

CRM Application for Jewel Management

COLLEGE : EINSTEIN COLLEGE OF ENGINEERING

TEAM ID : NM2025TMID04823

TEAM SIZE : 4

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1. INTRODUCTION

1.1 Project Overview:

This project focuses on building a Salesforce-based CRM solution tailored for jewellery shop operations. It helps manage day-to-day activities such as stock monitoring, price adjustments, customer handling, and billing. Using the Salesforce Lightning Platform, I created custom objects, automated workflows with Flows, and designed reports and dashboards to provide clear insights into sales, inventory movement, and customer trends..

1.2 Purpose:

The goal of this project is to transform traditional manual jewellery shop operations into a fully automated, cloud-driven Salesforce CRM system. It supports real-time inventory updates, flexible pricing management, customer billing, and order tracking within a unified platform. This solution improves customer experience, minimizes operational errors, and provides better insights for data-driven business decisions.

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.

2. IDEATION PHASE

2.1 Problem Statement:

Traditional jewellery stores often rely on manual methods for stock management, pricing, and billing, which leads to inconsistent records, limited customer tracking, and slow decision-making. Without a unified system, customer interactions, sales history, and special order details remain scattered, creating operational gaps and reducing service quality.

Many small and medium jewellery retailers struggle to maintain accurate inventory levels, manage customer relationships, and handle customized orders efficiently. Existing general-purpose software fails to address industry-specific requirements such as purity-based pricing, real-time stock updates, and detailed customer profiling, resulting in errors and a less satisfying customer experience.

2.2 Empathy Map Canvas:

Think & Feel

- “Are we missing out on leads because we’re not following up?”
- “I need to know who our high-value customers are.”

Hear

- “The customer wasn’t happy with the delay in their custom order.”
- “Can we send reminders for anniversaries and birthdays?”

See

- Registers with scribbled orders.
- Multiple Excel sheets for billing and inventory.

Say & Do

- “Call them about the pendant order tomorrow.”
- “Print out last year’s top customers list.”

Pain

- Losing customers due to lack of follow-up.
- No real-time inventory tracking.

Gain

- Higher customer satisfaction.
- More repeat purchases via automation.

2.3 Brainstorming:

The brainstorming stage involved gathering inputs from various stakeholders—such as jewellery shop owners, sales staff, developers, and regular users—to identify key features and improvements needed in the CRM system. This collaborative discussion helped uncover real operational challenges in the jewellery business and guided how Salesforce's cloud capabilities could be leveraged to simplify and optimize those processes..

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).

3. Requirement Analysis:

3.1 Customer Journey Map:

The customer journey map illustrates the complete path a customer takes—from the initial interaction with the store to post-purchase follow-ups. Mapping these stages helps pinpoint areas where the CRM can introduce automation, remove friction, and improve the overall customer experience.

Awareness Stage

- Customer browses website or social media.
- CRM captures leads using Web-to-Lead forms.

Consideration Stage

- Customer visits the store or requests a catalog.

- Salesforce auto-assigns a sales representative.
- Email/SMS with product recommendations is triggered.

Purchase Stage

- Customer places an order (in-store or online).
- CRM logs order and creates a sales opportunity.
- Invoice is generated using built-in templates.

Delivery Stage

- Customer receives order.
- CRM sends order tracking notifications and confirmations.

Post-Purchase Stage

- Customer receives feedback form.
- Loyalty points are updated.
- Follow-up reminders for anniversaries, birthdays, etc.

3.2 Solution Requirements:

This phase specifies the system's functional requirements—what the CRM should achieve—as well as the non-functional requirements, which describe the expected performance and quality standards. Key

needs include:

- Real-time tracking of jewellery inventory
- Flexible and automated price management
- Billing with automatic tax computation
- Interactive dashboards and detailed reporting
- Strong data security with controlled user access
- Integration with communication channels like email and SMS
- Clear record ownership for auditing and traceability

3.3 Data Flow Diagrams:

DFD illustrates how data moves between the system's components. This helps developers visualize dependencies and database interaction points.

Main Entities & Data Flow Points:

1. Customer submits a product inquiry.
2. Data flows to CRM Interface (Form or App).
3. CRM creates or updates Customer Object.
4. CRM logs sale and updates Sales Record.
5. Inventory count is adjusted in the Inventory Object.
6. Reports are updated to reflect real-time sales and stock.

3.4 Technology Stack:

Defines the tools and platforms used to develop, deploy, and manage the CRM system in Salesforce.

- Platform: Salesforce Lightning Experience.
- Logic: Apex Triggers, Validation Rules, Flow Builder.

- UI: Lightning Tabs, Pages, Reports, Dashboards.
- Database: Salesforce Standard & Custom Objects.
- Integration: Email Templates, Scheduled Flows, Approval Processes.

4. PROJECT DESIGN

4.1 Problem Solution Fit:

Problem: Manual processes and lack of centralized tracking

Solution: Salesforce CRM system automating every major jewelry workflow

4.2 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 • Dashboards visualizing sales, stock, and revenue performance

4.3 : 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

5. PROJECT PLANNING AND SCHEDULING

5.1 Project Planning:

The planning and scheduling phase focuses on outlining the project timeline, scope, team roles, required tools, and key milestones. This stage ensures that development progresses in a structured and scalable way, keeping the project aligned with business objectives and enabling the CRM solution to be delivered efficiently and in well-defined phases.

- Week 1: Requirement gathering, Use Case and ER Diagrams
- Week 2: Custom object creation, Page Layouts and Tab Setup
- Week 3: Flows and Automation Setup, Validation Rules
- Week 4: Reports and Dashboards, Testing and Review
- Week 5: Final Deployment, Documentation and User Training

6. PROJECT DEVELOPMENT PHASE - SALESFORCE GUIDED PROJECT

The development phase forms the foundation of the CRM system, where essential features were built using Salesforce's declarative components along with programmatic enhancements when needed. Work was carried out in iterative Agile sprints, allowing continuous refinement and faster delivery. This stage was divided into multiple development activities to ensure structured and efficient implementation.

6.1 Developer Environment Setup:

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

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

 Build enterprise-quality apps fast and get hands-on with Agentforce and Data Cloud.

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- ✓ Build AI agents with Agentforce
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- ✓ Integrate with anything using APIs



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First name Last name

Job title Work email

Company Country/Region

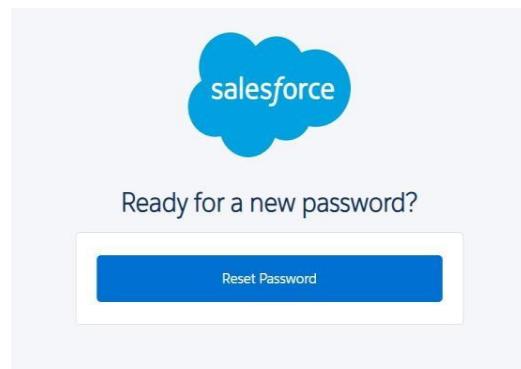
Your org may be provisioned on or migrated to Hyperforce, Salesforce's public cloud infrastructure.

I agree to the [Main Services Agreement – Developer Services](#) and [Salesforce Program Agreement](#). I acknowledge, as described in the [Developer Documentation](#), (1) the Developer Edition includes autonomous and other generative AI features, and (2) Salesforce may limit use of those features and the org, and may terminate any org that has been inactive for 45 days.

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I'm not a robot  reCAPTCHA Privacy - Terms

Sign Me Up





Change Your Password

Enter a new password for **streetcause178@sb.com**.
Make sure to include at least:

- 8 characters
- 1 letter
- 1 number

* New Password

Good

* Confirm New Password

* Security Question

In what city were you born?

* Answer

*=required

Change Password

Password was last changed on 6/20/2025, 3:59 AM.

6.2 Custom Object Creation:

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

1. Jewel Customer

The screenshot shows the Salesforce Setup interface with the 'Object Manager' selected in the top navigation bar. The main title is 'Jewel Customer'. On the left, a sidebar lists various configuration options under '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 'Details' tab is selected. The main content area displays the object's details, including:

Description	
API Name	Jewel_Customer__c
Custom	✓
Singular Label	Jewel Customer
Plural Label	Jewel Customers
Enable Reports	✓
Track Activities	
Track Field History	
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

At the bottom right of the main content area are 'Edit' and 'Delete' buttons.

