



CRM APPLICATION FOR JEWEL MANAGEMENT

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1.INTRODUCTION

1.1 Project Overview:

This project involves the development of a CRM based Jewel Management System using Salesforce. It streamlines operations like inventory tracking, price updates, billing, and customer management for a jewellery business. The project leverages Salesforce Lightning Platform to design custom objects, automate processes using Flows, and generate actionable insights via dashboards and reports.

1.2 Purpose:

The purpose is to replace manual processes with an automated, cloud-based Salesforce CRM that enables real-time stock updates, dynamic pricing, customer billing, and order tracking. The system enhances customer experience, operational accuracy, and business decision-making.

The purpose of this project is to design and implement a Salesforce-based CRM solution specifically for jewel businesses to:

- Centralize customer information and communication.
- Track and manage jewellery inventory (gold and silver).
- Enable personalized marketing and offers.
- Facilitate efficient order processing and billing.
- Improve customer retention through engagement automation.
- Generate detailed reports on sales, trends, and staff performance.

PHASE 1 : IDEATION PHASE:

1.1 Problem Statement:

Traditional jewellery shops face problems like manual stock maintenance, lack of customer records, and inefficiencies in pricing and billing. There's also no integrated view of customer interactions. This leads to errors, delayed decision-making, and customer dissatisfaction.

Many small to mid-sized jewellery retailers struggle with managing customer relationships, tracking sales, handling special orders, and maintaining inventory. Current manual systems or generic software often fall short of addressing the industry's unique needs.

1.2 Objectives:

✓ **Customer Data Management:** To maintain a centralized database of customer profiles, including personal details, purchase history, and preferences, to enable personalized services.

✓ **Sales Tracking and Lead Management:** To automate the process of capturing leads, tracking sales activities, and converting potential customers into loyal buyers through Salesforce tools.

✓ **Product and Inventory Management** To manage detailed information about jewelry products, including type, purity, weight, price, and stock availability, ensuring transparency and control.

✓ **Billing and Order Processing:** To simplify the billing process by automating invoice generation, payment tracking, and sales reporting for each transaction.

1.3 Ideas collected during brainstorming:

- Use of custom objects for Items, Billing, Orders, and Customers.
- Automate stock management with flows.
- Dashboard for daily performance insights.
- Notifications for low inventory.
- Implement record-triggered and scheduled flows.
- Introduce validation rules to prevent data inconsistencies.
- Plan separate dashboards for different roles (sales, inventory, admin).

PHASE 2 : REQUIREMENT ANALYSIS:

2.1. Functional and Non-Functional Requirements:

2.1.1 Functional Requirements

1. Customer Data Management:

- * Maintain a centralized database of customer details (name, contact, preferences, purchase history).
- * Enable segmentation of customers based on purchase behavior and preferences.
- * Provide personalized recommendations and follow-ups.

2. Lead and Sales Management:

- * Capture and track leads from various sources (walk-ins, website, referrals, events).
- * Automate lead scoring, assignment, and conversion workflows.
- * Track each stage of the sales pipeline (lead → opportunity → quotation → order → invoice).

3. Product and Inventory Management:

- * Store detailed jewelry product information (type, metal, purity, weight, design, price).
- * Track stock availability and automatically update inventory after each sale.
- * Enable real-time synchronization between sales and inventory records.

4. Billing and Order Processing:

- * Automate invoice generation after sales confirmation.
- * Track payments and update customer records accordingly.
- * Generate daily, weekly, and monthly sales reports for performance analysis.

5. User Management and Access Control:

- * Define roles for sales executives, inventory managers, finance officers, and administrators.
- * Restrict access to sensitive data based on user roles and responsibilities.

2.1.2 Non-Functional Requirements:

- * **Performance:** The system should handle concurrent users efficiently with minimal latency.
- * **Scalability:** The system must support the addition of new products, users, and stores without performance degradation.
- * **Security:** Customer and payment data must be encrypted and protected according to Salesforce security standards.
- * **Usability:** The interface must be intuitive and easily navigable for users with minimal training.
- * **Reliability:** The system should maintain 99.9% uptime and ensure data integrity during transactions.
- * **Maintainability:** System configurations and workflows should be easily updatable through Salesforce's declarative tools.

2.2. Object Relationships, Automations, and User Roles

Object Relationships

- * Customer → Lead → Opportunity → Order → Invoice
- * Product → Inventory → Order Line Items → Invoice
- * User (Sales Rep / Manager) → Assigned Leads, Opportunities, and Orders

Automations

- * **Lead Assignment Rule:** Automatically assigns leads to sales reps based on location or product interest.
- * **Workflow Rules:** Trigger follow-up emails and reminders for pending opportunities.
- * **Inventory Update:** Automatically reduce stock quantity upon successful order completion.
- * **Approval Process:** Approval workflow for discount or high-value jewelry orders.

- * **Reports and Dashboards:** Auto-refresh daily to show key KPIs (sales, top products, customer growth).

User Roles

- * **Admin:** Full control over all modules and system settings.
- * **Sales Executive:** Access to leads, opportunities, and customer profiles.
- * **Inventory Manager:** Manage product catalog and update stock details.

2.3. Documentation and Traceability

- * All requirements are documented in a **Requirement Traceability Matrix (RTM)** linking each functional requirement to corresponding design components, workflows, and test cases.

- * Salesforce objects, fields, and flows are mapped to business requirements for traceability throughout the project lifecycle.

- * Any changes in scope or configuration are version-controlled and reviewed during sprint retrospectives.

2.4. Dependencies and System Constraints

Dependencies:

- * Integration with external payment gateways (e.g., Razorpay, PayPal).
- * Access to product catalog and pricing database.
- * Stable internet connection for Salesforce access.
- * User licenses and appropriate Salesforce editions (Sales Cloud, Service Cloud).

System Constraints:

- * Limited customization within certain Salesforce managed packages.
- * Data storage limits depending on Salesforce edition.
- * System performance depends on Salesforce API call limits and governor limits.

PHASE 3: PROJECT DESIGN

3.1 Problem Solution Fit:

Problem: Manual processes and lack of centralized tracking

Solution: Salesforce CRM system automating every major jewelry workflow

3.2 Proposed Solution:

Five major custom objects: Item__c, Price__c, Jewel_Customer__c, Customer_Order__c, Billing__c

- Lightning app with navigation tabs
- Automated flows for inventory, billing, and notifications

3.3 Solution Architecture:

Objects and Relationships:

- Jewel_Customer__c ↔ Customer_Order__c ↔ Billing__c ↔ Item__c ↔ Price__c
- Lookup and Master-Detail fields used to link records
- Formula fields for auto-calculations (e.g., total billing amount)
- Validation rules for quantity and price limits
- Record Types to distinguish Gold, Silver, and Diamond workflows

3.4 Key Design Components:

- **Entity-Relationship (ER) Design:**
All major entities—**Customer, Lead, Opportunity, Product, Order, Invoice, and Inventory**—are defined with clear relationships. The design ensures seamless data flow from lead capture to final billing.
- Modular Architecture
- Workflow and Automation Design
- Security and Access Design

3.5 User Experience (UX) Considerations

- Intuitive Navigation
- Responsive Design
- Responsive Design
- Visual Dashboards

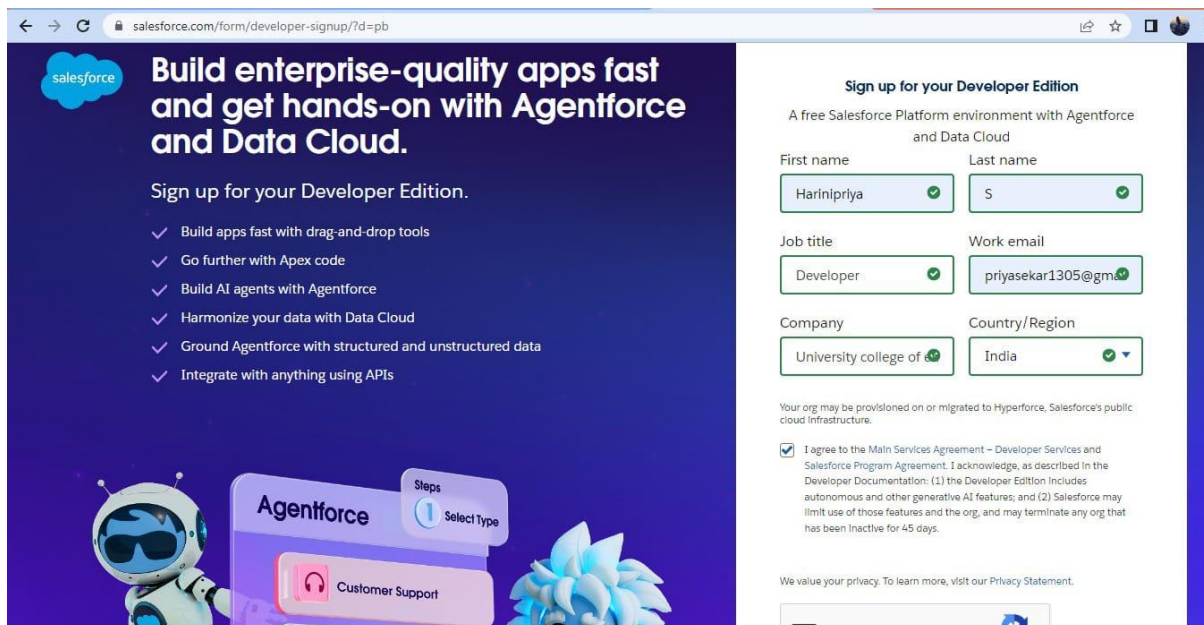
PHASE 4: PROJECT DEVELOPMENT - SALESFORCE GUIDED PROJECT

The development phase is the backbone of the CRM application, where core functionalities were implemented using Salesforce's declarative tools and programmatic capabilities. This phase was conducted in iterative sprints, following Agile methodology, and broken into several key activities.

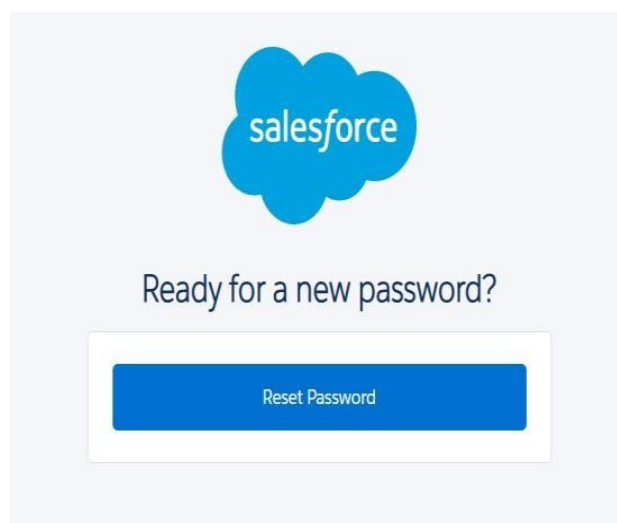
4.1 Developer Environment Setup:

- Create Salesforce Developer Org via developer.salesforce.com/signup

Fill the required information, verify email, set password, and access Salesforce Setup.



The screenshot shows the Salesforce Developer Edition sign-up page. On the left, there's a blue banner with the Salesforce logo and text: "Build enterprise-quality apps fast and get hands-on with Agentforce and Data Cloud." Below this, it says "Sign up for your Developer Edition." and lists several benefits with checkmarks: "Build apps fast with drag-and-drop tools", "Go further with Apex code", "Build AI agents with Agentforce", "Harmonize your data with Data Cloud", "Ground Agentforce with structured and unstructured data", and "Integrate with anything using APIs". There's also an illustration of a robot and a flower. On the right, the "Sign up for your Developer Edition" form is visible. It includes fields for First name (Harinipriya), Last name (S), Job title (Developer), Work email (priyasekar1305@gmail.com), Company (University college of), and Country/Region (India). There's a checkbox for "I agree to the Main Services Agreement" and a link to the Privacy Statement.



Account Activation:

Change Your Password

Enter a new password for
priyasekar1305690@agentforce.com. Make sure to
include at least:

- ✓ 8 characters
- ✓ 1 letter
- ✓ 1 number

* New Password

..... Good

* Confirm New Password

..... Match

New Security Question

▼ In what city were you born?

