

CRM Application for Jewel Management (Developer)

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INTRODUCTION :

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.

DEVELOPMENT PHASE :

Creating Developer Account: By using this URL - <https://developer.salesforce.com/signup>

The screenshot shows the 'Sign up for your Developer Edition' page. It features a blue header with the Salesforce logo and a banner on the left advertising 'Agentforce and Data Cloud'. Below the banner, there's a list of benefits: 'Build apps fast with drag-and-drop tools', 'Go further with Apex code', 'Build AI agents with Agentforce', 'Harmonize your data with Data Cloud', 'Ground Agentforce with structured and unstructured data', and 'Integrate with anything using APIs'. To the right, there's a form for entering personal information: First name (Abiram), Last name (Pandiarajan), Job title (Developer), Work email (abiram.23bds@kclas.v), Company (Kumaraguru College), and Country/Region (India). A note below the form states: 'Your org may be provisioned on or migrated to Hyperforce, Salesforce's public cloud infrastructure.' There's also a checkbox for agreeing to the 'Main Services Agreement – Developer Services and Salesforce Program Agreement'. At the bottom, there's a reCAPTCHA field.

Create Jewel Customer Object :

The screenshot shows the 'Object Manager' section of the Salesforce setup. On the left, a sidebar lists various object configuration options like Fields & Relationships, Page Layouts, Lightning Record Pages, etc. The main area displays the 'Jewel Customer' object details. The 'Details' tab is selected, showing the API Name as 'Jewel_Customer__c', which is marked as 'Custom'. Other details include Singular Label ('Jewel Customer') and Plural Label ('Jewel Customers'). On the right, there are checkboxes for 'Enable Reports', 'Track Activities', and 'Track Field History'. Deployment status is listed as 'Deployed' with a link to 'Standard salesforce.com Help Window'. At the top right, there are 'Edit' and 'Delete' buttons.

Create Objects - Item , Customer Order , Price , Billing :

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

Header: Search Setup, Home, Object Manager

Breadcrumbs: SETUP > OBJECT MANAGER

Section: Item

Left Sidebar (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

Right Panel (Details):

Description	
API Name	Item_c
Custom	<input checked="" type="checkbox"/>
Singular Label	Item
Plural Label	Items
Enable Reports	<input checked="" type="checkbox"/>
Track Activities	
Track Field History	
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

Buttons: Edit, Delete

Setup Home Object Manager

Customer Order

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

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

Edit Delete

Setup Home Object Manager

Billing

Details

Description

API Name: Billing_c
Custom: ✓
Singular Label: Billing
Plural Label: Billings

Enable Reports: ✓
Track Activities
Track Field History
Deployment Status: Deployed
Help Settings: Standard salesforce.com Help Window

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

Edit Delete

Setup Home Object Manager

Price

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

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

Edit Delete

To Create a Tab- Item , Customer Order , Price , Billing Objects :

The screenshot shows the Salesforce Setup interface with the search bar set to "tab". The left sidebar includes sections for Feature Settings (Analytics, Tableau), User Interface (Console Settings, Loaded Console Tab Limit, Rename Tabs and Labels), and Tabs. The main content area is titled "Tabs" under "SETUP". It displays "Custom Object Tabs" with a table showing five tabs: Billings (Apple style), Customer Orders (Car style), Items (Boat style), Jewel Customers (Jewel style), and Prices (Bank style). Below this are sections for "Web Tabs" and "Visualforce Tabs", both currently empty.

Create a Lightning App - Jewellery Inventory System :

The screenshot shows the Lightning App Builder interface with the title "Jewellery Inventory System". The top navigation bar includes "Lightning App Builder", "App Settings", "Pages", and "Help". The left sidebar has sections for App Options, Utility Items (Desktop Only), Navigation Items, Navigation Rules, and User Profiles. The main content area is titled "App Details & Branding". It contains two main sections: "App Details" and "App Branding". In "App Details", fields include "App Name" (Jewellery Inventory System), "Developer Name" (Jewellery_Inventory_System), and "Description" (Elevate your look with elegance). In "App Branding", there is a "Image" field with a placeholder image and a "Primary Color Hex Value" field set to "#0070D2". At the bottom, there is an "Org Theme Options" checkbox and an "App Launcher Preview" section showing a blue icon with "JI" and the app name.