2. Item

The screenshot shows the Salesforce Setup interface with the 'Object Manager' selected in the top navigation bar. The main title is 'Item'. On the left, a sidebar lists various configuration options under '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 'Details' tab is selected. The main content area displays the object's details, including:

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

At the bottom right of the main content area are 'Edit' and 'Delete' buttons.

3. Customer Order

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes a cloud icon, 'Setup', 'Home', and 'Object Manager'. A search bar says 'Search Setup' and various global buttons are on the right. The main area shows 'SETUP > OBJECT MANAGER' and the 'Customer Order' object. On the left is a sidebar with links like 'Fields & Relationships', 'Page Layouts', etc. The main 'Details' tab is selected, showing fields for 'Description', 'API Name' (Customer_Order__c), 'Custom' (checked), 'Singular Label' (Customer Order), and 'Plural Label' (Customer Orders). To the right are buttons for 'Edit' and 'Delete'. Below the main area is a deployment status section with 'Deployed' and a help link.

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

Edit Delete

4. Price

The screenshot shows the Salesforce Object Manager interface, similar to the previous one but for the 'Price' object. The top navigation bar, sidebar, and main area with the 'Details' tab selected are identical. The 'API Name' field shows 'Price__c', and the 'Plural Label' field shows 'Prices'. The deployment status section indicates 'Deployed'.

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

The screenshot shows the Salesforce Object Manager interface for the 'Billing' object. The left sidebar lists various configuration tabs: 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 main 'Details' tab is selected. The right pane displays the object's details, including:

- Description: Billing
- 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

Buttons at the top right of the details pane include 'Edit' and 'Delete'.

6.3 Creation of Tabs

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

1. Jewel Customer

The screenshot shows the Salesforce Tabs setup page for the 'Jewel Customer' object. The left sidebar shows a search bar for 'tabs' and a 'User Interface' section with 'Rename Tabs and Labels' and 'Tabs' selected. A global search bar at the top also has 'tabs' entered. The main area displays the 'Custom Object Tab' for 'Jewel Customers'. It includes a note: 'Below is the information for the custom tab. Click Edit to change the custom tab.' Below this is the 'Custom Tab Definition Detail' table:

Custom Tab Definition Detail	
Tab Label	Jewel Customers
Object	Jewel Customer
Description	Created By Bobbadi Harshitha Team 6/22/2025, 8:13 AM
Created By	Bobbadi Harshitha Team 6/22/2025, 8:13 AM
Tab Style	Airplane
Splash Page Custom Link	

2. Item

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. A search bar at the top right says 'Search Setup'. The main content area has a title 'Custom Object Tab Items' and a sub-section 'Custom Tab Definition Detail'. It displays the following information:

Tab Label	Items	Tab Style
Object	Item	Splash Page Custom Link
Description		Alarm clock
Created By	Bobbadil Harshitha Team 6/22/2025, 8:17 AM	Modified By
		Bobbadil Harshitha Team 6/22/2025, 8:17 AM

A message at the bottom left says ' Didn't find what you're looking for? Try using Global Search.' and a help link 'Help for this Page'.

3. Customer Order

The screenshot shows the Salesforce Setup interface with the 'Customer Orders' tab definition selected. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. A search bar at the top right says 'Search Setup'. The main content area has a title 'Custom Object Tab Customer Orders' and a sub-section 'Custom Tab Definition Detail'. It displays the following information:

Tab Label	Customer Orders	Tab Style
Object	Customer Order	Splash Page Custom Link
Description		Bell
Created By	Bobbadil Harshitha Team 6/22/2025, 8:19 AM	Modified By
		Bobbadil Harshitha Team 6/22/2025, 8:19 AM

A message at the bottom left says ' Didn't find what you're looking for? Try using Global Search.' and a help link 'Help for this Page'.

4. Price

The screenshot shows the Salesforce Setup interface. The left sidebar has 'User Interface' expanded, with 'Rename Tabs and Labels' selected. The main content area is titled 'Tabs' under 'SETUP'. A sub-section titled 'Custom Object Tab Prices' is displayed, with a note below it stating: 'Below is the information for the custom tab. Click Edit to change the custom tab.' A 'Custom Tab Definition Detail' table is shown, with the following data:

Tab Label	Prices	Object	Price	Description	Splash Page Custom Link	Tab Style	Fan
Created By	Bobbadi Harshitha Team	Created On	6/22/2025, 6:20 AM	Modified By	Bobbadi Harshitha Team	Modified On	6/22/2025, 6:20 AM

5. Billing

So we get the required all custom tabs as below

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. The left sidebar has 'User Interface' expanded, with 'Tabs' selected. The main content area is titled 'Custom Tabs' and contains a table for 'Custom Object Tabs'. The table has columns for Action, Label, Tab Style, and Description. The data is as follows:

Action	Label	Tab Style	Description
Edit Del	Billing	Boat	
Edit Del	Customer Orders	Bell	
Edit Del	Items	Alarm clock	
Edit Del	Jewel Customers	Airplane	
Edit Del	Prices	Fan	

Below this is a section for 'Web Tabs' which states 'No Web Tabs have been defined'.

6.4 Creation of Lightning App

App Name: Jewelry Inventory System

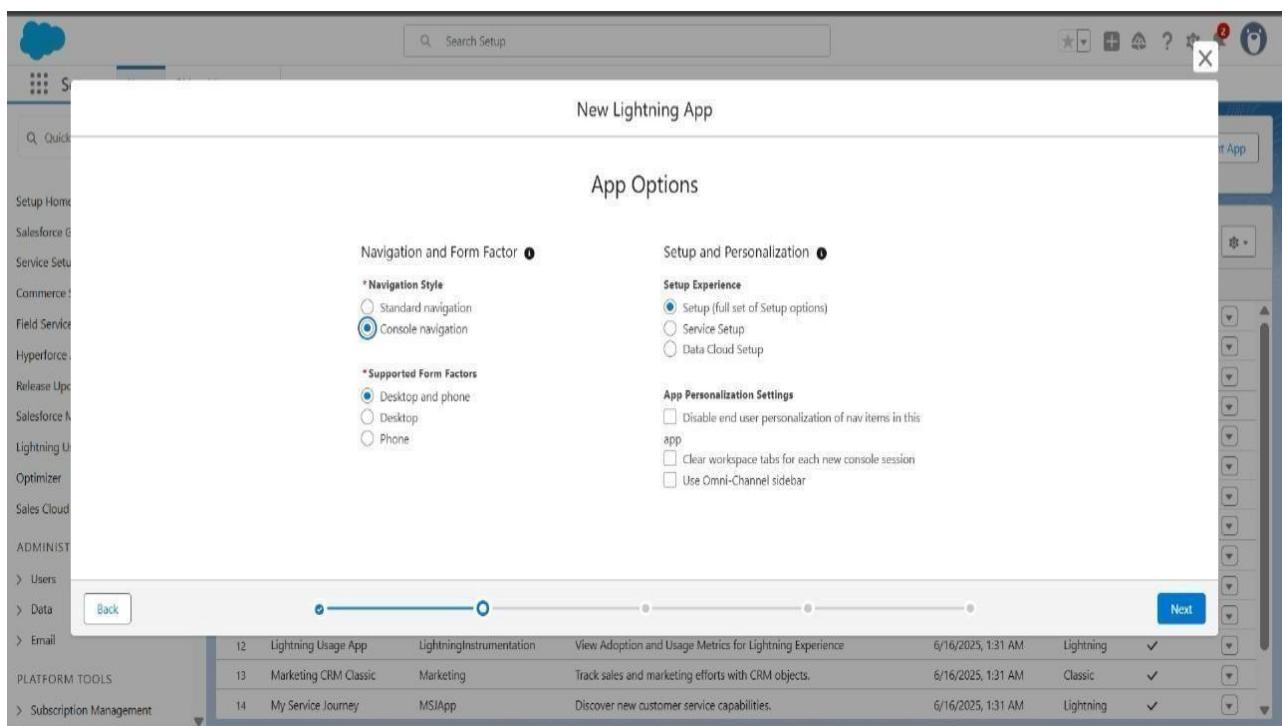
The screenshot shows the Lightning App Builder interface with the 'App Details & Branding' tab selected. The left sidebar lists 'App Settings' and 'App Details & Branding'. The main content area is titled 'App Details & Branding' and includes fields for App Name, Developer Name, Image, Primary Color Hex Value, Description, and Org Theme Options. At the bottom, there is an 'App Launcher Preview' section showing a blue icon with 'jl' and the app name.

