CRM APPLICATION FOR JEWEL MANAGEMENT - (DEVELOPER)

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1.INTRODUCTION

1.1 Project Overview

The **Jewel Inventory System** is a comprehensive software solution developed to streamline and manage the inventory and sales operations of jewellery stores and manufacturers. This system is designed to provide an efficient and user-friendly platform for tracking jewellery items, maintaining accurate inventory records, and supporting seamless sales transactions. By automating key processes, the Jewel Inventory System enhances operational efficiency, reduces manual errors, and ensures better control over stock and customer management.

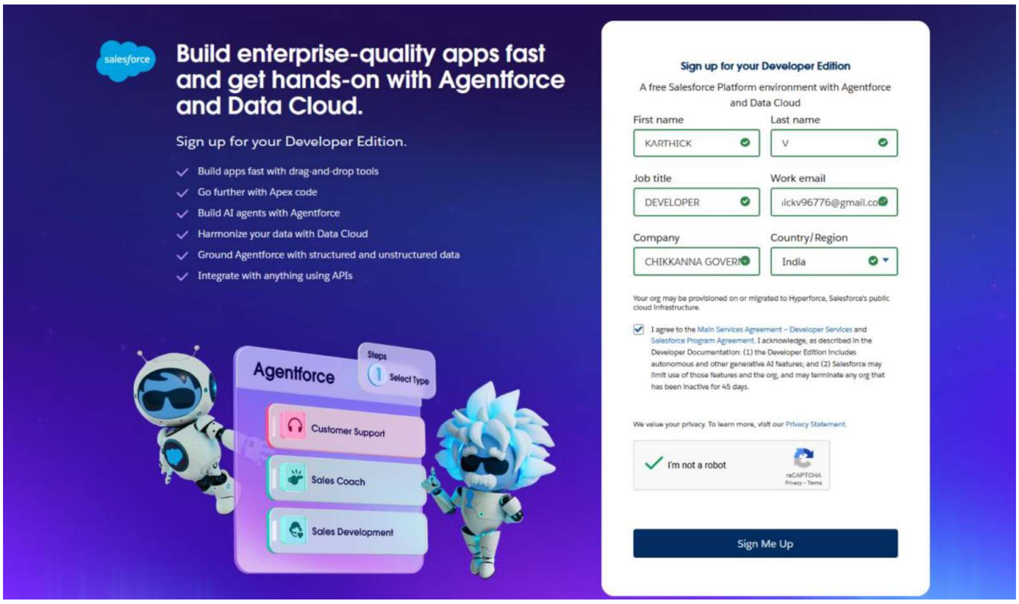
1.2 Purpose

The purpose of the **Jewel Inventory System** is to develop a computerized solution that simplifies the management of jewellery inventory and sales activities. The system is intended to replace traditional manual methods with an efficient and user-friendly application that ensures accurate record keeping, easy tracking of jewellery items, and smooth handling of sales transactions. By providing better control over stock and reducing human errors, the project aims to improve operational efficiency and support effective decision-making for jewellery businesses.

DEVELOPMENT PHASE

Creating Developer Account :

By using this URL - **https://www.salesforce.com/form/developer-signup/?d=pb**



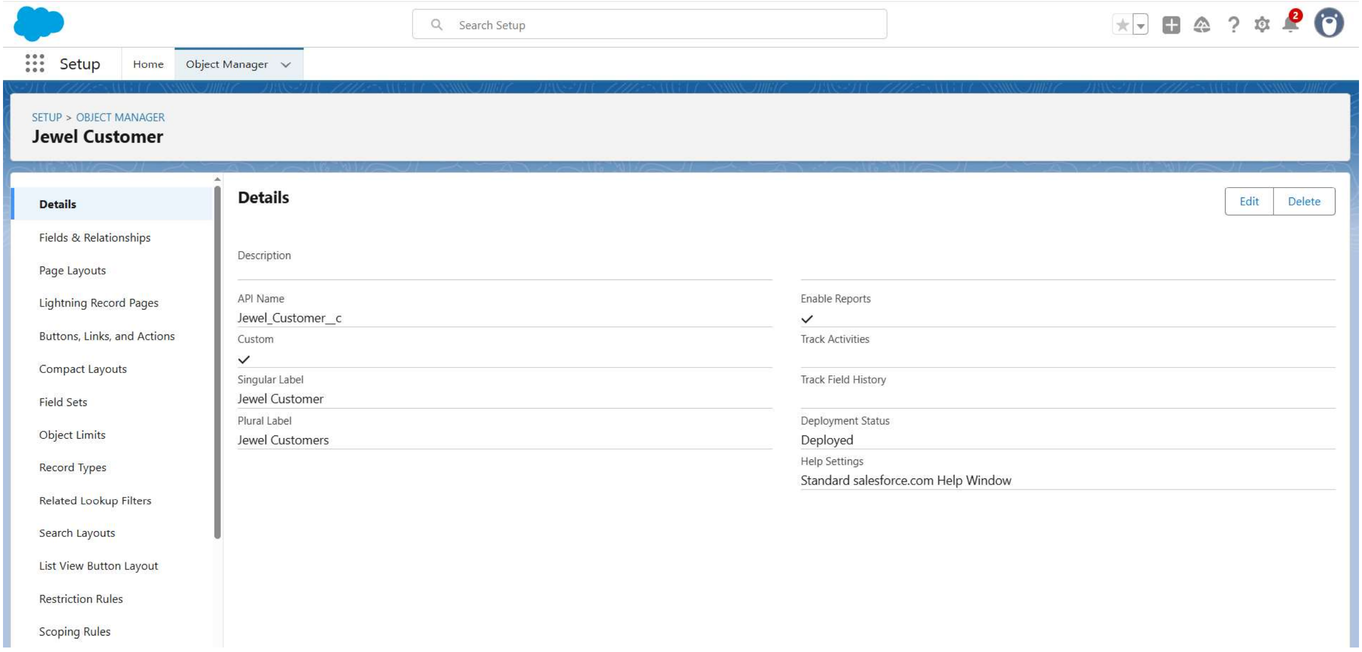
Account Activation Object:

- Open your email inbox and click on the **Reset Password** link (wait 5–10 minutes if needed).
- Enter a new password, answer the security question, and click **Change Password**.
- You will be redirected to your **Salesforce setup page**.

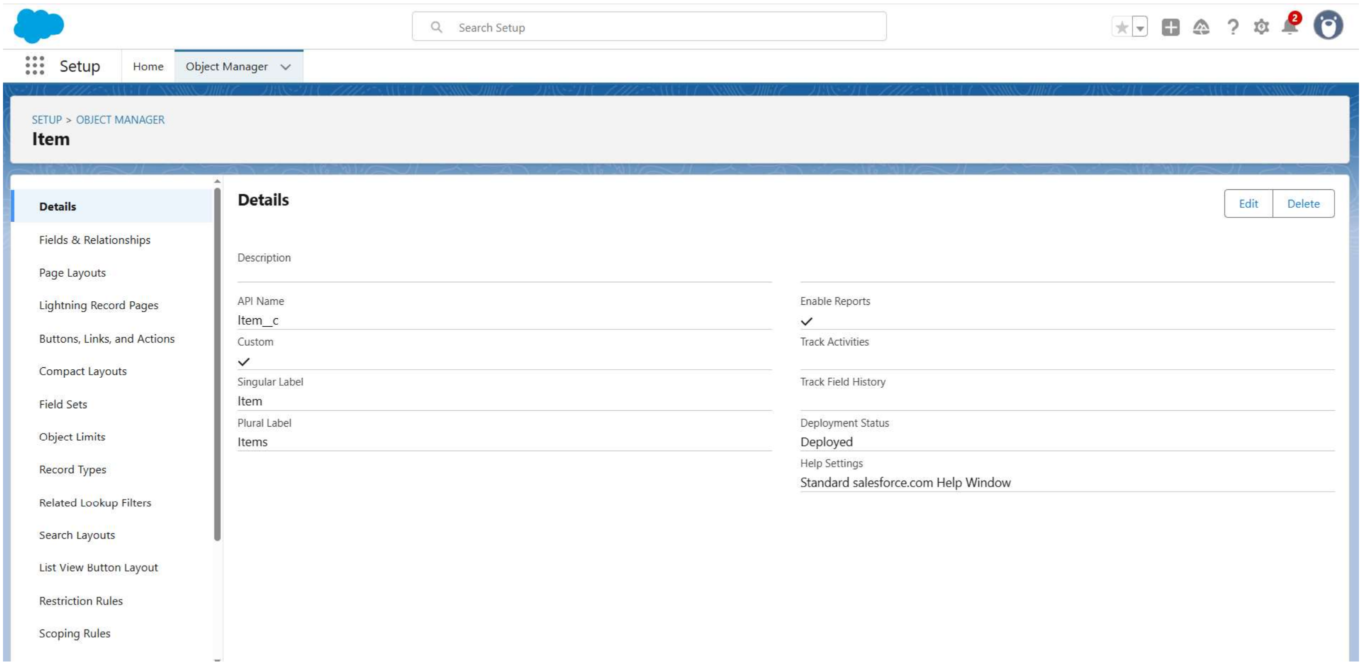
OBJECT:

- **Created objects**: Jewel Customer, Item, Customer Order, Price, Billing.

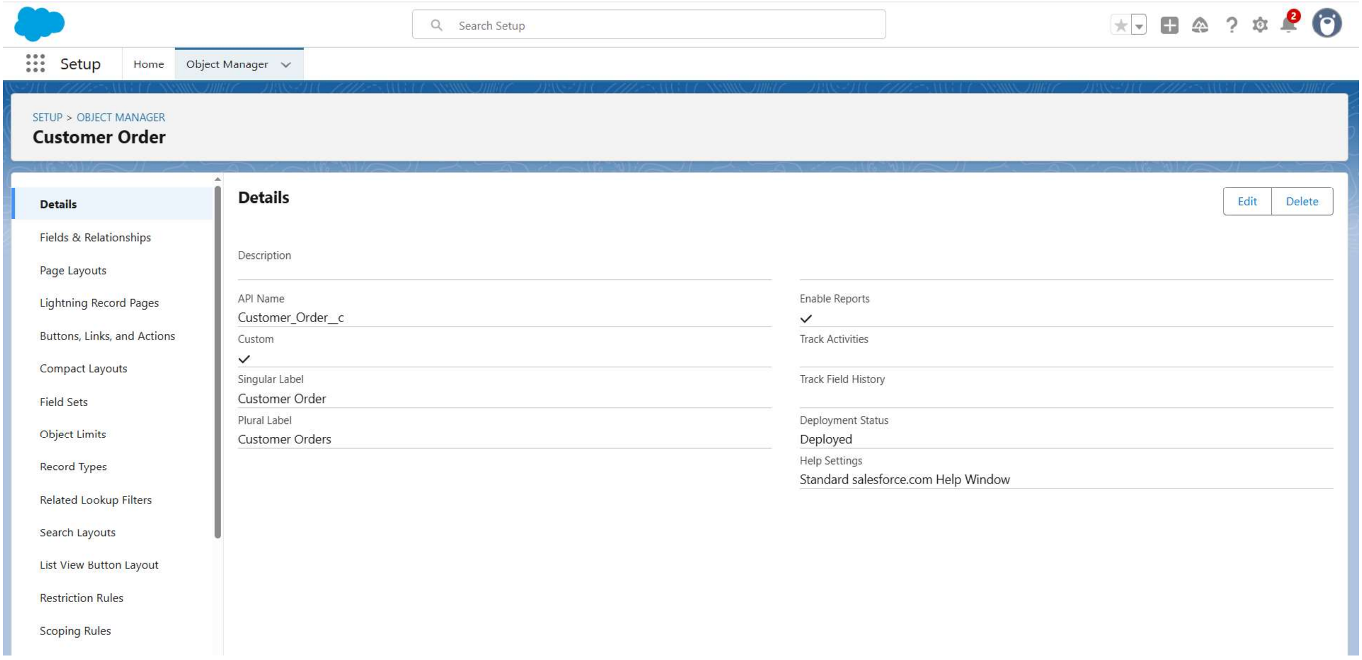
Jewel Customer Object :



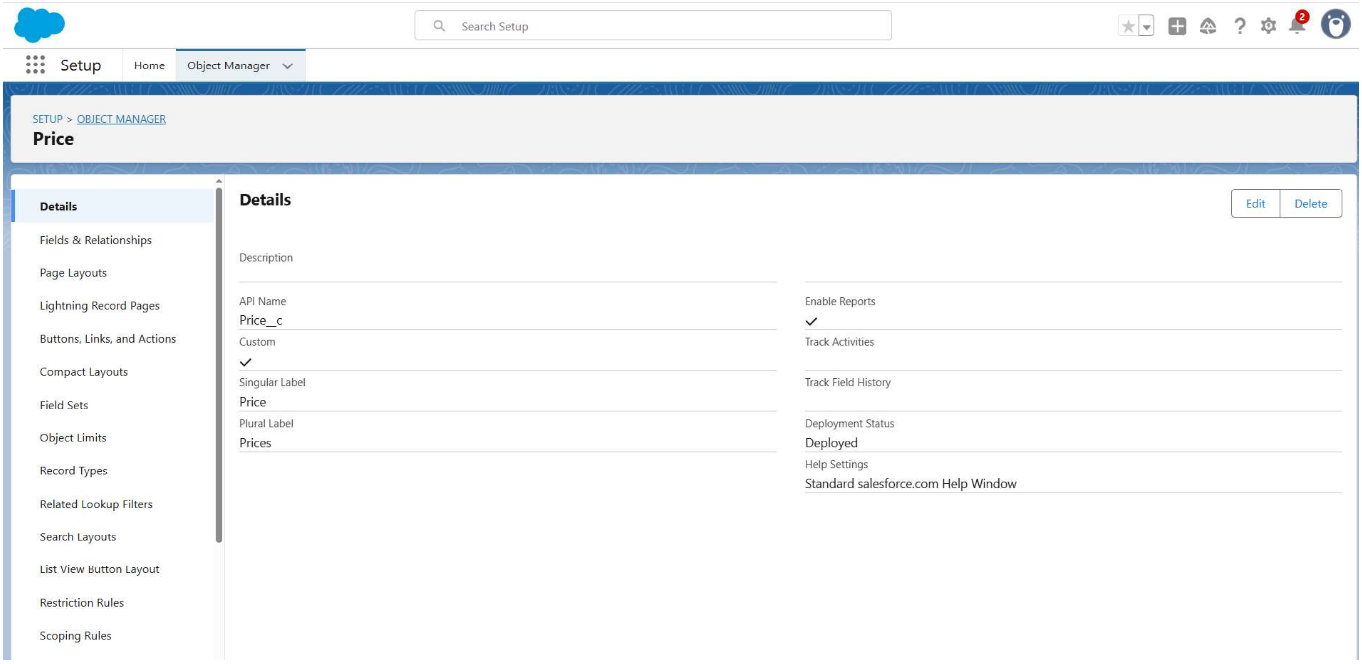
Item Object :



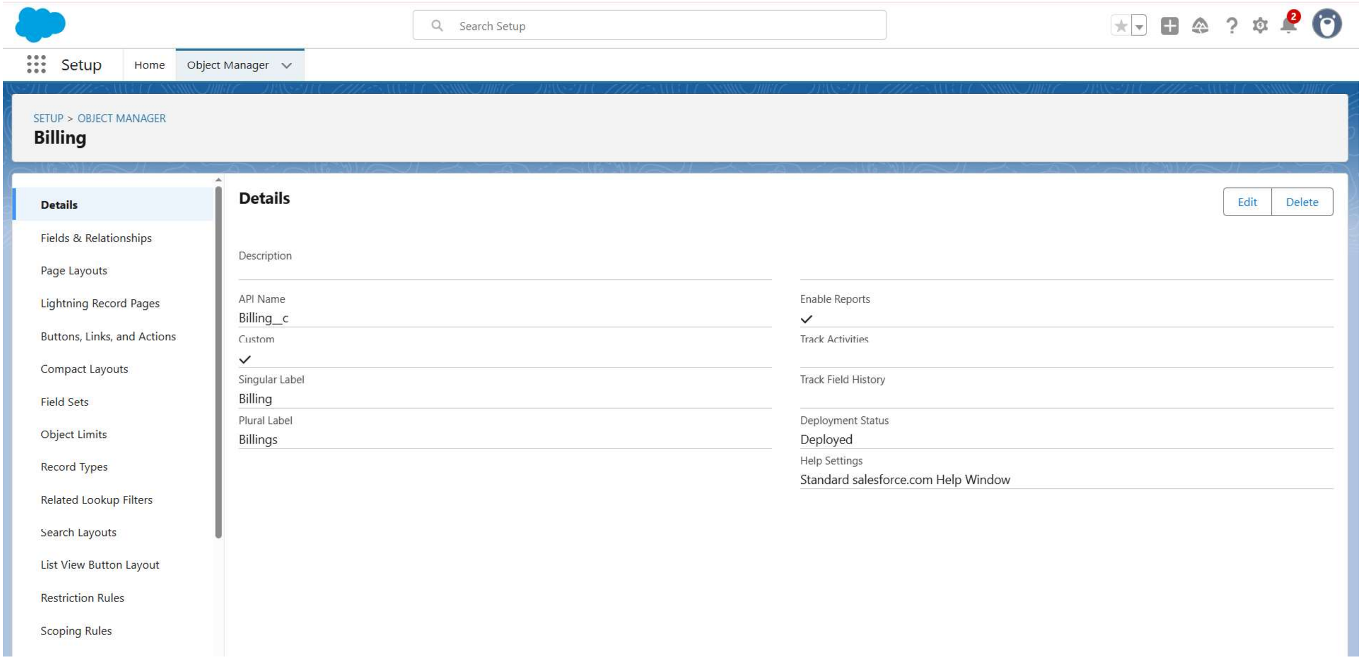
Customer Order Object :



Price Object :



Billing Object :



TABS :

*A **Tab** in Salesforce is a user interface used to create and view records of objects.

