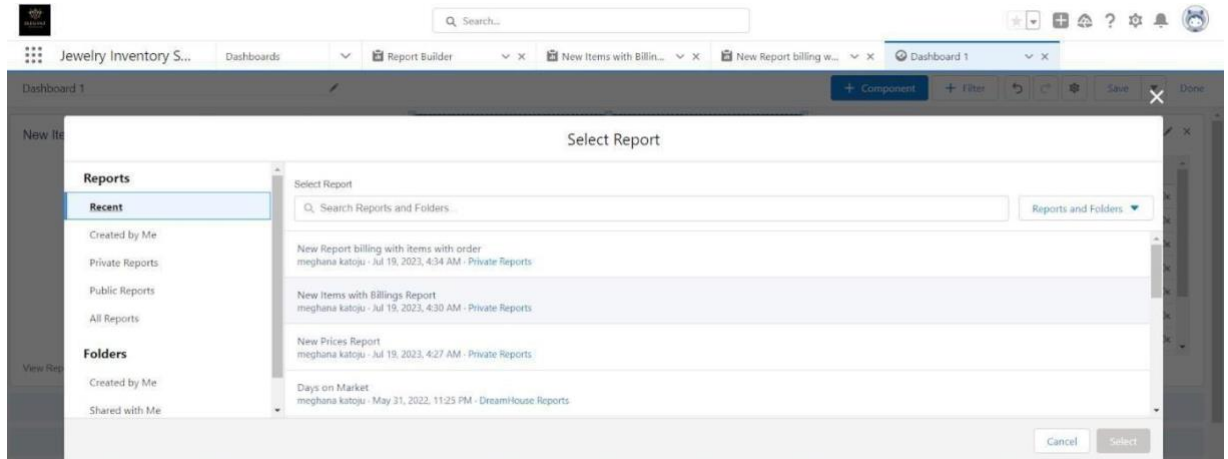
1. Go to the app >> click on the Dashboard tabs.



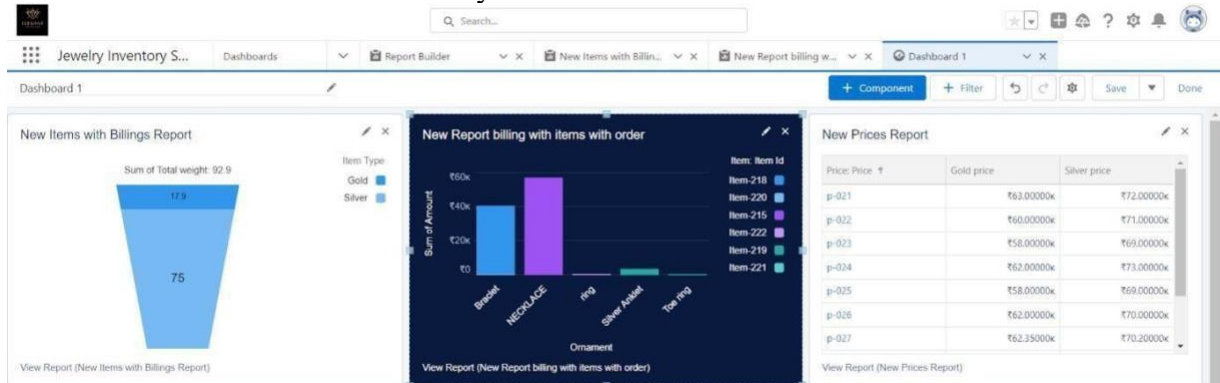
2. Give a Name and click on Create.
3. Select add component.



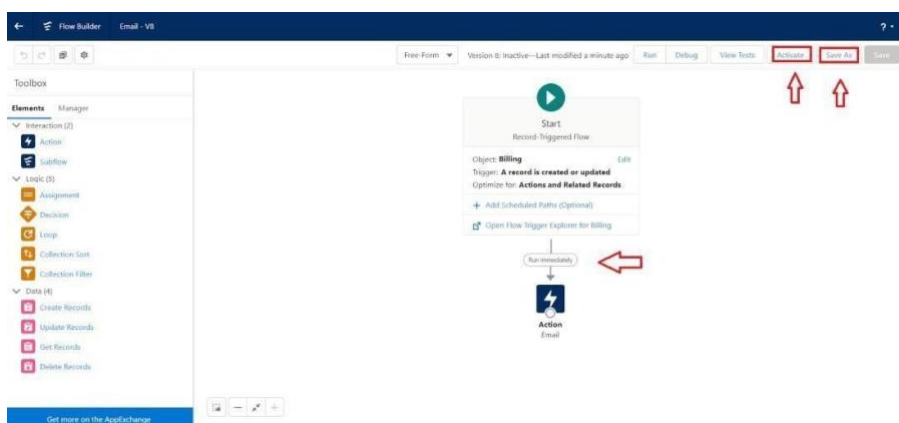
4. SelectaReportandclickon select.