App Details & Branding

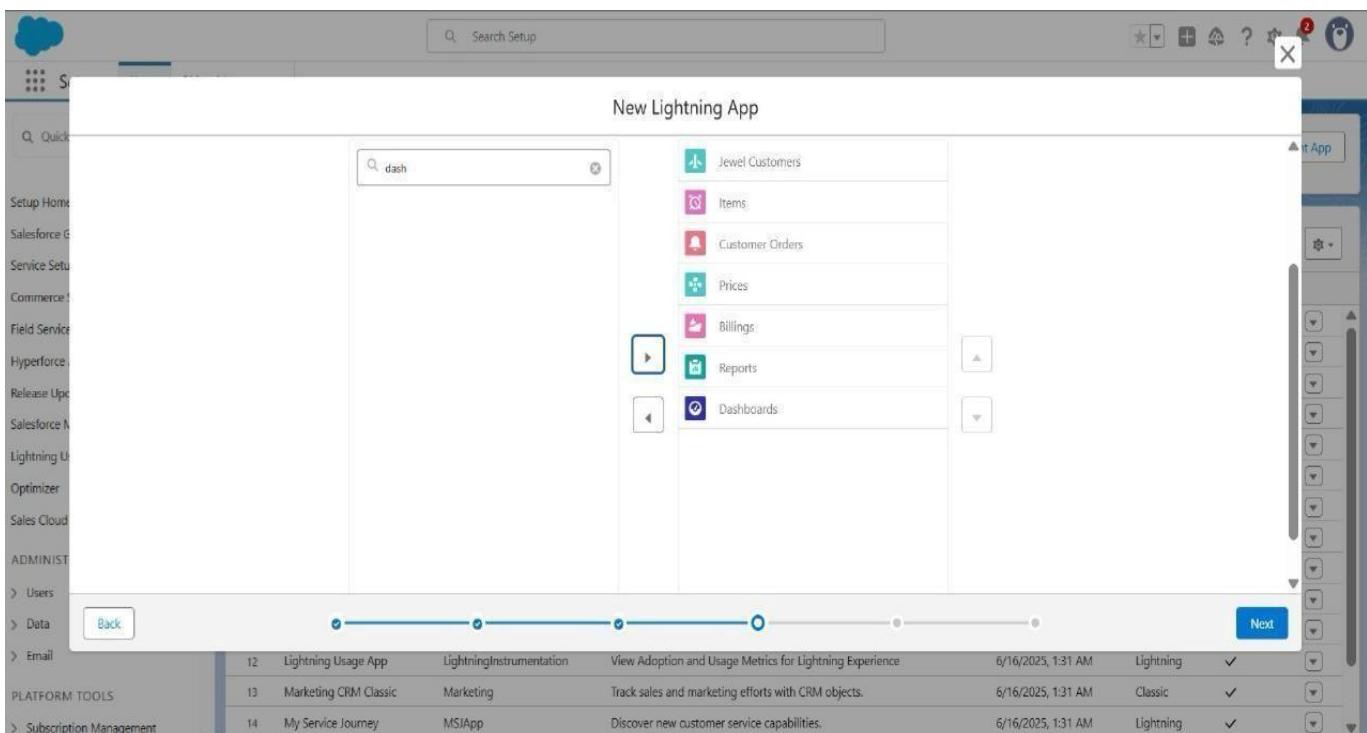
Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.

App Details	App Branding
*App Name <small>1</small> jewelry Inventory System	Image <small>1</small> <input type="button" value="Upload"/> Primary Color Hex Value <small>1</small> #0070D2
*Developer Name <small>1</small> jewelry.Inventory.System	Org Theme Options <input type="checkbox"/> Use the app's image and color instead of the org's custom theme.
Description <small>1</small> Elevate your look with elegance	

App Launcher Preview



Navigation Items



6.5 Creation of Fields

1. Creating lookup relationship

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

The screenshot shows the Salesforce Setup interface for creating a new relationship. The left sidebar is titled 'Customer Order' and includes options like 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, and Scoping Rules. The 'Fields & Relationships' option is selected. The main area is titled 'Customer Order New Relationship' and 'Step 3. Enter the label and name for the lookup field'. It contains fields for 'Field Label' (Customer), 'Field Name' (Customer), 'Description' (empty), and 'Help Text' (empty). Below these are settings for 'Child Relationship Name' (Customer_Orders), 'Required' (checkboxes for 'Always require a value in this field in order to save a record' and 'Clear the value of this field. You can't choose this option if you make this field required.'), 'What to do if the lookup record is deleted' (checkboxes for 'Don't allow deletion of the lookup record that's part of a lookup relationship.' and 'Add this field to existing custom report types that contain this entity'), and 'Auto add to custom report type' (checkbox checked). A 'Lookup Filter' section is at the bottom. The top right shows 'Step 3 of 6' and navigation buttons for Previous, Next, and Cancel.

The screenshot shows the continuation of the relationship creation process. The left sidebar remains the same. The main area is titled 'Customer Order New Relationship' and 'Step 6. Add custom related lists'. It shows a table with one row for the 'Customer' field, listing its Field Label, Data Type (Lookup), Field Name (Customer), and Description. Below the table, it says 'Specify the title that the related list will have in all of the layouts associated with the parent.' and shows a 'Related List Label' input field containing 'Customer Orders'. It also says '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.' and shows a 'Page Layout Name' dropdown with 'Jewel Customer Layout' selected. There is also a checkbox for 'Append related list to users' existing personal customizations.' Navigation buttons for Previous, Save & New, Save, and Cancel are at the bottom right.

2. Creating a Master-Detail Relationship

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

Customer Order

Step 5. Add reference field to Page Layouts

Field Label: Item
Data Type: Master-Detail
Field Name: Item
Description:

Add Field Page Layout Name
 Customer Order Layout

Help for this Page

Previous Next Cancel

Customer Order

Step 6. Add custom related lists

Field Label: Item
Data Type: Master-Detail
Field Name: Item
Description:

Related List Label:

Add Related List Page Layout Name
 Item Layout
 Append related list to users' existing personal customizations

Help for this Page

Previous Save & New Save Cancel

3. Creating Text Field in Jewel Customer Object

Setup Home Object Manager

SETUP > OBJECT MANAGER
Jewel Customer

New Custom Field

Step 2. Enter the details Step 2 of 4

Field Label: City

Length: 20

Field Name: City

Description:

Help Text:

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 the 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

Help for this Page

Previous Next Cancel

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

Setup Home Object Manager

SETUP > OBJECT MANAGER
Jewel Customer

New Custom Field

Step 4. Add to page layouts Step 4 of 4

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.

Help for this Page

Previous Save & New Save Cancel

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

4. Creating the Phone field in object Jewel Customer

Jewel Customer
New Custom Field
Step 4. Add to page layouts

Field Label	Phone
Data Type	Phone
Field Name	Phone
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.

5. Creating the Email field in object Jewel Customer

Jewel Customer
New Custom Field
Step 4. Add to page layouts

Field Label	Email
Data Type	Email
Field Name	Email
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.

6. Creating the number field in Item object

The screenshot shows the Salesforce Setup interface for creating a new custom field. The left sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, and Lightning Record Pages. The main area is titled 'Item New Custom Field' and is on 'Step 4 of 4'. The field details are: Field Label: Punty, Data Type: Number, Field Name: Punty, and Description: (empty). A checkbox 'Add Field' is checked next to 'Page Layout Name'. Below it, another checkbox is checked next to 'Item Layout'. A note at the bottom says 'When finished, click Save & New to create more custom fields, or click Save if you are done.' Navigation buttons at the bottom right include Previous, Save & New, Save, and Cancel.

7. Creating Picklist Field in Item Object

The screenshot shows the Salesforce Setup interface for creating a new custom field. The left sidebar lists various setup categories. The main area is titled 'Item New Custom Field' and is on 'Step 4 of 4'. The field details are: Field Label: Item_Type, Data Type: Picklist, Field Name: Item_Type, and Description: (empty). A checkbox 'Add Field' is checked next to 'Page Layout Name'. Below it, another checkbox is checked next to 'Item Layout'. A note at the bottom says 'When finished, click Save & New to create more custom fields, or click Save if you are done.' Navigation buttons at the bottom right include Previous, Save & New, Save, and Cancel.

