







CRM APPLICATION FOR JEWEL MANAGEMENT – (Developer)

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INTRODUCTION:

Salesforce is your customer success platform, designed to help you sell, service, market, analyze, and connect with your customers. Salesforce has everything you need to run your business from anywhere. Using standard products and features, you can manage relationships with prospects and customers, collaborate and engage with employees and partners, and store your data securely in the cloud.



PROJECT OVERVIEW:

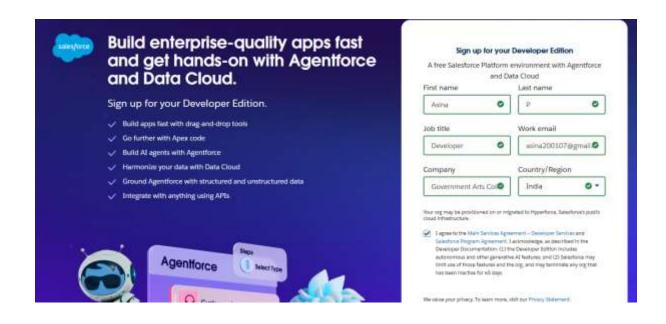
The Jewel Inventory System is a comprehensive software Solution designed to streamline and manage the inventory and sales processes of a jewellery store or a jewellery manufacturer. The system aims to provide an efficient and user-friendly solution to track and control the inventory of various jewellery items, maintain accurate records, and facilitate seamless sales transactions.



PURPOSE:

Creating Developer Account:

By using URL -https://developer.salesforce.com/signup



CREATION OF OBJECT:

Salesforce objects are database tables that permit you to store data that is specific to an organization. What are the types of Salesforce objects

Salesforce objects are of two types:

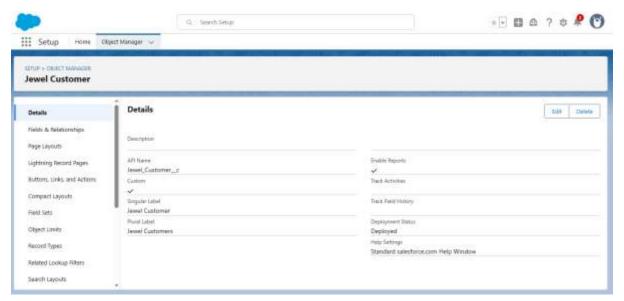
- 1. Standard Objects: Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.
- 2. Custom Objects: Custom objects are those objects that are created by users. They supply information that is unique and essential to their organization. They are the heart of any application and provide a structure for sharing data.

The Required Objects:

- o Jewel Customer Object
- o Item Object

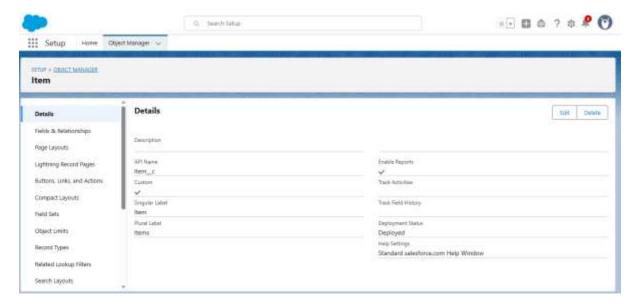
Jewel Customer Object:

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



Item Object:

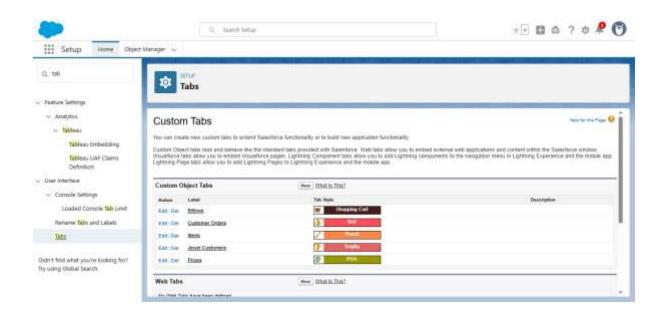
The purpose of creating a Item object is to manage the inventory of gold and silver items.



Both the Objects are Created Succesfully.

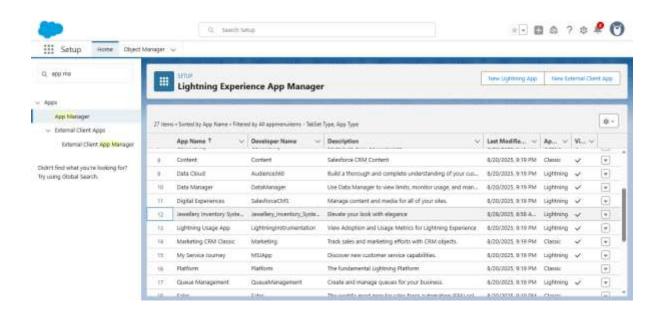
Creation of Tabs:

A tab is like a user interface that is used to build records for objects and to view the records in the objects.



Creation of the Lightening App:

Lightning apps let you brand your apps with a custom color and logo. You can even include a utility bar and Lightning page tabs in your Lightning app. Members of your org can work more efficiently by easily switching between apps.