New Answer

Madurai Good

*=required

4.2 Custom Object Creation:

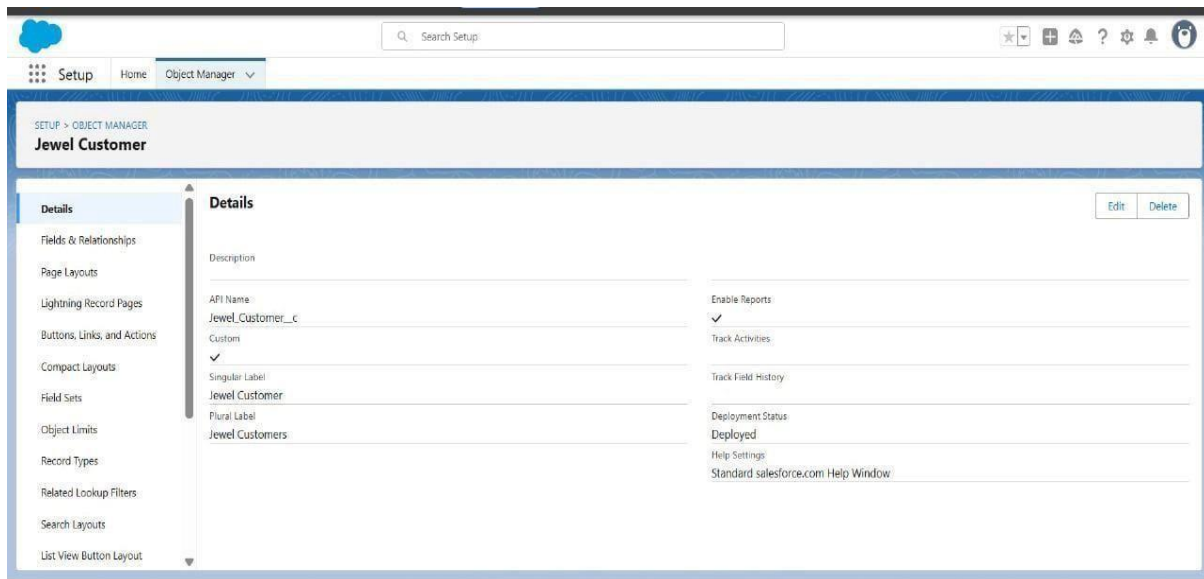
We create five main custom objects for

- Jewel Customer
- Item,
- Customer Order,
- Price,
- Billing.

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

1. Enter the label name: Jewel Customer
2. Plural label name: Jewel Customers
3. Enter Record Name Label and Format
 - * Record Name >> Customer name
 - * Data Type >> Text

1.Jewel Customer



Activity 2: Create Item Object

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

1. Enter the label name >> Item

2. Plural label name >> Items

3. Enter Record Name Label and Format

* Record Name >> Item Id

* Data Type >> Auto Number

* Display Format >> Item- {00}

* Starting Number >> 1

2. Click on Allow reports.

3. Allow search >> Save.

Note: Create 3 more objects with label names as Customer order, Price, Billing

2.Item

Setup

Home

Object Manager

Search Setup

SETUP > OBJECT MANAGER

Item

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Details

Description

API Name
Item__c

Custom
✓

Singular Label
Item

Plural Label
Items

Enable Reports
✓

Track Activities

Track Field History

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

EditDelete

3.Customer Order

Setup

Home

Object Manager

Search Setup

SETUP > OBJECT MANAGER

Customer Order

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Details

Description

API Name
Customer_Order__c

Custom
✓

Singular Label
Customer Order

Plural Label
Customer Orders

Enable Reports
✓

Track Activities

Track Field History

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

EditDelete

4.Price

Setup

Home

Object Manager

Search Setup

SETUP > OBJECT MANAGER

Price

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Details

Description

API Name

Price__c

Custom

✓

Singular Label

Price

Plural Label

Prices

Enable Reports

✓

Track Activities

Track Field History

Deployment Status

Deployed

Help Settings

Standard salesforce.com Help Window

Edit

Delete

5.Billing

Setup

Home

Object Manager

Search Setup

SETUP > OBJECT MANAGER

Billing

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Details

Description

API Name

Billing__c

Custom

✓

Singular Label

Billing

Plural Label

Billings

Enable Reports

✓

Track Activities

Track Field History

Deployment Status

Deployed

Help Settings

Standard salesforce.com Help Window

Edit

Delete

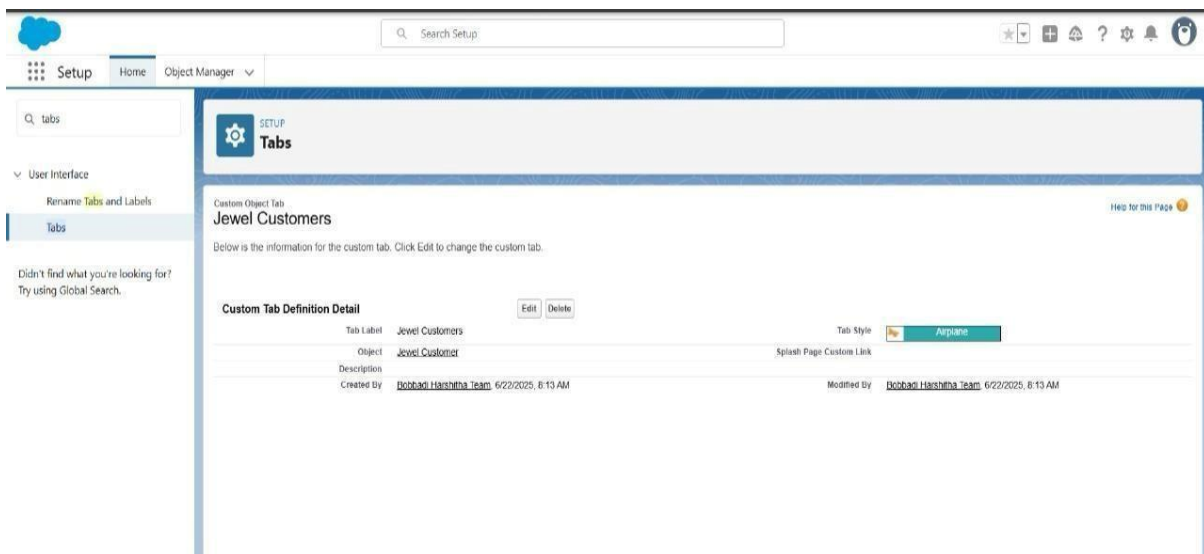
4.3 Creation of Tabs

We create five main custom tabs for Jewel Customer, Item, Customer Order, Price, Billing.

Activity 1: Creating a Custom Tab

1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab).
2. Select Object (Jewel Customer) >> Select any tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) keep it as default >> Save.

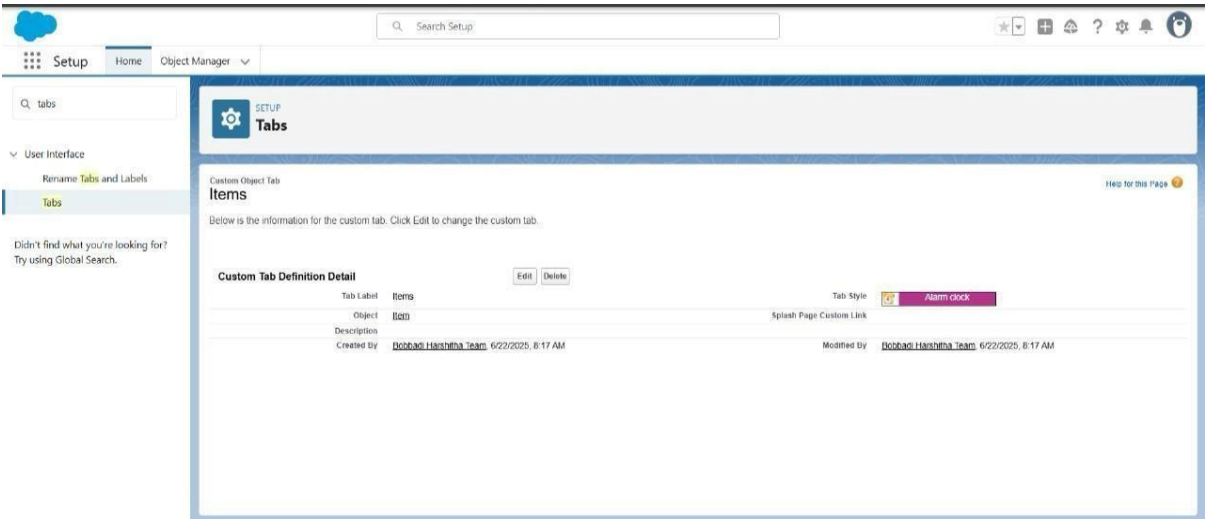
Jewel Customer



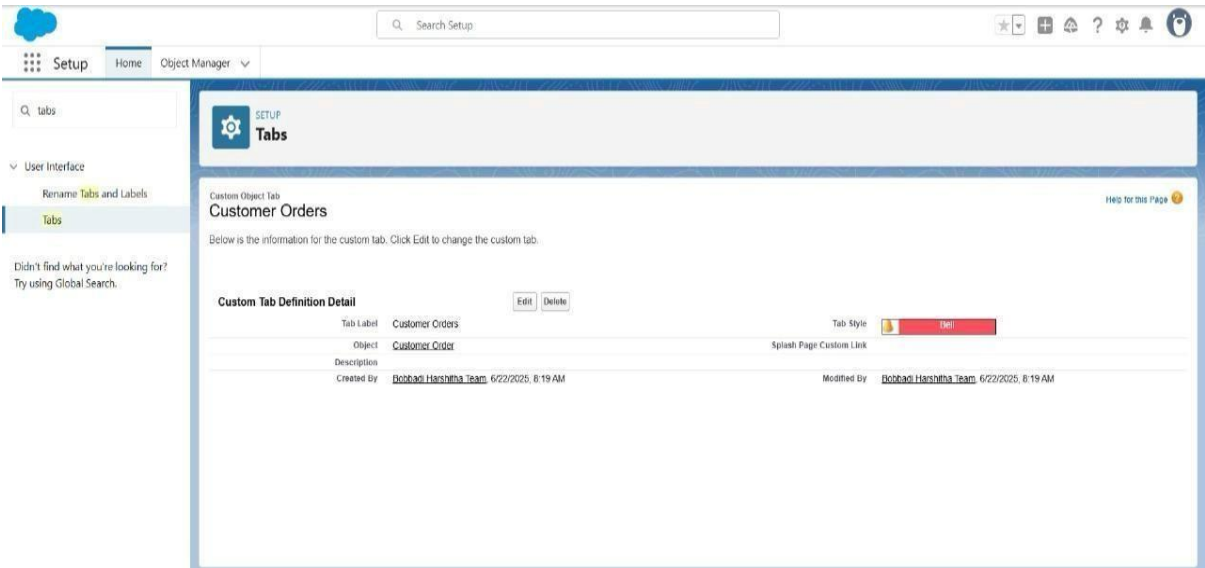
Activity 2: To Create a Tab (Item, Customer Order, Price, Billing)

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.