5. ClickAddthenclickonSaveandthenclickonDone.Activity2:Createanother Dashboard as we discussed in activity 1.

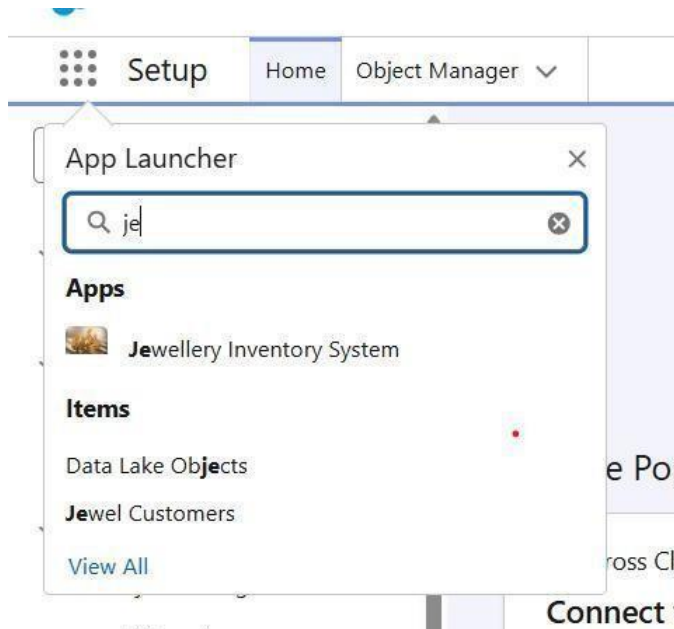


16. CreateaFlow

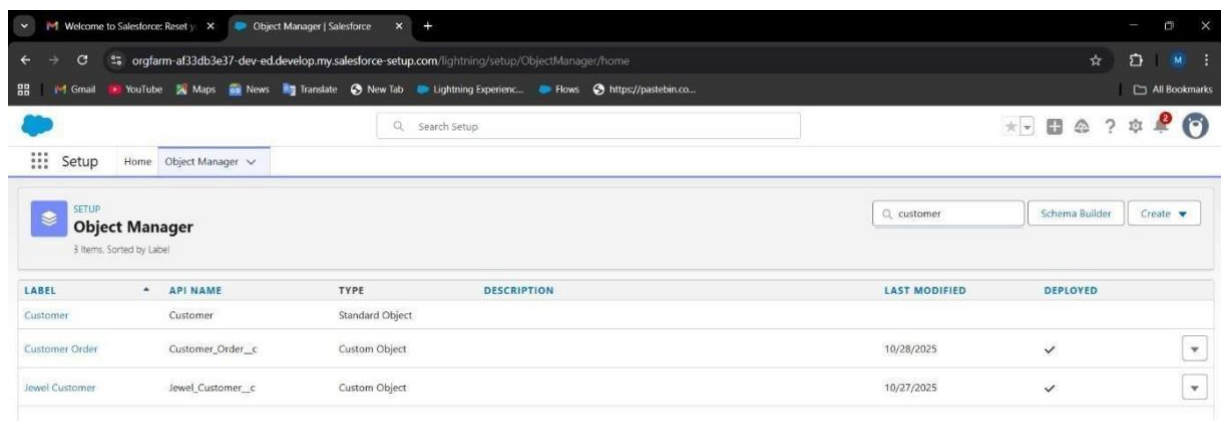


Outputscreenshots

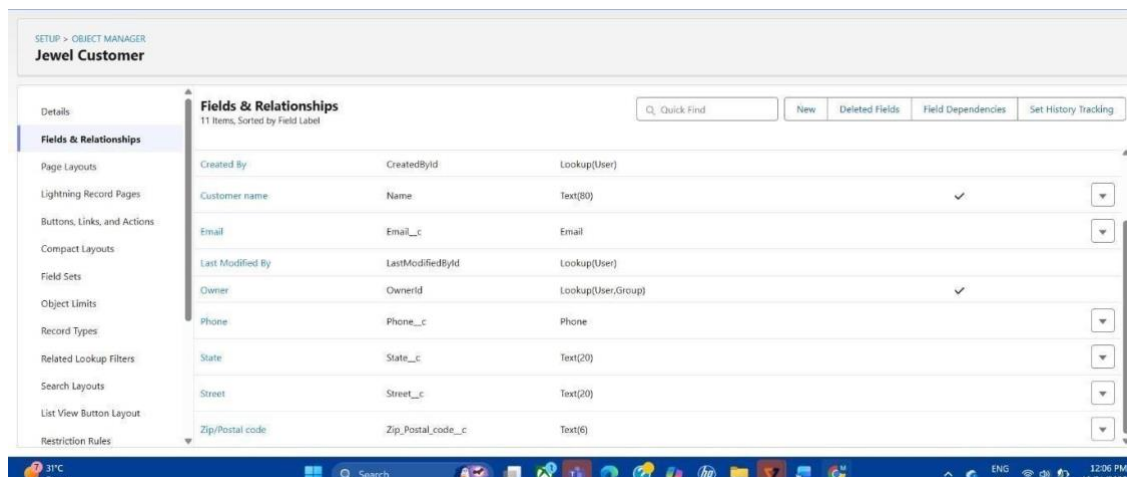
1. Searchforjewelleryinventorysystem:



2. Creatingallcustomerrelatedobjects



3. Creatingcustomerrelatedobjectfields



4. Created sample records for Customers, item, prices, Billings

Jewellery Inventory System

Customer Orders

Customer Orders

Customer Orders

Recently Viewed ▾

15 items • Updated a few seconds ago

☐

Customer Order Id

1

☐ Customer Order-15

2

☐ Customer Order-14

3

☐ Customer Order-13

4

☐ Customer Order-12

5

☐ Customer Order-11

6

☐ Customer Order-10

7

☐ Customer Order-09

8

☐ Customer Order-08

9

☐ Customer Order-07

10

☐ Customer Order-06

11

☐ Customer Order-05

Jewellery Inventory System

Prices

Recently Viewed ▾

14 items • Updated a few seconds ago

Price Id

1

Price-14

2

Price-13

3

Price-12

4

Price-11

5

Price-10

6

Price-09

7

Price-08

8

Price-07

9

Price-06

10

Price-05

11

Price-04

Jewellery Inventory System

Items

Items

Recently Viewed ▾

14 items • Updated a few seconds ago

1

☐

Item-14

2

☐

Item-07

3

☐

Item-13

4

☐

Item-12

5

☐

Item-11

6

☐

Item-10

7

☐

Item-09

8

☐

Item-08

9

☐

Item-06

10

☐

Item-05

11

☐

Item-04

Jewellery Inventory System

Billings

Billings

Recently Viewed ▾

14 items • Updated a few seconds ago

<input type="checkbox"/>	Billing Id
1	<input type="checkbox"/> Billing-14
2	<input type="checkbox"/> Billing-13
3	<input type="checkbox"/> Billing-12
4	<input type="checkbox"/> Billing-11
5	<input type="checkbox"/> Billing-10
6	<input type="checkbox"/> Billing-09
7	<input type="checkbox"/> Billing-08
8	<input type="checkbox"/> Billing-07
9	<input type="checkbox"/> Billing-06
10	<input type="checkbox"/> Billing-05
11	<input type="checkbox"/> Billing-04

Jewellery Inventory System		Jewel Customers	▼
<div> <div>Jewel Customers</div> <div>Recently Viewed</div> <div>13 items • Updated a few seconds ago</div> </div>			
<input type="checkbox"/> Customer name			
1	<input type="checkbox"/>	Abi	
2	<input type="checkbox"/>	Reena	
3	<input type="checkbox"/>	Sneha	
4	<input type="checkbox"/>	Rahan	
5	<input type="checkbox"/>	Bavya	
6	<input type="checkbox"/>	Karthi	
7	<input type="checkbox"/>	Kavya	
8	<input type="checkbox"/>	Rahul Mehta	
9	<input type="checkbox"/>	Priya Sharma	
10	<input type="checkbox"/>	Riya Jewels	
11	<input type="checkbox"/>	Priya	

5. Createthereportfortherecords

Jewellery Inventory System

Reports

▼

Reports

Recent

5 items

Q

Search recent reports...

REPORTS	Report Name	Description	Folder	Created By	Created On
Recent	Prices Report		Private Reports	Muthamil Selvi P	10/29/2025, 1:15 PM
Created by Me	Prices Report		Private Reports	Muthamil Selvi P	10/28/2025, 7:48 AM
Private Reports	Billings with item and customer order		Private Reports	Muthamil Selvi P	10/28/2025, 7:33 PM
Public Reports	Item with Billings Report		Private Reports	Muthamil Selvi P	10/29/2025, 1:12 PM