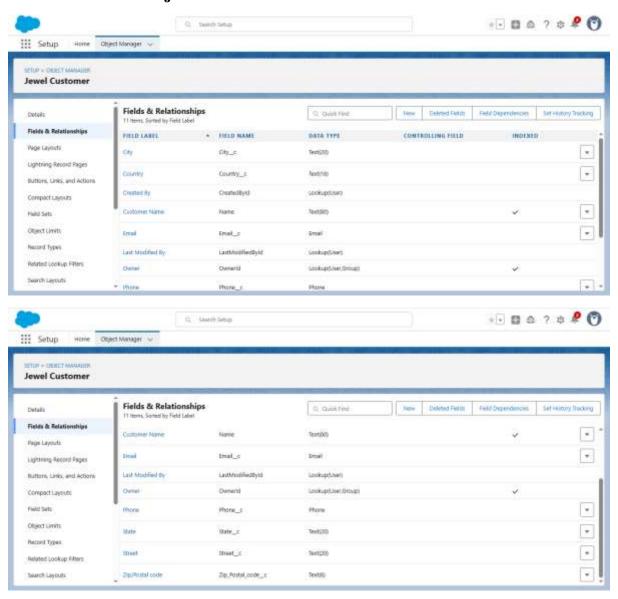
Creation of Fields:

When we talk about Salesforce, Fields represent the data stored in the columns of a relational database. It can hold any valuable information that you require for a specific object. Hence, the overall searching, deletion, and editing of the records become simpler and quicker.

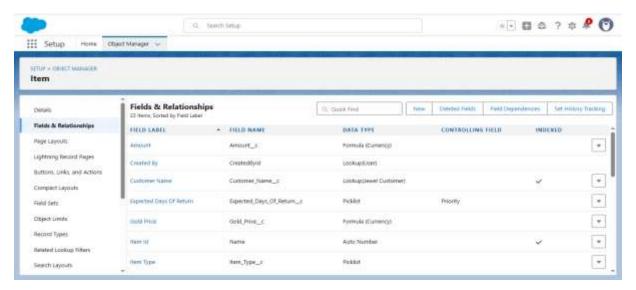
Custom Fields:

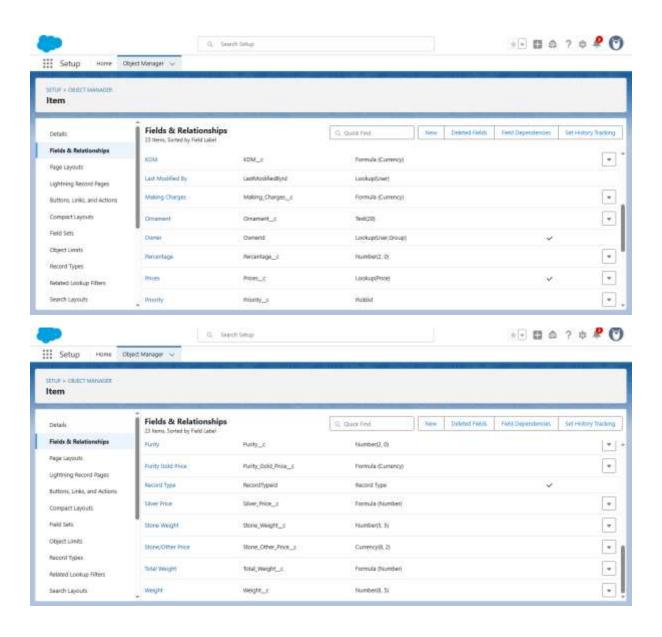
On the other side of the coin, Custom Fields are highly flexible, and users can change them according to requirements. Moreover, each organiser or company can use them if necessary. It means you need not always include them in the records, unlike Standard fields. Hence, the final decision depends on the user, and he can add/remove Custom Fields of any given form.

Jewel Customer Object Fields:

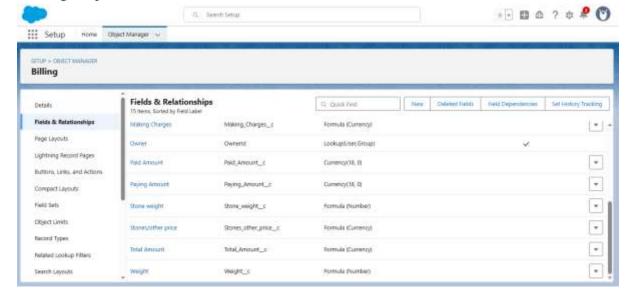


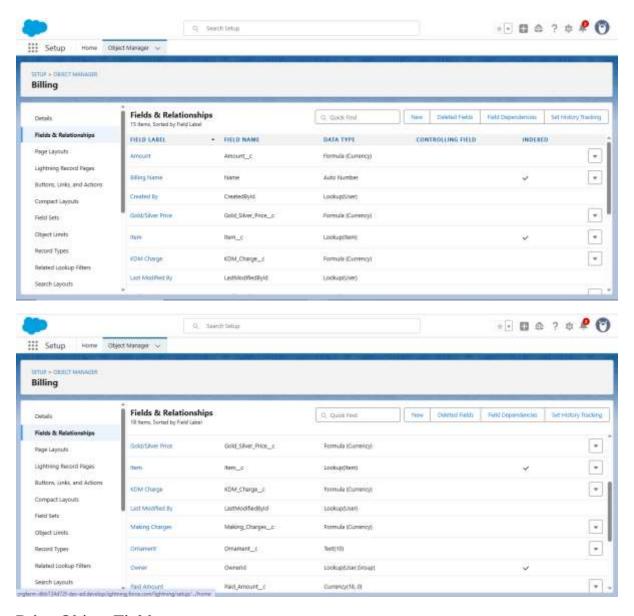
Item Object Fields:



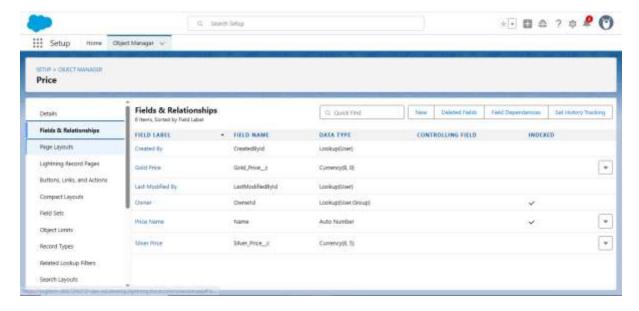


Billing Object Fields

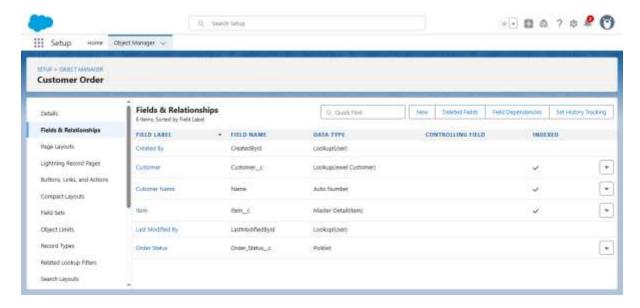




Price Object Fields



Customer Order Fields

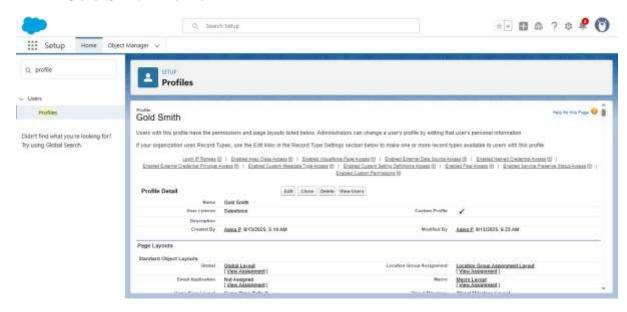


All the Required fields are created with their appropriate Object. Now, We can use these fields accoudingly.

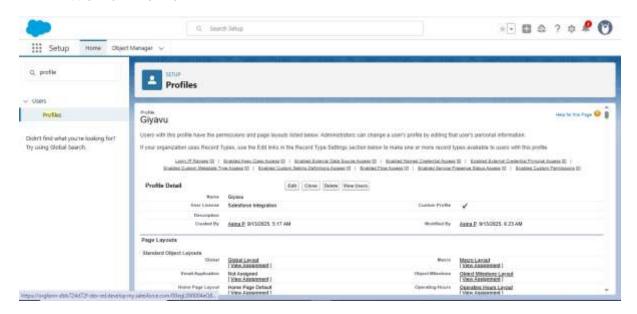
Creation of Profiles:

A profile is a group/collection of settings and permissions that define what a user can do in salesforce. Profile controls "Object permissions, Field permissions, User permissions, Tab settings, App settings, Apex class access, Visualforce page access, Page layouts, Record Types, Login hours & Login IP ranges. You can define profiles by the user's job function. For example System Administrator, Developer, Sales Representative.

Gold Smith Profile



• Worker Profile



Creation of Roles

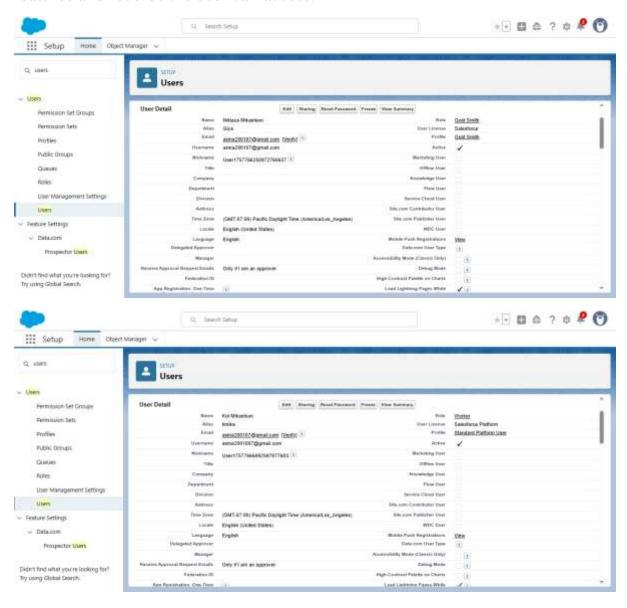
A role in Salesforce defines a user's visibility access at the record level. Roles may be used to specify the types of access that people in your Salesforce organisation can have to data. Simply put, it describes what a user could see within the Salesforce organisation.