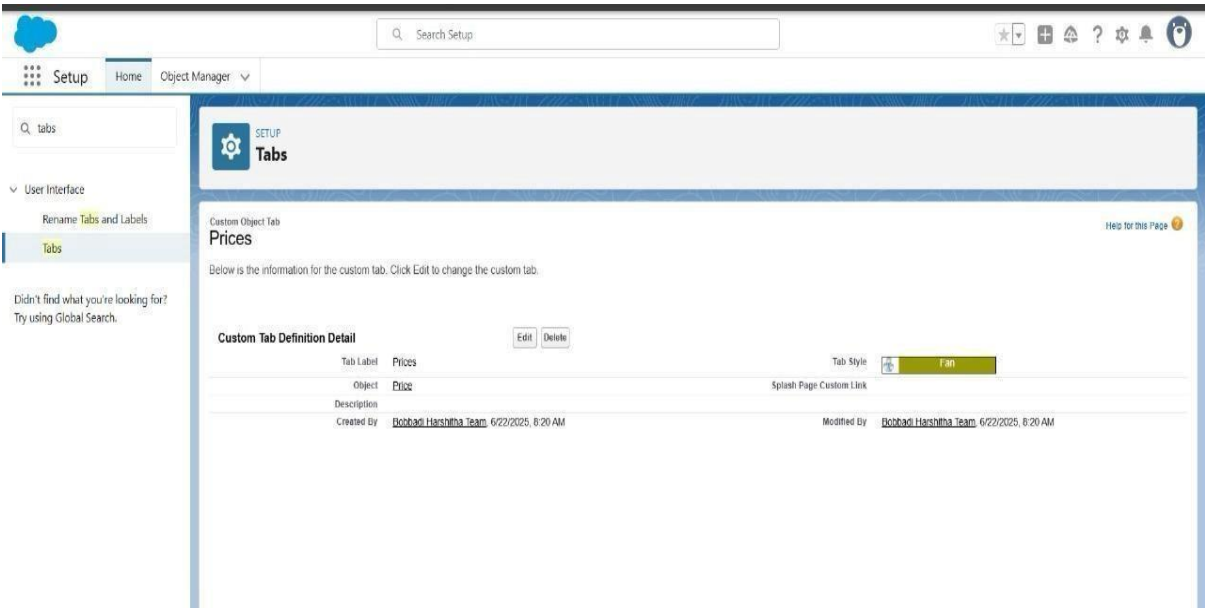
2.Item



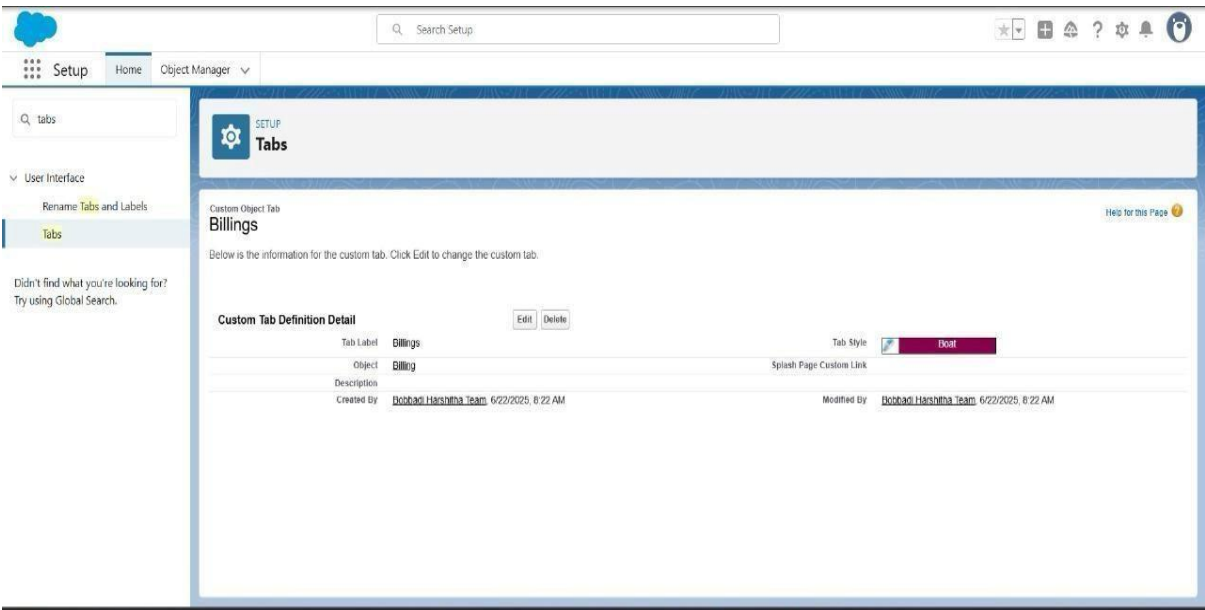
3.Customer Order



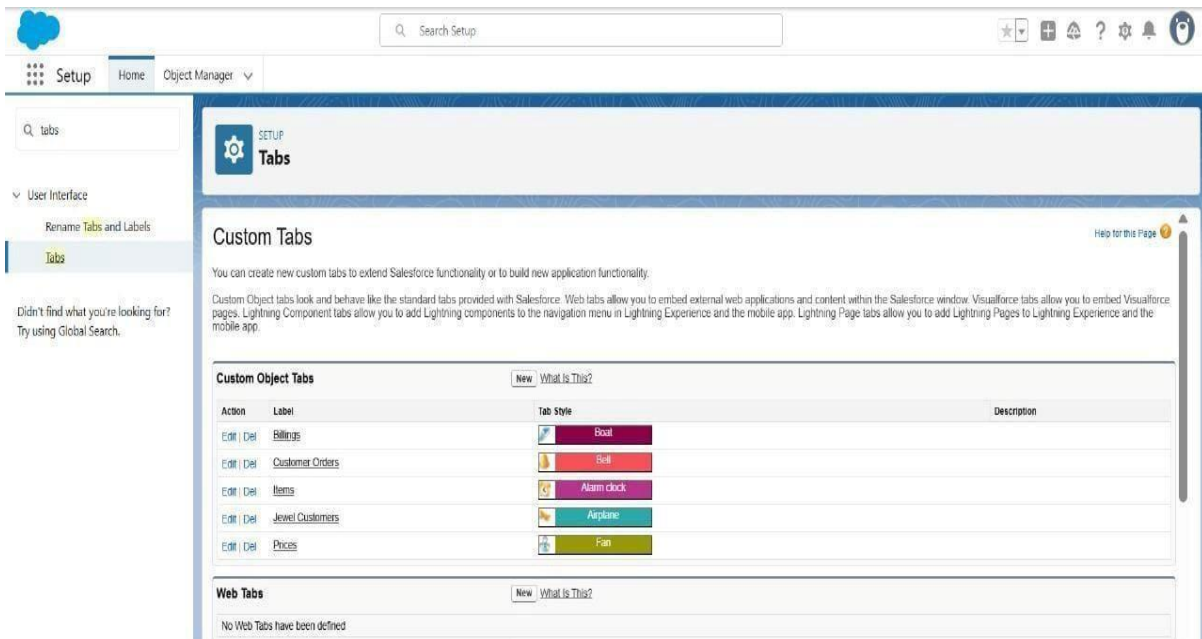
4.Price



5.Billing



So we get the required all custom tabs as below



4.4 Creation of Lightning App

Activity 1: Create A Lightning App

1. Go to setup page >> search “app manager” in quick find >> select “app manager” >>

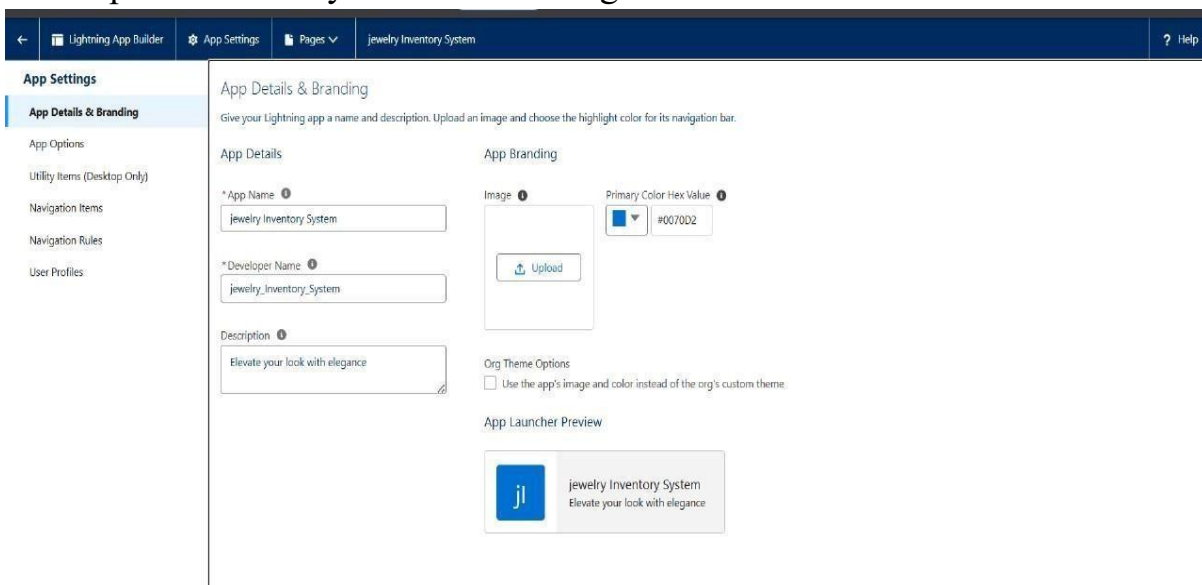
2. Click on New lightning App.

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

App Name: Jewellery Inventory System.

Developer Name: This will auto populated

Description: Elevate your look with elegance



New Lightning App

App Options

Navigation and Form Factor

***Navigation Style**

☐ Standard navigation

☒ Console navigation

***Supported Form Factors**

☒ Desktop and phone

☐ Desktop

☐ Phone

Setup and Personalization

Setup Experience

☒ Setup (full set of Setup options)

☐ Service Setup

☐ Data Cloud Setup

App Personalization Settings

☐ Disable end user personalization of nav items in this app

☐ Clear workspace tabs for each new console session

☐ Use Omni-Channel sidebar

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12	Lightning Usage App	LightningInstrumentation	View Adoption and Usage Metrics for Lightning Experience	6/16/2025, 1:31 AM	Lightning	✓
13	Marketing CRM Classic	Marketing	Track sales and marketing efforts with CRM objects.	6/16/2025, 1:31 AM	Classic	✓
14	My Service Journey	MSIAApp	Discover new customer service capabilities.	6/16/2025, 1:31 AM	Lightning	✓

Navigation Items

New Lightning App

Navigation Items

dash

- Jewel Customers
- Items
- Customer Orders
- Prices
- Billings
- Reports
- Dashboards

[Back](#) [Next](#)

12	Lightning Usage App	LightningInstrumentation	View Adoption and Usage Metrics for Lightning Experience	6/16/2025, 1:31 AM	Lightning	✓
13	Marketing CRM Classic	Marketing	Track sales and marketing efforts with CRM objects.	6/16/2025, 1:31 AM	Classic	✓
14	My Service Journey	MSIAApp	Discover new customer service capabilities.	6/16/2025, 1:31 AM	Lightning	✓

4.5 Creation of Fields

1. Creating lookup relationship

Activity 1: Creating Lookup 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 & 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 >> Next >> Next >> Save.

The screenshot shows the Salesforce Setup interface for the 'Customer Order' object. The left sidebar lists various setup options, with 'Fields & Relationships' selected. The main content area is titled 'New Relationship' and shows 'Step 3. Enter the label and name for the lookup field'. The form includes fields for 'Field Label' (set to 'Customer'), 'Field Name' (set to 'Customer'), 'Description', and 'Help Text'. Below these, the 'Child Relationship Name' is set to 'Customer_Orders'. There are three radio button options for 'What to do if the lookup record is deleted?': 'Always require a value in this field in order to save a record' (selected), 'Clear the value of this field. You can't choose this option if you make this field required.', and 'Don't allow deletion of the lookup record that's part of a lookup relationship'. There is also a checkbox for 'Add this field to existing custom report types that contain this entity'.

The screenshot shows the Salesforce Setup interface for the 'Customer Order' object, specifically 'Step 6. Add custom related lists'. The form displays a table with the following information:

Field Label	Customer
Data Type	Lookup
Field Name	Customer
Description	

Below the table, there is a section for 'Specify the title that the related list will have in all of the layouts associated with the parent.' The 'Related List Label' is set to 'Customer Orders'. A message states: 'Select the page layouts that should include this field. The field will be added as the last field in the first 2-column section of these page layouts. The field will not appear on any pages if you do not select a layout. To change the location of this field on the page, you will need to customize the page layout.'

There is a table for 'Add Related List' with the following entries:

Add Related List	Page Layout Name
<input checked="" type="checkbox"/>	Jewel Customer Layout

There is also a checkbox for 'Append related list to users' existing personal customizations' which is checked. The bottom right corner has buttons for 'Previous', 'Save & New', 'Save', and 'Cancel'.

2. Creating a Master-Detail Relationship

Creating Master-Detail Relationship between Item & Customer Order Object.

Activity 2: Creating a Master-Detail Relationship

1. Go to the setup page >> click on object manager >> type object name (Customer Order) in the quick find bar >>
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 >> Next >> Next >> Save.

The screenshot shows the Salesforce Setup interface for creating a new relationship for the Customer Order object. The left sidebar lists various setup options, with 'Fields & Relationships' selected. The main content area is titled 'New Relationship' and shows 'Step 5 of 6: Add reference field to Page Layouts'. A table lists the relationship details: Field Label (Item), Data Type (Master-Detail), Field Name (Item), and Description. Below the table, a message states: 'These are the page layouts that will include this field. Because this is a Master-Detail relationship, the field is required.' A table lists the page layouts: 'Add Field' (checked) and 'Page Layout Name' (Customer Order Layout). Navigation buttons 'Previous', 'Next', and 'Cancel' are visible.

The screenshot shows the Salesforce Setup interface for creating a new relationship for the Customer Order object. The left sidebar lists various setup options, with 'Fields & Relationships' selected. The main content area is titled 'New Relationship' and shows 'Step 6 of 6: Add custom related lists'. A table lists the relationship details: Field Label (Item), Data Type (Master-Detail), Field Name (Item), and Description. Below the table, a message states: 'Specify the title that the related list will have in all of the layouts associated with the parent.' A text input field for 'Related List Label' contains 'Customer Orders'. Another message states: 'These are the page layouts that will include this field. Because this is a Master-Detail relationship, the field is required.' A table lists the page layouts: 'Add Related List' (checked) and 'Page Layout Name' (Item Layout). A checkbox 'Append related list to users' existing personal customizations' is checked. Navigation buttons 'Previous', 'Save & New', 'Save', and 'Cancel' are visible.

