

Solution Architecture

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Project Name: CRM Application for Jewel Management

1. Architecture Overview

The architecture aims to provide an integrated, scalable, and automated platform for managing jewelry operations. It ensures efficient handling of customer data, inventory, custom orders, appointments, billing, and after-sales feedback using Salesforce cloud solutions.

2. Goals

- Centralized customer & product master data.
- Real-time order & inventory tracking (including item lifecycle).
- Automated notifications (order status, appointments, billing).
- Role-based access (salesperson, store manager, admin, accountant).
- Analytics & dashboards for sales, inventory aging, and high-value customers.
- Easy scaling to multiple branches and integrations.

3. Key Components

Salesforce CRM (Core): Custom objects, automation, reports, and dashboards.

Frontend: Staff Portal (Salesforce Lightning / LWC), Customer Portal (Experience Cloud), Mobile App (React Native).

Integration Layer: Mulesoft / Heroku / AWS Lambda for external services.

Payments & POS: Razorpay / Stripe integration for transactions.

Notifications: Twilio / SendGrid for automated SMS & Email.

Analytics & BI: Salesforce Einstein / Tableau.

Data Storage: Salesforce DB with daily AWS S3 backups.

4. Security & Compliance

- Role-based access control and field-level security.
- Data encryption at rest and in transit.
- Audit logs for every user operation.
- Compliance with data privacy standards (GDPR & PCI-DSS).

5. Scalability & Monitoring

- Scalable across multiple branches using Salesforce's cloud infrastructure.
- Real-time health monitoring and failure alerts.
- Scheduled backups and event-based recovery.