*Tabs can be of different types such as **Custom, Web, Visualforce, Lightning Component.**

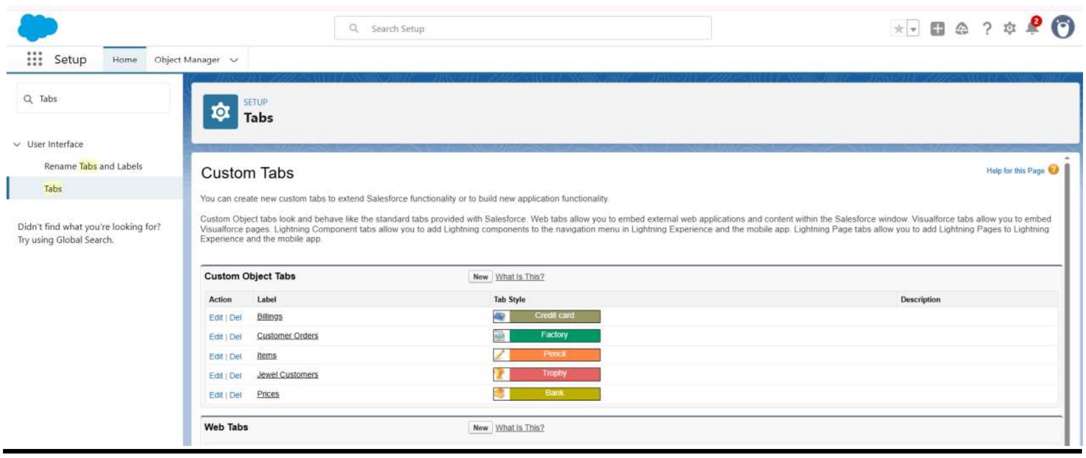
*They help businesses access stored data easily, improve navigation, and enhance productivity.

Created a Custom Tab :

create a **Customer Tab**, go to **Setup → Tabs → New (Custom Object Tab)**.

Select the object **Jewel Customer**, choose a tab style, and proceed with default profile and app settings.

Click **Save** to complete the tab creation.



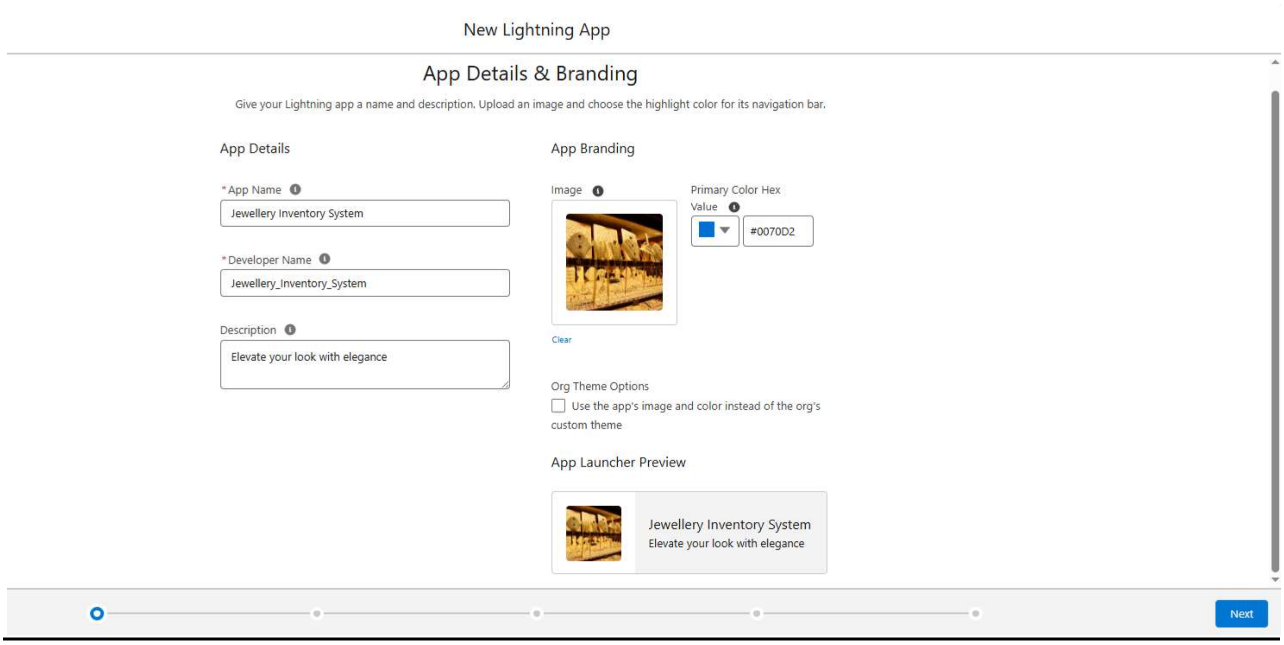
THE LIGHTNING APP :

*A **Lightning App** is a collection of objects, tabs, and tools grouped together in Salesforce for a specific purpose.

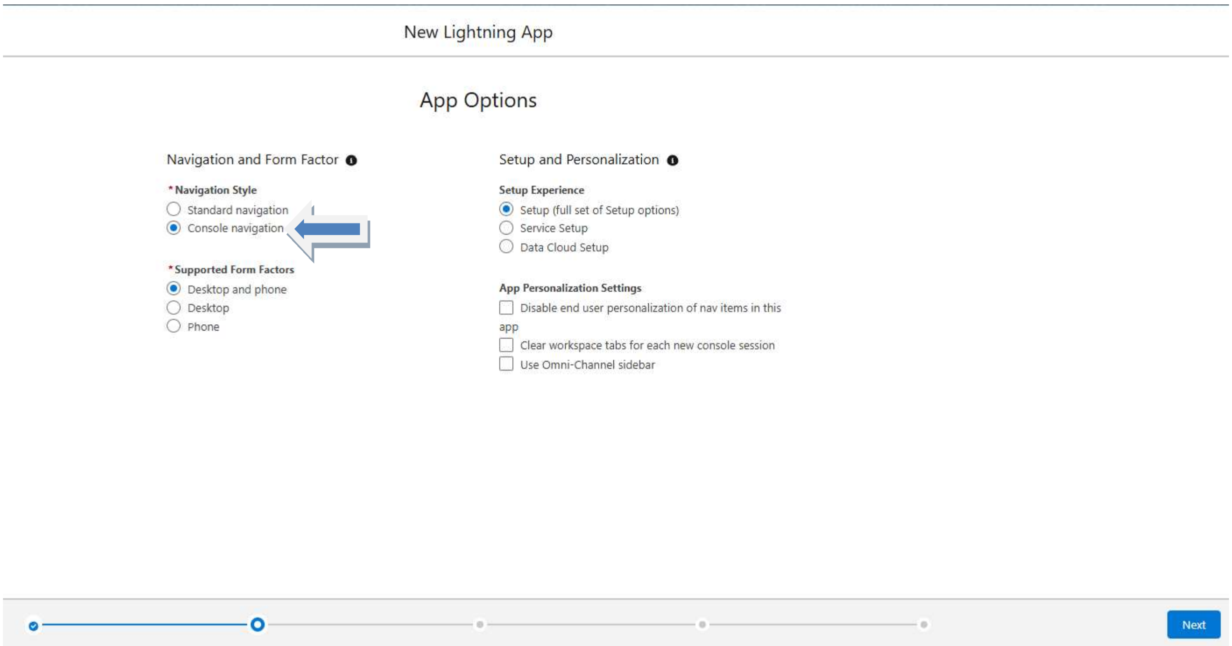
*It allows customization with logos, colors, utility bars, and Lightning page tabs.

*Users can easily switch between apps, improving navigation and efficiency.

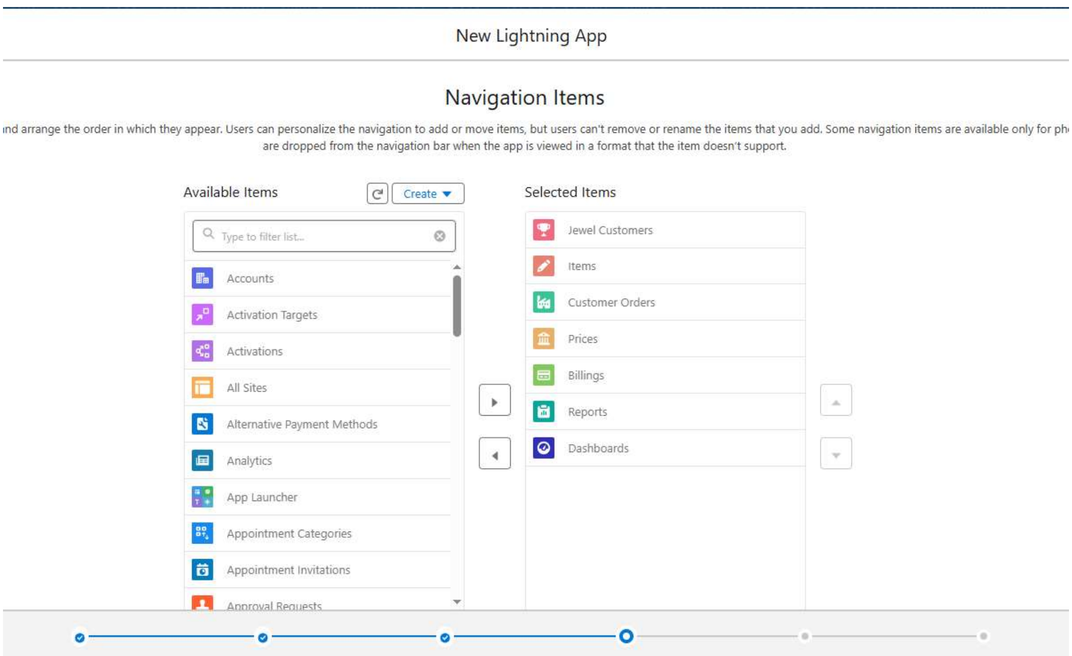
Created a Lightning App :



To create a **Lightning App**, go to **Setup → App Manager → New Lightning App**. Enter the app name, select a logo/color



This screen shows the **App Options** in Salesforce Lightning App setup, where you choose navigation style, supported devices, and personalization settings.



This screen shows the **Navigation Items setup** in Salesforce Lightning App, where you select and arrange objects (like Jewel Customers, Items, Orders, Reports, Dashboards) to be included in the app.

FIELDS :

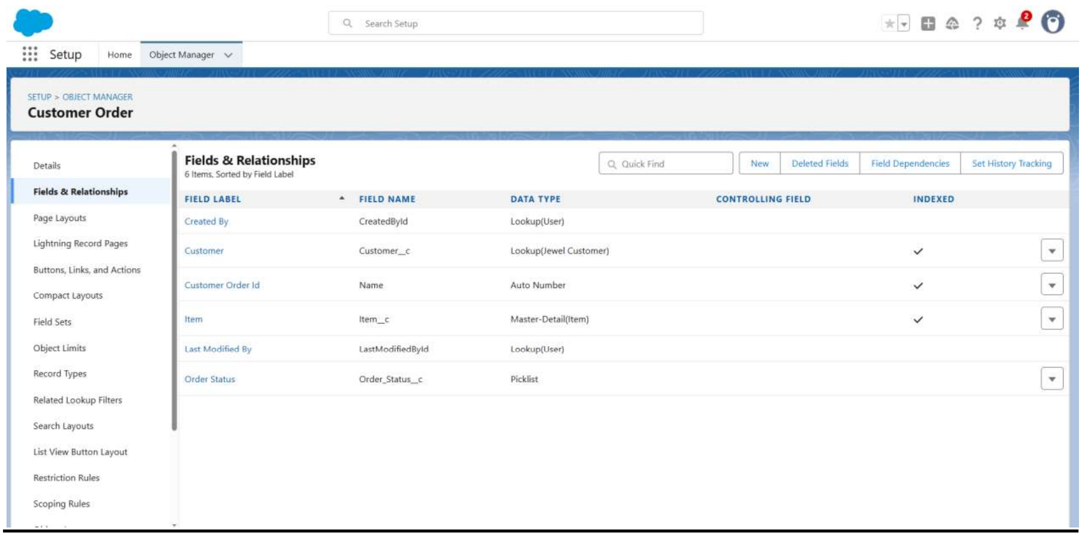
*In Salesforce, **Fields** represent the data stored in object records, similar to columns in a database.

*They are of two types: **Standard Fields** (predefined like Created By, Owner, Last Modified) and **Custom Fields** (user-defined based on requirements).

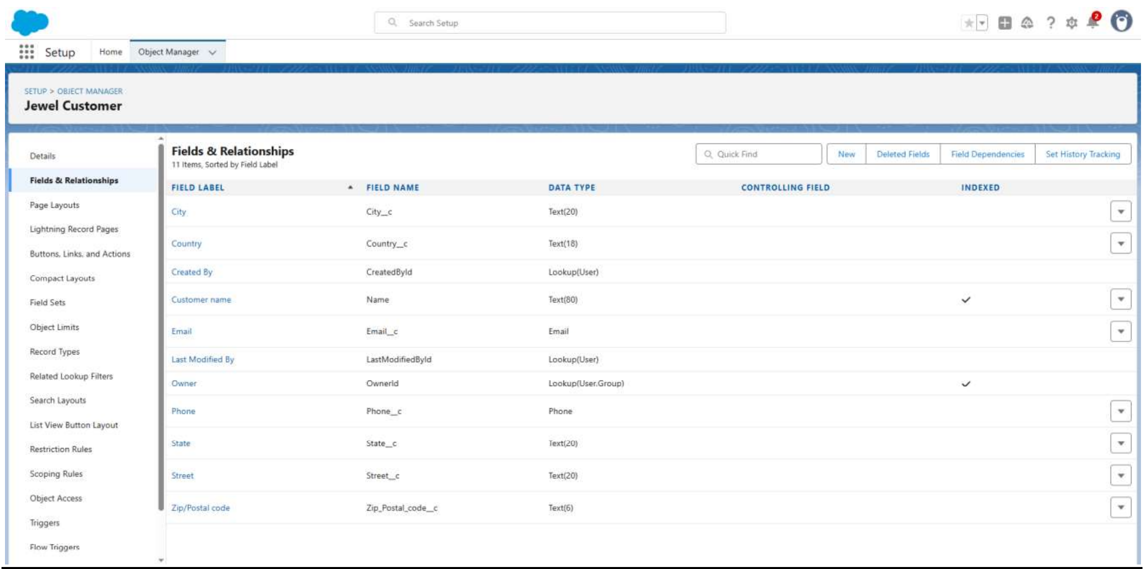
*Fields make it easy to store, search, edit, and manage specific information for each object.

Configured Fields And Relationships:

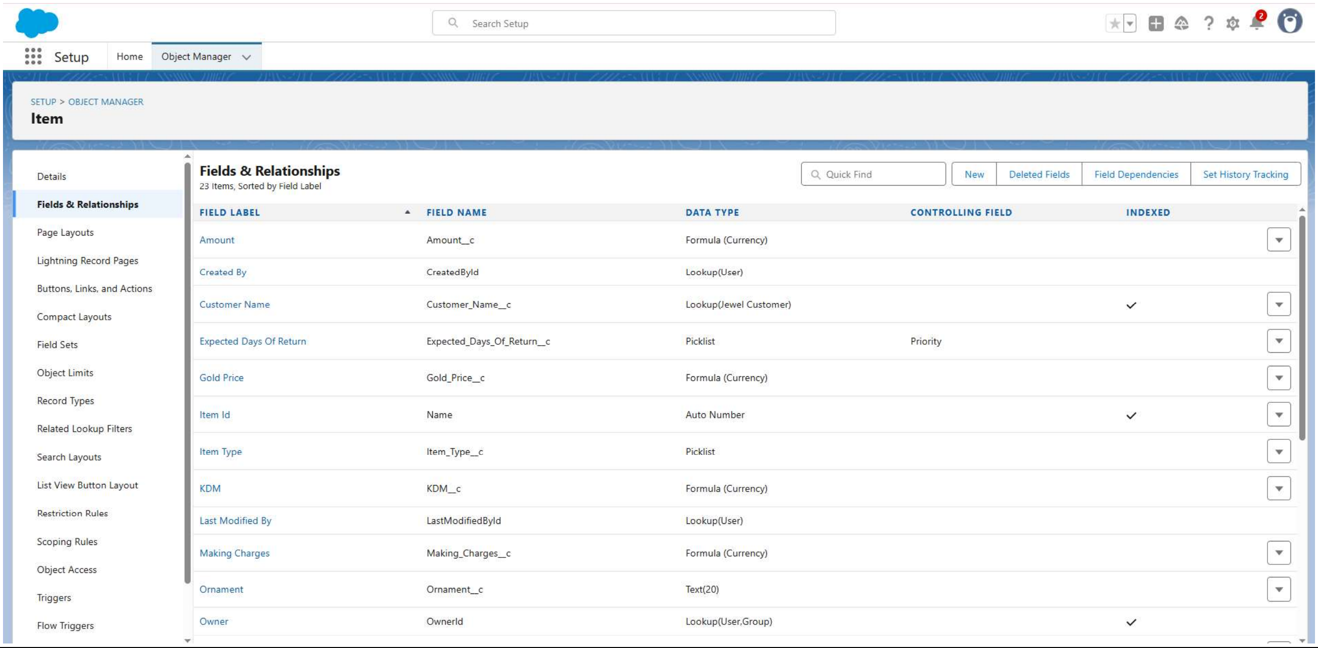
Customer Order Fields And Relationships:



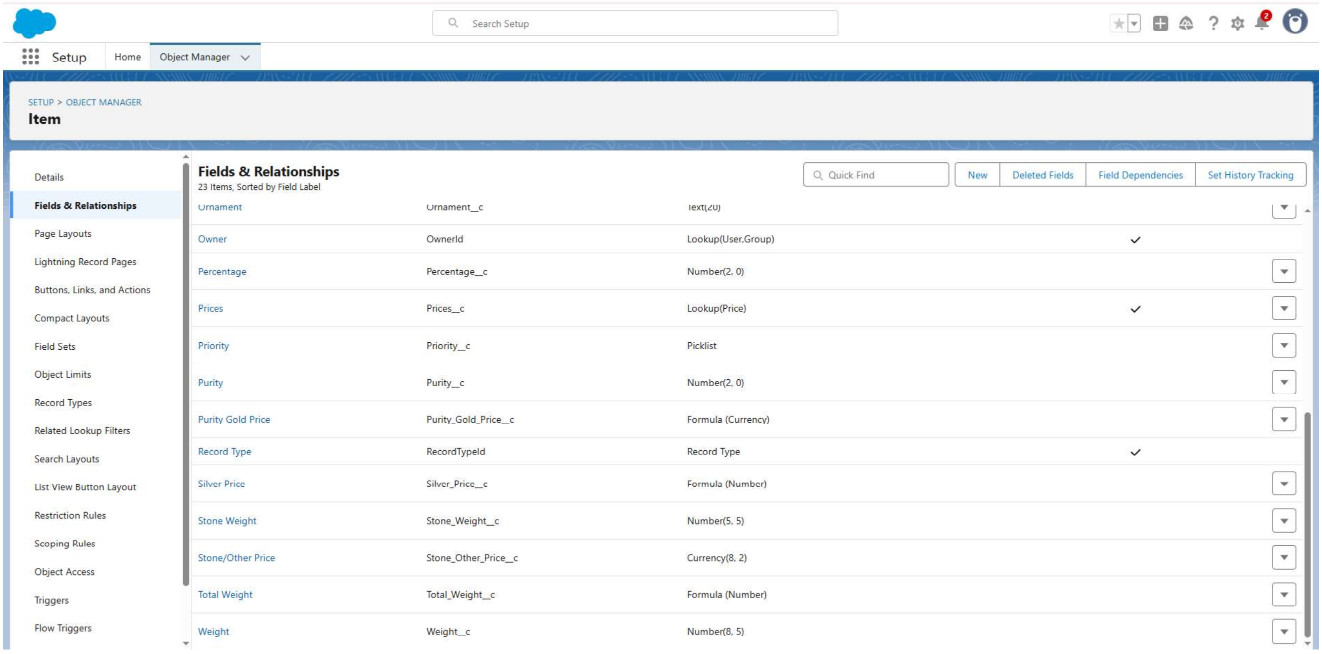
Jewel Customer Fields And Relationships:



Items Fields And Relationships:

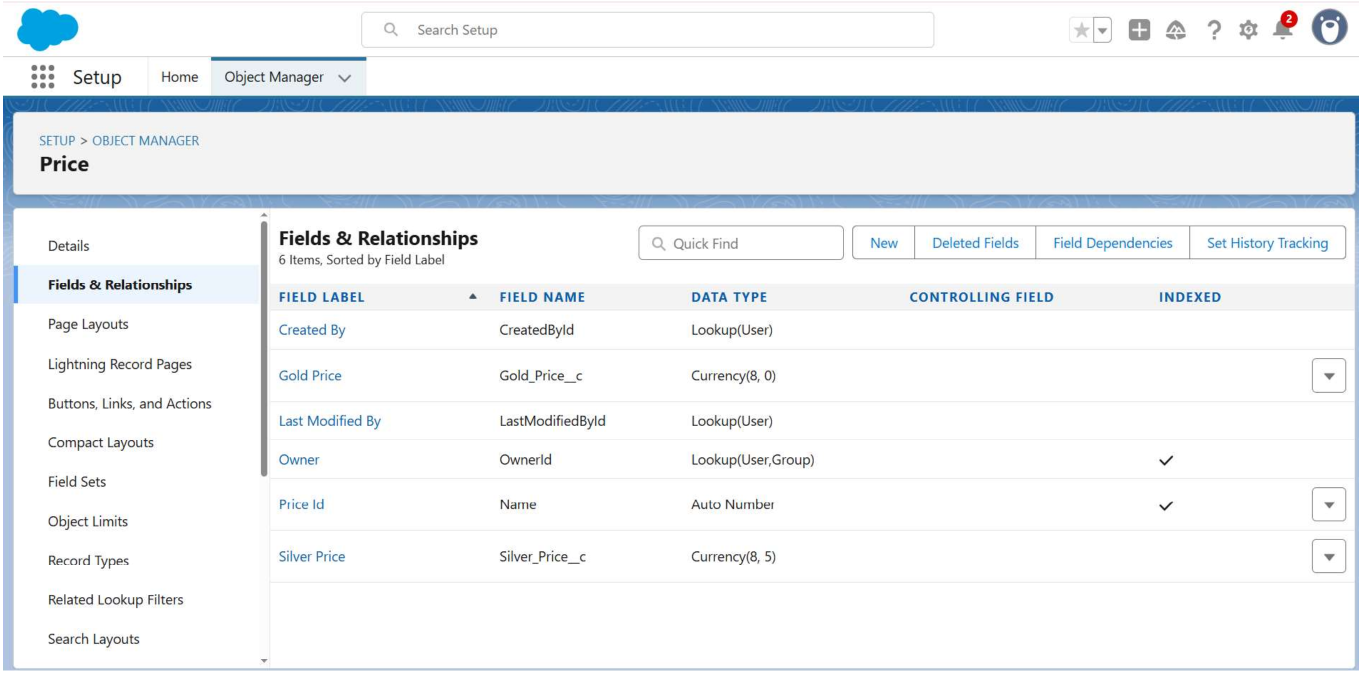


FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount	Amount__c	Formula (Currency)		
Created By	CreatedById	Lookup(User)		
Customer Name	Customer_Name__c	Lookup(Jewel Customer)		✓
Expected Days Of Return	Expected_Days_Of_Return__c	Picklist	Priority	
Gold Price	Gold_Price__c	Formula (Currency)		
Item Id	Name	Auto Number		✓
Item Type	Item_Type__c	Picklist		
KDM	KDM__c	Formula (Currency)		
Last Modified By	LastModifiedById	Lookup(User)		
Making Charges	Making_Charges__c	Formula (Currency)		
Ornament	Ornament__c	Text(20)		
Owner	OwnerId	Lookup(User,Group)		✓

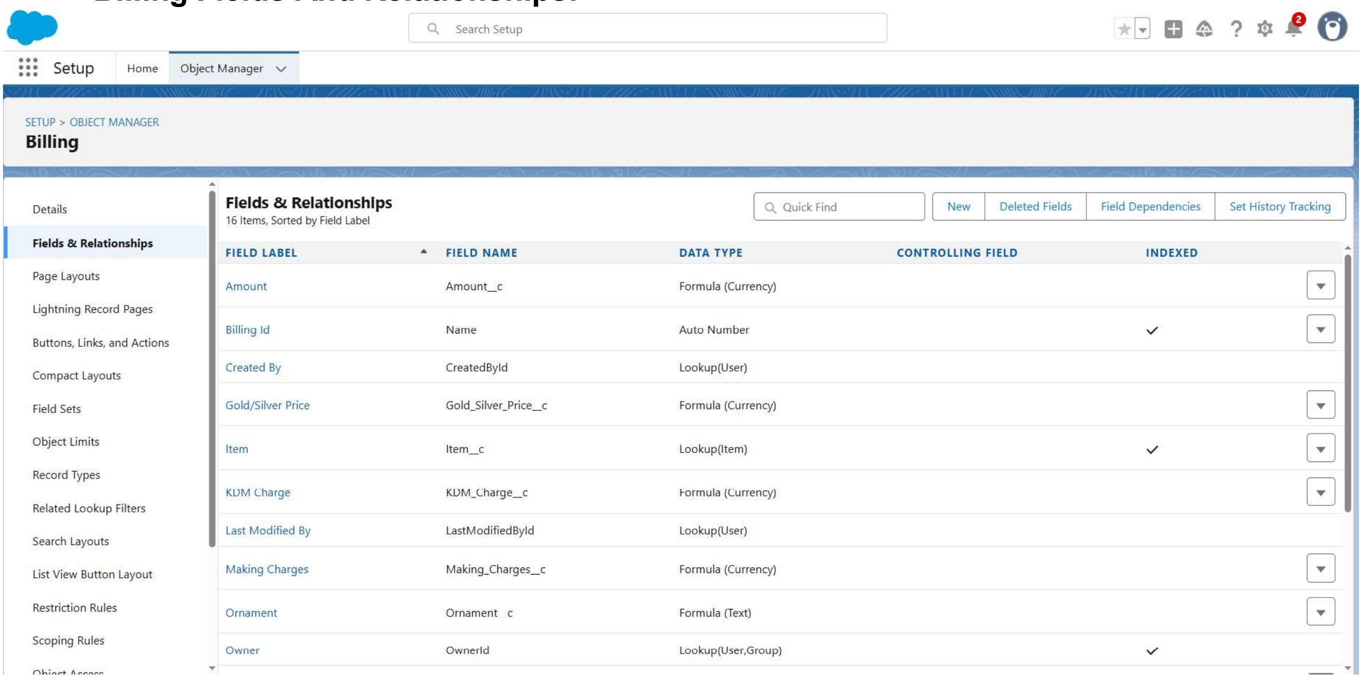


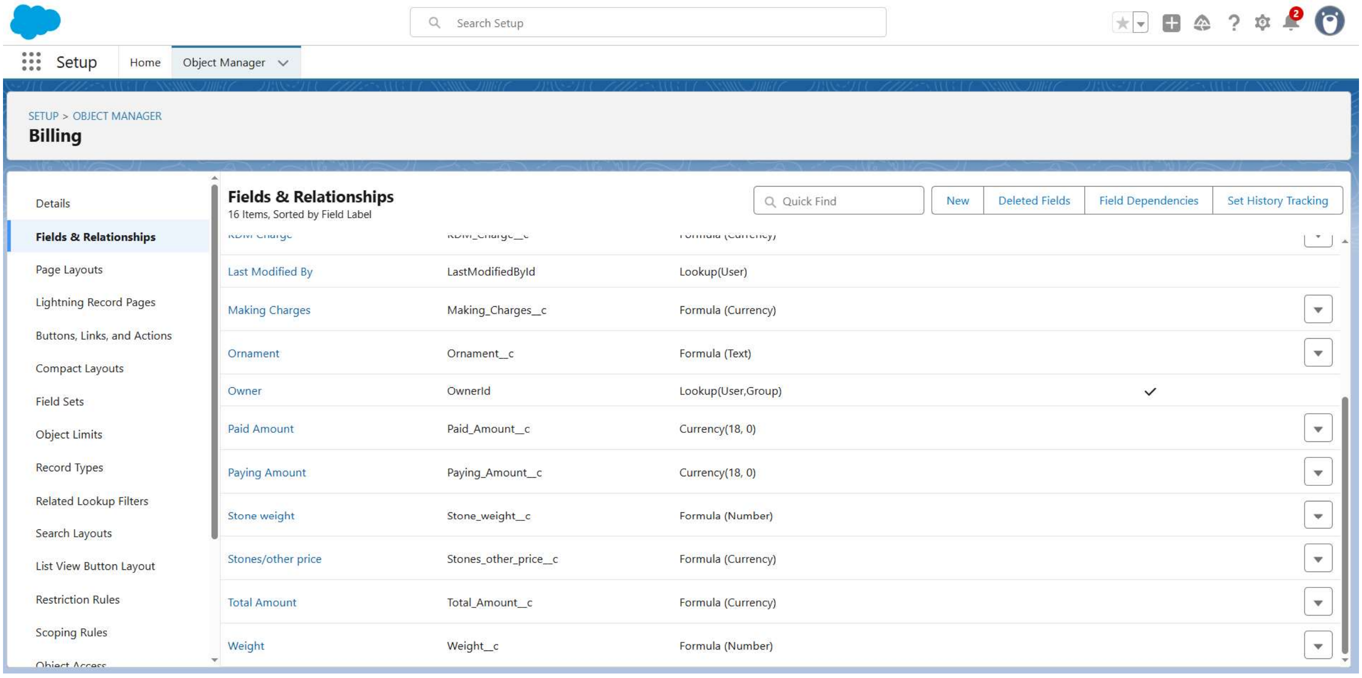
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Ornament	Ornament__c	Text(20)		
Owner	OwnerId	Lookup(User,Group)		✓
Percentage	Percentage__c	Number(2, 0)		
Prices	Prices__c	Lookup(Price)		✓
Priority	Priority__c	Picklist		
Purity	Purity__c	Number(2, 0)		
Purity Gold Price	Purity_Gold_Price__c	Formula (Currency)		
Record Type	RecordTypeId	Record Type		✓
Silver Price	Silver_Price__c	Formula (Number)		
Stone Weight	Stone_Weight__c	Number(5, 5)		
Stone/Other Price	Stone_Other_Price__c	Currency(8, 2)		
Total Weight	Total_Weight__c	Formula (Number)		
Weight	Weight__c	Number(8, 5)		

Price Fields And Relationships:

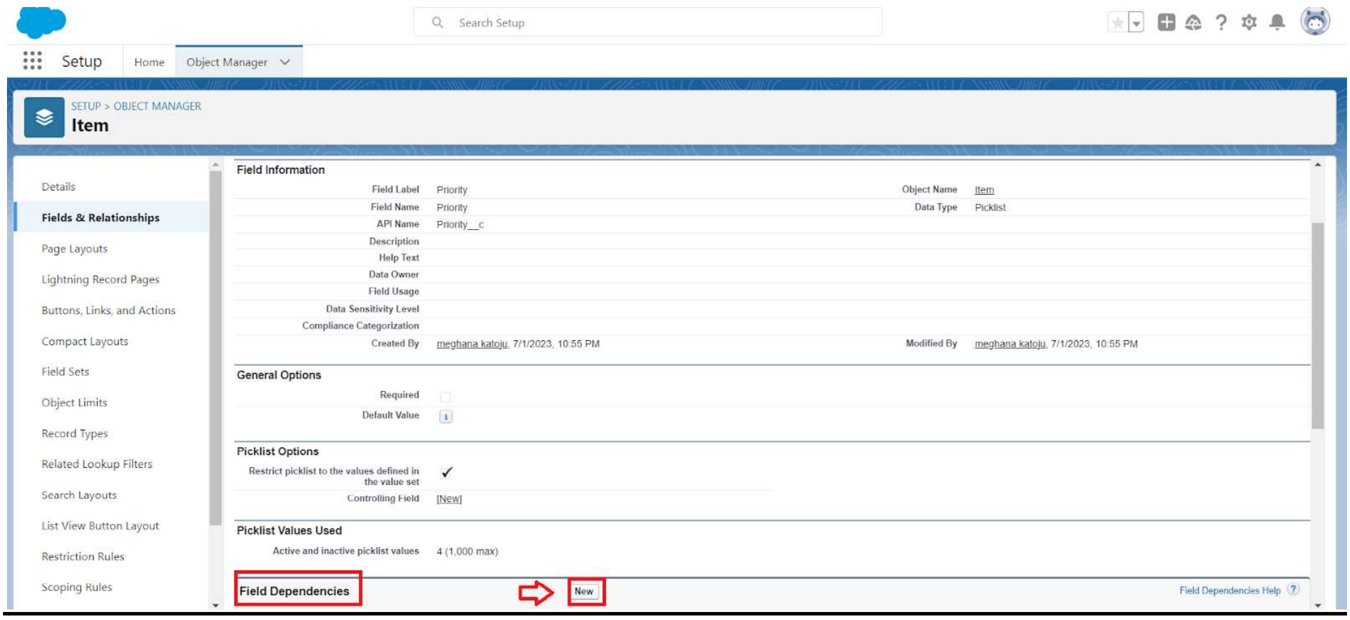


Billing Fields And Relationships:

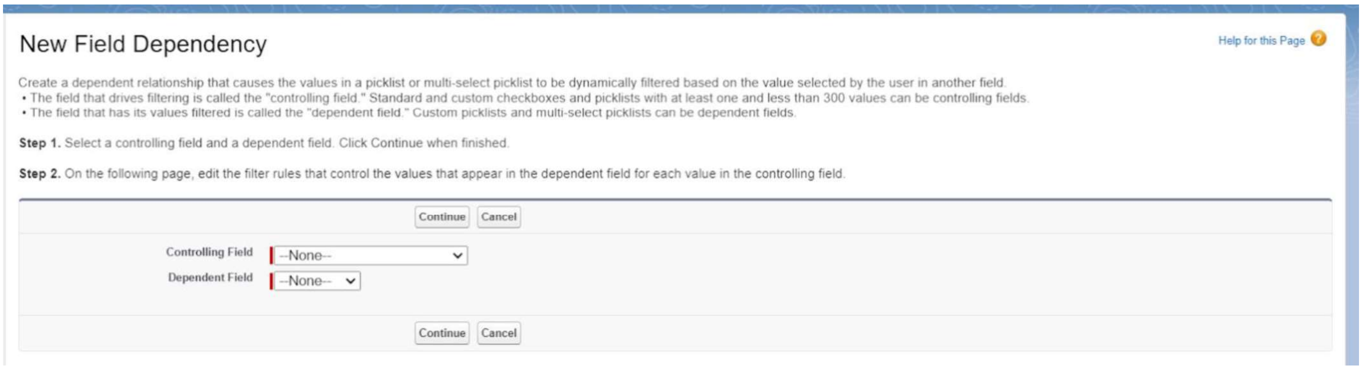




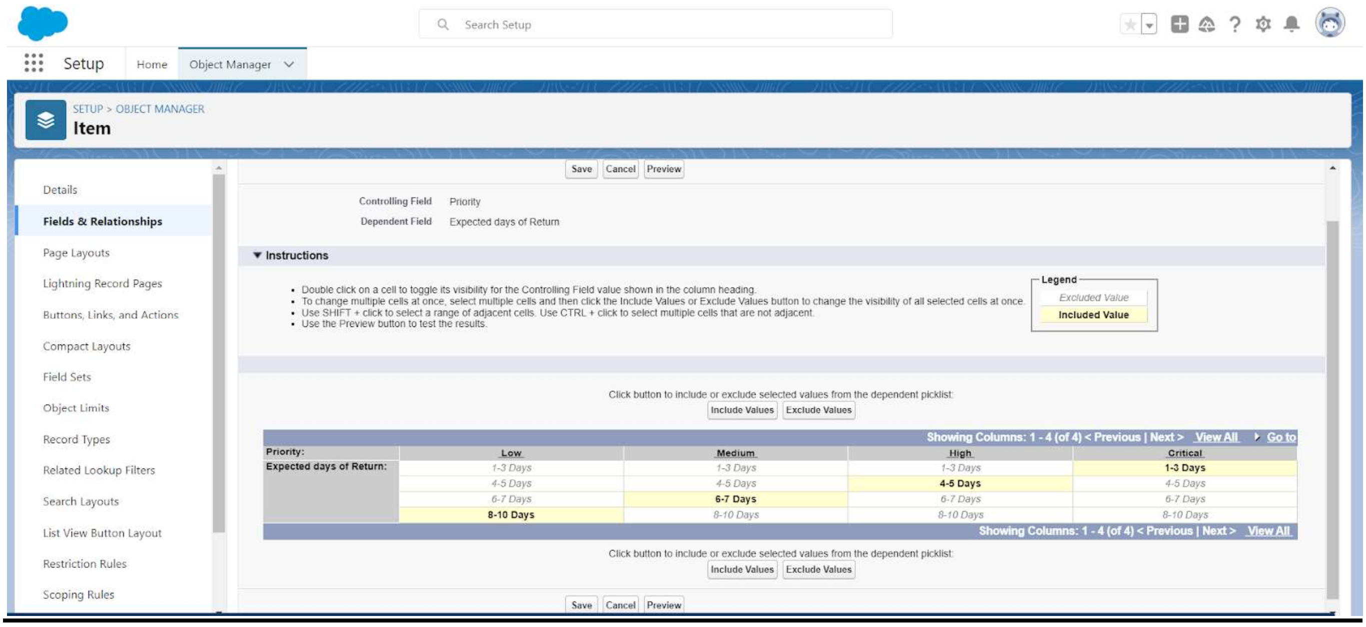
Created The Field Dependencies:



Go to **Setup → Object Manager → Item → Fields & Relationships** and open the **Priority** field.