8. Creating Currency Field in Price Object

Price

New Custom Field

Step 3. Establish field-level security

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

Item

Gold Price (Currency) =

Simple Formula Advanced Formula

Functions

- ABS
- ACOS
- ADDMONTHS
- AND
- ASCII
- ASIN

The screenshot shows the Salesforce Setup interface under the Object Manager section for the 'Item' object. A sidebar on the left lists various setup categories like Details, Fields & Relationships, Page Layouts, etc. The main area is titled 'New Custom Field' and is on 'Step 5. Add to page layouts'. The field details are: Field Label: 'Gold Price', Data Type: 'Formula', Field Name: 'Gold_Price'. Below this, instructions say to select page layouts for the field. Two checkboxes are checked: 'Add Field' and 'Page Layout Name'. One of them has 'Item Layout' selected. Buttons at the bottom include 'Previous', 'Save & New', 'Save', and 'Cancel'.

10. Creating Remaining Fields in Objects

Creating remaining fields in the objects

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

The screenshot shows the Salesforce Setup interface under the Object Manager section for the 'Jewel Customer' object. The sidebar lists various setup categories. The main area is titled 'Fields & Relationships' and shows a table of fields. The table includes columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: City (City_c, Text(20)), Country (Country_c, Text(18)), Created By (CreatedById, Lookup(User)), Customer Name (Name, Text(80)), Email (Email_c, Email), Last Modified By (LastModifiedById, Lookup(User)), Owner (OwnerId, Lookup(User,Group)), and Phone (Phone_c, Phone). Buttons at the top right include 'Quick Find', 'New', 'Deleted Fields', 'Field Dependencies', and 'Set History Tracking'.

2. Price : Silver Price

The screenshot shows the Salesforce Setup interface for the 'Price' object. The left sidebar lists various setup options like Page Layouts, Lightning Record Pages, Buttons, etc. The main area is titled 'Fields & Relationships' and contains a table with the following data:

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 left sidebar lists various setup options like Page Layouts, Lightning Record Pages, Buttons, etc. The main area is titled 'Fields & Relationships' and contains a table with the following data:

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)		

4. Customer Order: Order Status

The screenshot shows the Salesforce Object Manager interface for the 'Customer Order' object. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main title is 'Customer Order'. On the left, a sidebar lists various setup options like 'Page Layouts', 'Lightning Record Pages', and 'Fields & Relationships'. The 'Fields & Relationships' section is currently selected, displaying a table of fields. The table columns are: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: 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)), and Order Status (Order_Status__c, Picklist). A note at the bottom right of the table indicates '6 Items. Sorted by Field Label'.

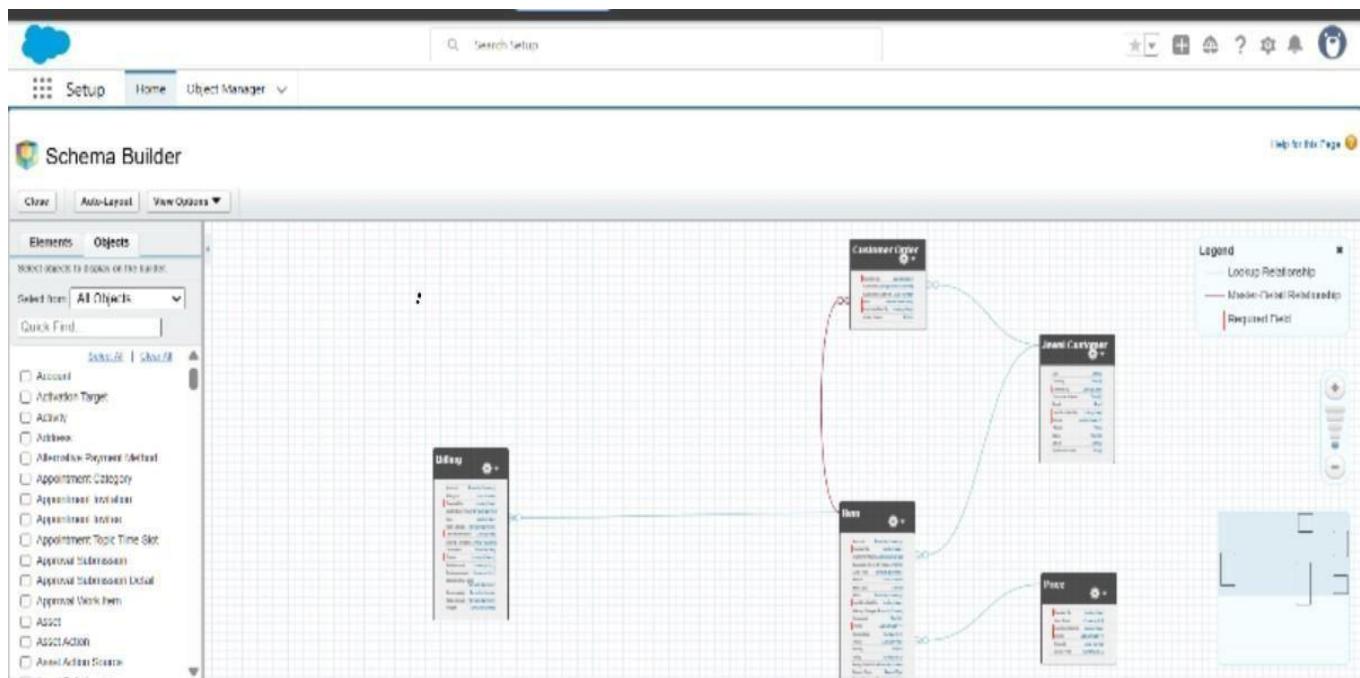
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Customer	Customer_c	Lookup(Jewel Customer)		✓
Customer Order Id	Name	Auto Number		✓
Item	Item_c	Master-Detail(Item)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Order Status	Order_Status__c	Picklist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

5. Billing: Field Label-Item, Ornament, Stone Weight, Weight, Amount, Gold/Silver Price, KDM Charge, Making Charges,Stone/Other Price, Total Amount.

The screenshot shows the Salesforce Object Manager interface for the 'Billing' object. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main title is 'Billing'. On the left, a sidebar lists various setup options like 'Page Layouts', 'Lightning Record Pages', and 'Fields & Relationships'. The 'Fields & Relationships' section is currently selected, displaying a table of fields. The table columns are: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: 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)), and Making Charges (Making_Charges__c, Formula (Currency)). A note at the bottom right of the table indicates '16 Items. Sorted by Field Label'.

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



12. Creation of Field Dependencies

The screenshot shows the Salesforce Setup interface for the 'Item' object. The left sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, and Lightning Record Pages. The main content area is titled 'Item Field Dependencies' and shows a table with one row: Action (Edit | Del), Controlling Field (Priority), Dependent Field (Expected Days Of Return), and Modified By (Bobbadi Harshitha Team, 6/23/2025, 6:53 AM).

13. Creation of Validation Rules

The screenshot shows the Salesforce Setup interface for the 'Jewel Customer' validation rule. The left sidebar lists various setup categories. The main content area is titled 'Jewel Customer Validation Rule' and shows the 'Validation Rule Detail' page. The rule is named 'Postal_Code' and is active. The error condition formula is: AND(OR(LEN(Zip_Postal_code__c)<>6, NOT(REGEX(Zip_Postal_code__c, "[0-9]{6}"))), NOT(ISBLANK(Zip_Postal_code__c))). The error message is 'Must contain 6 digits' and the error location is 'Zip/Postal code'. The rule was created by Bobbadi Harshitha Team on 6/23/2025 at 6:58 AM and modified by the same team on 6/23/2025 at 6:58 AM.

The screenshot shows the 'Jewel Customer Validation Rule' setup page. On the left, a sidebar lists various configuration options: 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 main content area is titled 'Validation Rule Detail' for the rule named 'ValidationRule_For_JewelCustomerObject'. It shows the formula: OR(ISBLANK(City_c), ISBLANK(Country_c), ISBLANK(Phone_c), ISBLANK(State_c), ISBLANK(Street_c)). The error message is 'Please fill Required fields' and the error location is 'Top of Page'. The rule was created by 'Bobbadil Harshitha Team' on 6/23/2025, 7:00 AM and modified by the same user on 6/23/2025, 7:00 AM.