Creating Lookup Relationship - Customer :

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

- Page Header:** orgfarm-95e265f622-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01lgK000002BbKr/FieldsAndRelationships/view
- Left Sidebar:** Includes links for Setup, Home, Object Manager, and various configuration options like Page Layouts, Lightning Record Pages, Buttons, Links, and Actions.
- Current Page:** SETUP > OBJECT MANAGER > Customer Order
- Section:** Fields & Relationships
- Table:** Displays 5 items, sorted by Field Label. The table has columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED.
- Data:**

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

Creating a Master-Detail Relationship - Item :

Creating Text Field , Phone , Email in Jewel Customer Object :

The screenshot shows the Salesforce Setup interface with the URL <https://orgfarm-95e265f622-dev-ed.lightning.force.com/lightning/setup/ObjectManager/D1lgK000002Bb7x/FieldsAndRelationships/view>. The page title is "Item". The left sidebar shows navigation 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 main content area is titled "Fields & Relationships" and displays a table of 11 items. The columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The table includes fields such as Created By (CreatedBy), Expected Days Of Return (Expected_Days_Of_Return__c), Gold Price (Gold_Price__c), Item Id (Name), Item Type (Item_Type__c), Last Modified By (LastModifiedBy), Owner (OwnerId), Prices (Prices__c), Priority (Priority__c), and Durability (Durability__c). The "INDEXED" column contains checkmarks for several fields.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
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		
Last Modified By	LastModifiedBy	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Prices	Prices__c	Lookup(Price)		✓
Priority	Priority__c	Picklist		
Durability	Durability__c	Number(10, 0)		

Creating the number,Picklist fields in Item object :

Setup > Object Manager > Item

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
Expected Days Of Return	Expected_Days_Of_Return__c	Picklist		
Gold Price	Gold_Price__c	Formula (Currency)		
Item Id	Name	Auto Number		✓
Item Type	Item_Type__c	Picklist		
Last Modified By	LastModifiedBy	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Price	Price__c	Lookup(Price)		✓
Priority	Priority__c	Picklist		
Purity	Purity__c	Number(2, 0)		

Setup > Object Manager > Item

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
Item Id	Name	Auto Number		✓
Item Type	Item_Type__c	Picklist		
Last Modified By	LastModifiedBy	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Purity	Purity__c	Number(2, 0)		

Creating the validation rule - Postal Code & ValidationRule For JewelCustomerObject :

Creating the validation rule - ValidationRule For Item :

The screenshot shows the Salesforce Object Manager interface for the 'Jewel Customer' object. On the left, a sidebar lists various configuration options like Details, Fields & Relationships, Page Layouts, and Validation Rules. The 'Validation Rules' option is currently selected. In the main content area, a new validation rule is being created with the following details:

Validation Rule Detail	
Rule Name	Postal_Code
Error Condition Formula	AND(OR(LEN(Zip_Postal_code__c) <> 6, NOT(REGEX(Zip_Postal_code__c, "[0-9]{6}"))), NOT(ISBLANK(Zip_Postal_code__c)))
Error Message	Must contain 6 digits", select the Error location as Field and select the field as "Zip/Postal code"
Description	
Created By	Abiram Pandiarajan, 9/12/2025, 5:40 AM
Active	✓
Error Location	Top of Page
Modified By	Abiram Pandiarajan, 9/12/2025, 5:40 AM

Gold Smith Profile :

Creating Gold Smith Role :

The screenshot shows the Salesforce Object Manager interface for the 'Jewel Customer' object. On the left, a sidebar lists various configuration options like Compact Layouts, Field Sets, and Validation Rules. The 'Validation Rules' option is currently selected. In the main content area, a validation rule named 'Postal_Code' is listed in the 'Validation Rules' section:

Validation Rules				
1 Items, Sorted by Rule Name				
RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
Postal_Code	Top of Page	Must contain 6 digits", select the Error location as Field and select the field as "Zip/Postal code"	✓	Abiram Pandiarajan, 9/12/2025, 5:40 AM

Creating the Role Hierarchy

You can build on the existing role hierarchy shown on this page. To insert a new role, click **Add Role**.