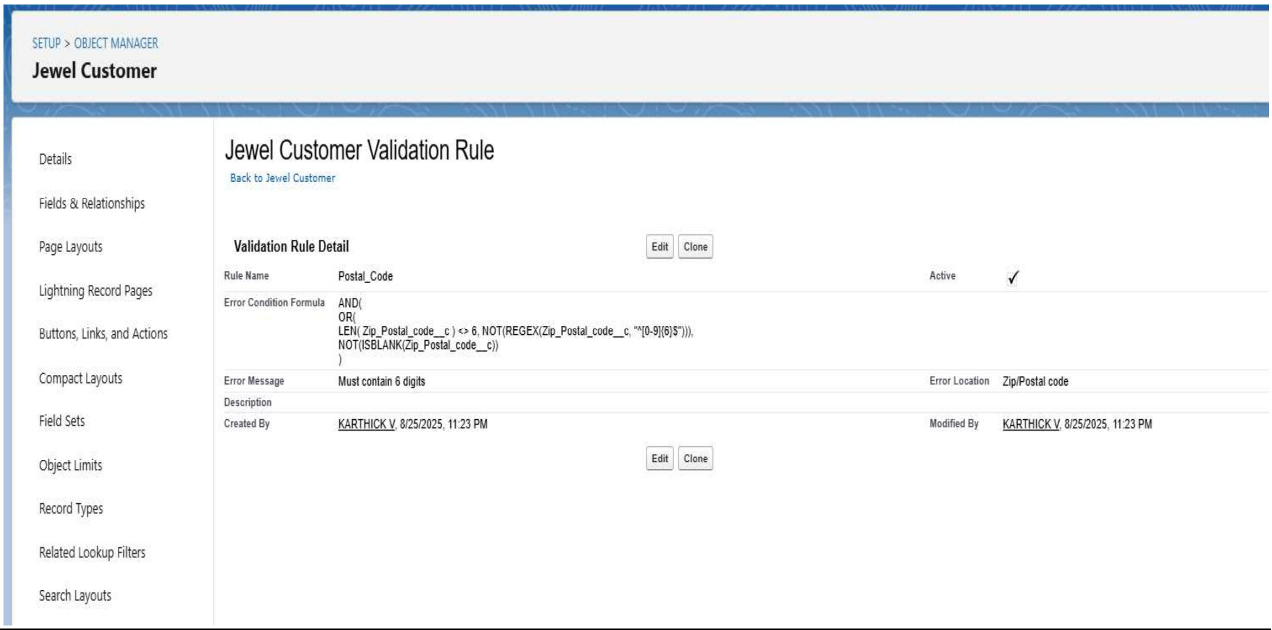


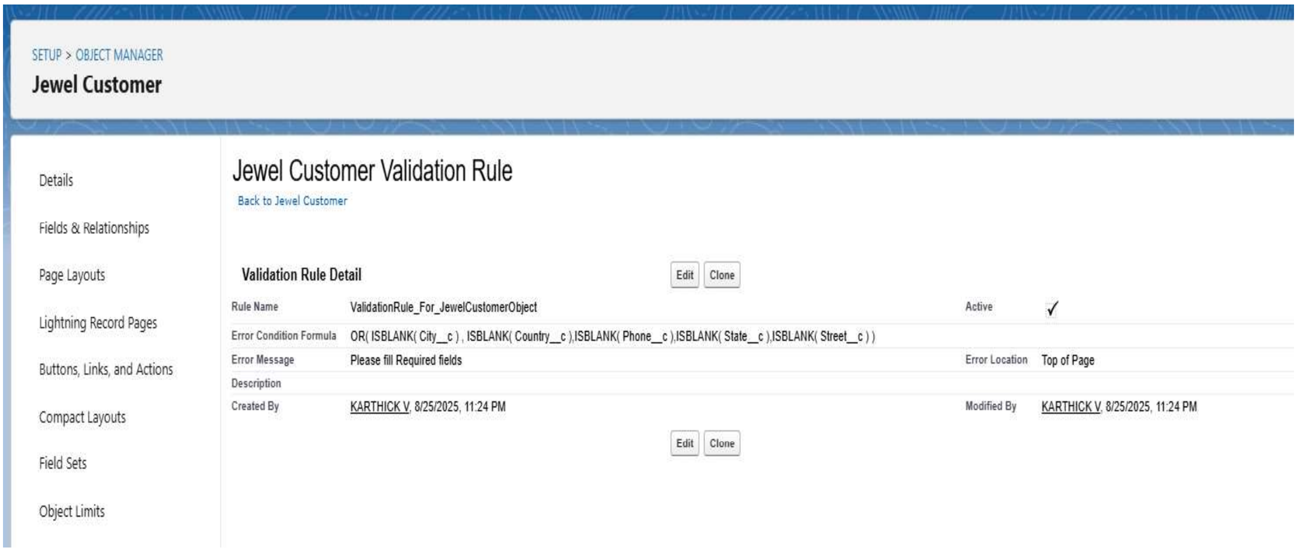
Create a new Field Dependency**, selecting** Priority **as the controlling field and** Expected Days of Return **as the dependent field.**



Map the related values, click Include Values**, and** Save **to complete**

Created the validation rule :



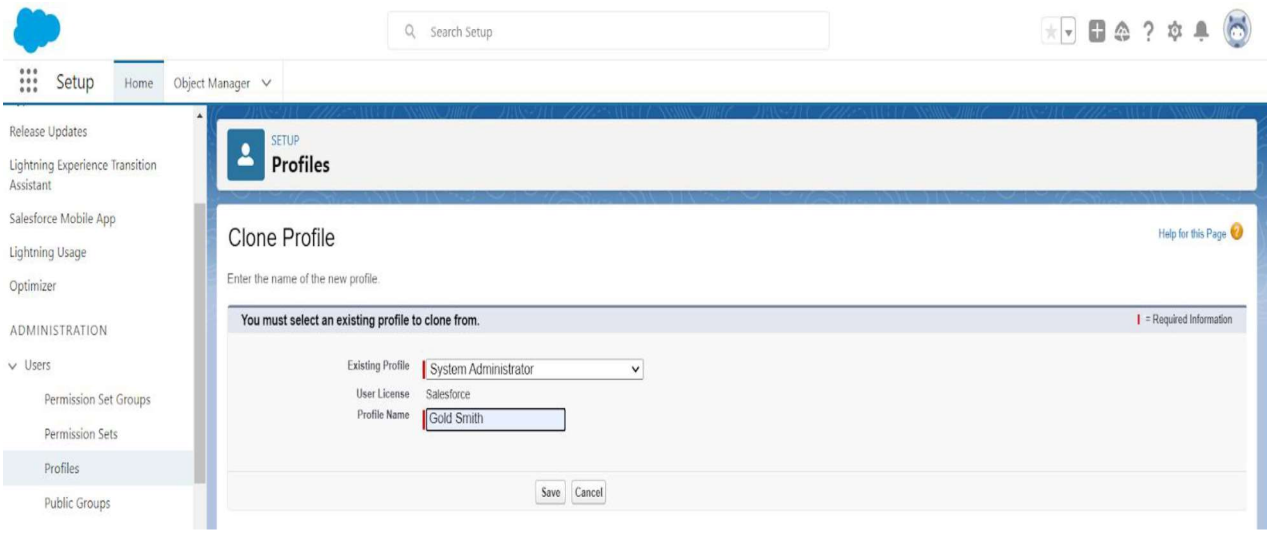


PROFILES :

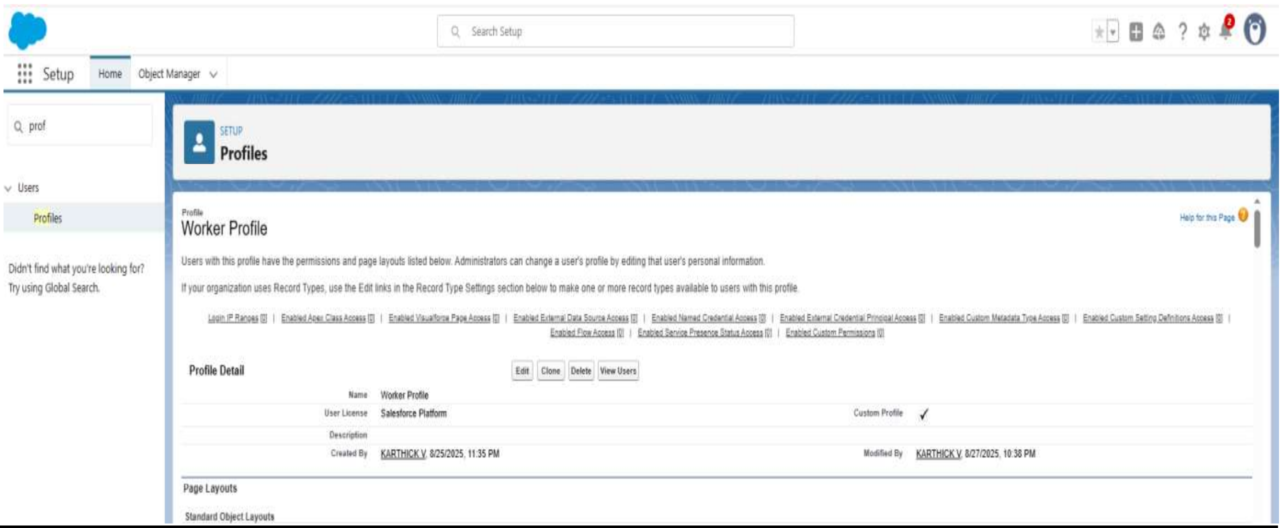
*A Profile **in Salesforce is a collection of settings and permissions that define user access to objects, fields, tabs, apps, and other features.**

* **There are** Standard Profiles **(predefined, non-deletable) and** Custom Profiles **(user-defined, deletable if unused).**

Gold Smith Profile Created:



Worker Profile Created:

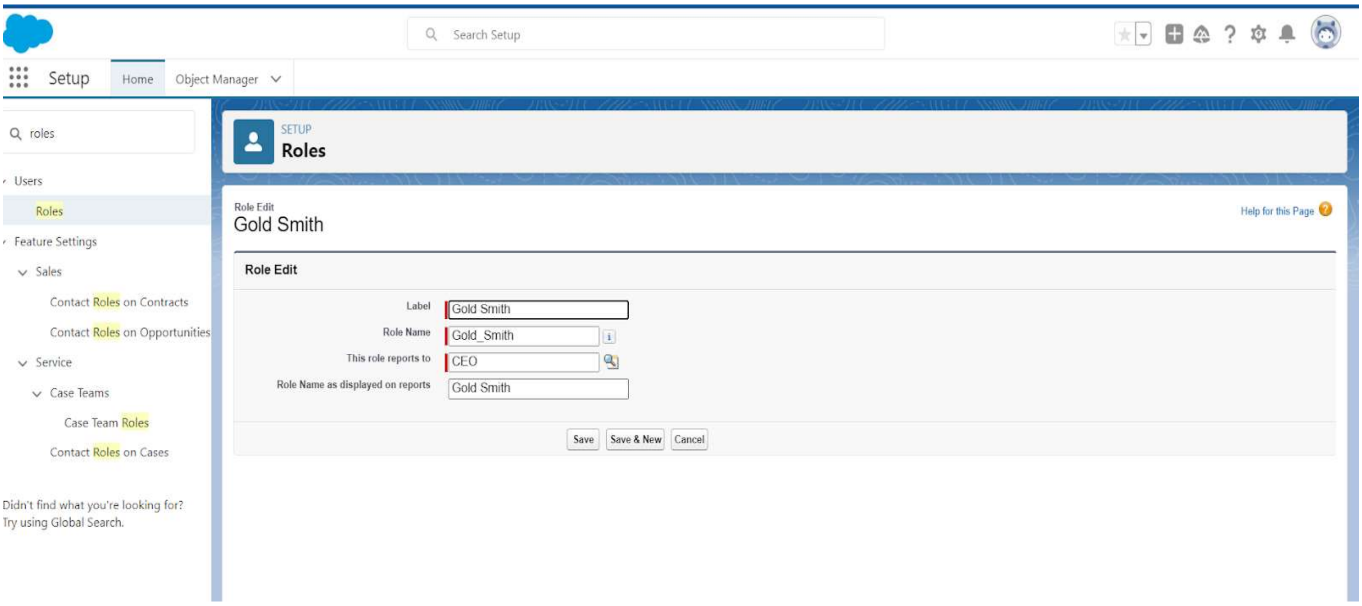


ROLES:

*A **Role** in Salesforce defines record-level visibility and determines what data a user can see within the organization.

*It helps differentiate users based on their **position** in the hierarchy, ensuring proper data access.

Created Gold Smith Role:

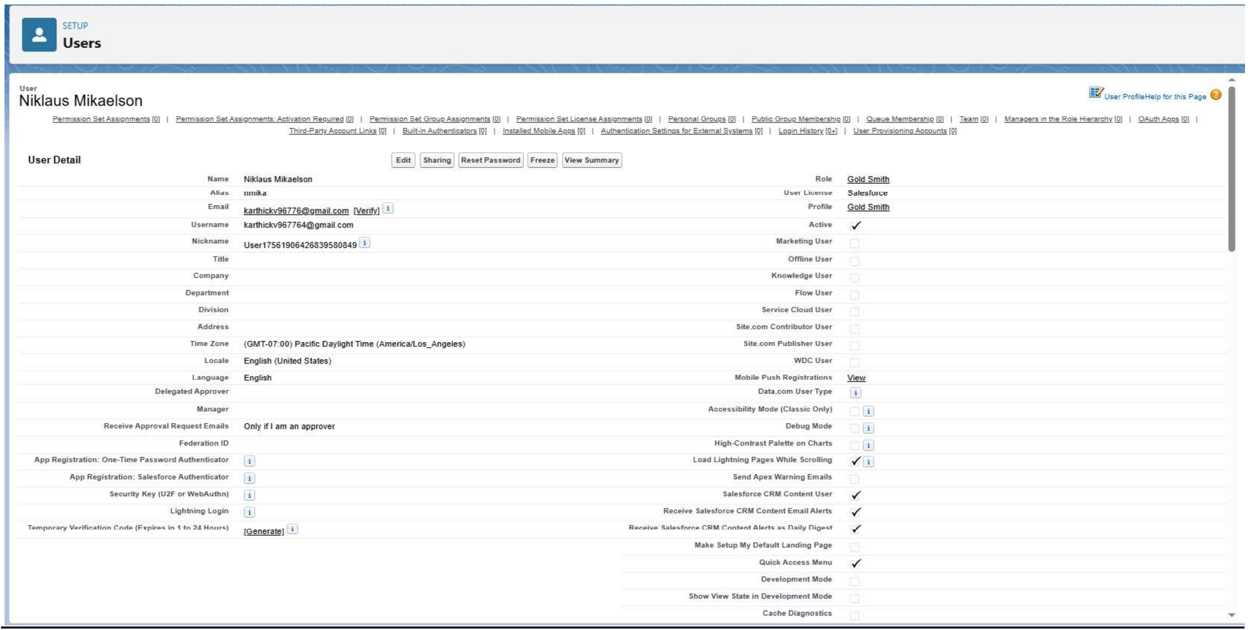


Created One More Role As Worker Which Reports To Gold Smith :

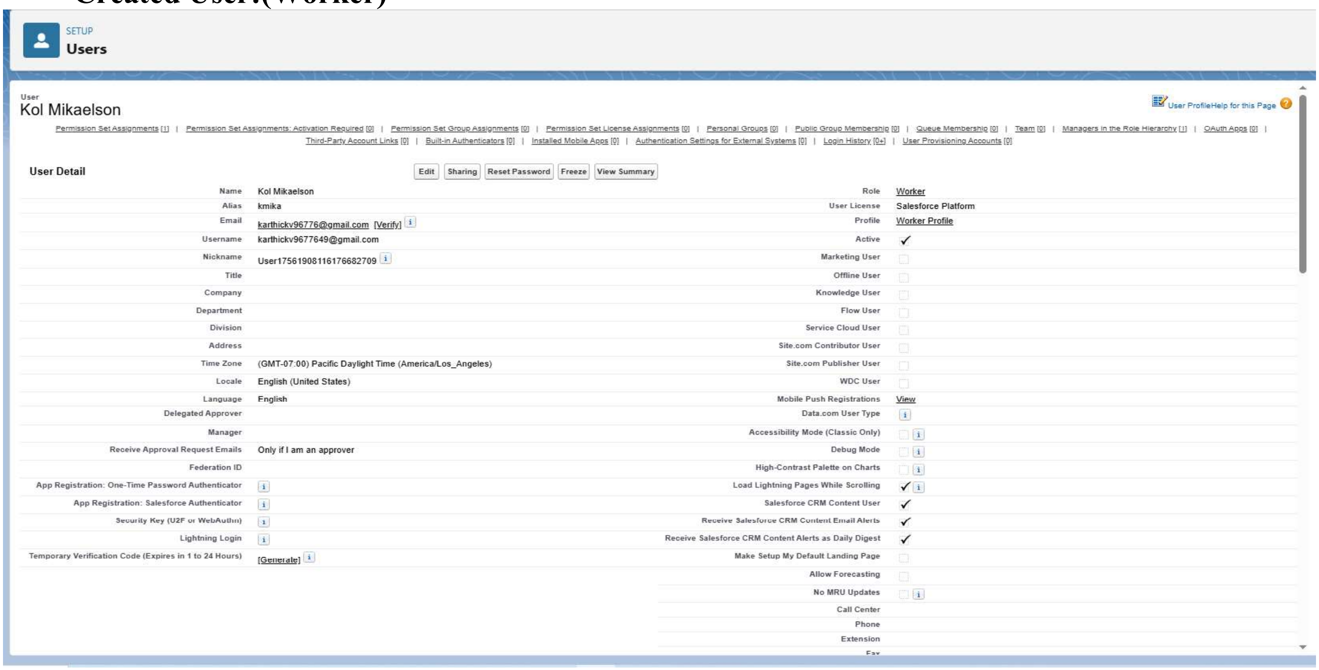
USERS:

A Salesforce user is anyone who logs in with a unique user account. Each account includes details like username, email, license, profile, and optionally a role. The user's account settings control access to features and records.