3. Creating Text Field 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. Now click on “Fields & Relationships” >> New
3. Select Data type as “Text”.
4. Click on Next

The screenshot shows the 'New Custom Field' setup page for the 'Jewel Customer' object. The page is titled 'Step 2. Enter the details' and is part of a 4-step process. The left sidebar shows the 'Fields & Relationships' section. The main content area contains the following fields and options:

- Field Label:** City
- Length:** 20
- Field Name:** City
- Description:** (empty text box)
- Help Text:** (empty text box)
- Required:** ☐ Always require a value in this field in order to save a record
- Unique:** ☐ Do not allow duplicate values
 - ☐ Treat "ABC" and "abc" as duplicate values (case insensitive)
 - ☐ Treat "ABC" and "abc" as different values (case sensitive)
- External ID:** ☐ Set this field as the unique record identifier from an external system
- Auto add to custom report type:** ☒ Add this field to existing custom report types that contain this entity

The screenshot shows the 'New Custom Field' setup page for the 'Jewel Customer' object, Step 4: Add to page layouts. The page is titled 'Step 4. Add to page layouts' and is part of a 4-step process. The left sidebar shows the 'Fields & Relationships' section. The main content area contains the following information and options:

Field Label	City
Data Type	Text
Field Name	City
Description	

Select the page layouts that should include this field. The field will be added as the last field in the first 2-column section of these page layouts. The field will not appear on any pages if you do not select a layout.

To change the location of this field on the page, you will need to customize the page layout.

- ☒ Add Field
- ☒ Page Layout Name
- Jewel Customer Layout

When finished, click Save & New to create more custom fields, or click Save if you are done.

4. Creating the Phone field in object Jewel Customer

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

The screenshot shows the Salesforce Setup interface. The left sidebar is expanded to 'Fields & Relationships'. The main content area is titled 'New Custom Field' and shows 'Step 4. Add to page layouts'. The field details are as follows:

Field Label	Phone
Data Type	Phone
Field Name	Phone
Description	

Below the table, there is a section for selecting page layouts. The 'Add Field' checkbox is checked, and the 'Page Layout Name' is 'Jewel Customer Layout'. The 'Save & New' button is visible at the bottom right.

5. Creating the Email field in object Jewel Customer

The screenshot shows the Salesforce Setup interface for creating a new custom field. The left sidebar is expanded to 'Fields & Relationships'. The main content area is titled 'New Custom Field' and shows 'Step 4. Add to page layouts'. The field details are as follows:

Field Label	Email
Data Type <td>Email</td>	Email
Field Name <td>Email</td>	Email
Description <td></td>	

Below the table, there is a section for selecting page layouts. The 'Add Field' checkbox is checked, and the 'Page Layout Name' is 'Jewel Customer Layout'. The 'Save & New' button is visible at the bottom right.

6. Creating the number field in Item object

Setup > OBJECT MANAGER
Item

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

Item
New Custom Field
Help for this Page

Step 4. Add to page layouts Step 4 of 4

Previous Save & New Save Cancel

Field Label	Purity
Data Type	Number
Field Name	Purity
Description	

Select the page layouts that should include this field. The field will be added as the last field in the first 2-column section of these page layouts. The field will not appear on any pages if you do not select a layout.
To change the location of this field on the page, you will need to customize the page layout.

☒ Add Field Page Layout Name

☒ Item Layout

When finished, click Save & New to create more custom fields, or click Save if you are done.

Previous Save & New Save Cancel

7. Creating Picklist Field in Item Object

Setup > OBJECT MANAGER
Item

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

Item
New Custom Field
Help for this Page

Step 4. Add to page layouts Step 4 of 4

Previous Save & New Save Cancel

Field Label	Item Type
Data Type	Picklist
Field Name	Item_Type
Description	

Select the page layouts that should include this field. The field will be added as the last field in the first 2-column section of these page layouts. The field will not appear on any pages if you do not select a layout.
To change the location of this field on the page, you will need to customize the page layout.

☒ Add Field Page Layout Name

☒ Item Layout

When finished, click Save & New to create more custom fields, or click Save if you are done.

Previous Save & New Save Cancel

8. Creating Currency Field in Price Object

The screenshot shows the Salesforce Setup interface for creating a new custom field for the Price object. The page is titled "New Custom Field" and is at "Step 3 of 4: Establish field-level security". The field details are as follows:

Field Label	Gold Price
Data Type	Currency
Field Name	Gold_Price
Description	

Below the field details, there is a section for "Field-Level Security for Profile". It includes a table with checkboxes for "Visible" and "Read Only" for various profiles.

Field-Level Security for Profile	Visible	Read Only
Analytics Cloud Integration User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Analytics Cloud Security User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Anypoint Integration	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Contract Manager	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cross Org Data Proxy User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custom: Marketing Profile	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custom: Sales Profile	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custom: Support Profile	<input checked="" type="checkbox"/>	<input type="checkbox"/>

9. Creating Formula Field(Cross Object) in Item Object

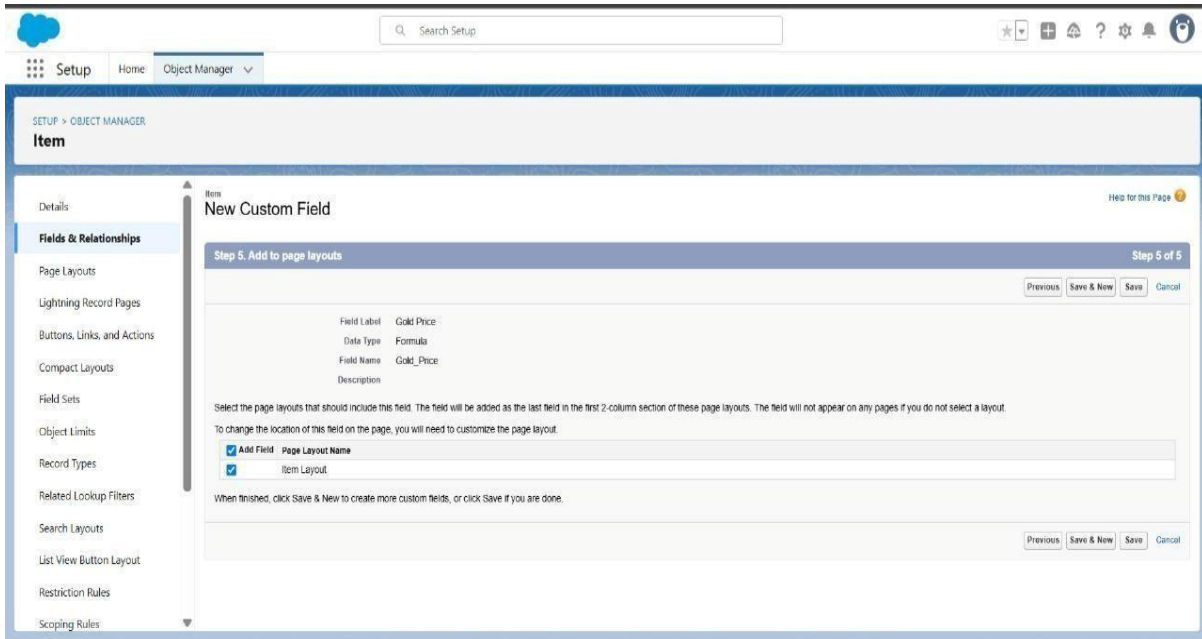
The screenshot shows the Salesforce Setup interface for creating a new custom formula field for the Item object. The page is titled "New Custom Field" and is at "Step 2 of 4: Enter formula". The field details are as follows:

Field Label	Gold Price (Currency)
Data Type	Text
Field Name	Gold_Price
Description	

Below the field details, there is a section for "Enter your formula". The formula is entered as:

$$\text{Gold Price (Currency)} = \text{Amount} - \text{Cost} / 10$$

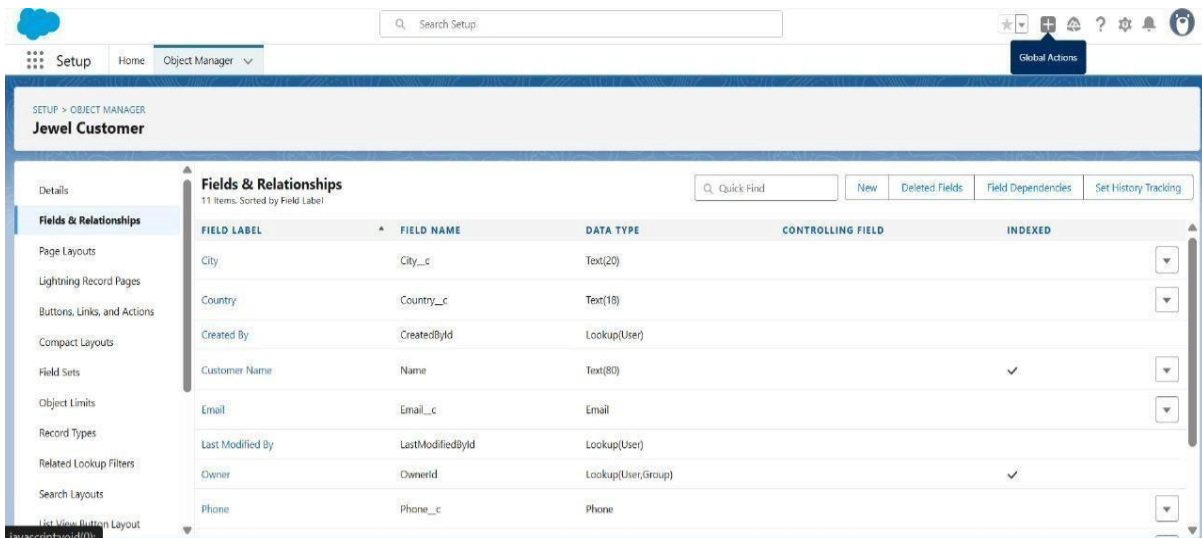
On the right side, there is a "Functions" panel with a list of functions: ABS, ACOS, ADDMONTHS, AND, ASCII, ASIN. The "Quick Tips" panel on the right includes links for "Getting Started" and "Operators & Functions".



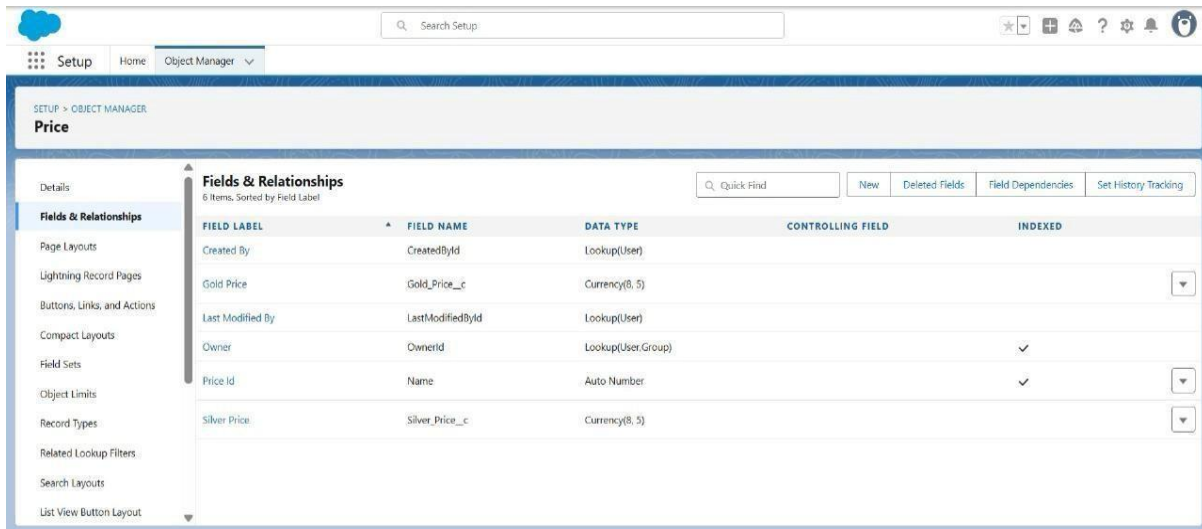
10. Creating Remaining Fields in Objects