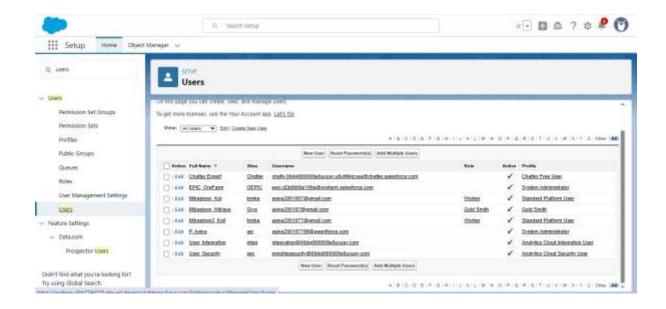
- Gold Smith
- Worker



Creation of Users:

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

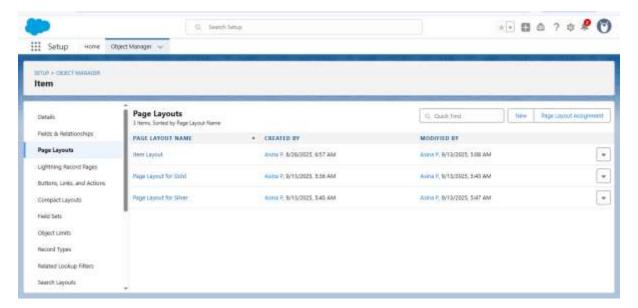




Creation of Page Layouts:

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

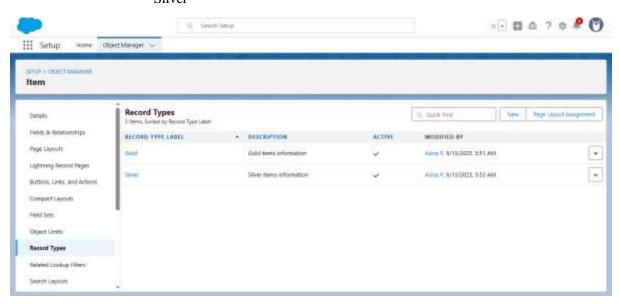
- Layout for Gold
- Layout for Silver



Creation of Record Type:

Record Types are a way of grouping many records of one type for that object. These can be applied to any standard or custom object, and allow you to have a different page layout, fields, required fields, and picklist values.

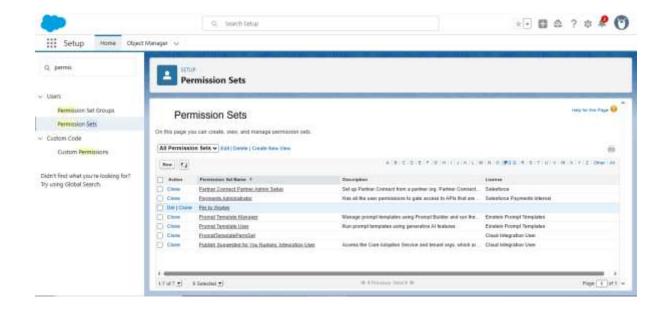
- Gold
- Silver



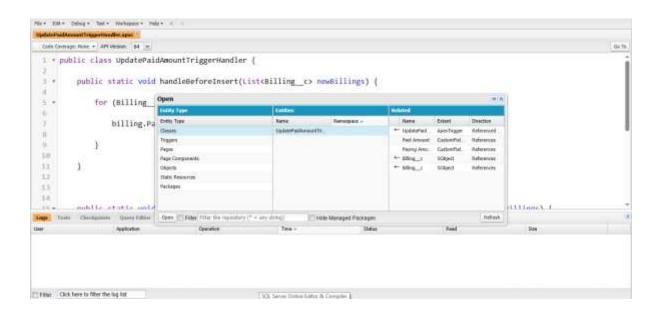
Creation of a Permission Set:

A standard permission set consists of a group of common permissions for a particular feature associated with a permission set licence. Using a standard permission set saves you time and facilitates administration because you don't need to create the custom permission set.

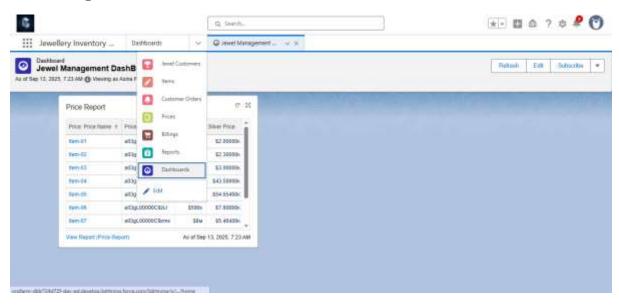
Per to Worker

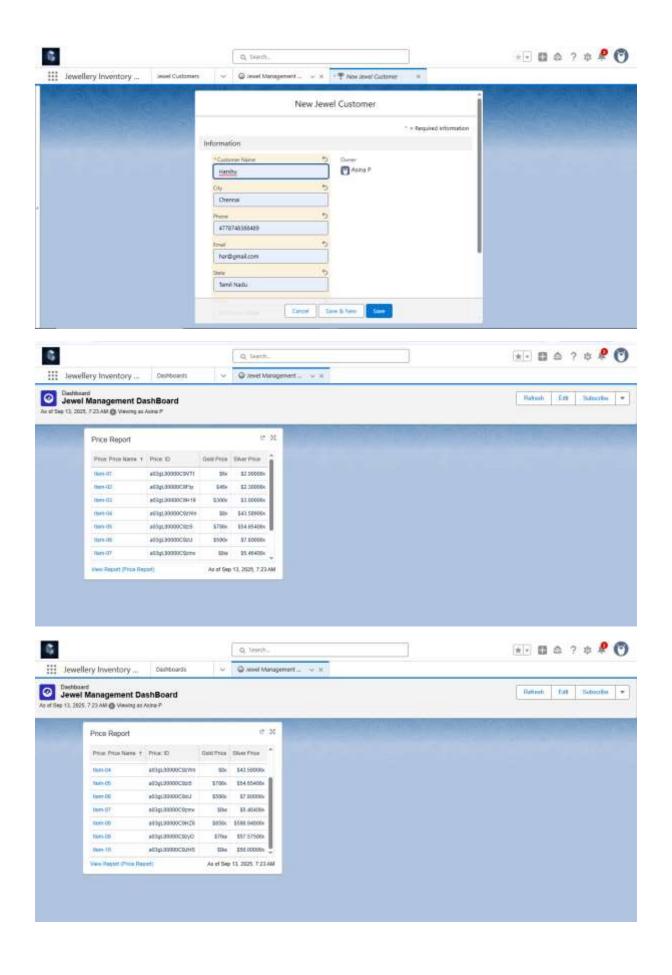


Creation of Triggers:



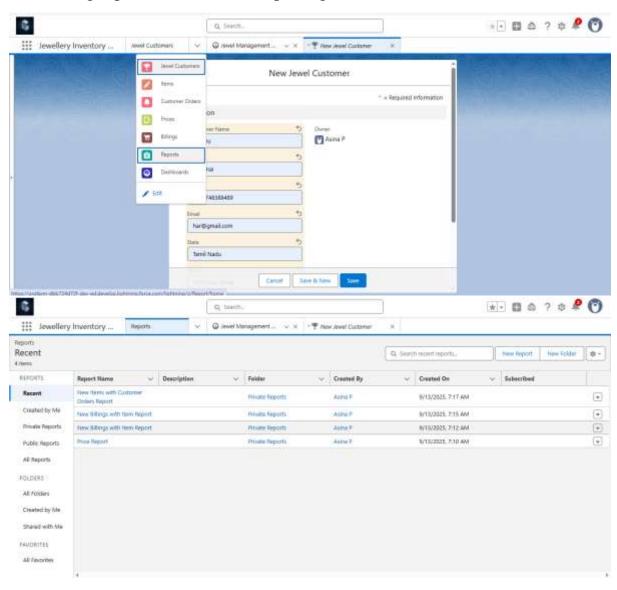
User Adoption:





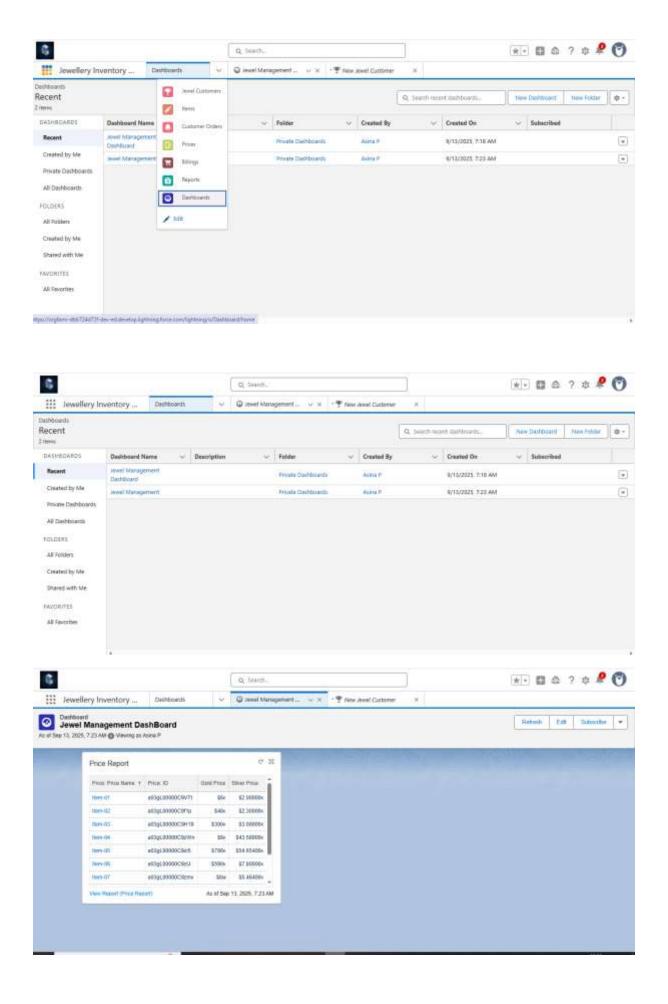
Creation of Reports:

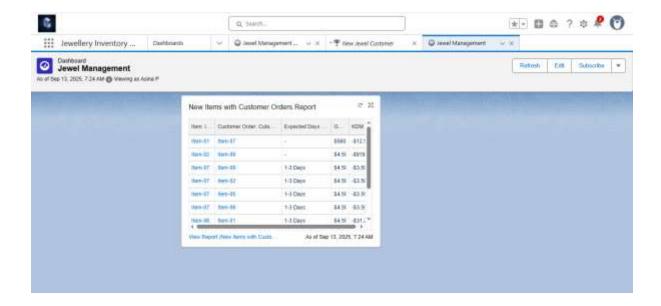
Reports give you access to your Salesforce data. You can examine your Salesforce data in almost infinite combinations, display it in easy-to-understand formats, and share the resulting insights with others. Before building, reading, and sharing reports, review these reporting basics.



