

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	29 October 2025
Team ID	NM2025TMID06238
Project Name	CRM Application for Jewel Management - (Developer)
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Example: The CRM Application for Jewelry Management is a Salesforce-based cloud CRM that integrates customer, billing, inventory, and reporting processes in a single secure platform.

Reference: <https://developer.salesforce.com/docs>

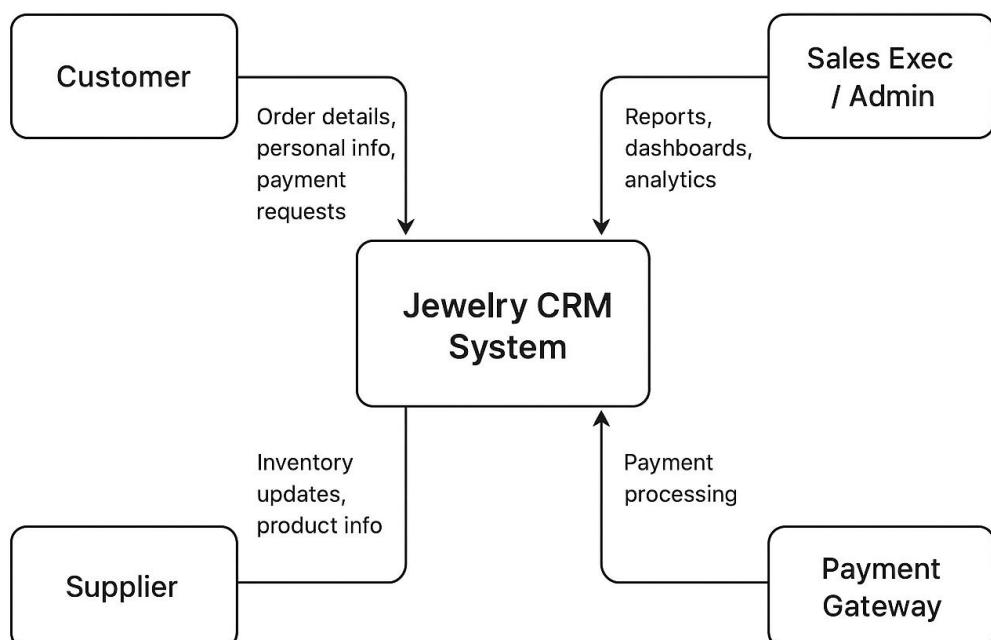


Table 1: Components & Technologies

S.No	Component	Description	Technology
1	Customer Management	Manages customer details such as name, contact, and purchase history. Links customers to their orders and billing records.	Salesforce Custom Object (Customer__c), Apex Classes, Lightning Web Components (LWC)
2	Inventory (Item) Management	Handles jewelry item details like type, ornament, weight, metal, and price. Updates stock levels automatically after sales.	Salesforce Object (Item__c), Validation Rules, Flows
3	Order Management	Manages customer orders by linking selected items and customers. Automatically calculates total amounts.	Salesforce Object (Order__c), Apex Triggers, Flows
4	Billing Management	Generates billing records automatically when an order is created or updated. Triggers email notifications.	Salesforce Object (Billing__c), Apex Triggers, Email Alert Flow
5	Payment Processing	Integrates with external payment gateways to process customer payments and update billing status.	REST API Integration (Stripe/PayPal), Apex HTTP Callouts
6	Email & Notification System	Sends automated billing and confirmation emails to customers after record creation or update.	Salesforce Flow (Record-Triggered), Text Templates, Send Email Action
7	Reports & Dashboards	Provides real-time reports like “Item with Billings” and “Billings with Item and Customer Order.” Displays	Salesforce Reports & Dashboards, Lightning Pages

S.No	Component	Description	Technology
		sales and inventory dashboards.	
8	User & Role Management	Controls access levels for different users (Admin, Sales Executive, Finance). Manages permissions and visibility.	Salesforce Role Hierarchy, Profiles, Permission Sets
9	Audit & Logging Module	Tracks all create, update, and delete actions for data transparency and compliance.	Salesforce Field History Tracking, Audit Trail
10	Integration Layer	Connects external systems such as Payment Gateways, Email APIs, and Supplier systems.	REST / SOAP APIs, Apex Integration Services

Table 2: Application Characteristics

S.No	Characteristics	Description	Technology
1	User Interface (UI)	Provides an intuitive and responsive interface for users to manage customers, orders, and billing.	Salesforce Lightning Experience, Lightning Web Components (LWC), HTML5, CSS3
2	Automation	Automates workflows like billing creation, email notifications, and payment updates without manual intervention.	Salesforce Flow Builder, Process Builder, Apex Triggers
3	Data Management	Handles structured storage of jewelry items, customers, orders, and billing information securely.	Salesforce Custom Objects, Relational Data Model, SOQL

S.No	Characteristics	Description	Technology
4	Integration	Connects with external systems such as payment gateways, supplier databases, and email APIs.	RESTful APIs, Apex HTTP Callouts, JSON / XML
5	Security	Ensures data privacy and system protection through access control, authentication, and encryption.	OAuth 2.0, HTTPS / TLS 1.2+, Role-Based Access Control