Creating remaining fields in the objects

1. Jewel Customer : State, Street, Country, Zip/Postal code



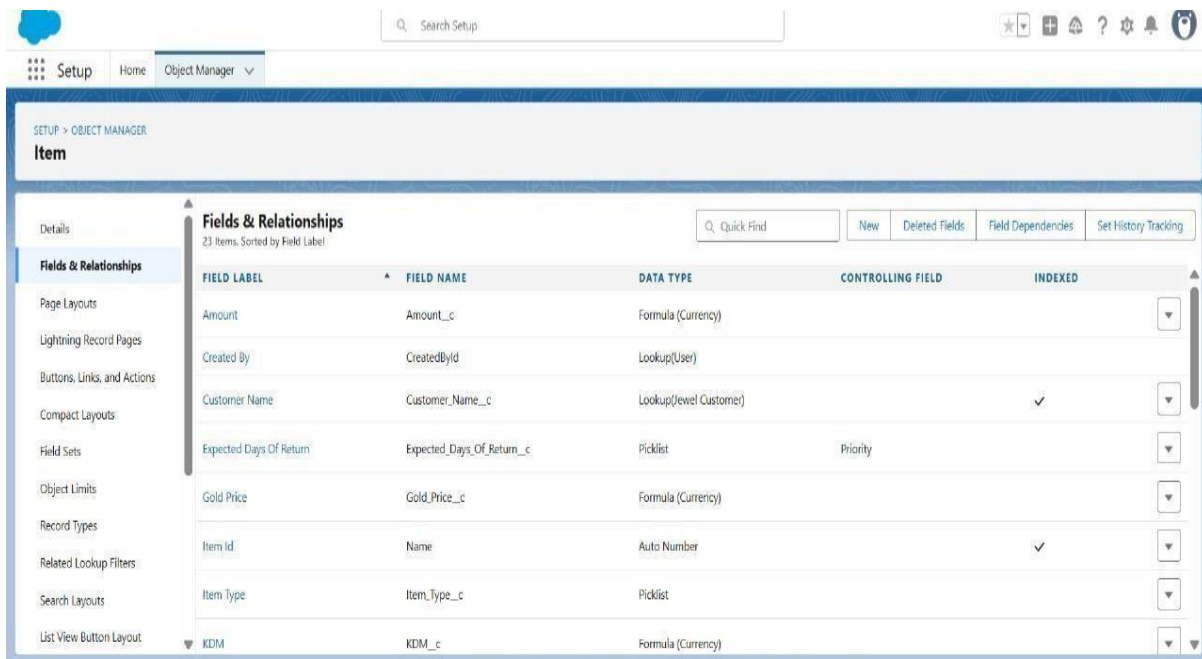
2.Price : Silver Price



The screenshot shows the Salesforce Setup interface for the 'Price' object. The 'Fields & Relationships' tab is selected, displaying a table of 6 fields. The table columns are Field Label, Field Name, Data Type, Controlling Field, and Indexed. The fields listed are Created By, Gold Price, Last Modified By, Owner, Price Id, and Silver Price.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Gold Price	Gold_Price__c	Currency(8, 5)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User.Group)		✓
Price Id	Name	Auto Number		✓
Silver Price	Silver_Price__c	Currency(8, 5)		

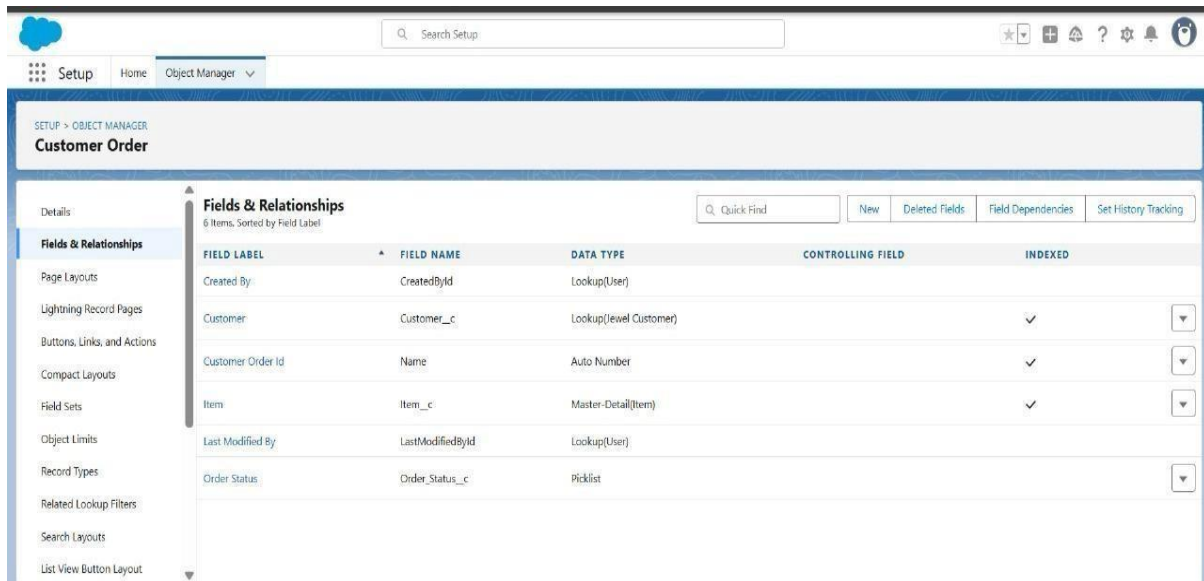
3.Item : Field Label-Customer Name, Ornament, Weight, Stone Weight, Percentage,Stone/Other Price, Expected Days of Return, Priority, Silver Price, Purity Gold Price, Total weights, Amount, KDM, Making Charges.



The screenshot shows the Salesforce Setup interface for the 'Item' object. The 'Fields & Relationships' tab is selected, displaying a table of 23 fields. The table columns are Field Label, Field Name, Data Type, Controlling Field, and Indexed. The fields listed are Amount, Created By, Customer Name, Expected Days Of Return, Gold Price, Item Id, Item Type, and KDM.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount	Amount__c	Formula (Currency)		
Created By	CreatedById	Lookup(User)		
Customer Name	Customer_Name__c	Lookup(level Customer)		✓
Expected Days Of Return	Expected_Days_Of_Return__c	Picklist	Priority	
Gold Price	Gold_Price__c	Formula (Currency)		
Item Id	Name	Auto Number		✓
Item Type	Item_Type__c	Picklist		
KDM	KDM__c	Formula (Currency)		

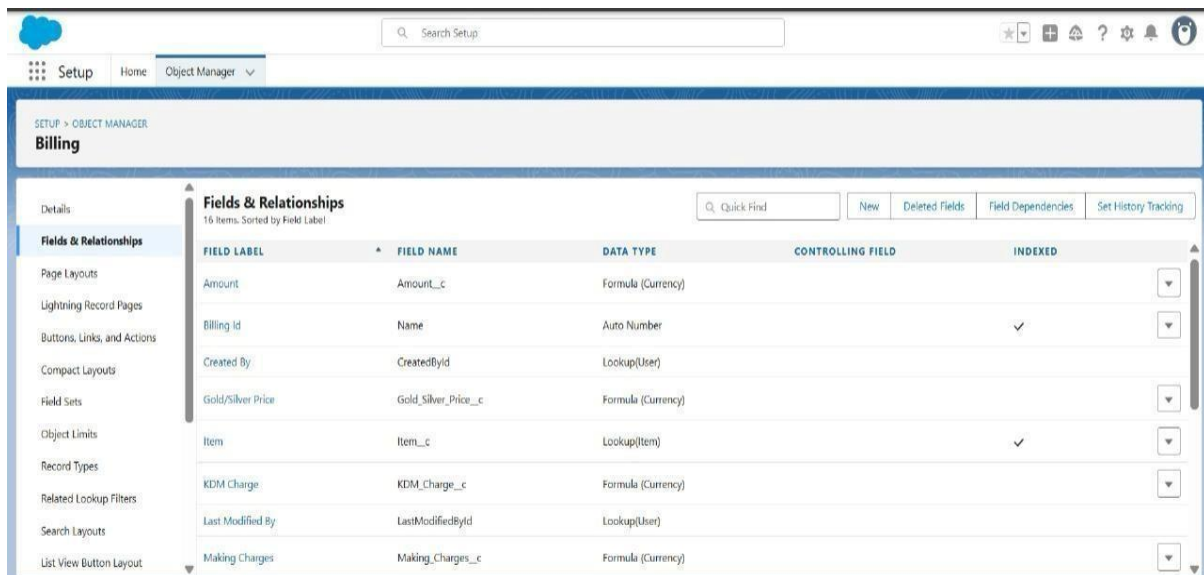
4.Customer Order: Order Status



The screenshot shows the Salesforce Setup interface for the 'Customer Order' object. The 'Fields & Relationships' tab is selected, displaying a list of 6 fields. The left sidebar contains navigation links for Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, and List View Button Layout. The top navigation bar includes Setup, Home, and Object Manager. The top right corner has a search bar and various utility icons.

FIELD LABEL	* FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Customer	Customer__c	Lookup(Jewel Customer)		✓
Customer Order Id	Name	Auto Number		✓
Item	Item__c	Master-Detail(Item)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Order Status	Order_Status__c	Picklist		

5.Billing: FieldLabelItem,Ornament,Stone,Weight,Weight,Amount, Gold/Silver Price, KDM Charge, Making Charges,Stone/Other Price, Total Amount.

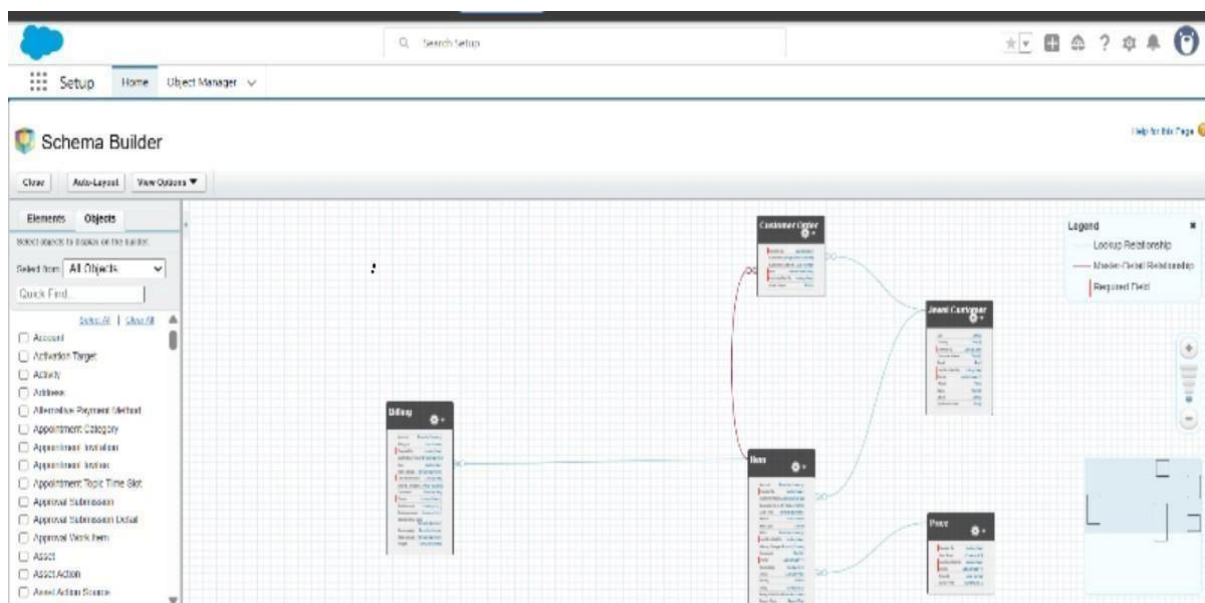


The screenshot shows the Salesforce Setup interface for the 'Billing' object. The 'Fields & Relationships' tab is selected, displaying a list of 16 fields. The left sidebar contains navigation links for Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, and List View Button Layout. The top navigation bar includes Setup, Home, and Object Manager. The top right corner has a search bar and various utility icons.

FIELD LABEL	* FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount	Amount__c	Formula (Currency)		
Billing Id	Name	Auto Number		✓
Created By	CreatedById	Lookup(User)		
Gold/Silver Price	Gold_Silver_Price__c	Formula (Currency)		
Item	Item__c	Lookup(Item)		✓
KDM Charge	KDM_Charge__c	Formula (Currency)		
Last Modified By	LastModifiedById	Lookup(User)		
Making Charges	Making_Charges__c	Formula (Currency)		

11. Creation of 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.



12. Creation of Field Dependencies

1. Go to setup >> click on Object Manager >> type object name(Item) in quick find bar >> click on the object.
2. Click on Fields & Relationships and click on the Priority field.
3. Search for Field Dependencies and click on New.
4. Select Controlling Field as “Priority” and Depending field as “Expected Days of Return” >> Continue.

13.Creation of Validation Rules

Cloud logo

Search Setup

Setup Home Object Manager

Setup > OBJECT MANAGER

Jewel Customer

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Jewel Customer Validation Rule

Back to Jewel Customer

Validation Rule Detail

Rule NamePostal_Code

Error Condition Formula

Error Message

Description

Created By

Bobbari Harshitha Team 6/23/2025, 6:58 AM

Modified By

Bobbari Harshitha Team 6/23/2025, 6:58 AM

Postal_Code

AND(
OR(
LEN(Zip_Postal_code__c) <= 6,
NOT(REGEX(Zip_Postal_code__c, "[0-9]{5}"))
),
NOT(ISBLANK(Zip_Postal_code__c))
)
)

Must contain 6 digits

Zip/Postal code

Active

✓

Edit

Close

Cloud logo

Search Setup

Setup Home Object Manager

Setup > OBJECT MANAGER

Item

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Item Field Dependencies

< Back to Custom Object: Item

This page allows you to define dependencies between fields (e.g., dependent picklists).