Created User:(Gold Smith)



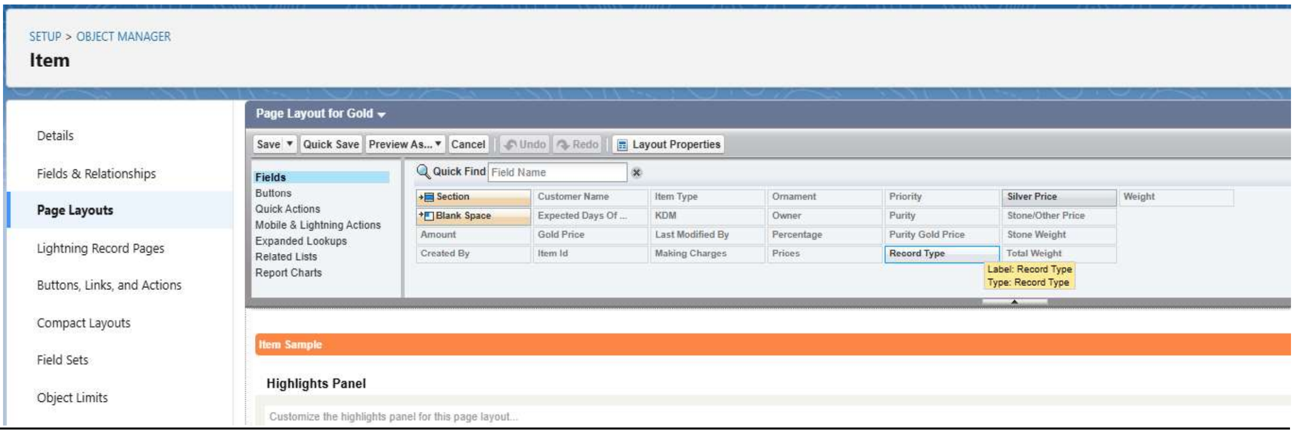
Created User:(Worker)



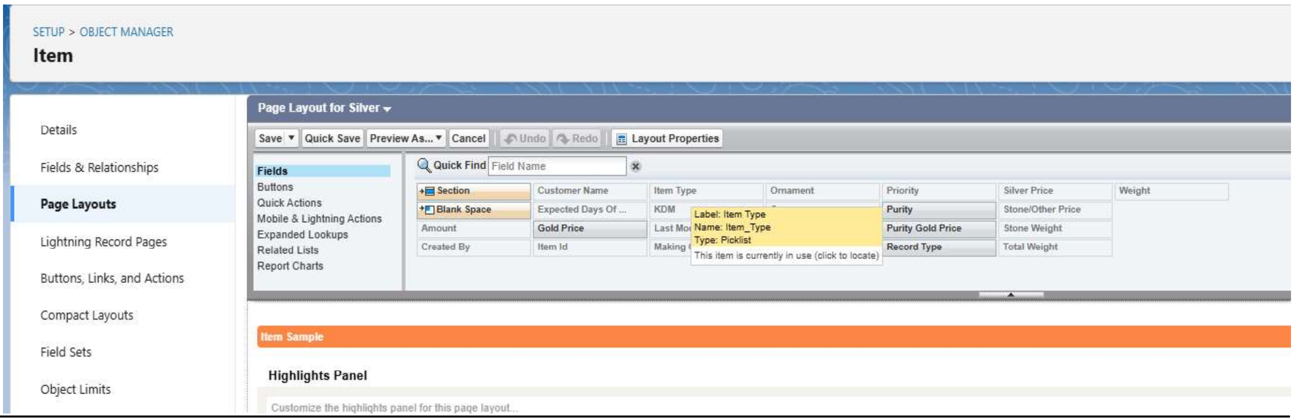
PAGE LAYOUTS:

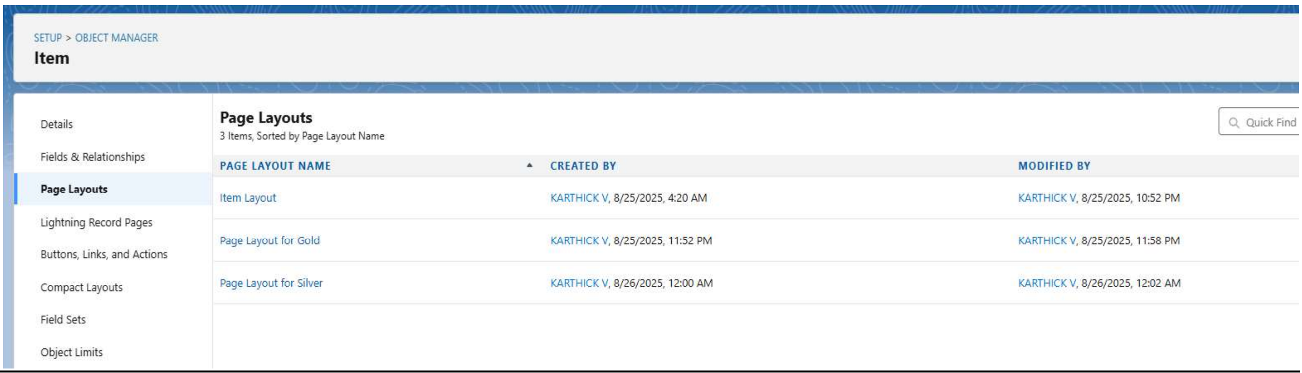
*Page Layouts in Salesforce let you customize the design of record detail and edit pages.
*They control the placement of fields, related lists, and custom links for both standard and custom objects.
*Use case: To make clumsy pages more organized and visually pleasant by grouping related information into sections.

Created a Gold Page layout:



Created a Silver Page layout:





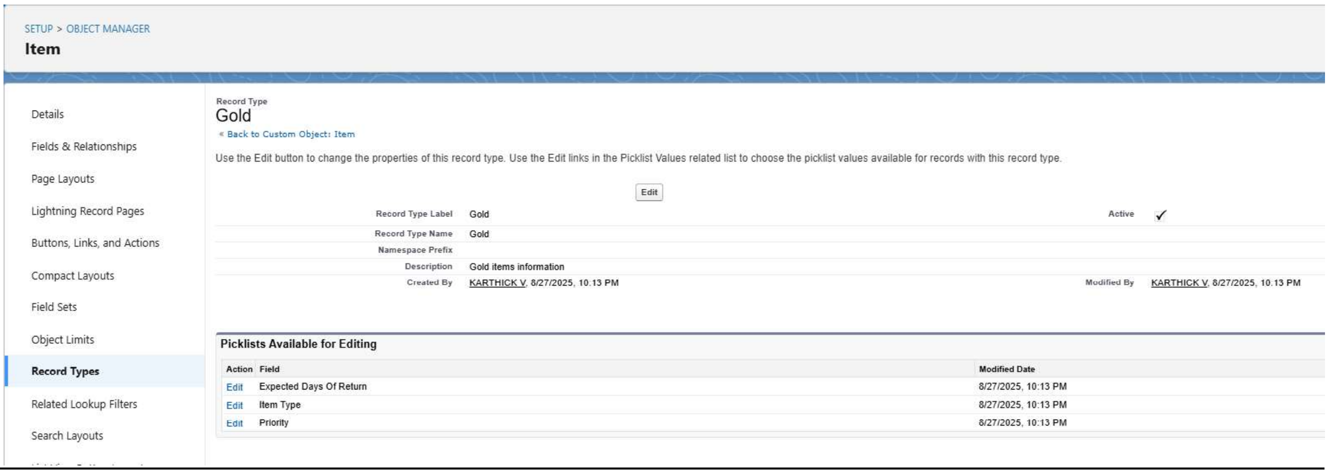
RECORD TYPES :

*Record Types in Salesforce group records of the same object to offer different page layouts, fields, and picklist values.

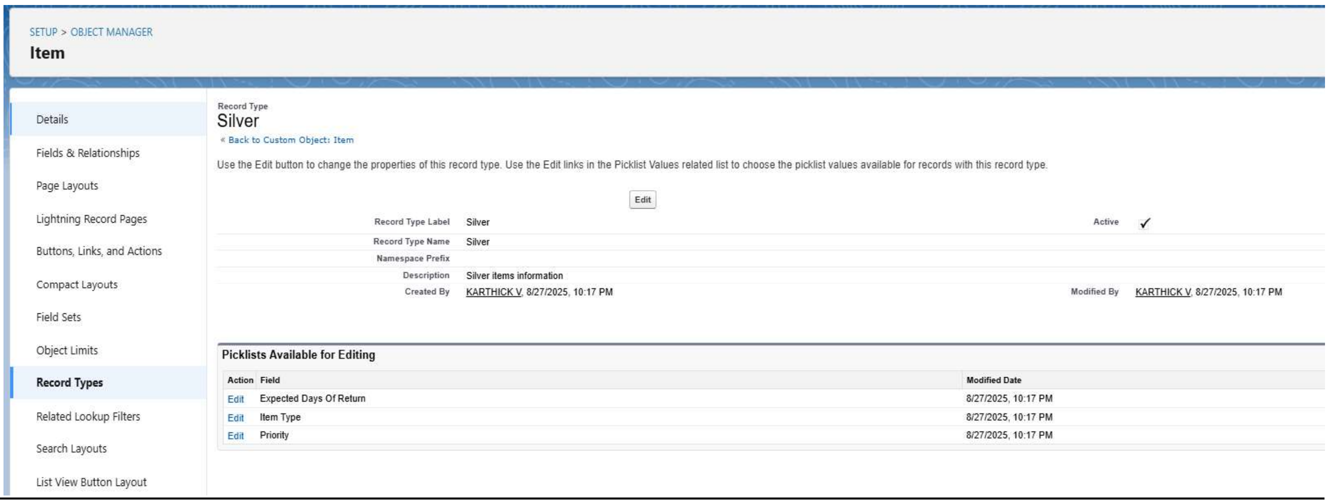
*They help tailor user experience based on different business processes within the same object.

*Use case: Create separate forms for Gold and Silver records to simplify data entry based on work mode.

created a Record Type : (Gold)



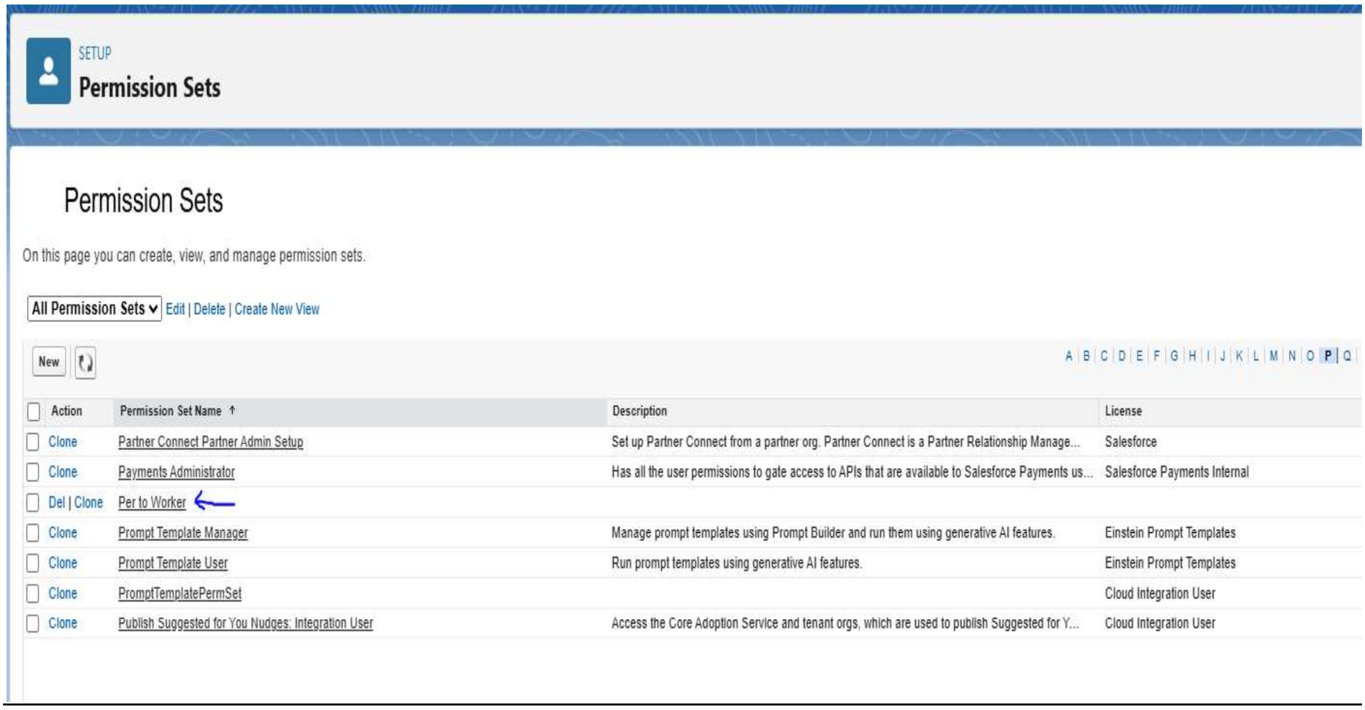
created a Record Type : (Silver)

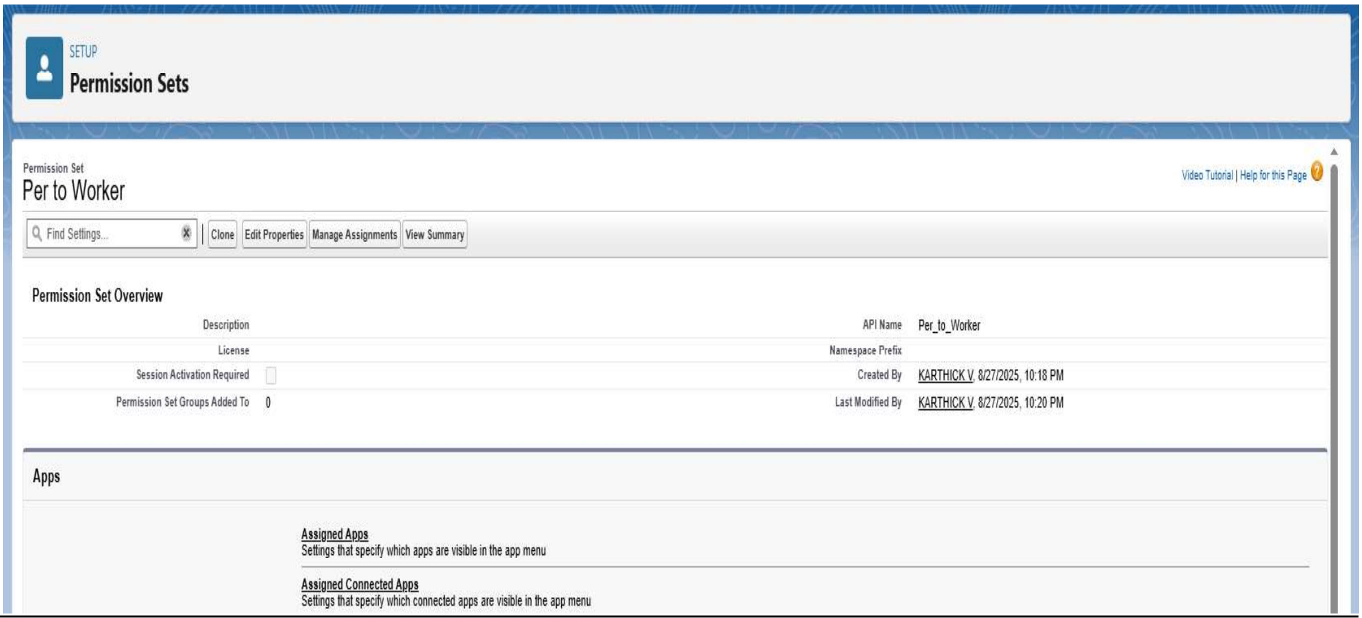


PERMISSION SETS :

*Permission sets are collections of settings and permissions that grant users access to specific tools or features.
*Standard permission sets save time by providing predefined permissions tied to a permission set license.

