

Project Design Phase-II Technology Stack (Architecture & Stack)

Date	8 JUNE 2025
Team ID	NM2025TMID0112
Project Name	CRM Application For Jewel Management Development
Maximum Marks	4 Marks

Technical Architecture – CRM Application for Jewel Management Development

Overview:

The **CRM for Jewel Management** system follows a **three-tier architecture** that ensures scalability, security, and efficient data management. It helps jewelry store administrators and sales staff handle customer records, sales, inventory, and reporting in a secure and responsive environment.

Architectural Description:

The system consists of the following **three main layers**:

1. Presentation Layer (User Interface):

- The interface through which users (Admin, Sales Staff, and Inventory Manager) interact with the system.
- Designed with responsive dashboards for managing jewelry stock, customer data, and billing.
- Technologies: **HTML, CSS, JavaScript, Salesforce Lightning Components (or Web Framework like React).**

2. Application Layer (Business Logic):

- Contains the logic for handling customer relationships, sales processing, and stock updates.
- Implements business rules such as user authentication, invoice generation, and report creation.
- Technologies: **Apex (Salesforce), Node.js, or Java Spring Boot.**

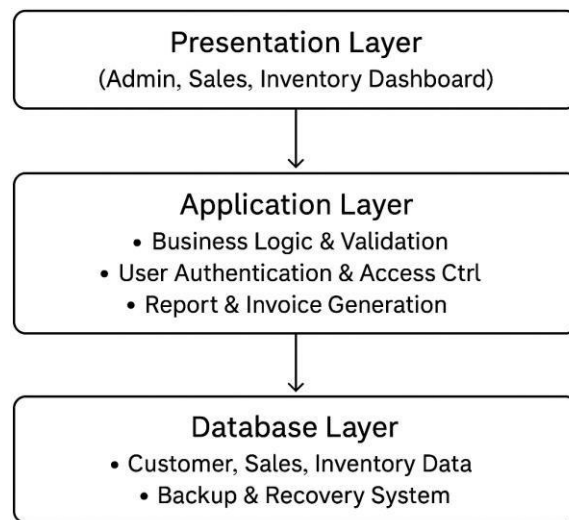
3. Database Layer (Data Storage):

- Stores customer records, jewelry items, transaction history, and system logs.
- Ensures data integrity, quick access, and secure backups.
- Technologies: **Salesforce Object Database or MySQL/PostgreSQL.**

Reference:

GitHub project: **CRM-to-Jewellery-Management** - <https://github.com/RADHIMEENAKSHI/CRM-TO-JEWELLERY-MANAGEMENT> GitHub

Open source jewellery management module: **Jewellery Management Software** for Odoo – https://apps.odoo.com/apps/modules/17.0/jewellery_management_software/app



Guidelines:

- Collect requirements for customer, sales, and inventory management.
- Design the system with clear modules and database connections.
- Develop the CRM using user-friendly and secure technologies.
- Test all functions to ensure accuracy and performance.
- Deploy the system and maintain it with regular updates.

User Interface:

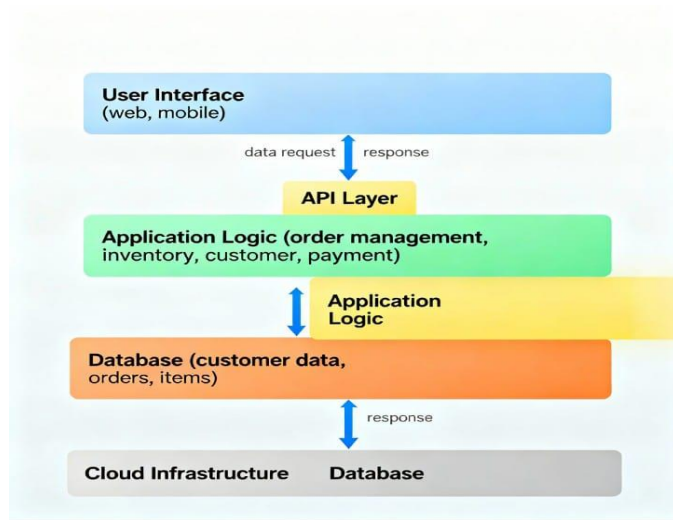


Table-1 : Components & Technologies:

Component Name	Description	Technology Used
User Interface	Provides dashboards for admin, sales staff, and inventory users	HTML, CSS, JavaScript, Salesforce Lightning
Business Logic	Handles jewelry management, billing, and reporting functions	Apex / Node.js / Java
Database	Stores all jewelry, customer, and transaction data	Salesforce DB / MySQL
Authentication Module	Ensures secure login for authorized users	OAuth 2.0 / Salesforce Security
Reporting Module	Generates sales and performance reports	Apex Reports / Power BI
Backup System	Regular backup and recovery of data	Cloud Backup Storage

Table-2: Application Characteristics:

Category	Requirement
Hardware	Intel i5/i7 Processor, 8GB RAM, 256GB SSD, Internet Connection
Operating System	Windows 10 / macOS / Linux
Software	Salesforce CRM Platform / Visual Studio Code / Node.js / MySQL
Browser	Google Chrome / Microsoft Edge
Network	Stable Internet Connection (Minimum 5 Mbps)