Creation of Dashboards:

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

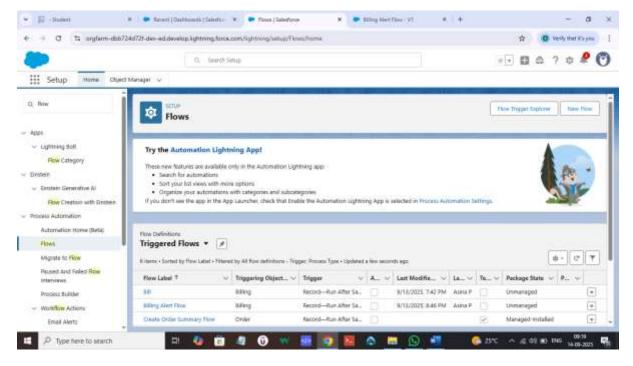


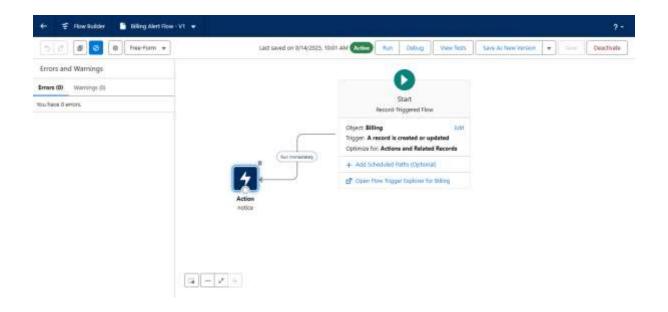


Creation of Flow:

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

Billing Alert Flow:

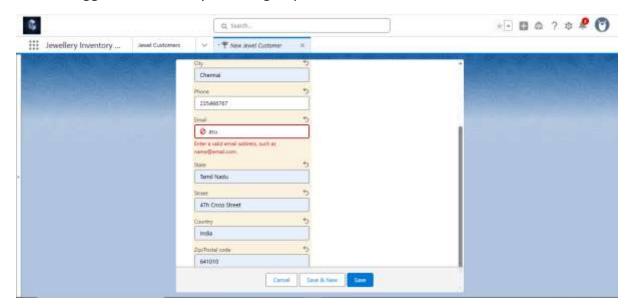




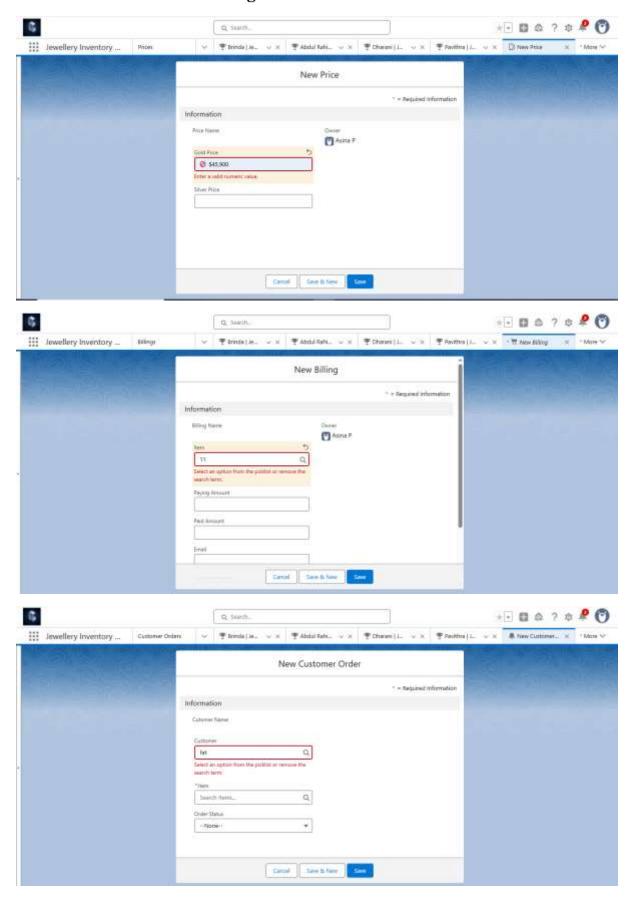
FUNCTIONAL AND PERFORMANCE TESTING:

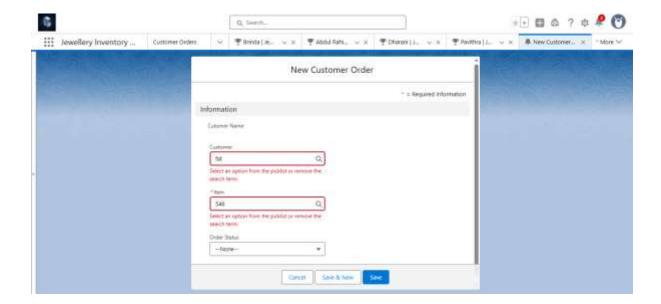
Performance Testing:

Trigger validation by entering duplicate values for records.