Created a permission set :

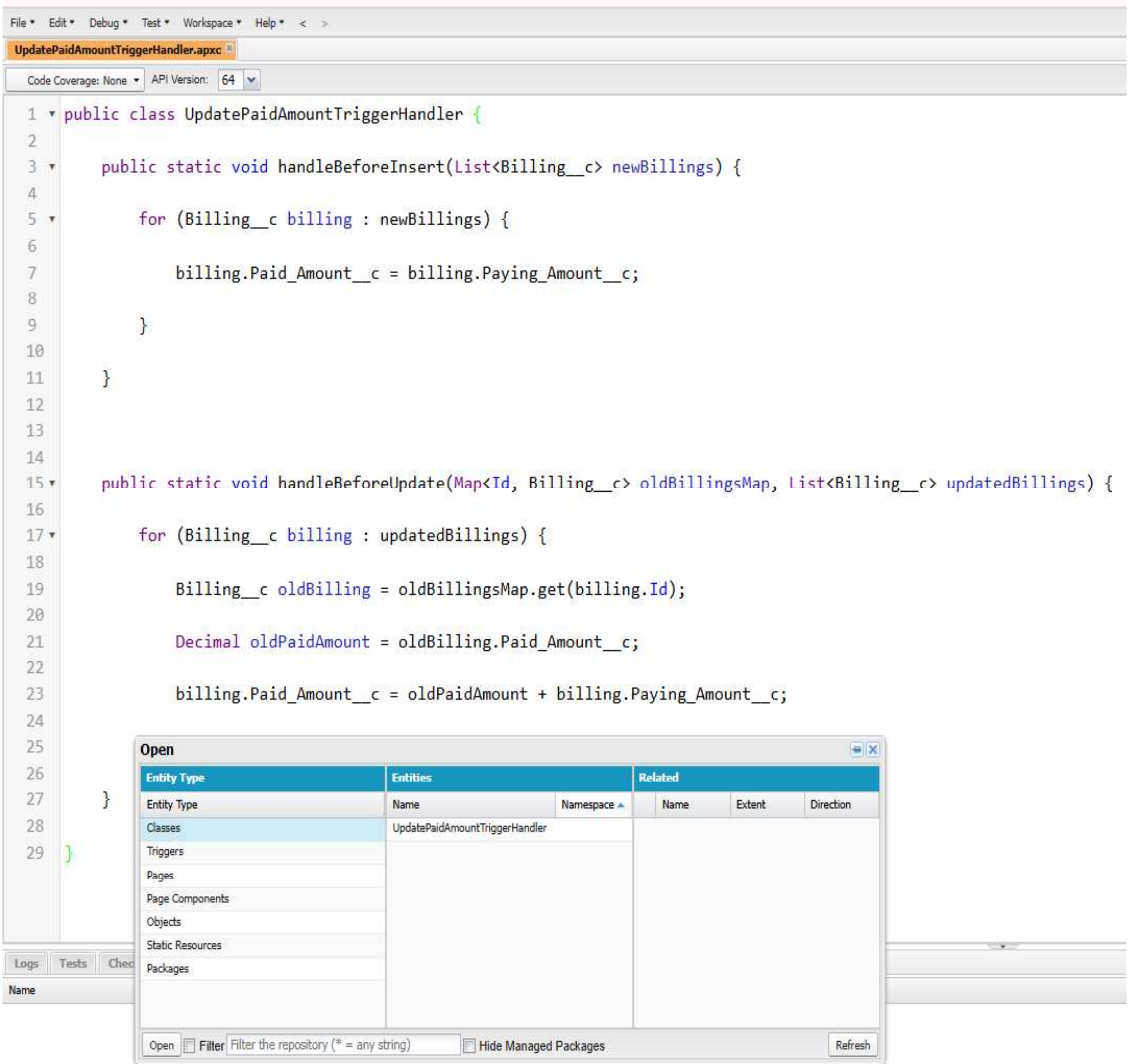




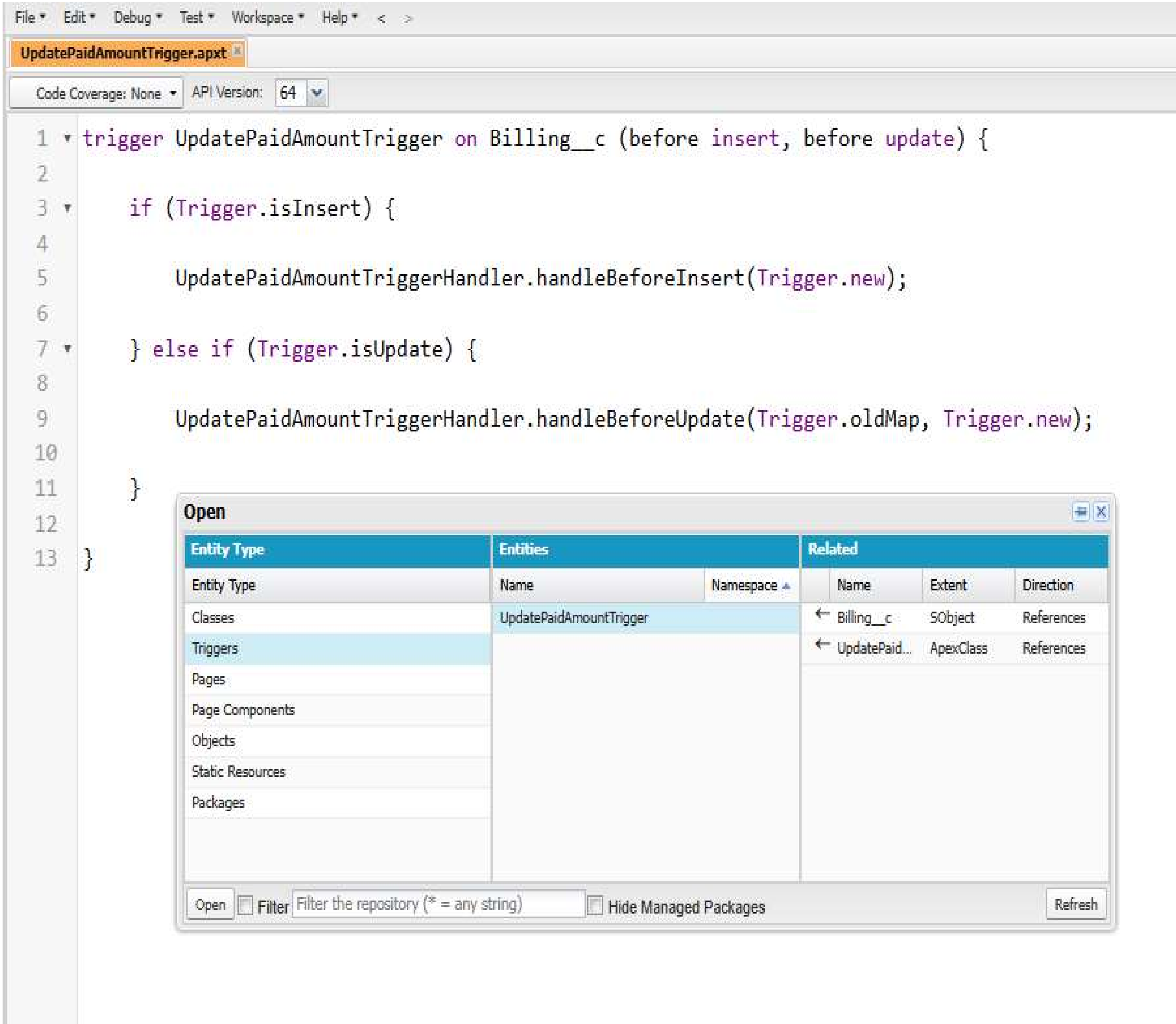
TRIGGER :

*A **trigger** is Apex code that runs automatically before or after events like insert, update, or delete.
*It helps automate processes and customize behavior when records change in Salesforce.
***Use case**: Update the *Paid Amount* on the *Billing* object based on the *Paying Amount* during insert and update actions.

Created a Trigger Handler class :



Created the trigger :

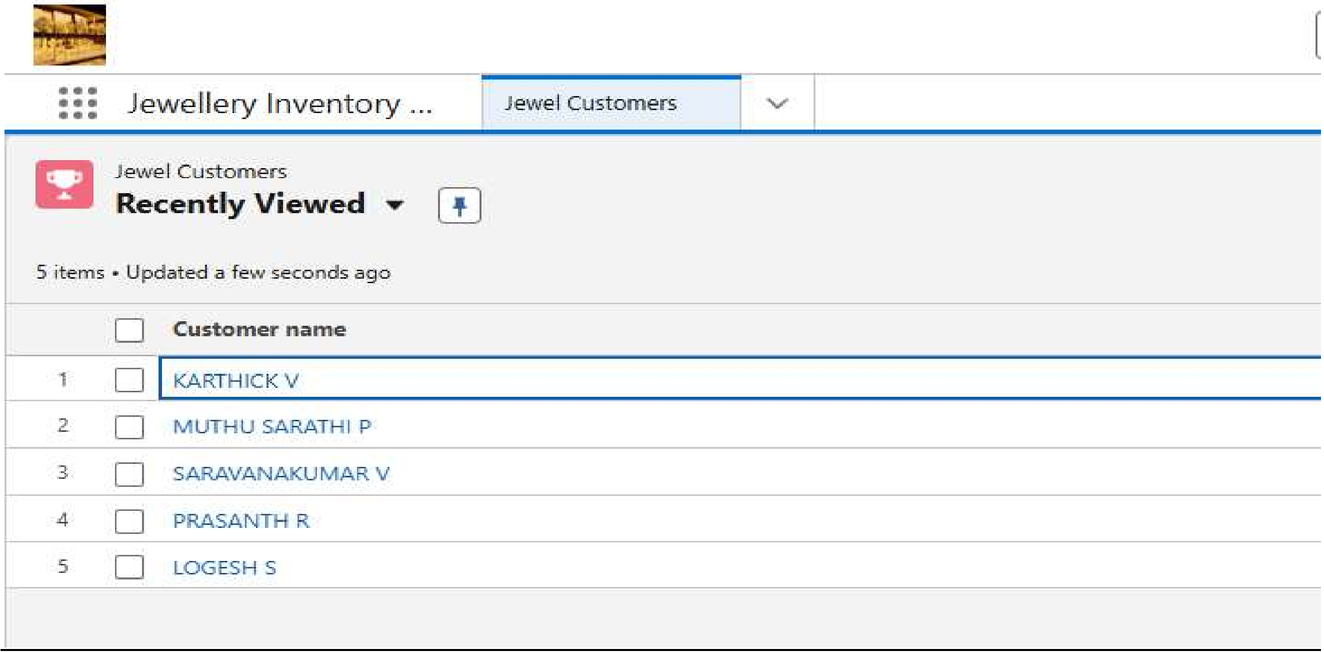


USER ADOPTION :

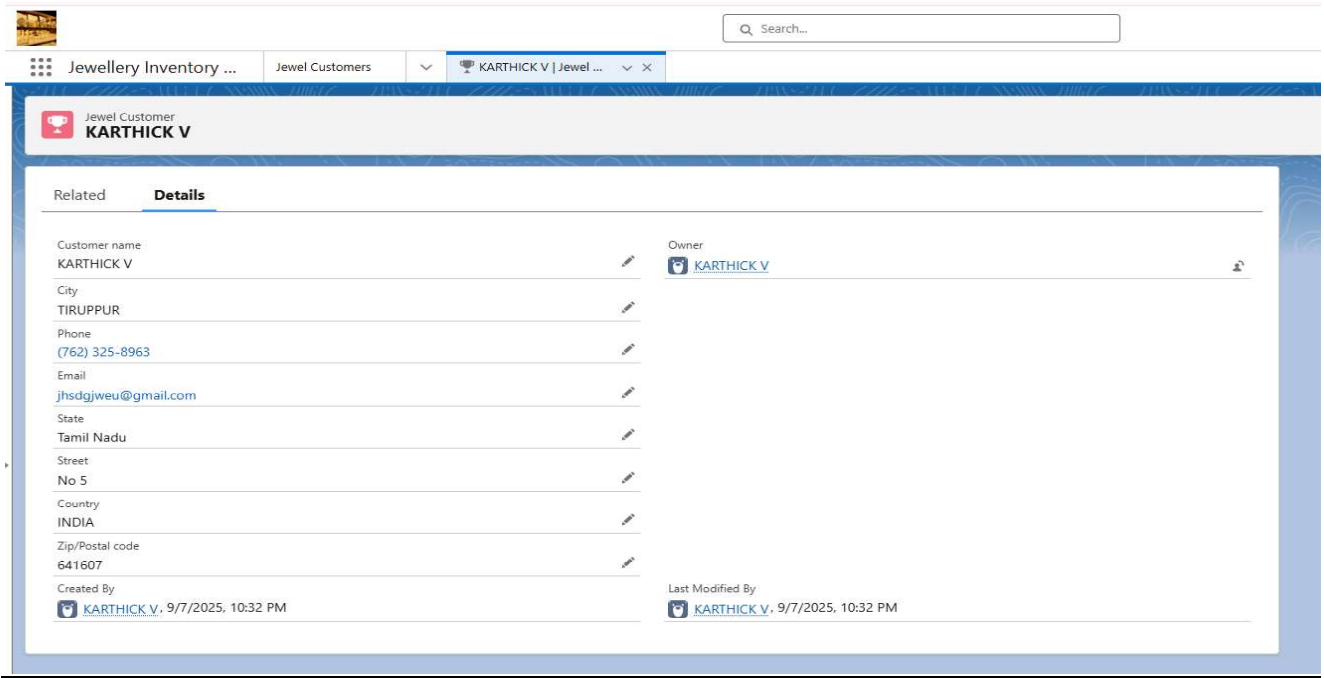
*User Adoption involves managing users effectively to ensure they utilize Salesforce efficiently.

*As an admin, you handle tasks like creating users, setting permissions, and configuring data access.

Created a Record (Jewel Customer) :

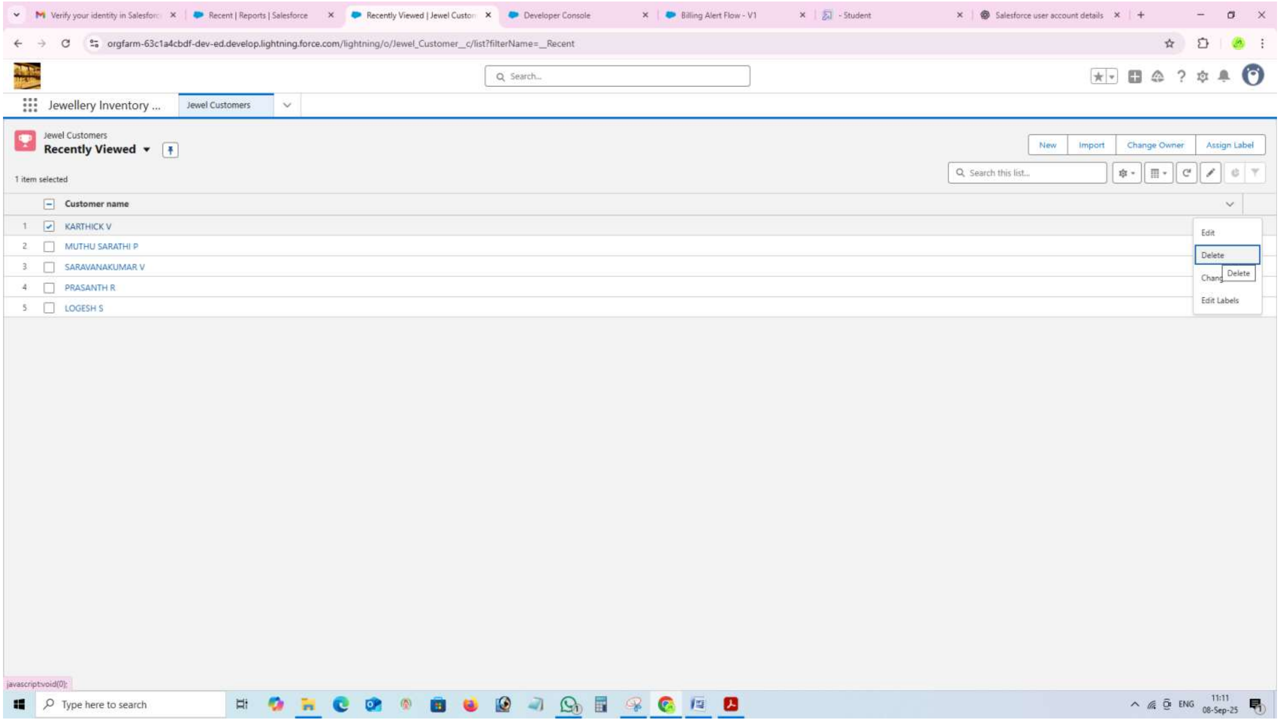


View a Record(Jewel Customer) :

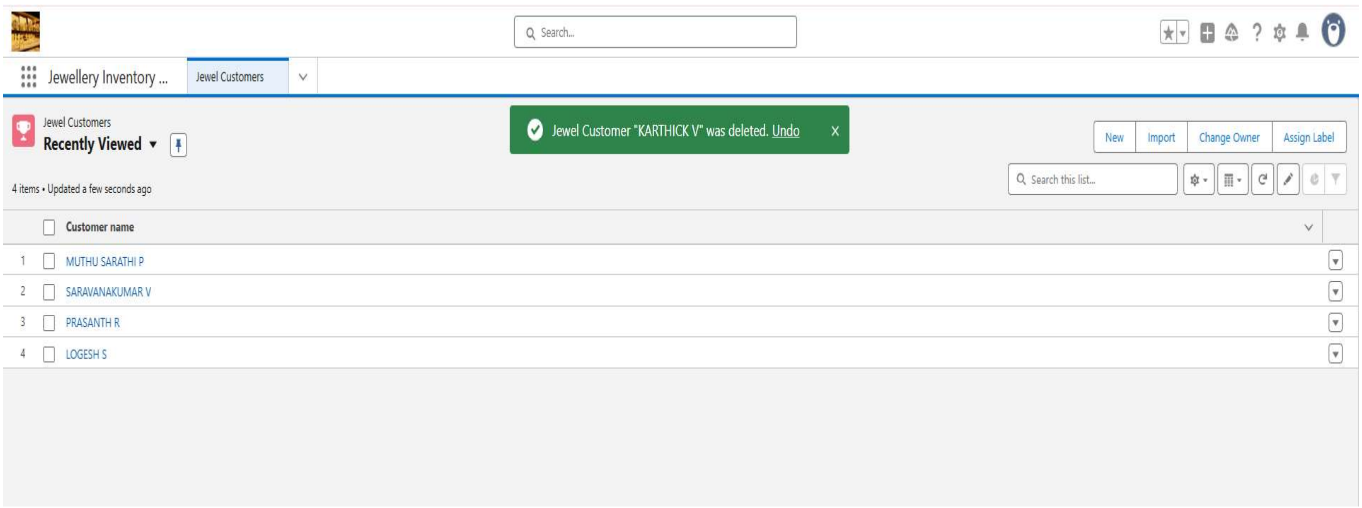


Deleted a Record(Jewel Customer) :

BEFORE DELETED :