6.6 Creation of Profiles

We create the goldsmith profile and the worker profile

The screenshot shows the 'Worker Profile' setup page under the 'Profiles' section. The page title is 'Worker Profile'. It displays a message for users with this 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.' Below this, a list of permissions is shown, including various access levels for Login, Apex, Class, Visualforce, External Data Source, Named Credential, External Credential, and Custom Metadata Type. The 'Profile Detail' section shows the profile name is 'Worker Profile', the user license is 'Salesforce Platform', and it is a 'Custom Profile'. The 'Page Layouts' section shows standard object layouts for Global, Email Application, Home Page Layout, and Account, along with their respective lead and location assignments.

6.7 Creation of Roles

The screenshot shows the Salesforce Setup interface with the 'Roles' page selected. The left sidebar has sections like 'Users', 'Feature Settings', 'Sales', 'Service', and 'Case Teams'. The main content area shows a tree view of roles under 'Ideal Institute of Technology', including 'CEO', 'CFO', 'COO', 'Gold Smith', 'Worker', 'SVP Customer Service & Support', 'Customer Support International', and 'Customer Support North America'. Each role has options to 'Edit', 'Del', or 'Assign'.

6.8 Creation of Users

The screenshot shows the Salesforce Setup interface with the 'Users' page selected. The left sidebar has sections like 'Optimizer', 'Sales Cloud Everywhere', 'ADMINISTRATION', 'Users', 'Data', 'Email', 'PLATFORM TOOLS', 'Subscription Management', and 'Feature Settings'. The main content area shows a table of users with columns for 'Action', 'Full Name', 'Alias', 'Username', 'Role', 'Active', and 'Profile'. The table includes rows for Chatter, EPIC, Mikael, Nikson, bob, integ, and sec, each with their respective details and status.

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/> Edit	Chatter Pyne	Chatter	chatty_01@00000000ynguan.armpcsuprmm@chatter.salesforce.com		<input checked="" type="checkbox"/>	Chatter Free User
<input type="checkbox"/> Edit	EPIC OrgFarm	EPIC	epic_112c3f7a152@orgfarm.com		<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/> Edit	Mikael Kol	Mikael	mikael@gmail.com	Worker	<input checked="" type="checkbox"/>	Worker Profile
<input type="checkbox"/> Edit	Mikaelson Niklaus	Nikson	nikson@gmail.com	Gold Smith	<input checked="" type="checkbox"/>	Gold Smith
<input type="checkbox"/> Edit	Team Bobbad Harshitha	bob	bobbaharshitha1974@agentforce.com		<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/> Edit	User Integration	integ	integration@00dpa000005riquao.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<input type="checkbox"/> Edit	User Security	sec	insightssecurity@0odpk00005ynguao.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User

6.9 Creation of Page Layouts

We create the page layouts for gold and silver items

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

- Header:** Search bar with "Search Setup" and various global navigation icons.
- Breadcrumbs:** SETUP > OBJECT MANAGER
- Page Title:** Item
- Left Sidebar:** A vertical sidebar with the following sections:
 - Details
 - Fields & Relationships
 - Page Layouts** (selected)
 - Lightning Record Pages
 - Buttons, Links, and Actions
 - Compact Layouts
 - Field Sets
 - Object Limits
 - Record Types
 - Related Lookup Filters
 - Search Layouts
 - List View Button Layout
- Main Content Area:**
 - Page Layout for Gold ▾** (Section title)
 - Save ▾ Quick Save Preview As... Cancel Undo Redo Layout Properties
 - Fields** (Section title)
 - Buttons
 - Quick Actions
 - Mobile & Lightning Actions
 - Expanded Lookups
 - Related Lists
 - Report Charts
 - Quick Find Field Name

Section	Customer Name	Item Type	Ornament	Priority	Silver Price	Weight
Blank Space	Expected Days Of ...	KDM	Owner	Purity	Stone/Other Price	
Amount	Gold Price	Last Modified By	Percentage	Purity Gold Price	Stone Weight	
Created By	Item Id	Making Charges	Prices	Record Type	Total Weight	
 - Item Sample**
 - Highlights Panel**

Customize the highlights panel for this page layout...
 - Quick Actions in the Salesforce Classic Publisher**

Actions in this section are currently inherited from the global publisher layout. You can override the global publisher layout to set a customized list of actions for the publisher on pages that use this layout.
 - Salesforce Mobile and Lightning Experience Actions**

6.9 Creation of Record Types

We create the gold an silver records

The screenshot shows the Salesforce Setup interface with the 'Object Manager' tab selected. On the left, a sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, etc., with 'Record Types' currently highlighted. The main content area displays a table titled 'Record Types' with two items: 'Gold' and 'Silver'. The 'Gold' record has a description 'Gold items information' and was modified by 'Bobbadli Harshitha Team' on 6/25/2025 at 4:27 AM. The 'Silver' record has a description 'Silver items information' and was modified by 'Bobbadli Harshitha Team' on 6/23/2025 at 12:15 PM.

RECORD TYPE LABEL	DESCRIPTION	ACTIVE	MODIFIED BY
Gold	Gold items information	✓	Bobbadli Harshitha Team, 6/25/2025, 4:27 AM
Silver	Silver items information	✓	Bobbadli Harshitha Team, 6/23/2025, 12:15 PM

6.10 Creation of Permission Sets

The screenshot shows the Salesforce Setup interface with the 'Permission Sets' tab selected. The search bar at the top contains 'permission sets'. The main content area shows a permission set named 'Per to Worker'. The 'Permission Set Overview' section includes fields for 'Description' (set to 'License'), 'Session Activation Required' (unchecked), 'Permission Set Groups Added To' (empty), 'API Name' (set to 'Per_to_Worker'), 'Namespace Prefix' (empty), 'Created By' (set to 'Bobbadli Harshitha Team, 6/23/2025, 12:18 PM'), and 'Last Modified By' (set to 'Bobbadli Harshitha Team, 6/23/2025, 12:22 PM'). Below this, the 'Apps' section contains sections for 'Assigned Apps', 'Assigned Connected Apps', 'Object Settings', 'App Permissions', and 'Apex Class Access'.

6.11 Creation of Trigger

The screenshot shows the Salesforce IDE interface. The main window displays the Apex class `UpdatePaidAmountTriggerHandler`. The code implements a static method `handleBeforeInsert` that iterates through a list of `Billing__c` objects and updates the `Paid_Amount__c` field to match the `Paying_Amount__c` field.

```
1 public class UpdatePaidAmountTriggerHandler {
2
3     public static void handleBeforeInsert(List<Billing__c> newBillings) {
4
5         for (Billing__c billing : newBillings) {
6
7             billing.Paid_Amount__c = billing.Paying_Amount__c;
8
9         }
10    }
11 }
```

The screenshot shows the Salesforce IDE interface. The main window displays the trigger `UpdatePaidAmountTrigger` defined on the `Billing__c` object. The trigger handles both insert and update events, calling the `handleBeforeInsert` and `handleBeforeUpdate` methods of the `UpdatePaidAmountTriggerHandler` class respectively.

```
1 trigger UpdatePaidAmountTrigger on Billing__c (before insert, before update) {
2
3     if (Trigger.isInsert) {
4
5         UpdatePaidAmountTriggerHandler.handleBeforeInsert(Trigger.new);
6
7     } else if (Trigger.isUpdate) {
8
9         UpdatePaidAmountTriggerHandler.handleBeforeUpdate(Trigger.oldMap, Trigger.new);
10    }
11 }
```

6.12 Creation of User Adoption

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

This screenshot shows a list of 10 recently viewed prices in a Microsoft Dynamics 365 application. The list is titled 'Recently Viewed' and includes items from 1 to 10, each with a checkbox and a name.

Price Id
1 Price-10
2 Price-09
3 Price-08
4 Price-07
5 Price-06
6 Price-05
7 Price-04
8 Price-03
9 Price-02
10 Price-01

This screenshot shows a list of 10 recently viewed jewel customers in a Microsoft Dynamics 365 application. The list is titled 'Recently Viewed' and includes names from 1 to 10, each with a checkbox.