Field Dependencies

Action

Controlling Field

Dependent Field

Modified By

Priority

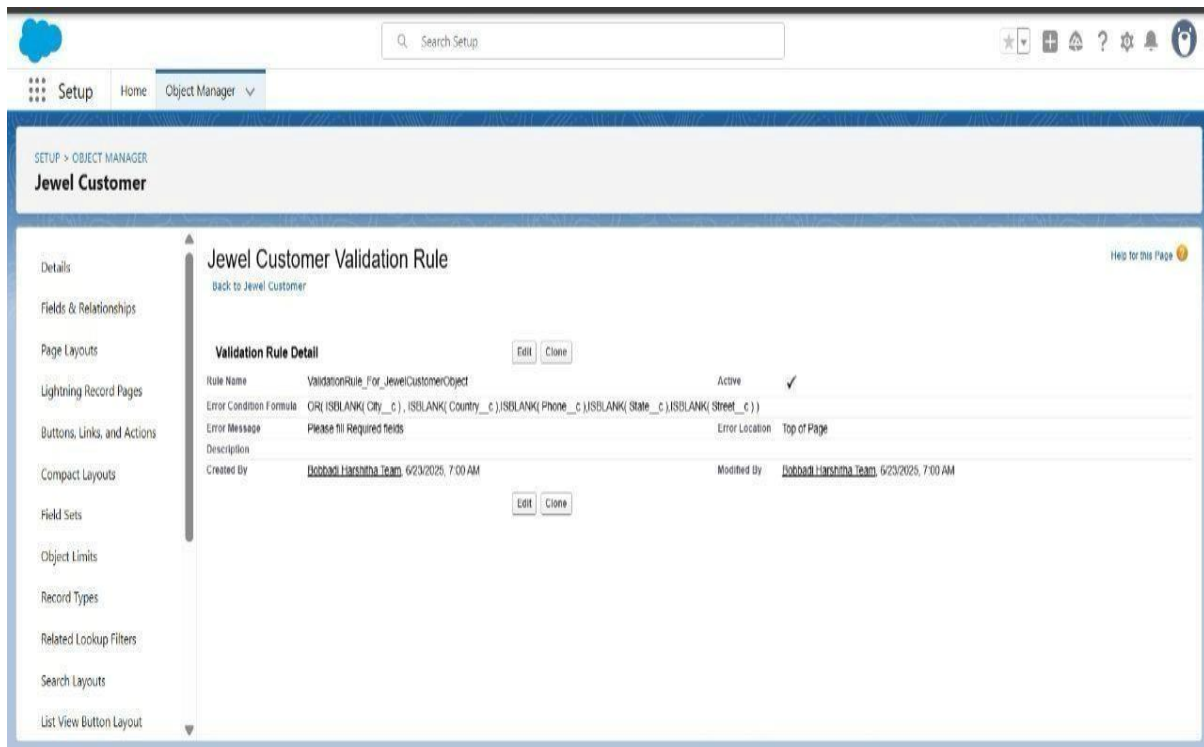
Expected Days Of Return

Bobbari Harshitha Team 6/23/2025, 6:53 AM

Edit

Del

New



4.6 Creation of Profiles

We create the goldsmith profile and the worker profile

1. Go to setup >> type profiles in quick find box >> click on profiles ? clone the desired profile (System Administrator) >> enter profile name (Gold Smith) >> Save.
2. While still on the profile page, then click Edit.
3. Scroll down to Custom Object Permissions and Give access permissions for Jewel Customer, Item, Customer Order, Price, Billings.

4. Scroll down and Click on Save.

Profiles

Profile: **Worker Profile**

Users with this profile have the permissions and page layouts listed below. Administrators can change a user's profile by editing that user's personal information.

If your organization uses Record Types, use the Edit links in the Record Type Settings section below to make one or more record types available to users with this profile.

Login IP Ranges (0) | Enabled Async Console Access (0) | Enabled Virtual Force Page Access (0) | Enabled External Data Source Access (0) | Enabled Named Credential Access (0) | Enabled External Credential (Personal) Access (0) | Enabled Custom Metadata Type Access (0) | Enabled Custom Settings Definition Access (0) | Enabled Flow Access (0) | Enabled Service Presence Status Access (0) | Enabled Custom Permissions (0)

Profile Detail [Edit] [Clone] [Delete] [View Users]

Name	Worker Profile	Custom Profile	✓
User License	Salesforce Platform		
Description			
Created By	Robbadi Harshitha Team	Modified By	Robbadi Harshitha Team
Created Date	6/23/2025, 7:31 AM	Modified Date	6/24/2025, 10:42 AM

Page Layouts

Standard Object Layouts

Global	Global Layout [View Assignment]	Lead	Lead Layout [View Assignment]
Email Application	Not Assigned [View Assignment]	Location	Location Layout [View Assignment]
Home Page Layout	Home Page Default [View Assignment]	Location Group	Location Group Layout [View Assignment]
Account	Account Layout [View Assignment]	Location Group Assignment	Location Group Assignment Layout [View Assignment]

4.7 Creation of Roles

Roles

Collapsible All Expand All

Ideal Institute of Technology

- 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**
 - SVP, Customer Service & Support** [Edit] [Del] [Assign]
 - Add Role**
 - Customer Support, International** [Edit] [Del] [Assign]
 - Add Role**
 - Customer Support, North America** [Edit] [Del] [Assign]
 - Add Role**

4.8 Creation of Users

Users

All Users

On this page you can create, view, and manage users.

To get more licenses, use the Your Account app. Let's Go

View: [All Users] [Edit] [Create New User]

[New User] [Reset Password(s)] [Add Multiple Users]

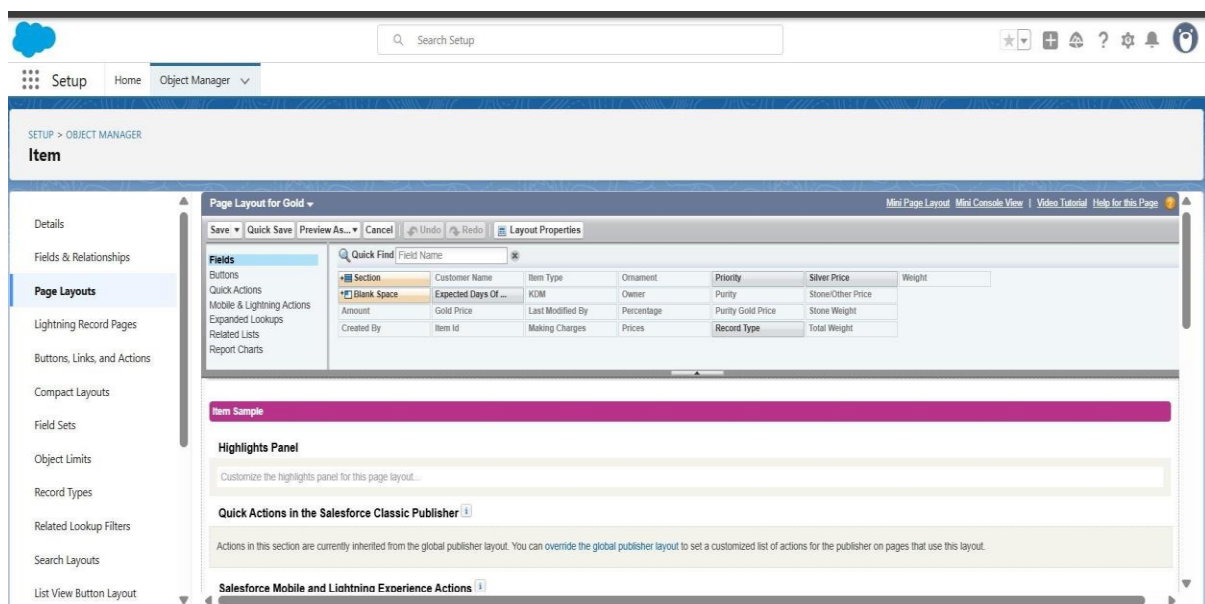
Action	Full Name	Alias	Username	Role	Active	Profile
[Edit]	Chatter Expert	Chatter	chatty.0000000000@my.salesforce.com		✓	Chatter Free User
[Edit]	EPIC OrgTeam	EPIC	epic.41b2d37a152@orgteam.com		✓	System Administrator
[Edit]	Michaelson, Kai	Michael	mikael@gmail.com	Worker	✓	Worker Profile
[Edit]	Michaelson, Niklas	Niklas	niklas@gmail.com	Gold Smith	✓	Gold Smith
[Edit]	Team, Robbadi Harshitha	bob	robbadiharshitha1574@orgteam.com		✓	System Administrator
[Edit]	User, Integration	integ	integration@0000000000@my.salesforce.com		✓	Analytics Cloud Integration User
[Edit]	User, Security	sec	insightssecurity@0000000000@my.salesforce.com		✓	Analytics Cloud Security User

[New User] [Reset Password(s)] [Add Multiple Users]

4.9 Creation of Page Layouts

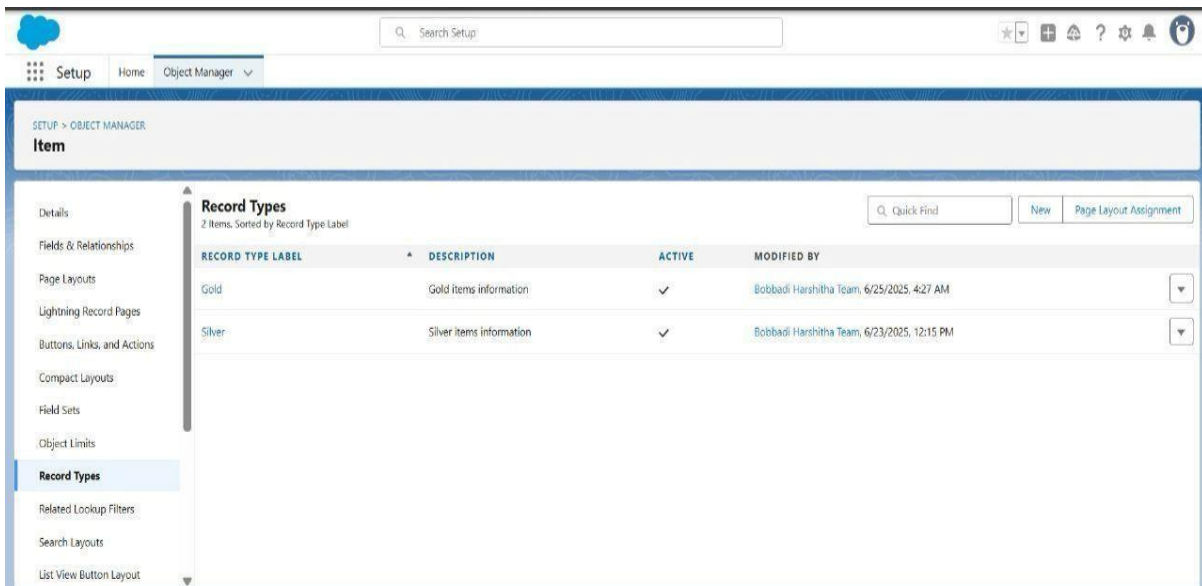
We create the page layouts for gold and silver items

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



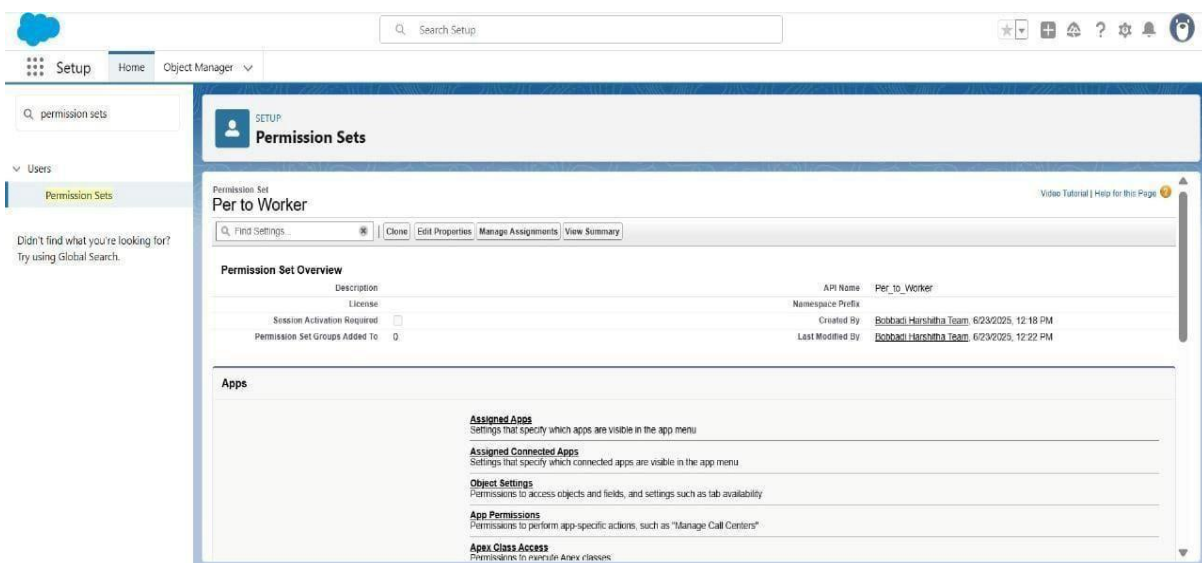
4.10 Creation of Record Types

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”.