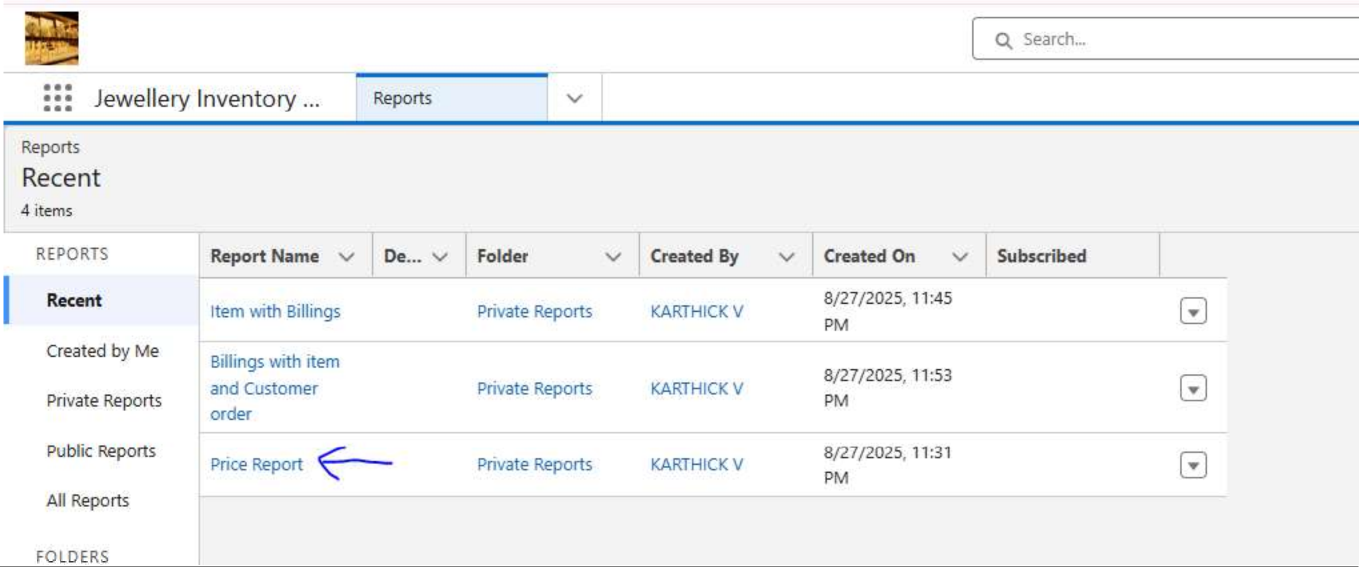
AFTER DELETED :

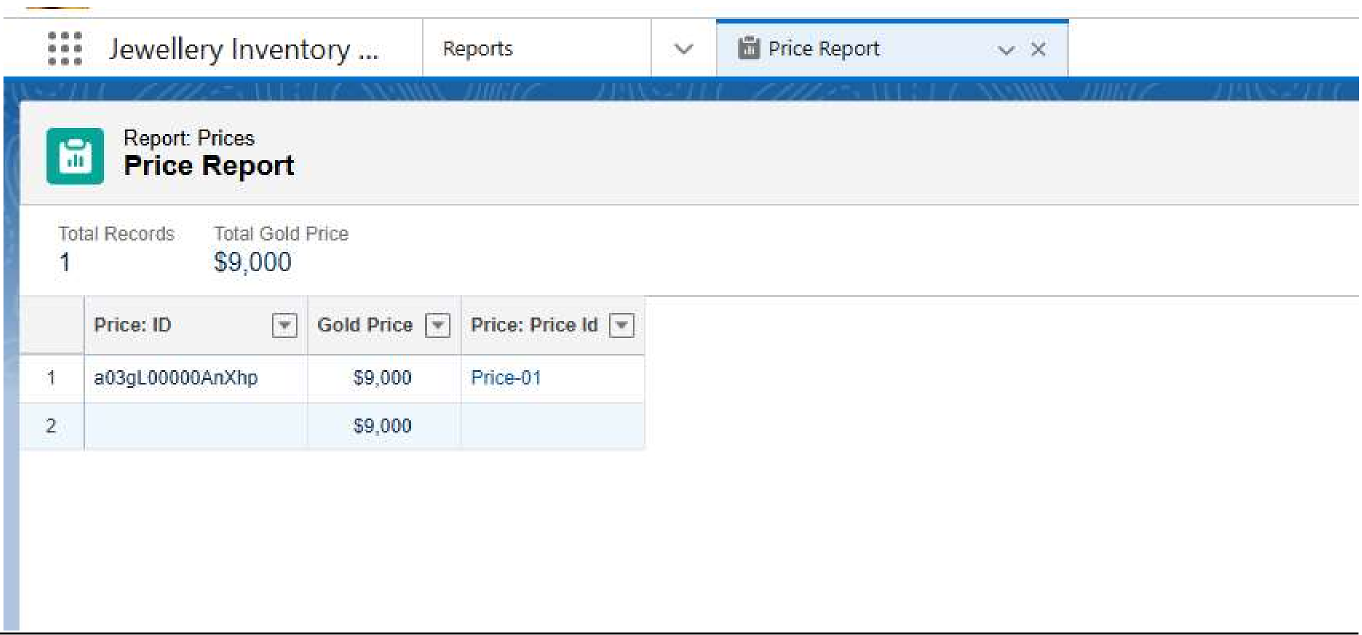


REPORTS :

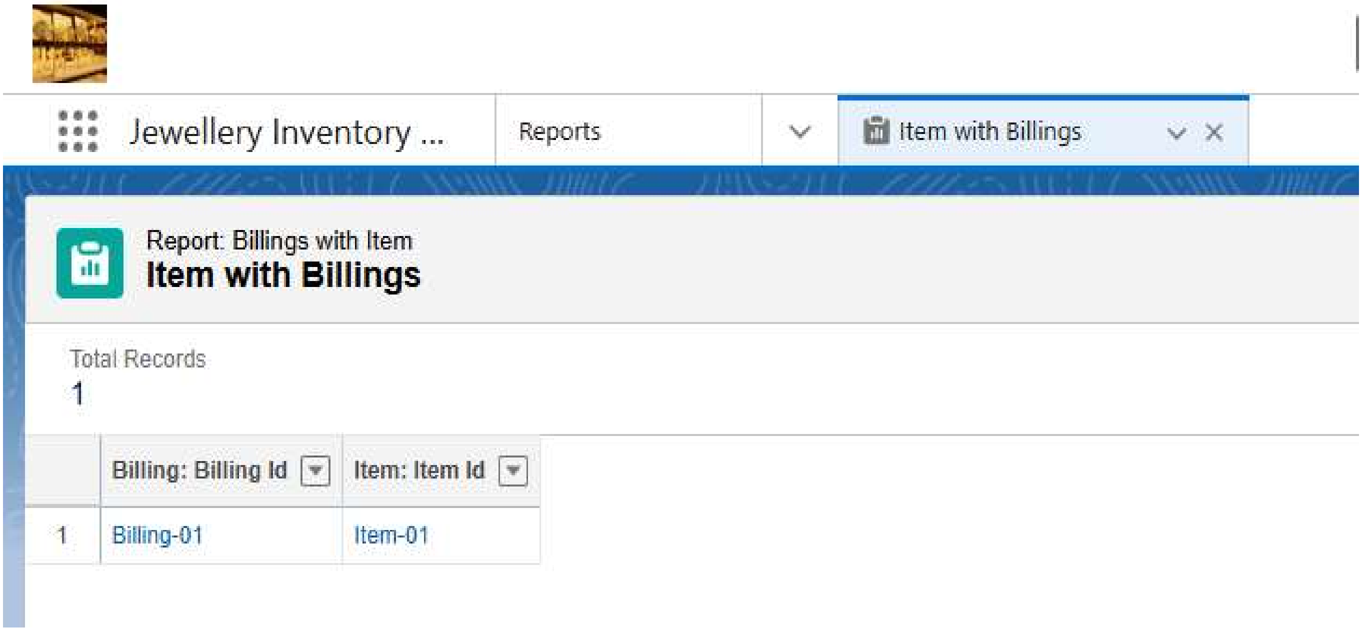
*Reports in Salesforce help you view and analyze data in various formats like Tabular, Summary, Matrix, and Joined.
*They allow you to organize and share key insights for better decision-making.
***Use case**: Create reports on Gold Items, Silver Items, Customer Orders, and Billings to give GoldSmith a clear business overview.

Created Price Reports:

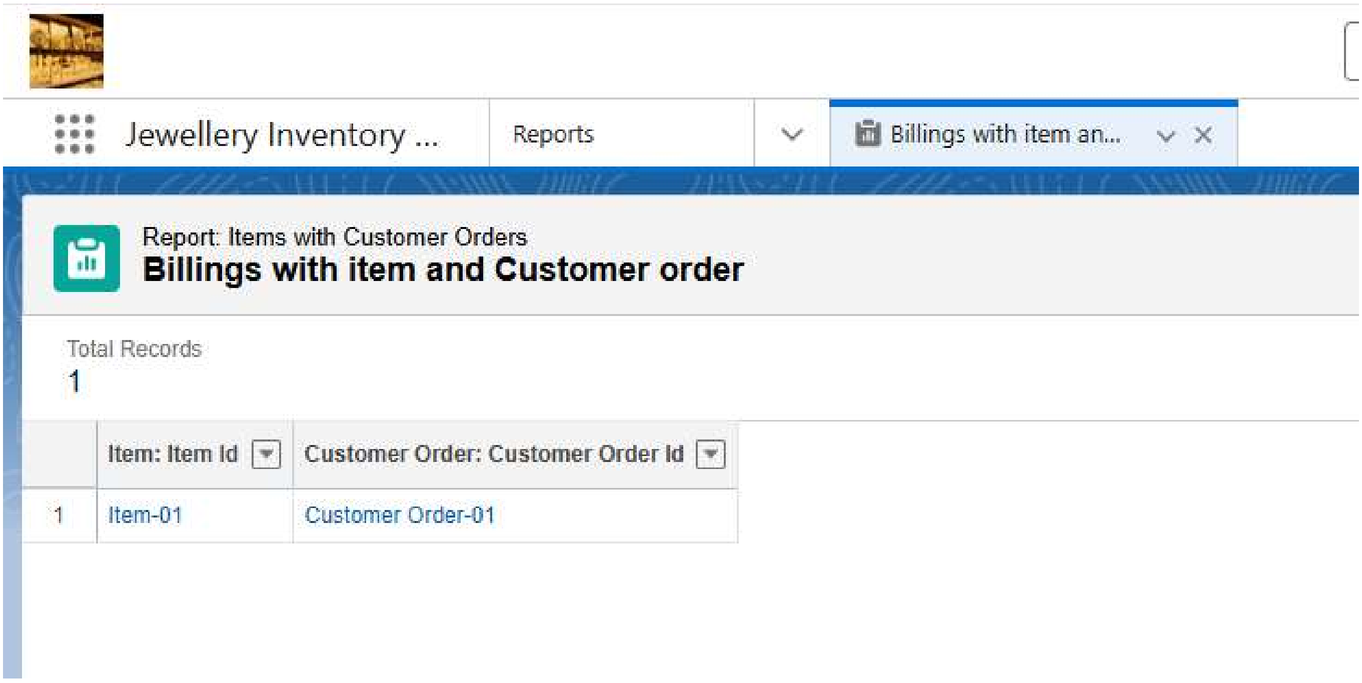




Created Item With Billings Report:



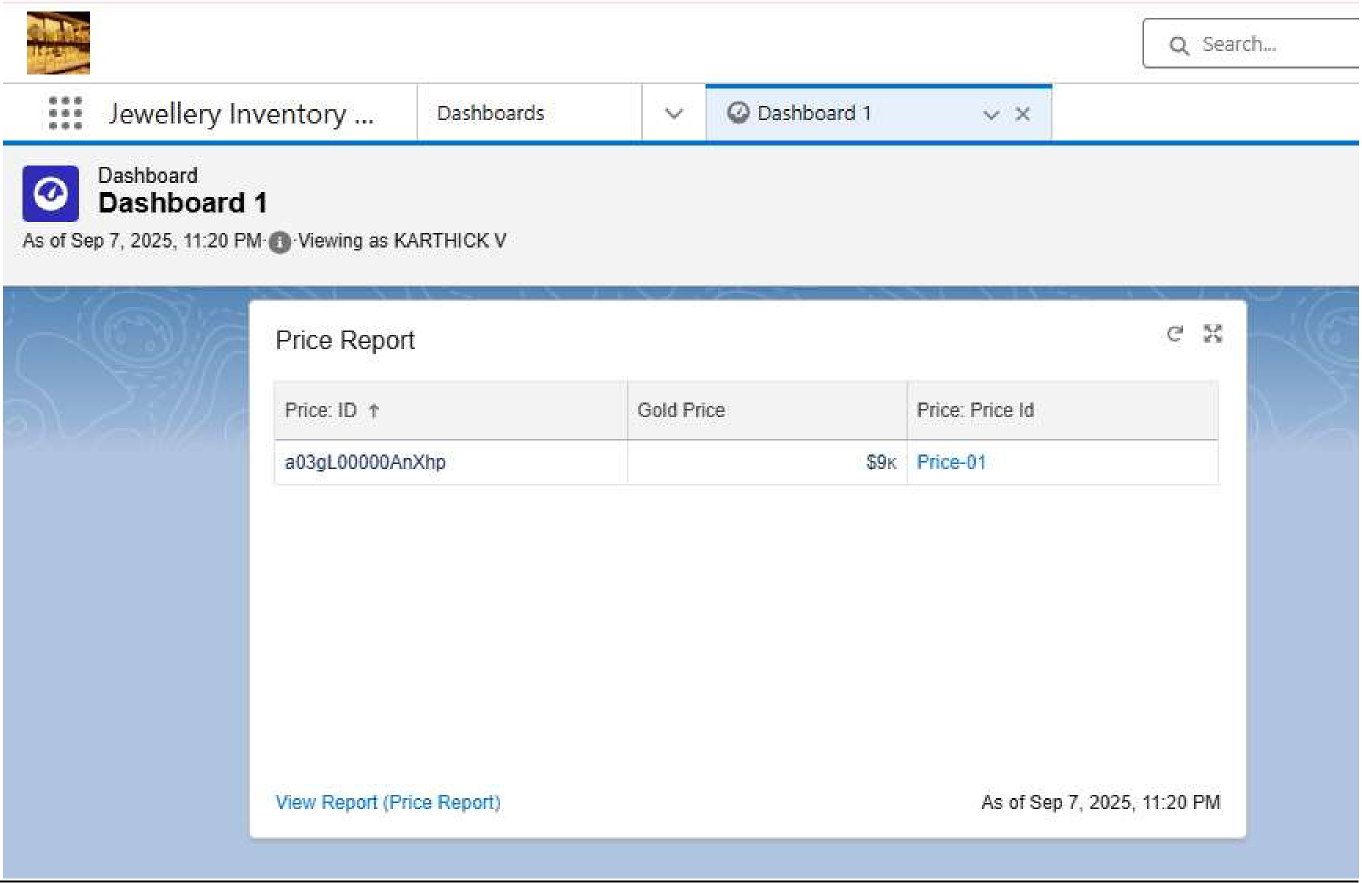
Created Billing With Item And Customer Order Report:



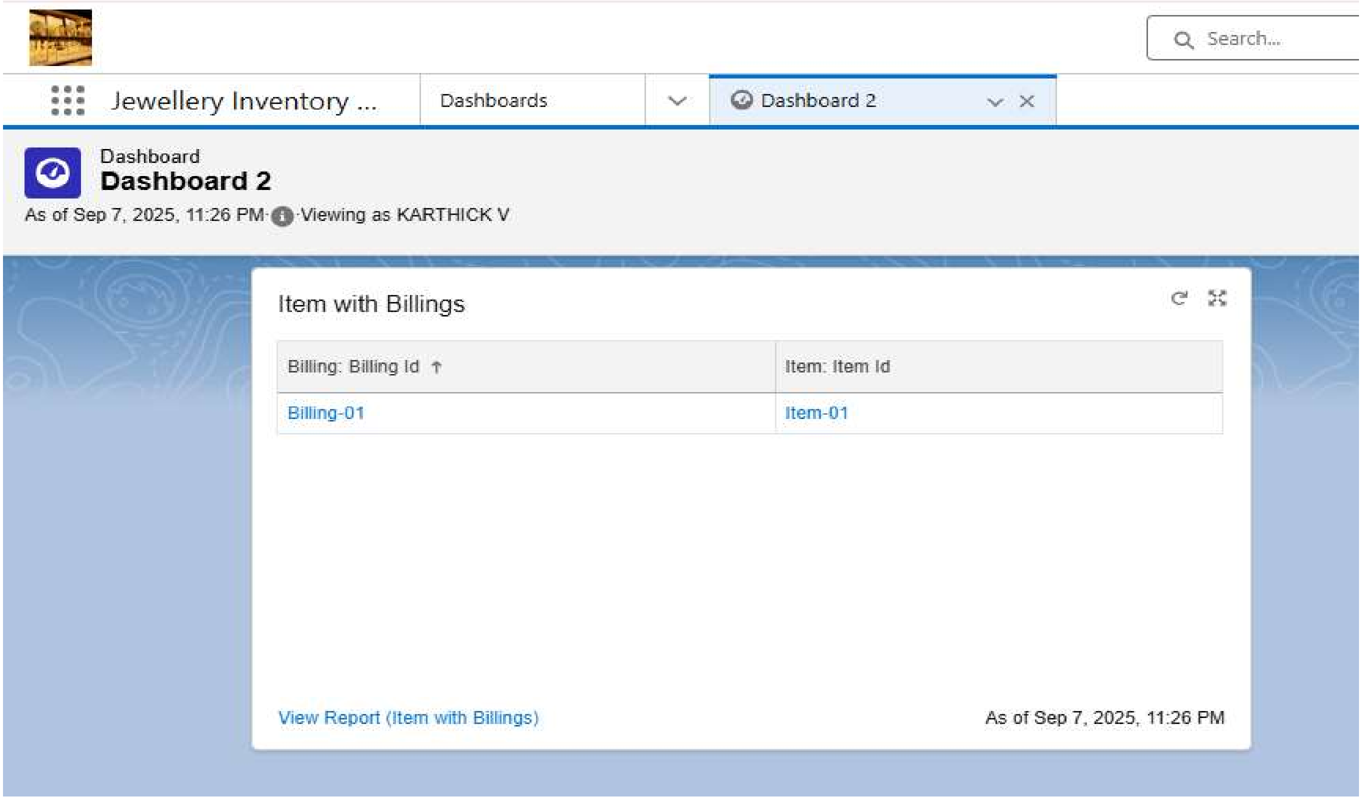
DASHBOARDS :

*Dashboards in Salesforce provide visual representations of report data to help track trends and performance in real time.
*They make it easier for users to interpret data quickly using charts, graphs, and metrics.
***Use case**: As an Admin, you create dashboards for GoldSmith to easily view key reports without searching through raw data.

