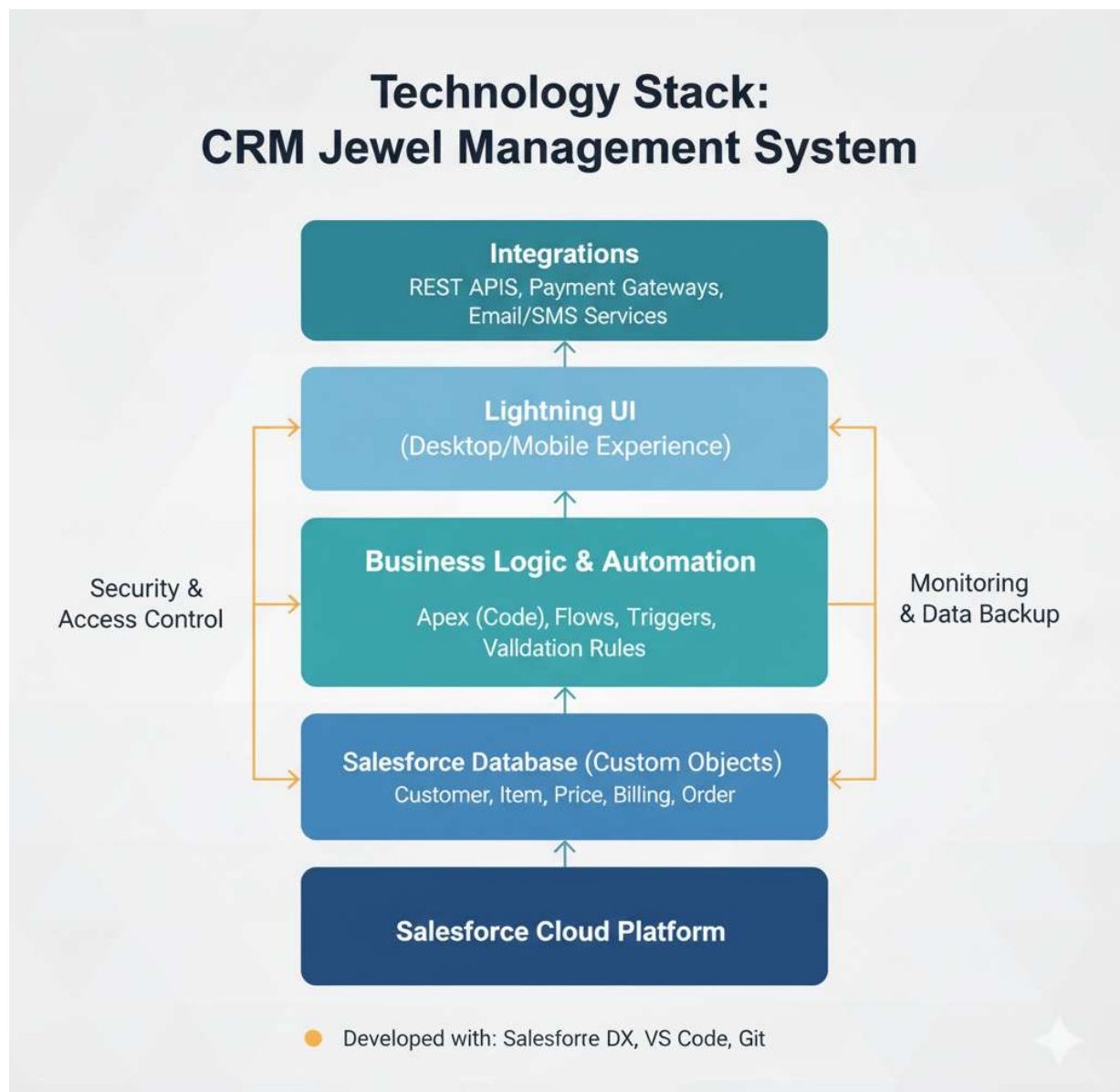# Project Design Phase-II

Technology Stack (Architecture & Stack)

Technical Architecture

The CRM Jewel Management System uses a three-tier architecture — user interface, logic layer, and database. It is hosted on the Salesforce Cloud, ensuring security, speed, and scalability for jewellery business management.

Key Features:

- Built on Salesforce Platform (SaaS)

- Web-based interface for admin and staff

- Centralized database for jewellery, customers, and billing

- Automated billing and email notifications

- Optional integration with payment and SMS APIs

Main Components:

1. User Interface (UI):
   Staff manage jewellery, customers, and billing through a web dashboard (built using Salesforce Lightning Web Components).

2. Customer Management:
   Handles customer registration, updates, and purchase tracking using Apex classes and Salesforce Flows.

3. Item & Inventory Management:
   Maintains jewellery details, purity, quantity, and auto-updates during billing.

4. Billing & Notifications:
   Generates bills automatically and sends emails or SMS alerts to customers.

5. Database:
   Stores all jewellery, customer, and billing records securely in the Salesforce Object Database.

6. Cloud Infrastructure:
   Hosted entirely on the Salesforce Cloud with 99.9% uptime and secure data handling.

7. External Integrations (Optional):
   Supports payment gateways like Razorpay or PayPal and message APIs like Twilio.

8. Future Add-on:
   Can include AI/ML for predicting best-selling jewellery or customer behavior using Salesforce Einstein.

System Characteristics:

- Security: Role-based access and encrypted data.

- Scalability: Can handle growing customers, items, and transactions.

- Performance: Fast operations using optimized Salesforce automation.

- Maintainability: Easy updates through modular design.

- Reliability: Consistent data and minimal downtime.

- Integration: REST APIs for linking with external tools.