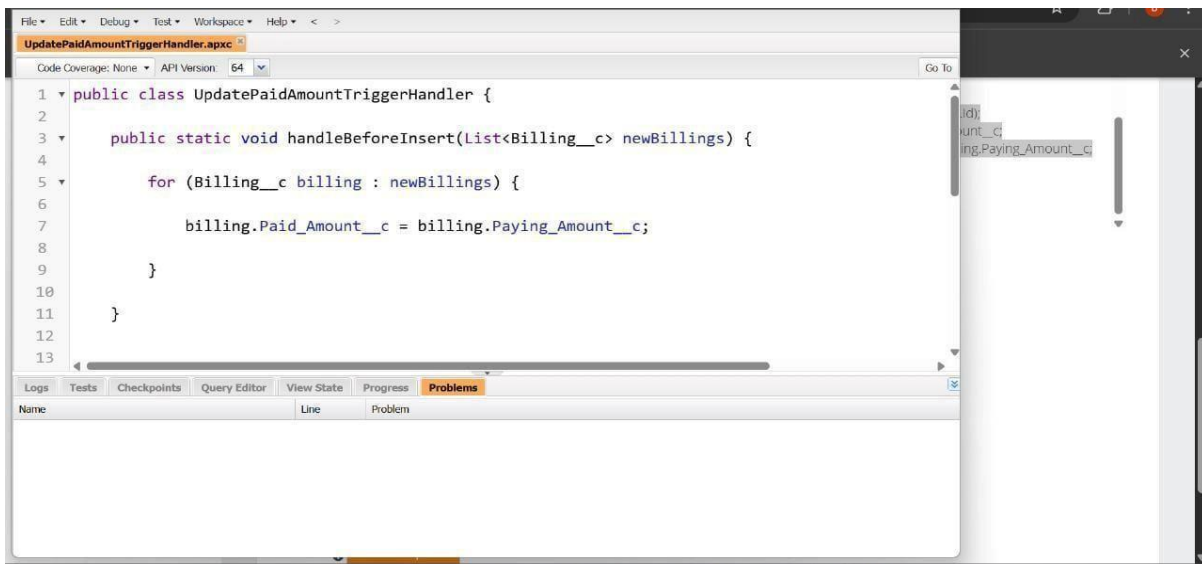
4.11 Creation of Permission Sets

1. Go to setup >> type “permission sets” in quick search >> select permission sets >> New.
2. Enter the label name as “Per to Worker”, API will be auto populated >> save.
3. Click on Save.
4. After saving the permission click on the Manage assignment
5. Now click on the Add Assignment.



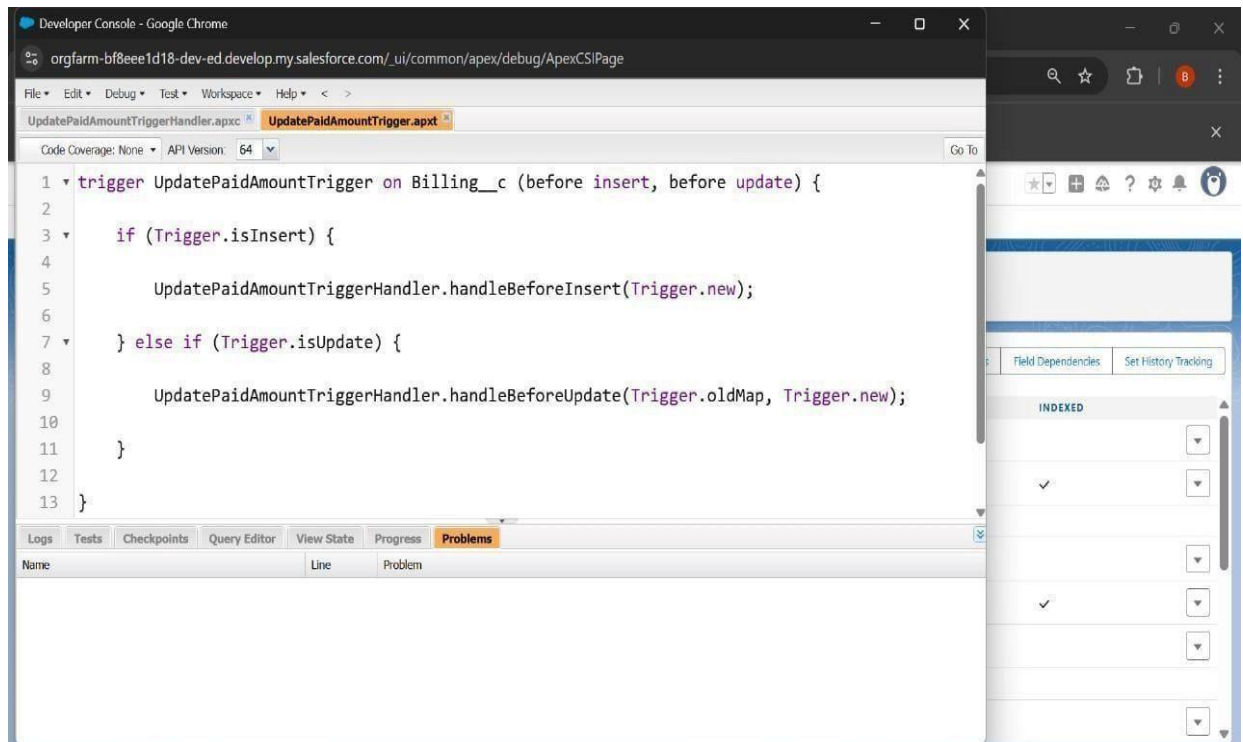
4.12 Creation of Trigger

- * 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.



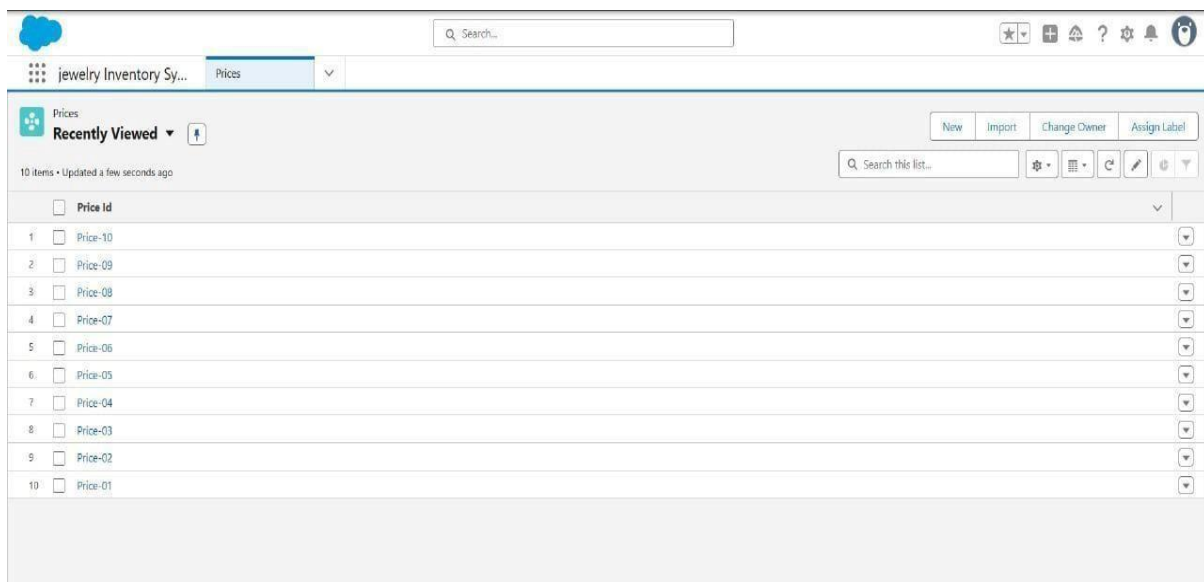
CODE:

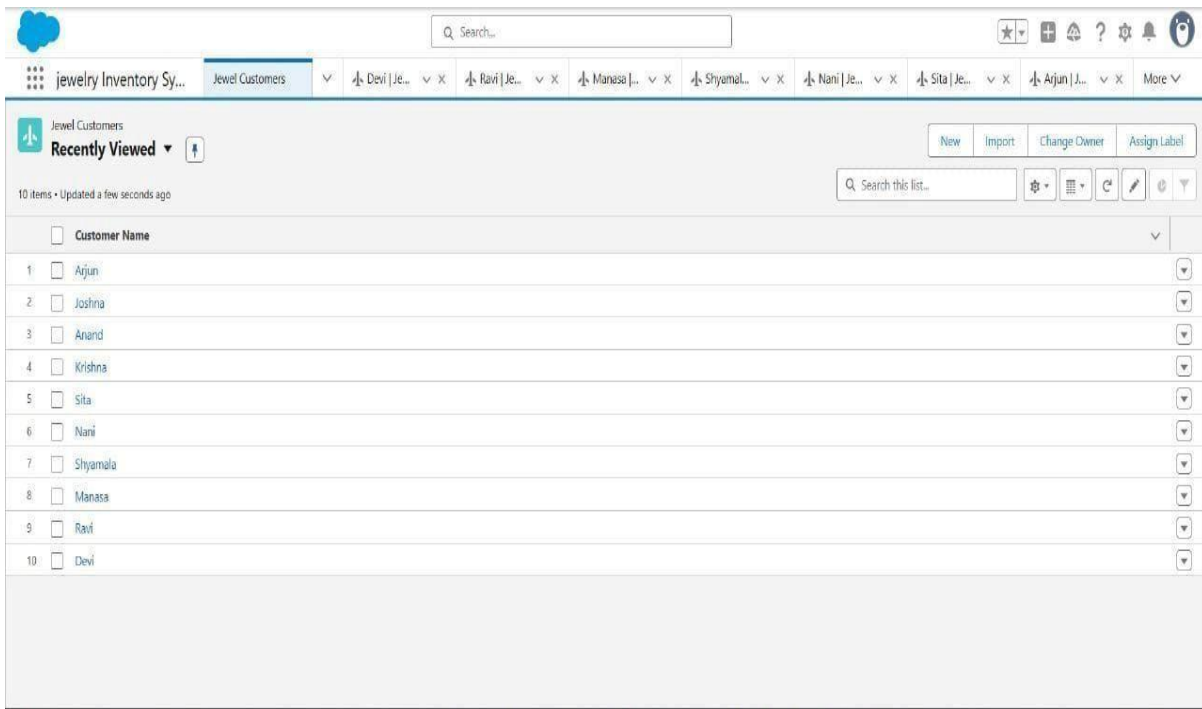
```
trigger UpdatePaidAmountTrigger on Billing__c (before insert, before update) {  
    if (Trigger.isInsert) {  
        UpdatePaidAmountTriggerHandler.handleBeforeInsert(Trigger.new);  
    } else if (Trigger.isUpdate) {  
        UpdatePaidAmountTriggerHandler.handleBeforeUpdate(Trigger.oldMap, 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



4.13 Creation of User Adoption

We create item, price, customer orders, jewel customers and billing





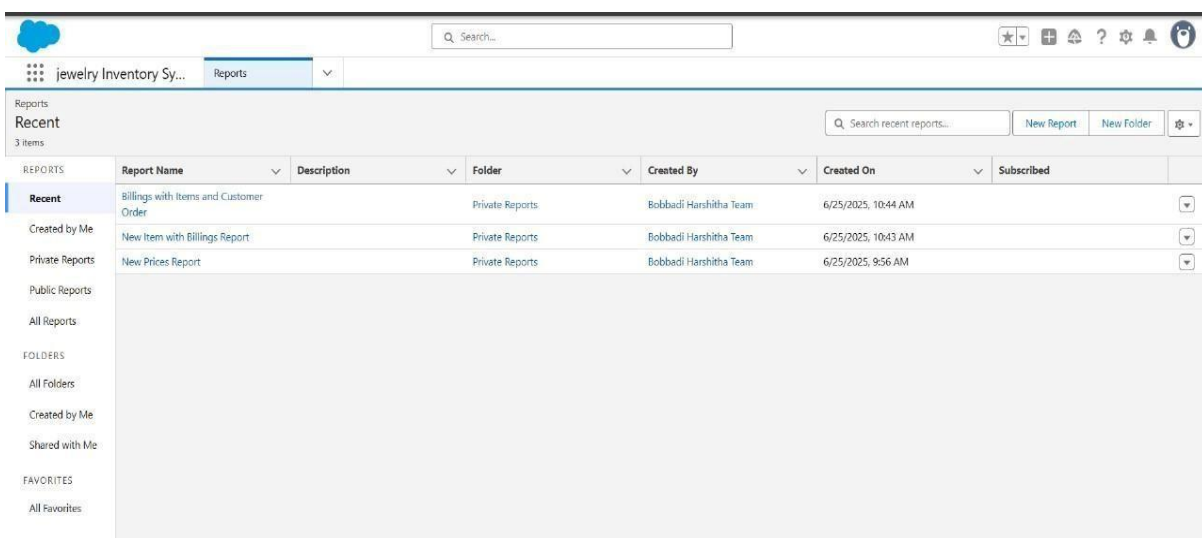
4.14 Creation of Reports

Go to the app >> click on the reports tab

2. Click New Report.

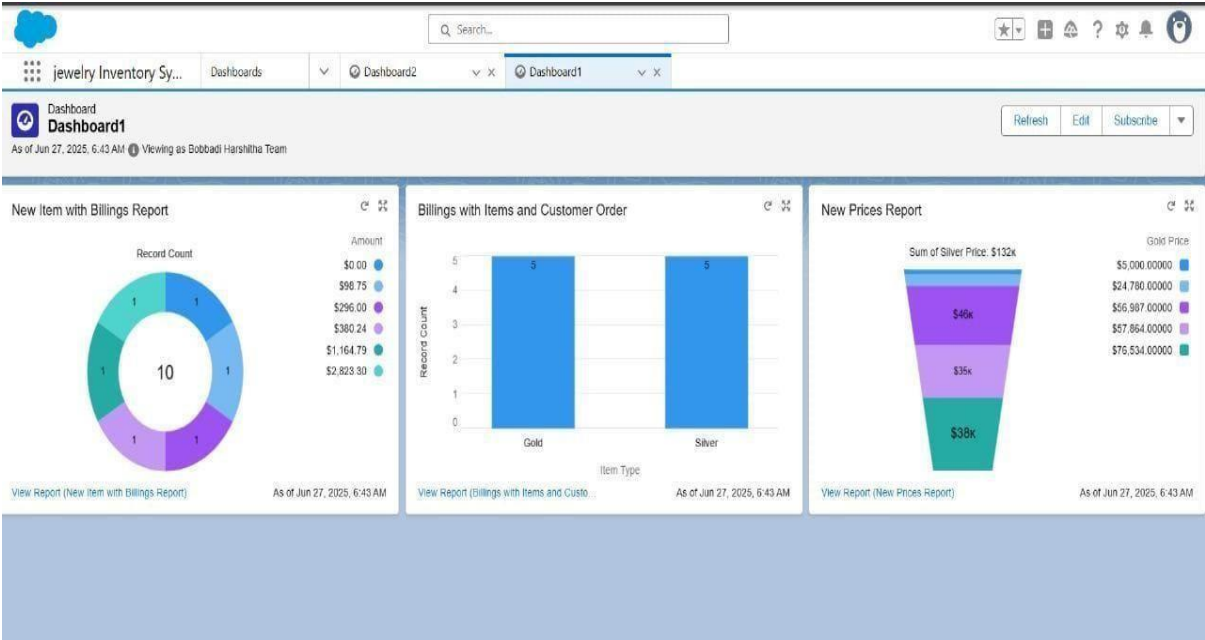
3. Select report type from category or from report type panel or from search panel >> Click on start report.

4. Customise your report5. Save or run it.

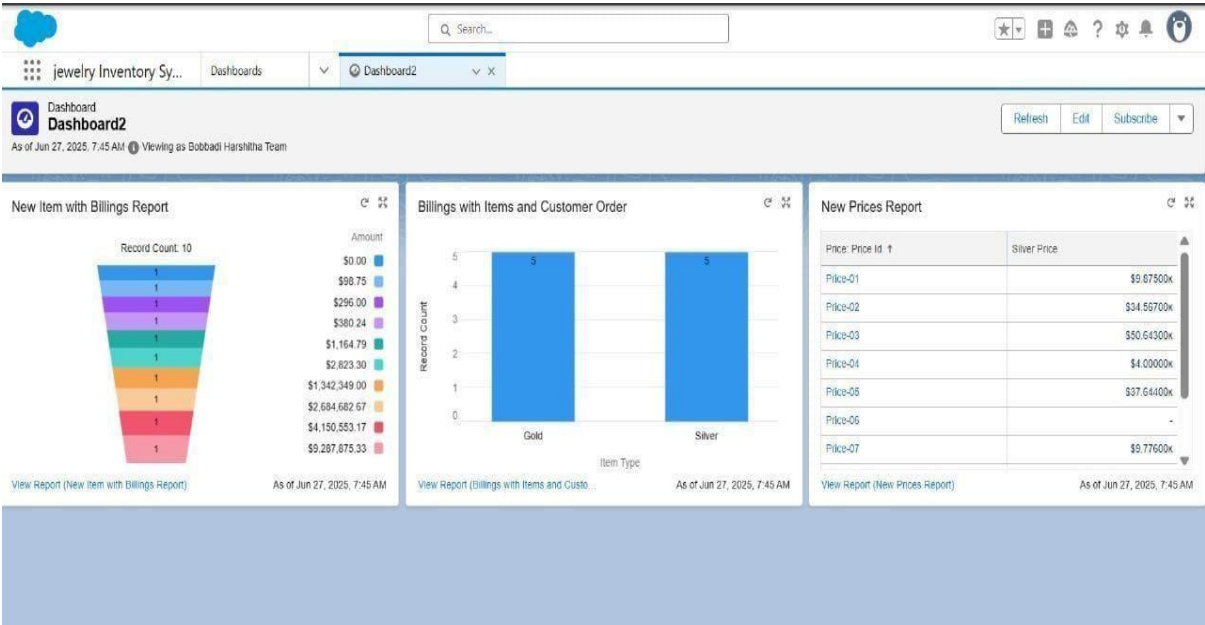


4.15 Creation of Dashboards

Dashboard 1



Dashboard 2



4.16 Creation of Flows

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

2.Select the Record-triggered flow and Click on Create. Select the Object as a “Billing” in the Drop down list.

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

4. Select the Optimise the flow for: “Actions and Related Records” and Click on Done.

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

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

7. Select the resource type as text template. Click done.

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

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

Hello

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

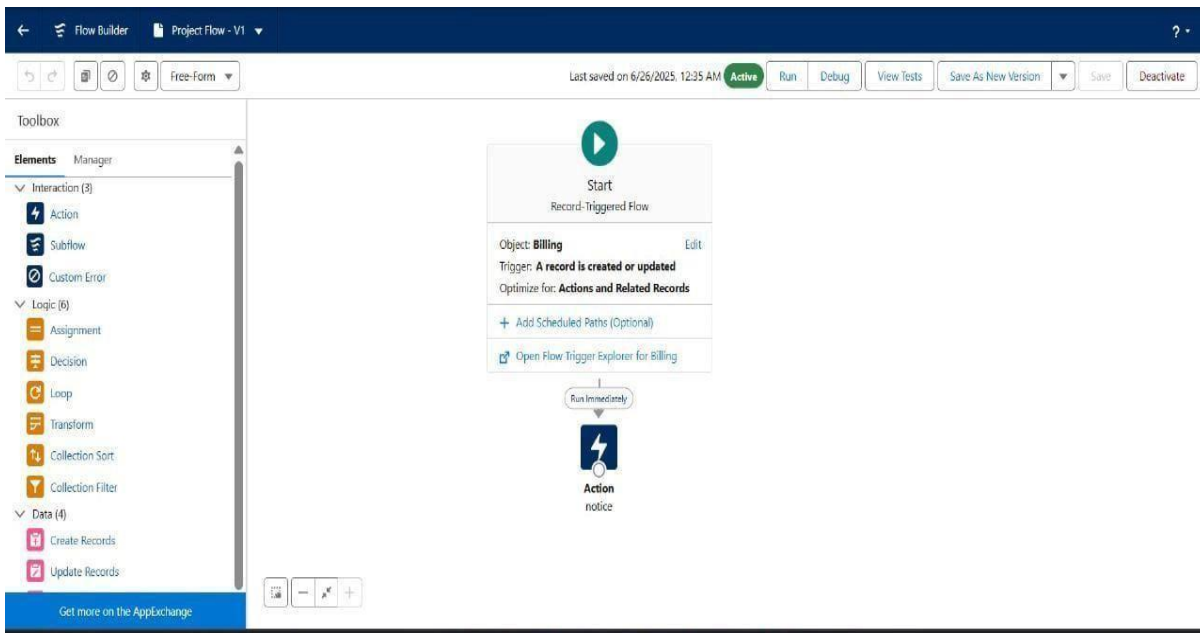
Here are the details for the item you purchased with Jewellery Inventory System

10.Give the label name as “notice”. Now drag the path from the start to the action element.

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

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

13.And click save, and click on activate.



PHASE 5: DEPLOYMENT & MAINTENANCE

- ✓ Once the CRM application was fully tested and validated, it was deployed in the Salesforce production environment for real-time use.
- ✓ All essential modules — including Customer, Jewelry Item, Customer Order, Billing, and Price — were activated and integrated.
- ✓ Dashboards and reports were shared with management for monitoring business performance and customer engagement.
- ✓ Maintenance involves regular updates, system monitoring, and performance optimization.

TESTING SUMMARY

- ❖ Unit Testing: Verified each module like Customer, Item, Order, Billing, and Price individually.
- ❖ Integration Testing: Checked data flow between related objects.
- ❖ User Acceptance Testing: Ensured system meets user expectations and is easy to use.
- ❖ Performance Testing: Confirmed fast loading and smooth operation.

- ❖ Security Testing: Validated access control and data protection.

TESTING AND DEBUGGING

Testing and debugging played a crucial role in ensuring the reliability, accuracy, and performance of the **CRM Application for Jewelry Management**. Multiple testing phases were conducted to verify that all modules — including customer data management, sales tracking, inventory control, and billing — functioned correctly and met the project requirements.

Functional Testing was carried out to validate each feature against the defined use cases. Modules such as lead conversion, order processing, and invoice generation were tested using different input scenarios to ensure that the workflows performed as expected.

Integration Testing ensured seamless data flow between interconnected objects like Customer, Product, Order, and Invoice, confirming that information remained consistent across the system.

User Acceptance Testing (UAT) was performed with sample users such as sales executives and store managers to evaluate the system's usability and performance in real business conditions. Their feedback helped refine layouts, validation rules, and automation flows.

LIMITATIONS

- ❖ Requires a stable internet connection for cloud access.
- ❖ Limited offline functionality in Salesforce.
- ❖ Custom UI design options are restricted within the Salesforce platform.
- ❖ Integration with external billing or ERP systems may need additional APIs.

FUTURE OUTCOMES

- ❖ Technical Improvements: Integration with AI and machine learning to predict customer preferences and buying trends.

- ❖ Business Outcomes: Increased brand loyalty through rewards, offers, and better customer engagement.

- ❖ Long-Term Goals: Expansion of CRM features to support multiple branches or franchises. Use of data analytics and forecasting for strategic business planning.

CONCLUSION

The **CRM Application for Jewelry Management** successfully streamlines and automates various operations of a jewelry business through the Salesforce platform. The system centralizes all customer-related information, product details, and sales transactions, ensuring that data is easily accessible and well-organized. By maintaining a comprehensive database of customers, purchase history, and preferences, the system enables the delivery of personalized services and builds stronger customer relationships.

This project effectively integrates multiple business functions—such as sales, lead management, inventory control, billing, and reporting—into one cohesive system. Through Salesforce’s powerful tools, it automates repetitive processes like lead tracking, order management, and invoice generation, significantly reducing manual work and human errors. The automated workflows ensure consistency in business operations, while real-time dashboards and reports provide valuable insights into sales trends and performance metrics.

One of the major achievements of this CRM application is its ability to enhance **transparency and accuracy**. The inclusion of automated pricing calculations, stock updates, and approval processes ensures that all business data is reliable and up to date. Additionally, role-based access control and secure data management practices safeguard sensitive business and customer information, which is crucial in a competitive industry like jewelry retail.

From a business perspective, the project demonstrates how **Salesforce CRM** can be tailored to meet the unique needs of the jewelry industry. It shows how technology can drive efficiency, improve decision-making, and strengthen relationships with both new and existing customers. The use of cloud-based architecture allows the system to be accessible anytime and anywhere, providing flexibility for managers and employees across different branches or departments.

In conclusion, the **CRM Application for Jewelry Management** stands as an effective example of how Salesforce technology can be implemented to achieve higher efficiency, better transparency, and improved customer satisfaction. It paves the way for jewelry businesses to embrace smart, data-driven operations and build long-term success in a rapidly evolving marketplace.

REFERNECES:

https://trailhead.salesforce.com/content/crm_application_for_jewel_management/create_custom_objects

https://trailhead.salesforce.com/content/crm_application_for_jewel_management/schema_builder

https://trailhead.salesforce.com/content/crm_application_for_jewel_management/field_dependencies

https://trailhead.salesforce.com/content/crm_application_for_jewel_management/profiles

https://trailhead.salesforce.com/content/crm_application_for_jewel_management/users

https://trailhead.salesforce.com/content/crm_application_for_jewel_management/triggers