

PROJECT DESIGN PHASE-II

Technology Stack (Architecture & Stack)

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|--------------|--------------------------------------|
| Date | 04 November 2025 |
| Team ID | NM2025TMID08827 |
| 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

Jewellery Management CRM Application Architecture Diagram

