

Project Design Phase – II

Technology Stack (Architecture & Stack)

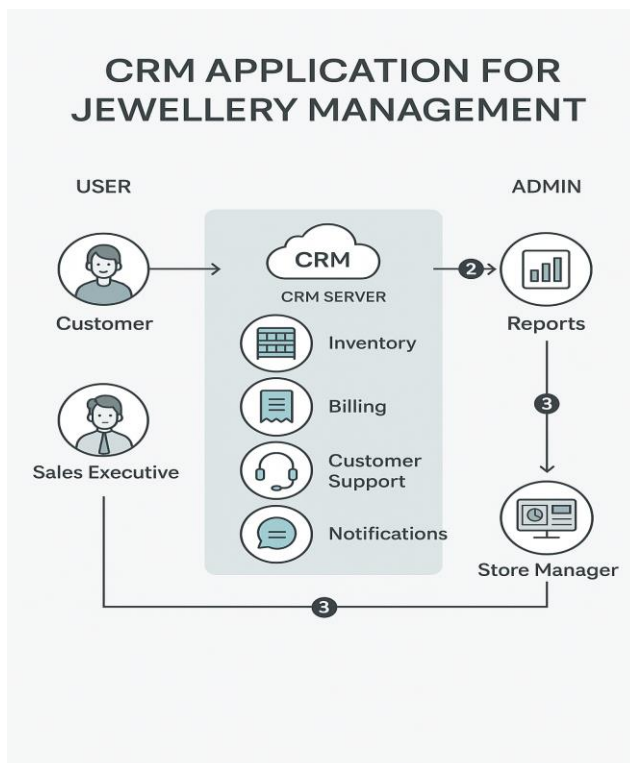
Date	01 November 2025
Team ID	NM2025TMID03998
Project Name	CRM Application for Jewellery Management
Maximum Marks	4 Marks

Technical Architecture:

The deliverable includes an overview of the architecture and its components, describing how each module of the CRM system interacts to manage customers, products, and sales. This architecture ensures smooth data flow, scalability, and efficient customer relationship handling for jewellery businesses.

Example: Application for Jewellery Management

Reference: <https://www.techradar.com/in/best/best-crm-software>



Guidelines:

- Include all core modules (Customer, Product, Sales, Billing, Analytics).
- Define the boundaries between application logic and database operations.
- Indicate connections between modules (internal APIs).
- Ensure data is securely stored and accessed by authorized users.
- Maintain scalability for multiple jewellery stores and branches.

Table – 1: Components & Technologies

S.No	Component Description	Technology
1	User Interface – Admin and employees interact via web-based dashboard.	HTML, CSS, JavaScript
2	Application Logic – 1 – Handles customer management, billing, and product catalog.	Application scripts and business logic
3	Application Logic – 2 – Generates and tracks invoices, manages offers and loyalty data.	Business rules and validation logic
4	Application Logic – 3 – Generates analytics reports and dashboards.	Report generation and data visualization
5	Database – Stores customer, product, and sales data securely.	Relational Database (MySQL / Any SQL DB)
6	File Storage – Stores images of jewellery items, invoices, and reports.	Local / Cloud Storage
7	External API – 1 – (Optional) Can integrate payment gateways or SMS/Email services.	REST API
8	External API – 2 – (Optional) Vendor and supplier management.	REST API
9	Machine Learning Model – (Future scope) Customer purchase prediction and trend analysis.	Not implemented in current phase
10	Infrastructure (Server / Cloud) – Application hosted on web or cloud server.	Cloud Hosting / Local Server

Table – 2: Application Characteristics

S.No	Characteristics	Description	Technology
1	Open-Source Frameworks	Uses standard open-source tools for UI and backend.	Open web technologies
2	Security Implementations	Role-based access, authentication, and encrypted data handling.	Secure Login, Access Control
3	Scalable Architecture	Designed to handle multiple stores, users, and transactions.	Modular architecture
4	Availability	High uptime with cloud-based hosting.	Cloud Hosting
5	Performance	Fast data access and optimized queries for smooth CRM operations.	Optimized database and caching