

PROJECT DESIGN PHASE-II: TECHNICAL ARCHITECTURE

Project Details :

Date	1 November 2025
Team ID	NM2025TMID06045
Project Title	CRM Application for Jewel Management
Maximum Marks	4 Marks

Technical Architecture :

The CRM Application for Jewel Management is built using the **Salesforce Cloud Platform**, designed to streamline jewel business operations such as **customer management, item tracking, order management, and reporting**. This architecture ensures scalability, data integrity, and security using Salesforce’s **multi-tenant cloud infrastructure**.

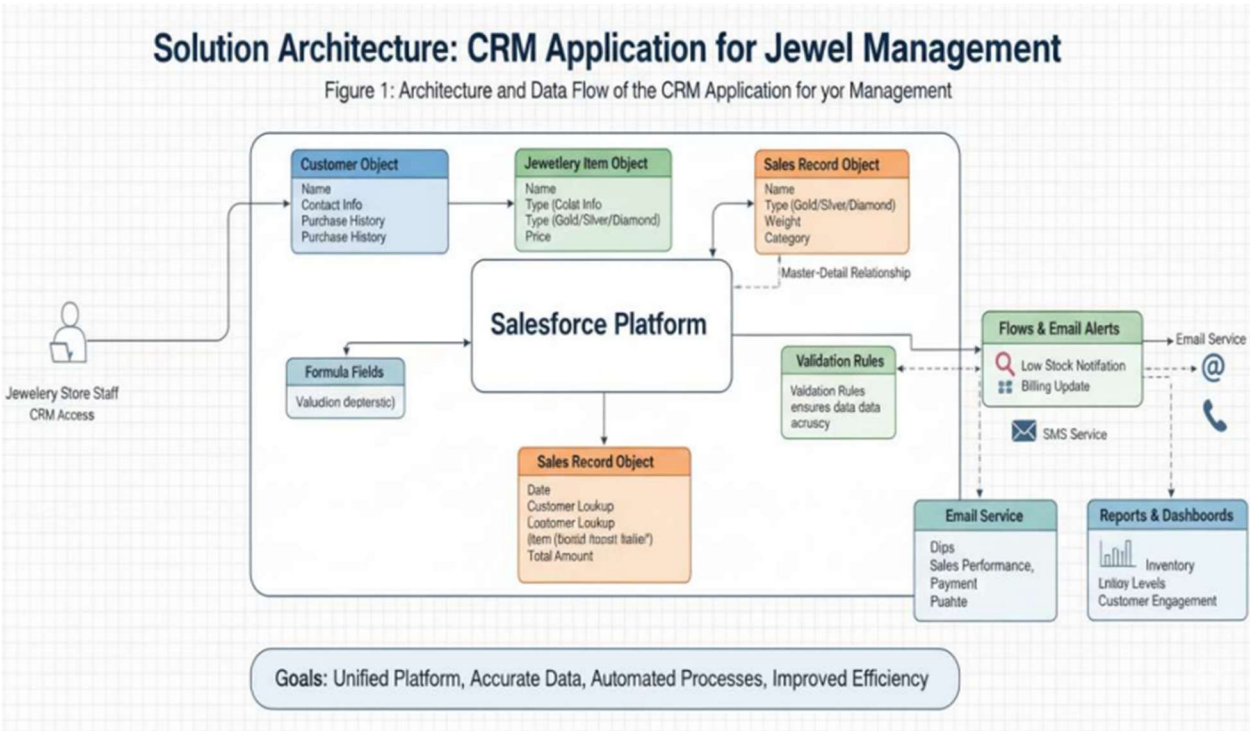


Figure 1: Architecture and Data Flow of the CRM Application for Jewel Management

Key Design Aspects:

- Built entirely on the **Salesforce Platform (PaaS)**.
- Integrates **custom objects, Lightning components, Apex classes, and Flow automation**.
- Provides **role-based access control** and real-time insights via **dashboards and reports**.
- Uses **cloud storage** for secure and centralized data management.

Table 1: Components & Technologies :

S.No	Component	Description	Technology Used
1.	User Interface (Frontend)	Provides intuitive navigation for customers, goldsmiths, and workers via Lightning Pages and Tabs.	Salesforce Lightning Experience, Lightning App Builder
2.	Application Logic – 1	Handles creation of objects, fields, and record relationships for Jewel management.	Salesforce Object Manager, Schema Builder
3.	Application Logic – 2	Automates business workflows such as order confirmation, stock updates, and customer notifications.	Salesforce Flows, Process Builder, Apex Triggers
4.	Application Logic – 3	Manages user profiles, permissions, and access hierarchy.	Profiles, Roles, Permission Sets (Salesforce Security Model)
5.	Database (Backend)	Stores all Jewel customer, order, item, and billing records securely.	Salesforce Cloud Database (SOQL / SOSL)
6.	Reporting & Analytics	Provides visual insights into customer activity, stock details, and sales performance.	Salesforce Reports & Dashboards
7.	Integration Services (Optional)	Enables future integration with payment systems or vendor APIs.	Salesforce REST API, External Services
8.	Automation Layer	Executes validation, data updates, and automatic report generation.	Apex Classes, Workflows, Flows
9.	Deployment / Hosting	Cloud-hosted through Salesforce environment (multi-tenant SaaS platform).	Salesforce Cloud (Force.com, AppExchange)

10.	Security & Access Layer	Ensures encryption, secure login, and role-based record visibility.	Salesforce Shield, Role Hierarchies, Two-Factor Authentication
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Table 2: Application Characteristics :

S.No	Characteristics	Description	Technology
1.	Scalability	Supports multiple users, clients, and jewel categories with seamless performance.	Salesforce Cloud Architecture
2.	Automation	Automates repetitive tasks like follow-ups, billing, and order tracking.	Apex Triggers, Workflows, Flows
3.	Security	Encrypted data and role-based user access ensure confidentiality.	Salesforce Shield / Profile-Based Access
4.	Customization	Fully customizable CRM modules based on business needs.	Lightning Components, Custom Objects
5.	Integration	Compatible with email services, payment APIs, and analytics tools.	Salesforce Connect, REST API
6.	Performance	Cloud optimization ensures quick response times for all CRM operations.	Salesforce Optimizer Tools