

SOLUTION ARCHITECTURE

Date	23 October 2025
Team ID	NM2025TMID02837
Project Name	CRM Application for Jewel Management
Maximum Marks	4 marks

Solution Architecture:

Goals of the Architecture:

The architecture aims to provide an integrated, scalable, and secure platform specifically designed for managing high-value jewel retail operations. It ensures efficient handling of **customer profiles**, **real-time high-value inventory tracking**, and digital service workflows (repairs, appraisals) while maintaining robust data consistency and accessibility. The design promotes modularity, enabling easy customization and future expansion within the Salesforce environment.

Key Components :

The solution architecture comprises key Salesforce components such as custom objects for **Customers, Jewelry Inventory (Assets), Digital Job Cards (Service)**, and **Billing/Appraisals**, supported by Flows, Validation Rules, and Platform Events for automation. Dashboards and Reports provide analytical insights into sales performance and stock movement, while **Role-Based Access Control** ensures stringent data security and proper authorization across all jewel store staff.

Development Phases :

Development followed structured phases: requirement analysis, data modeling for high-value assets, and Salesforce environment setup. Custom objects and relationships were created to link customers, inventory, and services, followed by automation using Flows and Apex (where needed). Rigorous testing ensured data integrity and functionality. Finally, dashboards, reports, and user profiles were configured to deliver a complete and efficient Jewel Management CRM solution.

Solution Architecture Description :

The **Jewel Management CRM Project** architecture is built entirely on the Salesforce platform, integrating data, automation, and analytics to streamline jewel retail and service operations. It uses a relational data model connecting **Customers, Jewelry Inventory, Digital Job Cards**, and **Billing** through custom objects. Automation is achieved via Salesforce Flows for **service status tracking, invoice generation, and loyalty program notifications**. Validation Rules enforce data accuracy for crucial fields like unique serial numbers, while dashboards provide real-time insights into sales, inventory aging, and service turnaround times. The architecture follows a modular approach to allow easy scaling and future enhancements. By leveraging Salesforce's security and cloud infrastructure, the system ensures reliable, accessible, and high-performing management of all jewel retail processes.

Solution Architecture Diagram :

Solution Architecture: CRM for Jewel Management