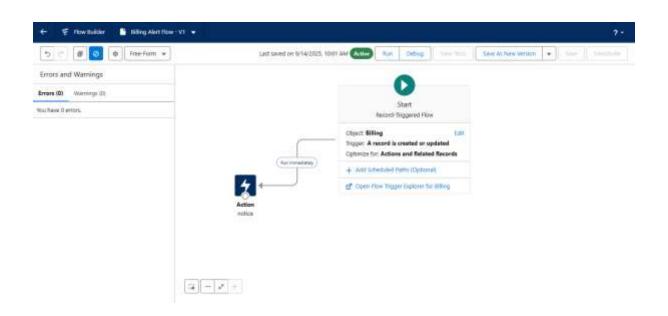


• Validation Rule Checking



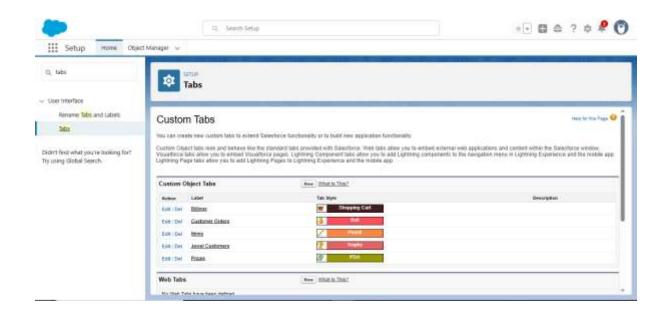


• Flow Activation Checking

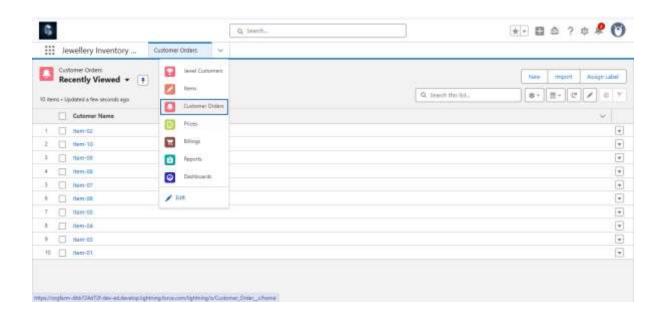


RESULT:

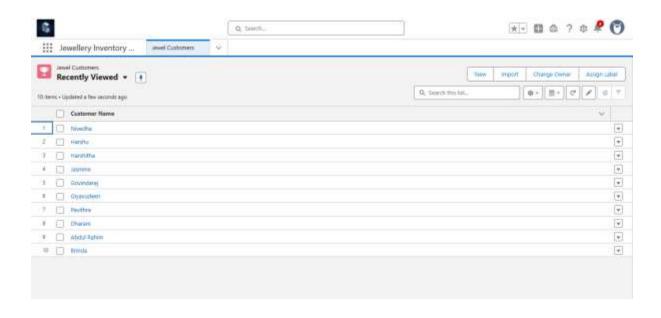
Tabs are Created Successfully

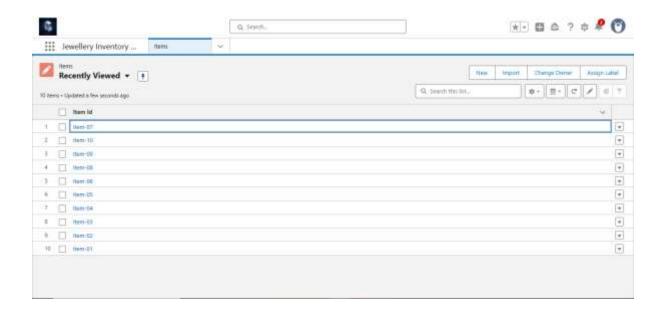


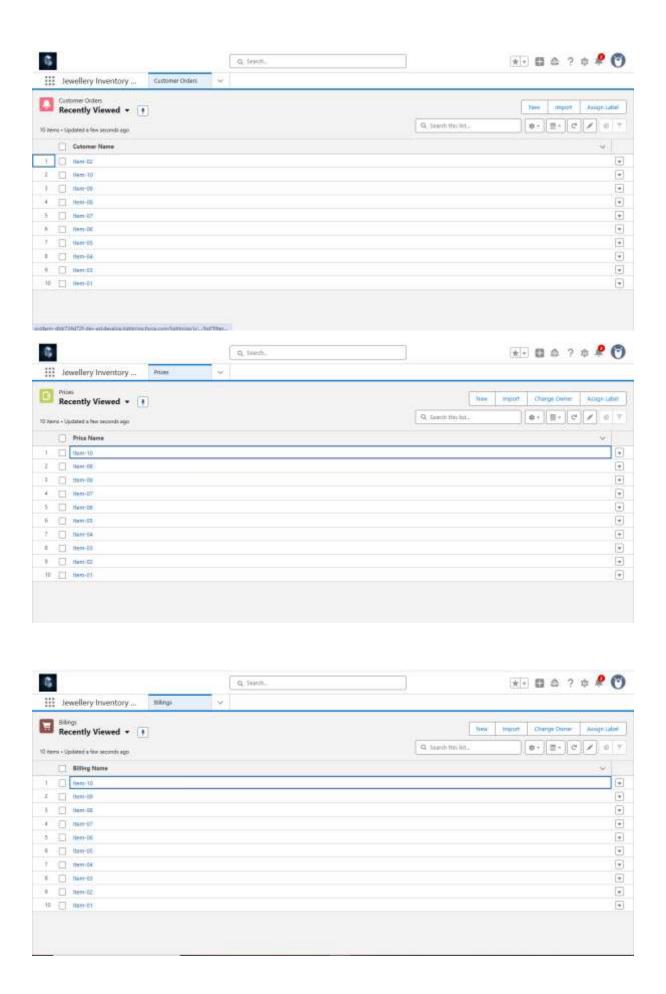
Required Object are Created Succesfully



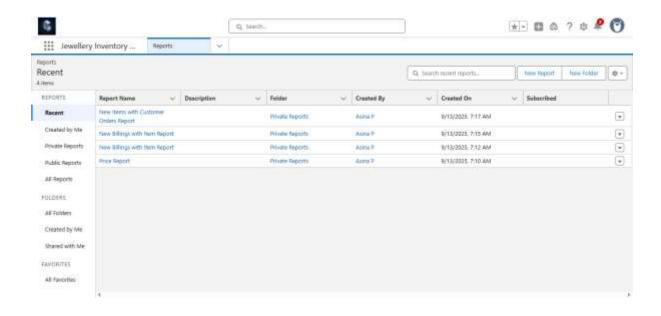
Records Created Succesfully



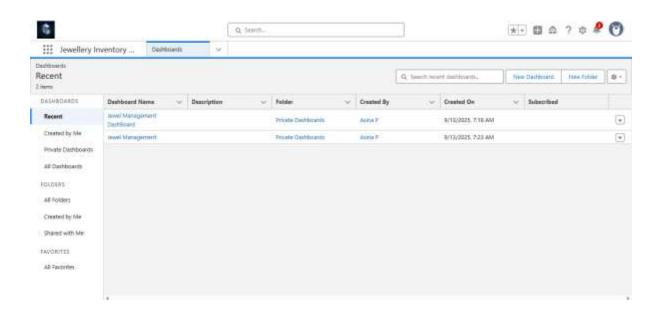




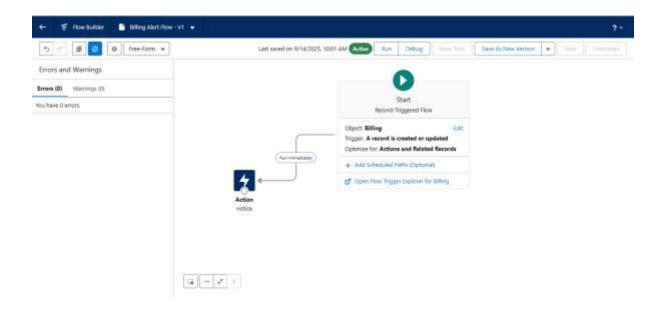
Reports Created Successfully



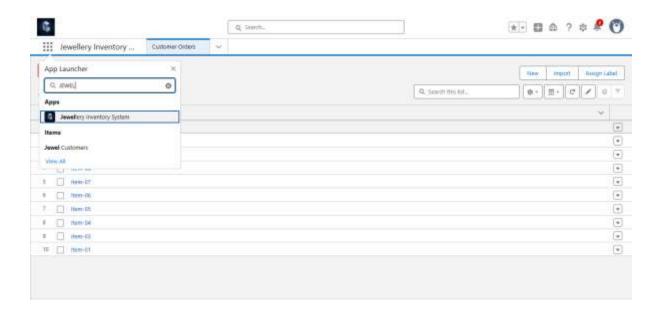
Dashboard Created Succesfully



Flow Created successfully



App Created Succesfully



ADVANTAGES AND DISADVANTAGES

ADVANTAGES:

1. Centralized Customer & Inventory Data

- All customer, sales, and jewelry inventory data is stored in one place.
- Real-time visibility of customer purchase history, preferences, and trends.

2. Personalization & Customer Engagement

- Salesforce CRM tools allow targeted offers, loyalty programs, and personalized recommendations.
- Helps jewelers improve repeat purchases and maintain long-term customer relationships.

3. Cloud-Based & Accessible Anywhere

- Being in Salesforce, the system is accessible on mobile, tablet, or desktop.
- Ideal for jewelers with multiple branches or sales teams on the move.

4. Automation of Business Processes

- Automates tasks like billing, reminders for maintenance/cleaning services, order tracking, vendor communication, etc.
- Reduces manual errors and improves efficiency.

5. Powerful Analytics & Reporting

- Dashboards provide insights on **best-selling products**, **seasonal demand**, **stock shortages**, **and customer lifetime value**.
- Supports data-driven decision-making.

6. Integration Capabilities

- Can integrate with **POS**, accounting software, ERP, and e-commerce platforms.
- Ensures smooth operations across online and offline sales channels.

7. Scalability

• Salesforce scales easily as the jewelry business grows (adding more users, branches, or product lines).

DISADVANTAGES:

1. High Cost

- Salesforce licensing, customization, and consultant fees can be **expensive** for small jewelers.
- Ongoing subscription costs may add up.

2. Customization Complexity

- Jewel management requires **specialized workflows** (**gold weight**, **gemstone tracking**, **hallmarking**, **repairs**, **etc.**).
- Heavy customization in Salesforce can be time-consuming and costly.

3. Training Requirement

- Staff need **proper training** to use Salesforce effectively.
- Without adoption, the CRM may not deliver full value.

4. Dependency on Internet

- As it's cloud-based, a **stable internet connection** is necessary.
- Downtime or poor connectivity can disrupt operations.

5. Data Migration Challenges

• Shifting legacy jewelry data (old invoices, customer history, stock details) into Salesforce can be **complex and error-prone**.

6. Possible Overhead for Small Businesses

• For a small, single-store jeweler, Salesforce might feel like **overkill** compared to lighter, cheaper solutions.

CONSLUSION:

The Salesforce-based CRM Jewel Management System delivers a strategic advantage to jewelers by streamlining operations, personalizing customer engagement, and enabling smarter business insights. While implementation may require investment and training, the system's scalability and powerful tools ensure sustainable growth and improved customer satisfaction. For businesses aiming to modernize and expand, this solution offers a strong foundation for future success.

APPENDIX:

```
Source Code: Provided in Apex Classes and Triggers
Class Name: UpdatePaidAmountTriggerHandler
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.ld);
      Decimal oldPaidAmount = oldBilling.Paid Amount c;
      billing.Paid_Amount__c = oldPaidAmount + billing.Paying_Amount__c;
    }
```