Your Organization's Role Hierarchy

- Corporate Structure
 - Add Role
 - CEO** Edit | Del | Assign
 - Add Role
 - CFO** Edit | Del | Assign
 - Add Role
 - COO** Edit | Del | Assign
 - Add Role
 - Gold Smith** Edit | Del | Assign
 - Add Role
 - SVP, Customer Service & Support** Edit | Del | Assign
 - Add Role
 - Customer Support International** Edit | Del | Assign
 - Add Role
 - Customer Support North America** Edit | Del | Assign
 - Add Role
 - Installation & Repair Services** Edit | Del | Assign
 - Add Role
 - SVP, Human Resources** Edit | Del | Assign
 - Add Role

Create User :

To Create Gold & Silver Page layouts :

Profile
Gold Smith

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

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

Enabled Apex Class Access | Enabled Visualforce Page Access | Enabled External Data Source Access | Enabled Named Credential Access |
Enabled External Credential Principal Access | Enabled Custom Metadata Type Access | Enabled Custom Setting Definitions Access | Enabled Flow Access | Enabled Service Presence Status Access |
Enabled Custom Permissions

Profile Detail

Name	Gold Smith	Edit	Clone	Delete	View Users
User License	Salesforce	Custom Profile ✓			
Description					
Created By	S.Rohith	9/7/2025, 10:54 AM	Modified By	S.Rohith	9/7/2025, 12:22 PM

Page Layouts

Standard Object Layouts	Global	Location Group Assignment	Location Group Assignment Layout
Email Application	Global Layout [View Assignment]	Macro	Macro Layout [View Assignment]
	Not Assigned [View Assignment]		

Users > Setup > Object Manager > Users

Search Setup

User Profile Help for this Page

Users

Gold smith

User Detail

Name	Value	Role	Value
Name	Gold smith	User License	Salesforce
Alias	gsmith	Profile	Standard User
Email	abiram.23bds@kclas.ac.in [Verify]	Active	✓
Username	abiram.23bds@kclas.ac.in	Marketing User	□
Nickname	User1757786764662448532	Offline User	□
Title		Knowledge User	□
Company		Flow User	□
Division		Service Cloud User	□
Address		Site.com Contributor User	□
Time Zone	(GMT-07:00) Pacific Daylight Time (America/Los_Angeles)	Site.com Publisher User	□
Locale	English (United States)	WDC User	□
Language	English	Mobile Push Registrations	View
Delegated Approver		Data.com User Type	□
Manager		Accessibility Mode (Classic Only)	□ [i]
Receive Approval Request Emails	Only if I am an approver	Debug Mode	□ [i]
Federation ID		Hints	Contract Palette on Charts

User Management Settings

Users

Feature Settings

Data.com

Prospector Users

Service

Embedded Service

Messaging for In-App and Web User Verification

User Interface

Action Link Templates

Object Manager > Item > Page Layouts

SETUP > OBJECT MANAGER

Item

Page Layouts

2 Items, Sorted by Page Layout Name

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY
Item Layout	Abiram Pandiarajan, 9/12/2025, 12:05 AM	Abiram Pandiarajan, 9/12/2025, 5:24 AM
Page Layout for Gold	Abiram Pandiarajan, 9/12/2025, 6:29 AM	Abiram Pandiarajan, 9/12/2025, 6:35 AM

Quick Find

New

Page Layout Assignment

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

To create a Record Type - Gold & Silver :

Creating permission set :