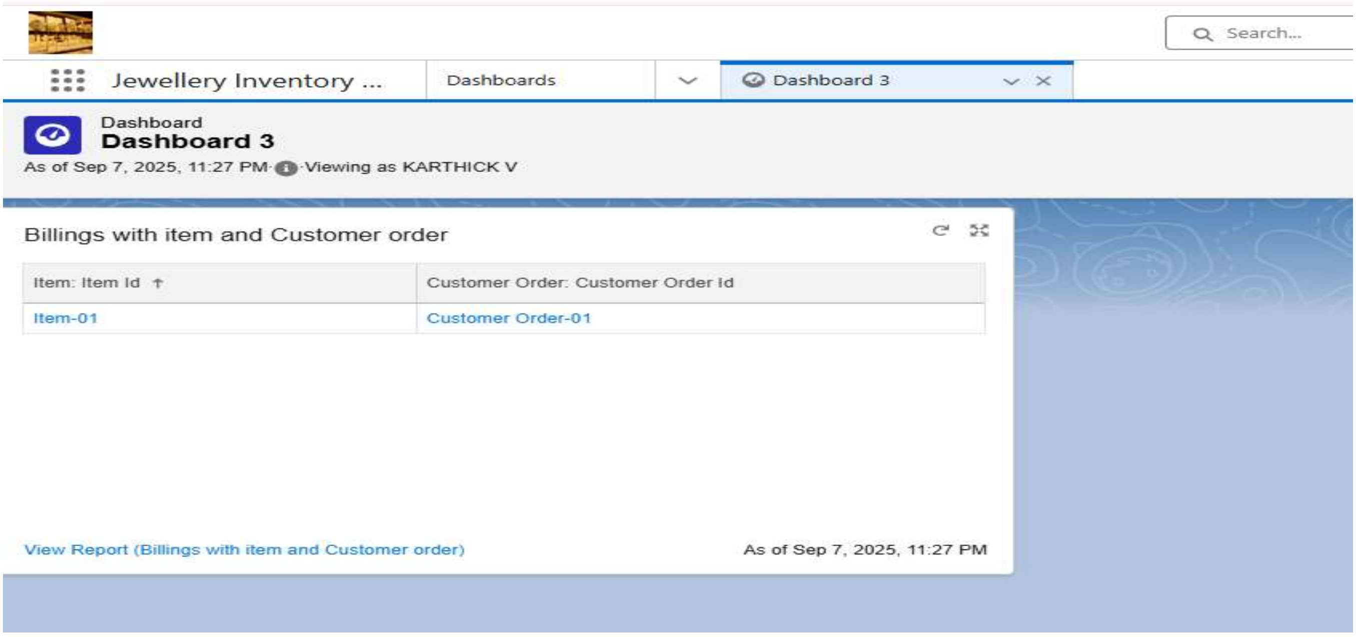
Created Dashboard 1 :



Created Dashboard 2 :



Created Dashboard 3 :



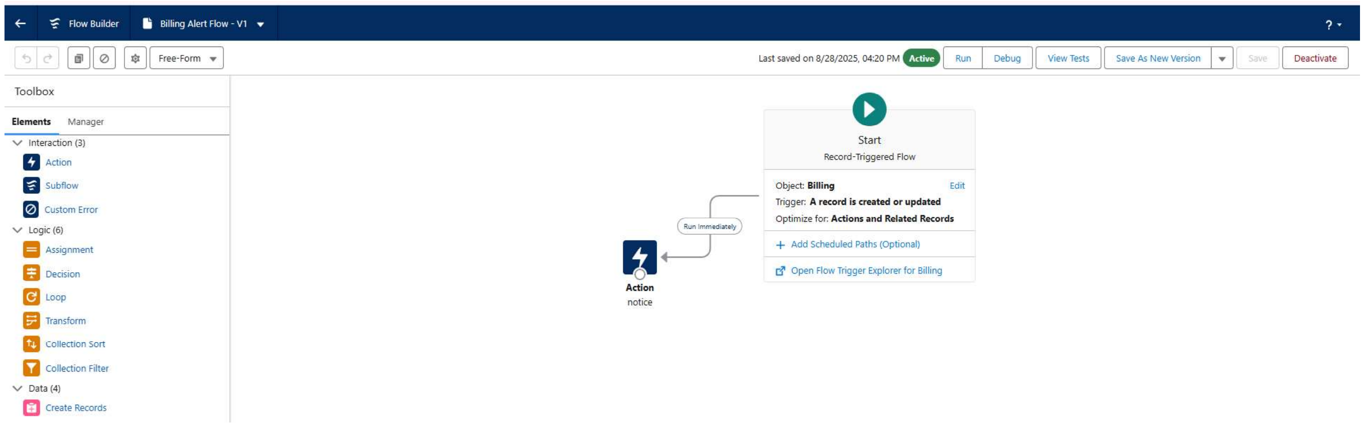
FLOWS :

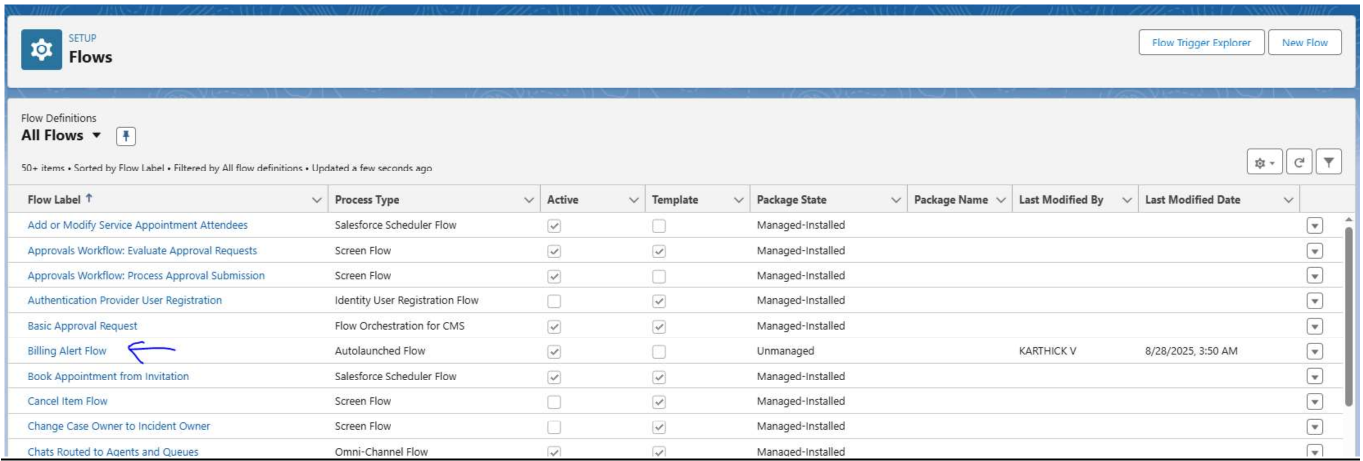
*Flows in Salesforce are visual tools used to automate business processes without writing code.

*They guide users through steps, collect/update data, and handle tasks like record updates or email triggers.

***Use case**: Use Flows to streamline complex processes through a drag-and-drop interface for efficient automation.

Created a Flow :

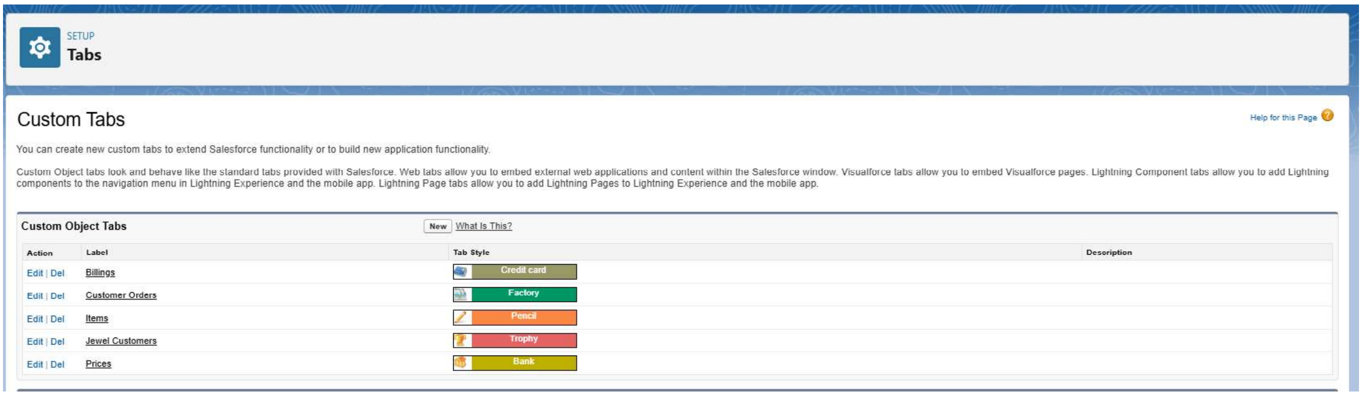




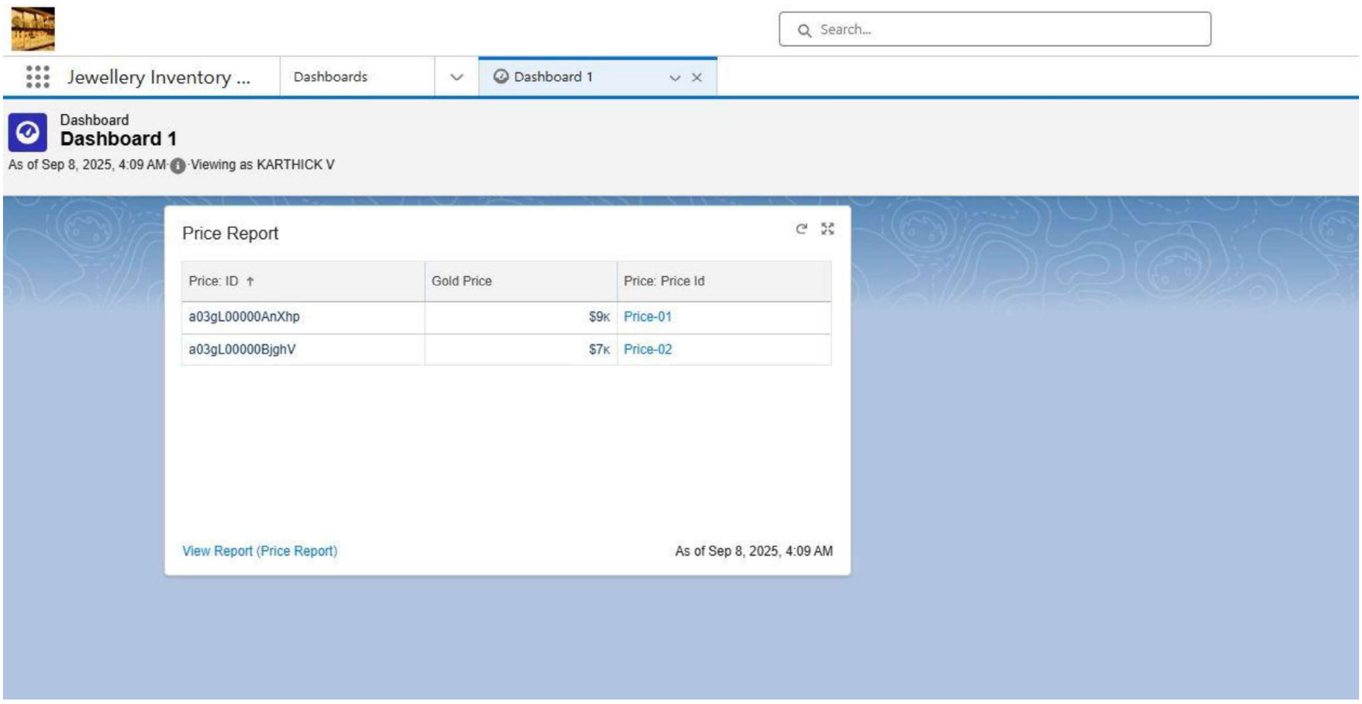
RESULTS :

Output Screenshots :

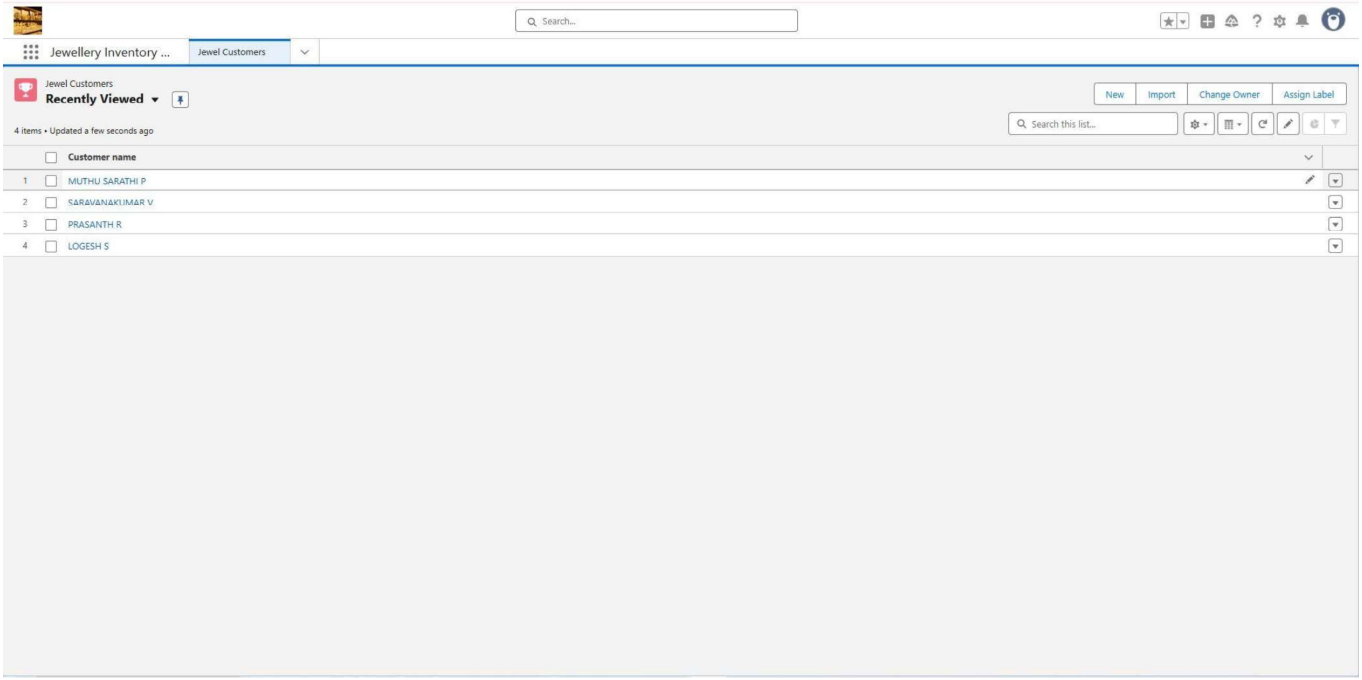
- ❖ **Tabs For Billings,Customer Orders,Items,Jewel Customers,Prices**



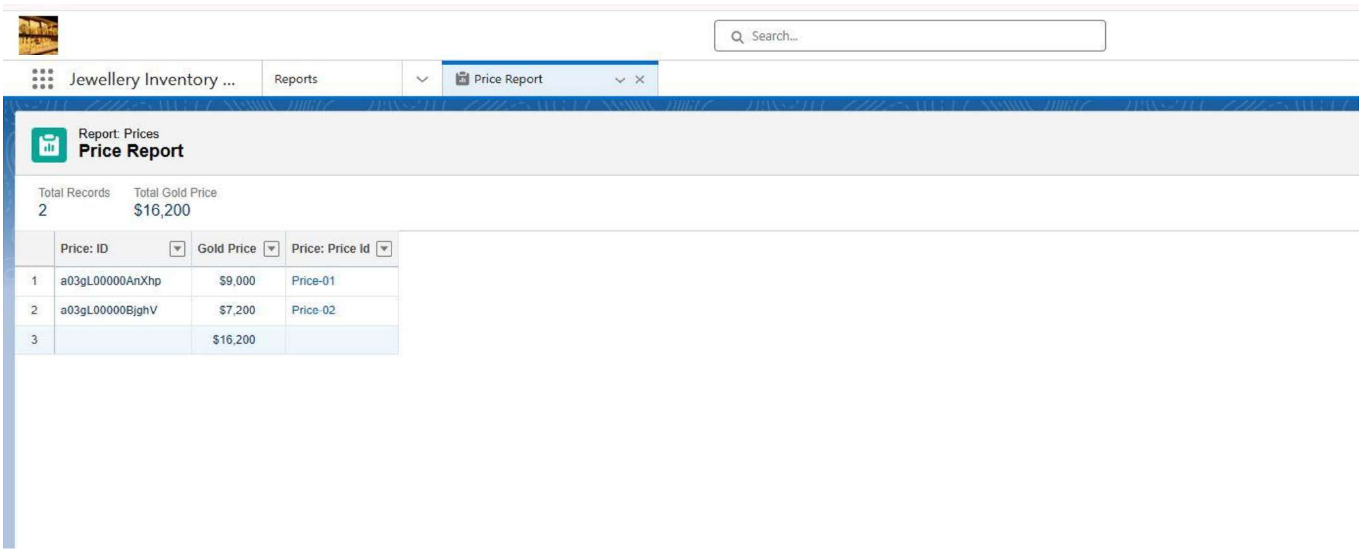
- ❖ **APP DASHBOARD :**



❖ JEWEL CUSTOMER RECORD PAGE :



❖ JEWEL REPORT :



ADVANTAGES & DIS ADVANTAGES :

ADVANTAGES :

- Tracks metal type,weight, price, and quantity per item.
- Eliminates manual data entry errors
- Stores customer details and purchase history
- Helps managers make **data-driven decisions**
- Reduces mistakes using **Validation Rules** and **Field Dependencies**
- Customized Lightning Pages for easy data entry
- Reduces training time for new staff
- Easy to add new jewellery types, stores, or processes in future
- Uses Salesforce profiles and permission sets
- Ensures that only authorized users can view or modify sensitive data

DIS ADVANTAGES :

- The app works only within Salesforce; integration with external platforms needs **custom APIs** or third-party tools.
- No support for scanning barcodes or using RFID for physical inventory checks.
- Needs improvement for complex inventory scenarios.
- Sales Order confirms but **actual payment collection is manual or outside the system**.
- New customer records are entered manually.
- All users may see the same dashboard view.
- Requires internet and Salesforce login.
- No offline access for stock audits or mobile order entries in remote areas.

CONCLUSION :

The Jewellery CRM application effectively streamlines inventory and sales processes using Salesforce tools like flows, validation rules. It improves data accuracy, automates order management, and enhances customer communication. The system offers a user-friendly interface and real-time reporting for better decision-making. This project demonstrates strong practical knowledge of Salesforce development. While effective, future enhancements like payment integration and barcode scanning can further improve its functionality. Overall, it delivers a smart solution tailored for jewellery business needs.