Customer Name
1 Arjun
2 Joshua
3 Anand
4 Krishna
5 Sita
6 Nani
7 Shyamala
8 Manasa
9 Ravi
10 Devi

6.13 Creation of Reports

The screenshot shows the Microsoft Power BI interface for report management. The top navigation bar includes a cloud icon, a search bar, and various navigation icons. The main area is titled "jewelry Inventory Sy..." and has a "Reports" tab selected. On the left, there's a sidebar with categories like "Recent", "Created by Me", "Private Reports", "Public Reports", "All Reports", "Folders", "Created by Me", "Shared with Me", and "Favorites". The main content area displays a table of recent reports with columns for Report Name, Description, Folder, Created By, Created On, and Subscribed status. Three reports are listed:

Report Name	Description	Folder	Created By	Created On	Subscribed
Billings with Items and Customer Order	Private Reports	Bobbadi Harshitha Team	6/25/2025, 10:44 AM		
New Item with Billings Report	Private Reports	Bobbadi Harshitha Team	6/25/2025, 10:43 AM		
New Prices Report	Private Reports	Bobbadi Harshitha Team	6/25/2025, 9:56 AM		

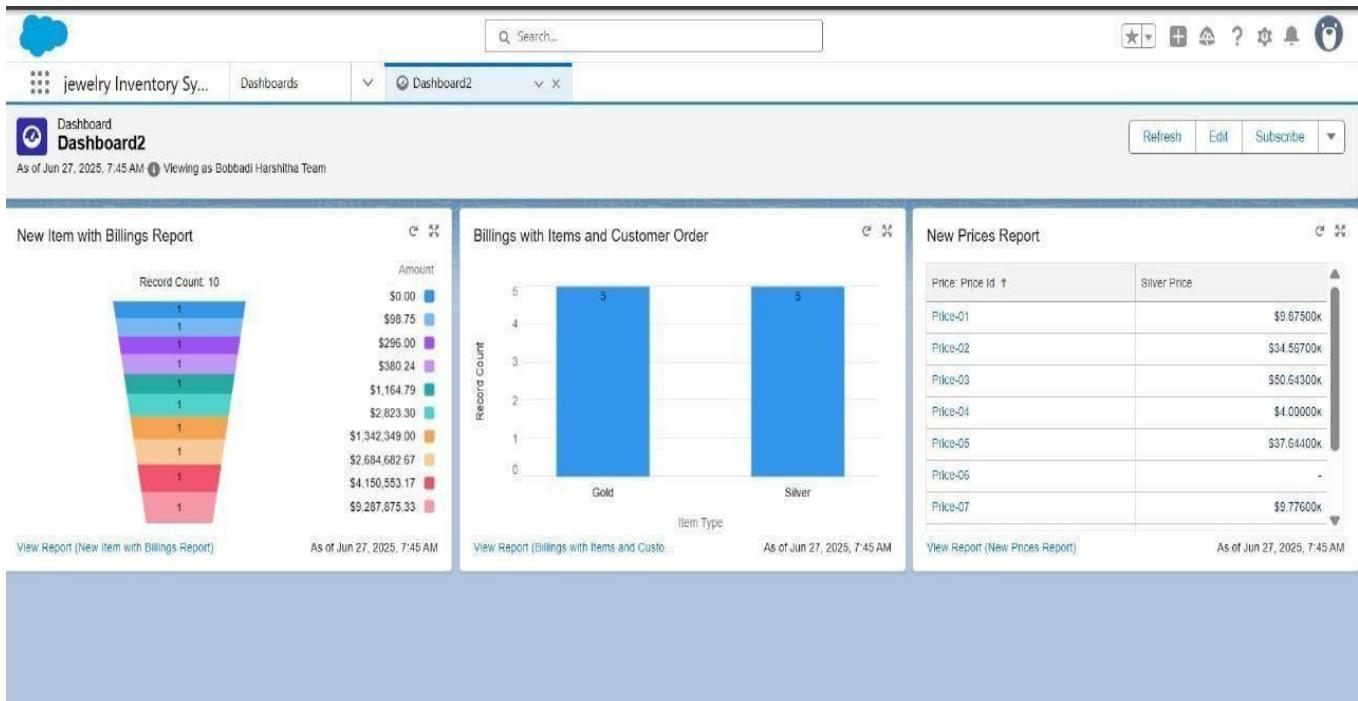
6.14 Creation of Dashboards

Dashboard 1

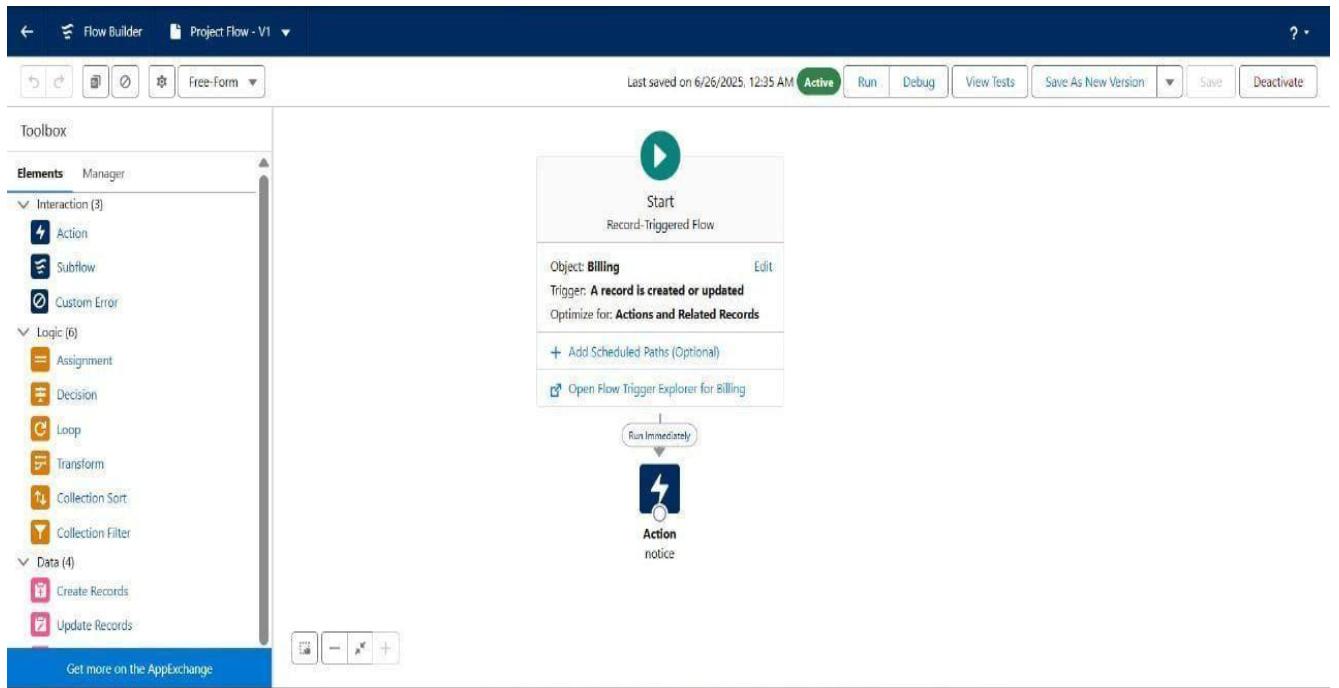
The screenshot shows a Microsoft Power BI dashboard titled "Dashboard 1". The top navigation bar includes a cloud icon, a search bar, and various navigation icons. The main content area displays three visualizations:

- New Item with Billings Report:** A donut chart showing record counts. The values are 10 (blue), 1 (purple), 1 (teal), 1 (purple), 1 (teal), 1 (purple), 1 (teal), 1 (purple), and 1 (teal). Below the chart is a link to "View Report (New Item with Billings Report)" and the timestamp "As of Jun 27, 2025, 6:43 AM".
- Billings with Items and Customer Order:** A bar chart comparing Gold and Silver item types. Both show a count of 5. Below the chart is a link to "View Report (Billings with Items and Custo)" and the timestamp "As of Jun 27, 2025, 6:43 AM".
- New Prices Report:** A treemap chart showing the sum of silver prices. The segments are labeled \$46k, \$35k, and \$38k. Below the chart is a link to "View Report (New Prices Report)" and the timestamp "As of Jun 27, 2025, 6:43 AM".