The screenshot shows the Salesforce Setup interface. On the left, the navigation bar has 'Users' selected under 'User Management Settings'. The main content area displays the 'User Detail' for 'Niklaus Mikaelson'. The user's name is Niklaus Mikaelson, alias nMika, email abiram.23bds@kclas.ac.in, and username abiram.23bds107@org.com. The role is 'Gold Smith', and the profile is 'Gold Smith'. The user is active. The 'User Detail' section includes fields for Name, Alias, Email, Username, Nickname, Title, Company, Department, Division, Address, Time Zone, Locale, Language, Delegated Approver, Manager, Receive Approval Request Email, Federation ID, Role, Profile, User License, Active, Marketing User, Offline User, Knowledge User, Flow User, Service Cloud User, Site.com Contributor User, Site.com Publisher User, WDC User, Mobile Push Registrations, Data.com User Type, Accessibility Mode (Classic Only), Debug Mode, and Hints/Contrast Palette on Charts.

The screenshot shows the 'Current Assignments' page for the 'Per to Worker' permission set. The sidebar navigation bar has 'Permission Sets' selected under 'Permission Sets'. The main content area shows a table titled 'Current Assignments' with columns: Full Name, Active, Role, Profile, User License, and Expires On. There is one assignment listed: 'kol Mikaelson' with 'Worker' role, 'Standard Platform User' profile, and 'Salesforce Platform' user license. The 'Current Assignments' table has columns: Full Name ↑, Active, Role, Profile, User License, and Expires On.

chrome: Recently | Billing | Billing A | Flow Trig | Billing A | Home | New Bill | -2-CRM | Develop | - Student | +

orgfarm-95e265f622-dev-ed.develop.lightning.force.com/lightning/o/Item_c/list?filterName=_Recent

The screenshot shows a Salesforce Lightning page titled "Jewellery Inventory ...". The top navigation bar includes links for "Jewel Customers", "Customers", "Items", "Customer Orders", "Prices", "Billings", "Reports", and "Dashboards". A search bar is located at the top right. Below the navigation is a section titled "Recently Viewed" with a dropdown arrow. It displays three items:

	Item Id
1	Item-02
2	Item-03
3	Item-01

A "Search this list..." input field and various filter and sort icons are visible on the right side of the list.

Create a Trigger Handler class & The Trigger :

Create,View and Delete a Record (Jewel Customer) :

The screenshot shows the Salesforce Lightning interface for a 'Jewellery Inventory' application. The user is viewing the 'Jewel Customers' list under the 'Recently Viewed' section. The list contains two items: 'abi' and 'sample 1'. The interface includes standard Salesforce navigation and search bars at the top.

Create Report :

The screenshot shows the Salesforce developer console with the file 'UpdatePaidAmountTriggerHandler.apxc' open. The code implements a trigger handler for the Billing__c object. It contains two static methods: 'handleBeforeInsert' and 'handleBeforeUpdate'. The 'handleBeforeInsert' method sets the Paid_Amount__c field to the Paying_Amount__c field for new records. The 'handleBeforeUpdate' method updates the Paid_Amount__c field for existing records 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
12
13
14
15    public static void handleBeforeUpdate(Map<Id, Billing__c> oldBillingsMap, List<Billing__c> updatedBillings) {
16
17        for (Billing__c billing : updatedBillings) {
18
19            billing.Paid_Amount__c = billing.Paying_Amount__c;
20
21        }
22    }
23 }
```

Create Dashboard :

The screenshot shows a Salesforce Lightning dashboard titled "Prices Report". The dashboard displays a single row of data in a table:

Price: ID ↑	Gold Price	Price: Price Id
a03gK00000AMLko	\$9k	Price-01

Below the table, there are two buttons: "View Report (Prices Report)" and "As of Sep 13, 2025, 7:52 AM".

Create a Flow :

The screenshot shows a Salesforce Lightning report titled "Prices Report". The report displays two rows of data in a table:

	Price: ID	Gold Price	Price: Price Id
1	a03gK00000AMLko	\$9,000	Price-01
2		\$9,000	

Conclusion :

The CRM Application for Jewel Management successfully streamlined customer interactions, sales tracking, and inventory management for jewelry businesses. As a developer, I focused on building a secure, scalable, and user-friendly system tailored to industry needs. This project enhanced operational efficiency and improved customer engagement. It also laid the groundwork for future features like analytics and mobile support.

