

PROJECT DESIGN PHASE-II

Technology Stack (Architecture & Stack)

Date	02 November 2025
Team ID	NM2025TMID00579
Project Name	CRM Application for Jewel Management
Maximum Mark	4 Marks

Technical Architecture

Components:

- User Interface: For sales staff, managers, and customers (optional portal)
- Business Logic: CRM workflows (customer registration, order, billing, sales tracking, aftersales service, repair tracking)
- Database: Stores customer profiles, inventory, orders, payment, and interaction history
- External Interfaces: May connect to payment gateways, SMS/email marketing APIs, jewellery price providers, and POS or e-commerce platforms
- Infrastructure: Cloud/On-premises (demarcation as required)
- Optional: Interfaces to recommendation AI or analytics for customer segmentation

Sample Architectural Block Diagram (CRM for Jewellery)

S.NO	Process/Block	Technology/Logic
1	Customer Management	CRM Module (Customer DB, Leads)
2	Inventory Management	Inventory Module (Stock DB)
3	Sales/Order Management	Sales Module (Orders, Billing)
4	Aftersales & Repairs	Service Module (Repair Tickets)

5	Marketing/Engagement	Campaigns Module (SMS, Email APIs)
6	Analytics/Reports	Analytics Module + Dashboards

- Demarcation: Mark core business logic (e.g., customer, sales processing) as application blocks. Separate infrastructure (Cloud DB, Local terminal) if required.
- External: Draw interfaces to E-commerce, Payment gateway, Marketing APIs, Price updater, etc.
- Data Storage: Main RDBMS, secure user and sales data.

Reference CRM Features for Jewellery

- Inventory and sales tracking (by product, stone, metal, customization)
- Customer engagement and history (anniversaries, purchases, preferences)
- Integration with POS/E-commerce
- Repair/service ticketing
- Multi-channel campaign management (email/SMS)
- Automated reminders for special events
- Analytics and business reporting
- Data security and compliance

Technological Stack Diagram