Dashboard 2

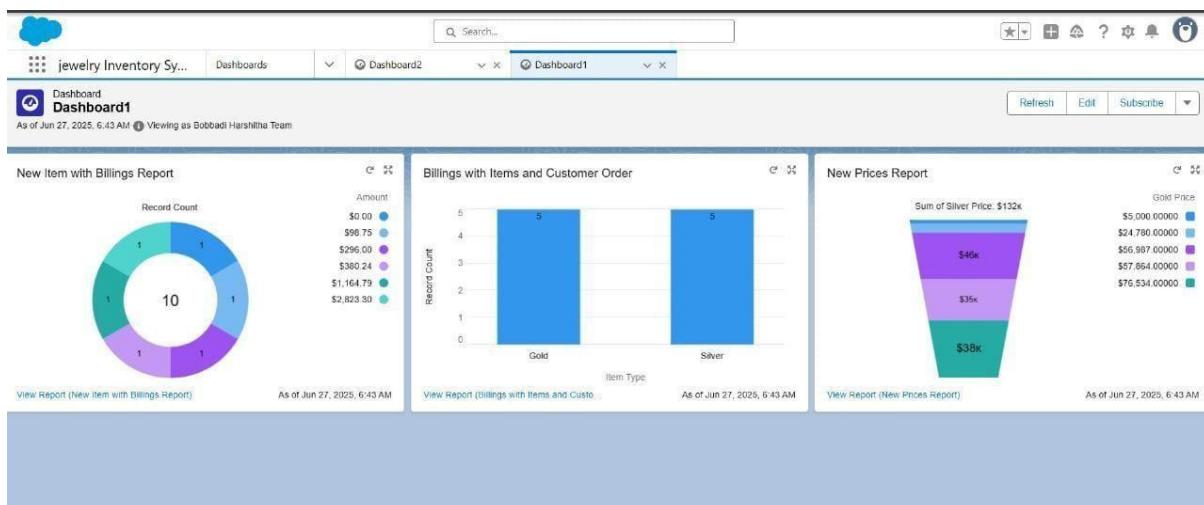


6.15 Creation of Flows



7 FUNCTIONAL AND PERFORMANCE TESTING

Dashboard-1:



Performance Observations (Phase Testing) for Dashboard-1:

1. Accurate Data Visualization

All dashboard charts—including donut, bar, and funnel—display real-time data correctly. Billing records (total of 10) and pricing segments match the entries stored in the system. Gold and Silver categories are properly classified, with each showing five records in the bar chart.

2. Functional Report Integration

“View Report” links under each chart are working and redirect to detailed Salesforce reports, confirming backend connectivity and report mapping is functional.

3. Pricing Tier Segmentation is Clear

Funnel chart shows diverse price bands for Gold and Silver items (e.g., ₹5k to ₹76k).

Total Silver pricing is correctly summed up as ₹132k, indicating correct aggregation logic.

4. UI Load Stability

All dashboard components load without errors or latency during testing.

Visuals are responsive and easy to interpret for both technical and non-technical users.

5. Equal Distribution Verification

Bar chart confirms equal distribution of Gold and Silver billings (5 each), helpful for verifying consistency during sales testing.

6. Test Pass Indicators

No missing data points, broken charts, or incorrect values observed during this testing phase. Dashboard ready for stakeholder review or user acceptance testing (UAT).

Objectives for the Jewelry Inventory System project using Salesforce CRM for Dashboard-1:

1. Improve Inventory and Billing Accuracy:

Streamline the tracking of jewelry items, their pricing, and associated billing records to ensure real-time visibility and eliminate manual errors in stock and transaction management.

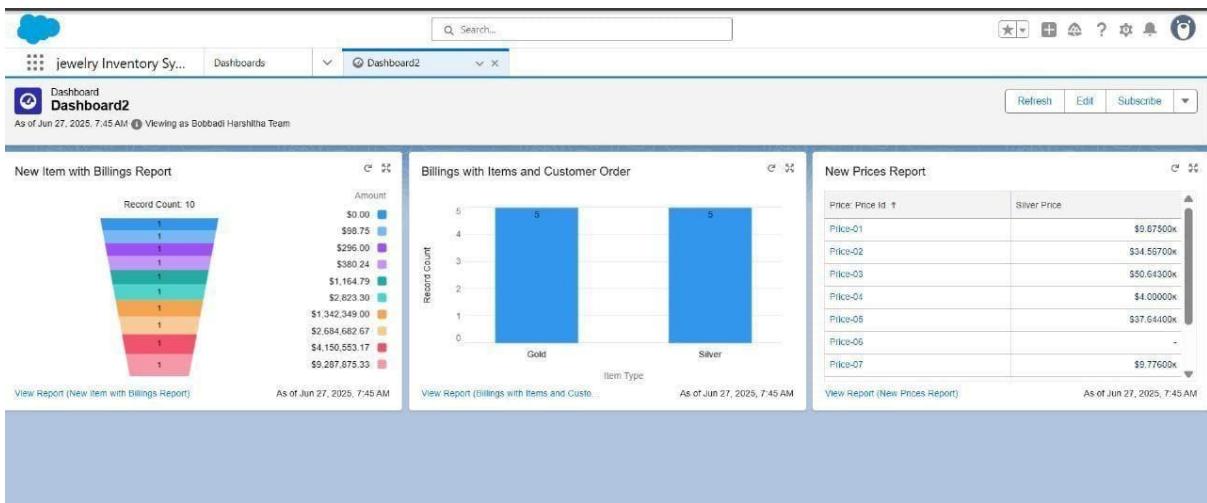
2. Enhance Customer Order Management:

Establish a seamless linkage between jewelry items and customer orders (Gold/Silver types), enabling faster processing, better customer service, and accurate historical records.

3. Enable Data-Driven Business Decisions:

Provide actionable insights through dynamic dashboards and reports that visualize billing trends, item-wise distribution, and pricing tiers—helping management make strategic inventory and pricing decisions.

Dashboard-2:



Performance Observations from Dashboard-2:

1. New Item with Billings Report:

10 items are billed, with amounts ranging from \$0.00 to a high of \$9,287,875.33. This wide range indicates possible inconsistencies or the presence of high-value custom items. One item is showing \$0.00, which may point to a data error or a complimentary item.

2. Billings by Item Type (Gold vs. Silver):

Both Gold and Silver have 5 records each, indicating a balanced dataset. Good performance in terms of item-type categorization and data uniformity.

3. New Prices Report:

Prices for items like Price-03 and Price-05 are significantly high, exceeding \$50k and \$37k respectively. A few items (e.g., Price-06) are missing price data, which needs attention during testing.

Project Objectives for Jewelry Inventory Management Dashboard -

2(Phase Testing):

1. Track New Items with Billing Details:

Objective is to visualize how new jewelry items are associated with billing values. Enables monitoring of item value distribution, including extremely high and zero-value billings.

2. Analyze Customer Orders by Item Type:

Understand customer billing patterns for gold and silver items. Understand customer billing patterns for gold and silver items.

3. Monitor and Update Jewelry Prices:

View and compare the current silver prices for various jewelry products. Supports pricing strategy alignment with market rates.

8 RESULTS (OUTPUT SCREENSHOTS)

A. Automated Emails (using templates):

- Stock Alert for Low Inventory
- Purchase Order Confirmation
- Sales Invoice Notification
- Inventory Replenishment Notification
- Daily Sales Summary

B. Automated Workflows:

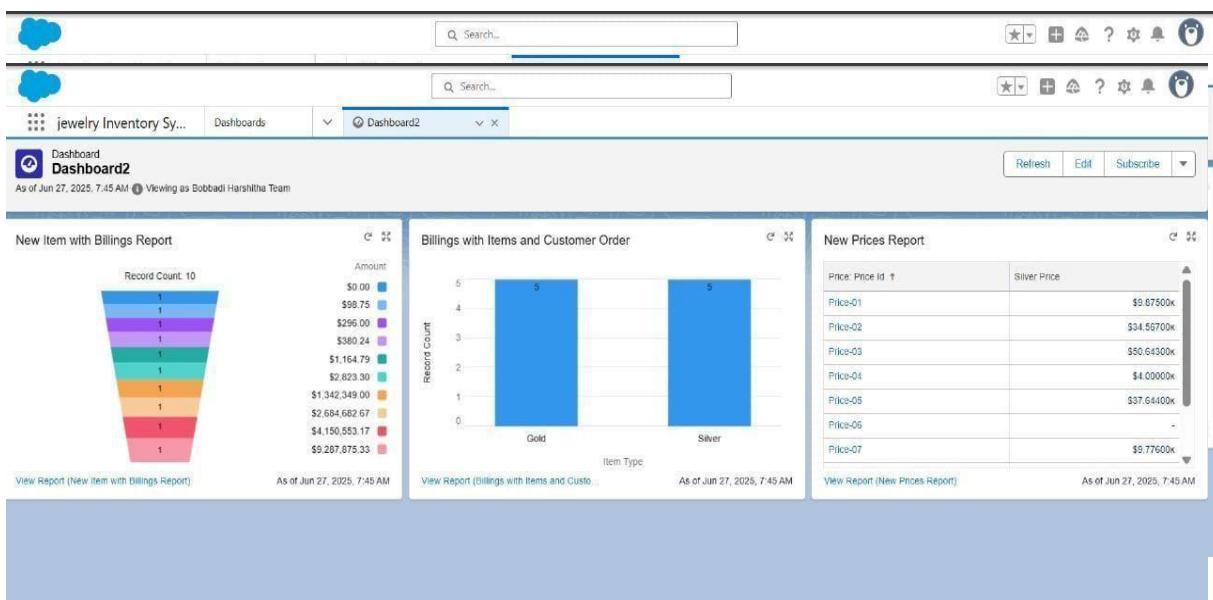
- Trigger-based validations
 - Auto-validate if stock is available before creating an invoice
 - Alert for duplicate product entries