6. DashboardViewofreports

Jewellery Inventory System

Dashboards

Dashboards

Recent

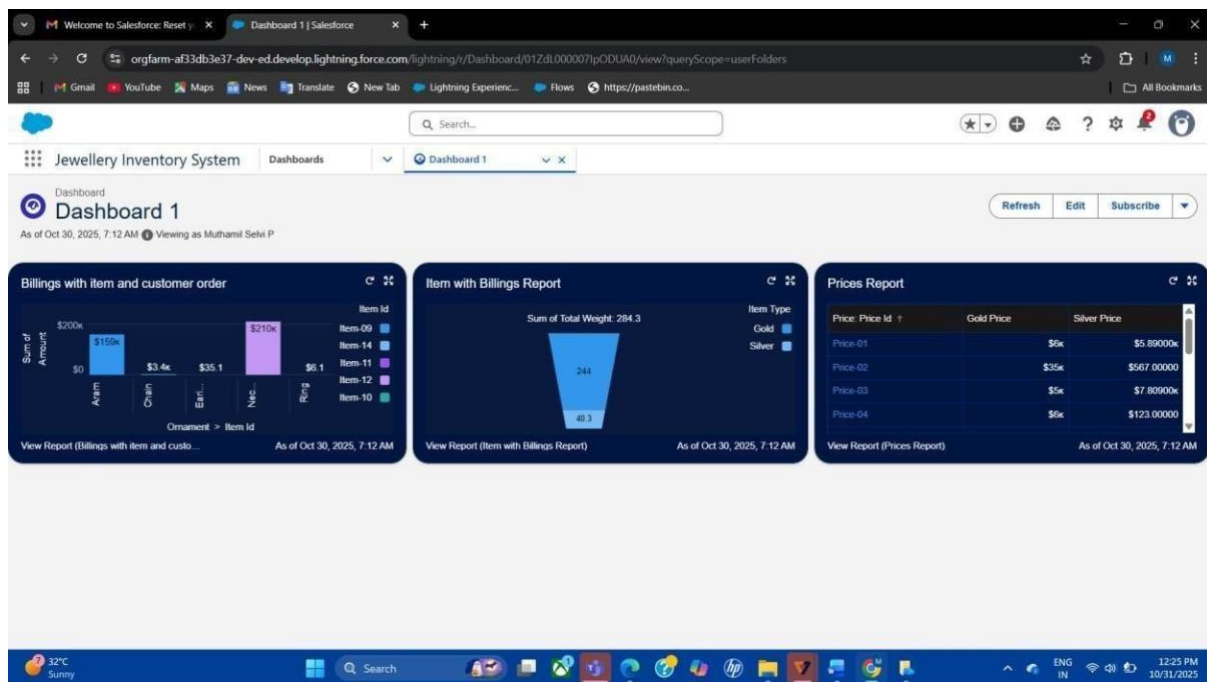
2 items

Q

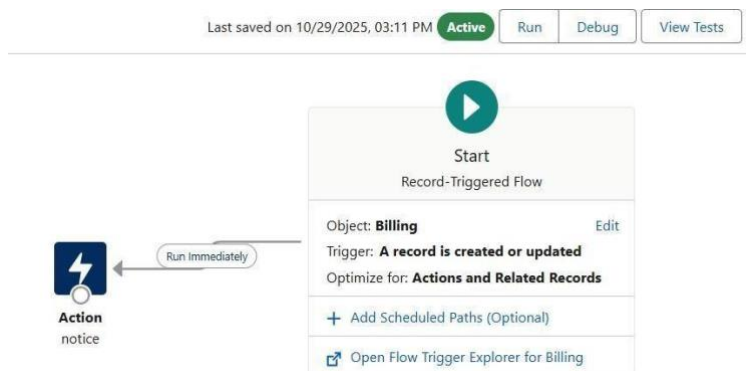
Search recent dashboards...

DASHBOARDS	Dashboard Name	Description	Folder	Created By	Created On
Recent	Dashboard 1		Private Dashboards	Muthamil Selvi P	10/28/2025, 10:34 AM
Created by Me	Dashboard 2		Private Dashboards	Muthamil Selvi P	10/28/2025, 7:36 PM
Private Dashboards					

7. Reportviewindashboard



8. WorkfloworFlowSetupPage



9. ProjectCompletion

Nm id:458DEE7CE334D2E8B5C47B2E0ABC93AC

Project title :CRM application for jewel management
No mentor has assigned

Demonstration video link
https://drive.google.com/drive/folders/1-_gL8-QITYb90Can7T0gIgemZJez7Q0V
Project 100 percent completed

Conclusion:

The CRM Application for Jewel Management effectively transforms the traditional jewelry business workflow into a fully digital and automated system using Salesforce. It streamlines key operations such as customer relationship management, product tracking, and order processing with improved accuracy and speed. This project showcases how a customized Salesforce CRM can be tailored to meet the specific needs of the jewelry industry, enhancing productivity, data management, and customer satisfaction.

By reducing manual efforts and enabling real-time analytics, the system empowers jewelers to make smarter, data-driven business decisions and ensures a seamless experience for both customers and administrators.