

## Project Design Phase Solution Architecture

Date	27 OCT 2025
Team ID	NM2025TMID01965
Project Name	CRM Application for Jewel Management
Maximum Marks	4 Marks

### Solution Architecture:

#### Goals of the Architecture:

- To design a **Salesforce-based CRM system** that integrates jewellery inventory, customer, and sales data into a unified platform.
- To ensure **real-time tracking and reporting** of jewellery items and sales performance.
- To **automate repetitive tasks** using Salesforce Flows, Email Alerts, and Validation Rules.
- To enhance **data integrity, customer satisfaction, and business efficiency** through streamlined workflows.

#### Key Components:

- **Objects and Relationships:** Jewellery Items, Customers, Sales Orders, and Staff.
- **Data Model:** Custom Objects created for Item Categories, Stock, and Transactions linked via Lookup and Master-Detail relationships.
- **Automation Tools:** Salesforce Flows, Formula Fields, Validation Rules, and Email Alerts.
- **Reports & Dashboards:** Used for Sales Analytics, Stock Monitoring, and Performance Tracking.
- **User Interface:** Customized page layouts and record types for easy navigation and data management.

#### Development Phases:

1. **Data Modelling:** Create custom objects and establish relationships for jewellery inventory and customer records.
2. **UI Customization:** Design intuitive page layouts and record forms for user-friendly access.
3. **Automation Setup:** Implement formula fields, validation rules, and Flows for automatic updates and alerts.
4. **Email Integration:** Configure email templates and notification triggers for order updates.
5. **Reports and Dashboards:** Build analytical dashboards to visualize sales trends and stock performance.
6. **Testing and Validation:** Validate each module for functionality, accuracy, and data consistency.

#### Solution Architecture Description:

The **CRM Application for Jewel Management** is designed to streamline jewellery business operations through Salesforce's powerful CRM capabilities.

The architecture combines **inventory control, sales management, and customer relationship tracking** into a cohesive and automated system.

The solution architecture focuses on building a **data-driven, scalable, and reliable system** that reduces manual work and enhances transparency.

Custom objects are created for **Jewellery Items, Customers, and Sales Orders**, which are interconnected

through **relationships** to ensure data consistency.

**Flows, Validation Rules, and Formula Fields** automate business logic and minimize human error.

**Dashboards and Reports** offer actionable insights on sales trends, top-performing products, and customer engagement.

This architecture promotes **efficiency, automation, and scalability**, enabling jewellery businesses to operate smarter and grow sustainably in a competitive market.

#### Example - Solution Architecture Diagram:



Figure : (Illustrative architecture showing Salesforce CRM modules such as Data Model, UI Customization, Automation, and Analytics interconnected through a centralized database for jewellery management.)