

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	01 NOV 2025
Team Id	NM2025TMID04501
Project Name	CRM Application for Jewel Management - (Developer)
Maximum Marks	4 Marks

Technical Architecture:

The deliverable shall include the architectural diagram and technical details as given below.

The Jewel Inventory System architecture is designed to manage jewellery inventory, track sales, and generate reports efficiently using Salesforce as the main platform. The application consists of user interfaces, business logic, database components, and automation processes. It follows a multi-tier cloud architecture integrating both data management and workflow automation layers.

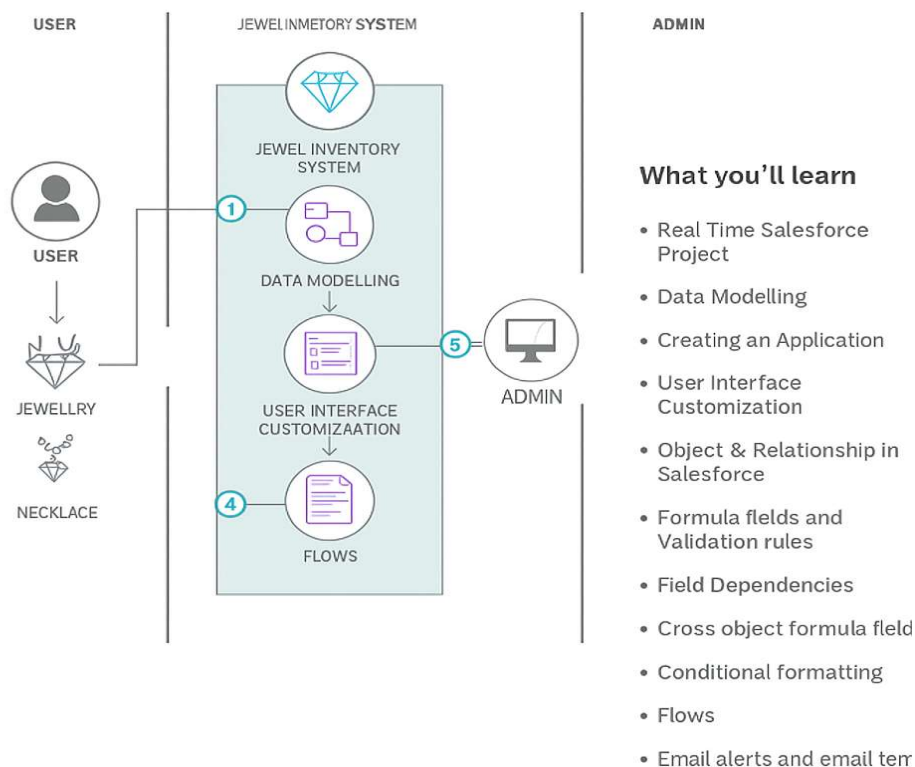


Table-1: Components & Technologies

S.No	Component	Description	Technology
1	User Interface	Admin and Sales Executives interact via Salesforce Web UI and mobile dashboards.	Salesforce Lightning UI, Salesforce Mobile App
2	Application Logic-1	Handles item addition, updates, and deletion for inventory management.	Salesforce Apex Classes, Triggers
3	Application Logic-2	Processes customer orders and updates stock automatically.	Salesforce Flows, Process Builder
4	Application Logic-3	Generates invoices and sends purchase confirmations.	Salesforce Email Templates, Workflow Rules
5	Database	Stores jewellery, customer, and sales data securely.	Salesforce Object Database (Custom & Standard Objects)
6	Cloud Database	Data hosted and managed on Salesforce Cloud Infrastructure.	Salesforce Cloud Platform
7	File Storage	Stores invoices, reports, and customer documents.	Salesforce File Storage / Attachments
8	External API-1	Payment gateway integration for secure online transactions.	REST API Integration
9	External API-2	Email service integration for notification delivery.	Email API / SMTP Configuration
10	Machine Learning Model	Future enhancement for predictive sales analytics.	Salesforce Einstein Analytics
11	Infrastructure (Server / Cloud)	Hosted and managed on Salesforce SaaS platform.	Salesforce Cloud (SaaS)

Table-2: Application Characteristics

S.No	Characteristics	Description	Technology
1	Open-Source Frameworks	Not applicable (Salesforce is a proprietary cloud platform).	-
2	Security Implementations	Role-based access control, validation rules, and profile permissions to ensure data safety.	Salesforce Profiles, Permission Sets, Validation Rules
3	Scalable Architecture	Cloud-based solution that scales automatically with business growth.	Salesforce Multi-Tenant Cloud Architecture
4	Availability	Highly available due to Salesforce's global cloud infrastructure.	Load-balanced Salesforce Instances
5	Performance	Optimized through indexed fields, automation, and asynchronous flows.	Salesforce Apex, SOQL Optimization, Flow Automation
6	Maintainability	Modular structure allows easy updates, field changes, and feature upgrades.	Salesforce Setup and Configuration Tools