C. Approval Workflow Output:

- Product Addition Requests
 - New products require manager approval before appearing in inventory
- Stock Reorder Requests
 - Approval triggered when reorder level is reached
- Notifications

- In-app and email notifications sent for each approval or rejection

Dashboards:



Reports:

New Prices Report

Total Records	Total Silver Price
10	\$642,908.00000
<input type="checkbox"/> Gold Price ↑ <input checked="" type="checkbox"/> Price: Price Id ↓ <input type="checkbox"/> Silver Price ↓	
(1)	Price-08
Subtotal	\$0.00000
(1) \$6,000.00000 (1)	Price-04
Subtotal	\$4,000.00000
(1) \$24,780.00000 (1)	Price-01
Subtotal	\$9,875.00000
(1) \$65,987.00000 (1)	Price-09
Subtotal	\$46,670.00000
(1) \$67,864.00000 (1)	Price-02
Subtotal	\$34,667.00000
(1) \$76,534.00000 (1)	Price-06
Subtotal	\$37,644.00000
(1) \$86,538.00000 (1)	Price-08
Row Counts	<input checked="" type="checkbox"/> Detail Rows <input type="checkbox"/> Subtotals <input type="checkbox"/> Grand Total

New Item with Billings Report

Total Records	10
<input type="checkbox"/> Amount ↑ <input checked="" type="checkbox"/> Item Id ↓ <input type="checkbox"/> Billing Id ↓	
(1) \$0.00 (1)	Item-08 Billing-06
Subtotal	
(1) \$98.75 (1)	Item-02 Billing-03
Subtotal	
(1) \$298.00 (1)	Item-09 Billing-04
Subtotal	
(1) \$380.24 (1)	Item-04 Billing-07
Subtotal	
(1) \$1,164.79 (1)	Item-06 Billing-09
Subtotal	
(1) \$2,823.30 (1)	Item-10 Billing-02
Subtotal	
(1) \$1,942,349.00 (1)	Item-01 Billing-01
Row Counts	<input checked="" type="checkbox"/> Detail Rows <input type="checkbox"/> Subtotals <input type="checkbox"/> Grand Total

Billing with Items and Customer Order

Total Records	10	
<input type="checkbox"/> Item Type ↑ <input checked="" type="checkbox"/> Item Id ↓ <input type="checkbox"/> Billing Id ↓		
(5) Gold	Item-01	Billing-01
	Item-03	Billing-05
	Item-08	Billing-06
	Item-05	Billing-08
	Item-07	Billing-10
Subtotal		
(5) Silver	Item-10	Billing-02
	Item-02	Billing-03
	Item-09	Billing-04
	Item-04	Billing-07
	Item-06	Billing-09
Subtotal		
Total (10)		

Flows:

The screenshot shows the Salesforce Flow Details page for a flow named "Project Flow".

Flow Details:

- Type: Record—Run After Save
- Associated Record: (None)
- Progress Status: Activated
- Last Modified Date: 6/25/2025, 12:05 PM
- Flow Owner: Bobbadi_Harsitha_Team

Information:

Flow Label	API Name
Project Flow	Project_Flow
Description	Record-Triggered After Save Flow.
Associated Record	(None)
Created By	Bobbadi_Harsitha_Team, 6/25/2025, 12:04 PM
Last Modified	Bobbadi_Harsitha_Team, 6/25/2025, 12:05 PM
Category	(None)

The screenshot shows the Salesforce Flow Builder interface for a flow named "Project Flow - V1".

Toolbox:

- Interaction (3): Action, Subflow, Custom Error
- Logic (6): Assignment, Decision, Loop, Transform, Collection Sort, Collection Filter
- Data (4): Create Records, Update Records

Flow Structure:

```
graph TD; Start((Start)) --> Action[Action]; Action --> End((End))
```

The flow starts with a "Start" step (Record-Triggered Flow) for the "Billing" object, triggered by "A record is created or updated". This leads to an "Action" step (notice).

Triggers:

SETUP > OBJECT MANAGER
Billing

Triggers

LABEL	API VERSION	SIZE WITHOUT COMMENTS	MODIFIED BY
UpdatePaidAmountTrigger	64.0	310	Bobbadi Harshitha Team, 6/24/2025, 10:48 AM

SETUP > OBJECT MANAGER
Billing

Apex Trigger
UpdatePaidAmountTrigger

Apex Trigger Detail

Name: UpdatePaidAmountTrigger	sObject Type: Billing
Code Coverage: 0% (0/4)	Status: Active
Created By: Bobbadi Harshitha Team, 6/24/2025, 10:47 AM	Last Modified By: Bobbadi Harshitha Team, 6/24/2025, 10:48 AM
Namespace Prefix:	

Help for this Page ⓘ

Apex Trigger Version Settings Trace Flags

```
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);
    }
}
```

9 ADVANTAGES AND DISADVANTAGES:

ADVANTAGES:

Automation Efficiency:

All critical operations like billing, inventory updates, and notifications are

automated via flows, reducing manual errors.

Centralized Data Handling:

Data is stored and managed in a centralized CRM system, making it easily accessible and modifiable.

Real-Time Analytics:

Dashboards and reports provide live updates on business performance, which helps in faster decision-making.

User-Friendly UI:

Salesforce Lightning provides a smooth and modern interface for all users.

Scalability:

The app can be expanded to handle more data and integrate with other business apps like payment gateways.

Customer Satisfaction:

By streamlining the sales and service process, the application enhances the overall customer experience.

DISADVANTAGES

Learning Curve:

New users may need training to understand Salesforce's interface, objects,

and flows.

Customization Dependency:

Some specific logic might require Apex development or third-party tools.

Cost Factor:

Scaling to a full enterprise-level Salesforce environment could be costly for small businesses.

Admin Management:

Role and permission setup must be carefully handled to ensure data security.

10 CONCLUSION

"In conclusion, the CRM Application for Jewel Management serves as a robust, cloud-based solution built using Salesforce. It brings digital transformation to traditional jewelry retailing by:

- Streamlining operations with custom objects and flows
- Improving business oversight with real-time dashboards
- Automating repetitive tasks like billing and inventory updates
- Enhancing data integrity and customer service

The project demonstrates how low-code tools like Salesforce Flow and Lightning App Builder can be used by developers to create enterprise-grade solutions. Our application is not only scalable and efficient but also provides a solid foundation for future business growth in the jewelry sector."

11 FUTURE SCOPE

"The current CRM application for Jewel Management lays a strong foundation for digital jewellery retail operations. However, the system can be further improved and extended in the following ways:

Payment Gateway Integration:

Integrate with online payment services such as Razorpay, PayPal, or Stripe to allow direct billing and payment within the CRM.

SMS and WhatsApp Alerts:

Enhance communication by integrating Twilio or other SMS APIs to send updates like order confirmations, billing alerts, or promotions.

Mobile App Development:

Extend the system using Salesforce Mobile SDK to create a dedicated mobile app for store owners and executives to manage inventory and billing on-the-go.

Barcode Scanner Support:

Enable barcode scanning through the mobile app or connected devices for faster item search and billing.

AI-Based Recommendations:

Use Salesforce Einstein to provide personalized recommendations to customers based on previous purchase history.

Third-Party Integrations:

Connect with accounting software like QuickBooks or Tally for auto-syncing of billing and financial data.

Multi-Store Management:

Add support for multiple branches or stores to manage inventory separately but view consolidated dashboards.

Customer Feedback System:

Implement a feedback module to collect and analyse customer reviews, which can be visualized in reports.