Requirement analysis

Here's a detailed **Requirement Analysis Phase** specifically for a **CRM Application for Jewel Management** project 👇

Requirement Analysis Phase – CRM Application for Jewel Management

1. Purpose of Requirement Analysis

The requirement analysis phase identifies, gathers, and documents all the **functional** and **non-functional** requirements needed to build the CRM system for managing jewelry business operations.
It ensures that the system meets stakeholder expectations and supports the jewelry sales, customer relationship, and inventory processes efficiently.

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2. Objectives

- Understand business goals and user needs of the jewelry management system.
- Define system functions such as customer management, sales tracking, inventory control, and reporting.
- Identify integration points (POS systems, accounting, payment gateways).
- Define performance, usability, and security requirements.
- Prepare the **Software Requirement Specification (SRS)** document.

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3. Stakeholder Identification

Stakeholder	Role / Interest
Business Owner / Jeweler	Needs reports, dashboards, customer insights
Sales Executive	Manages customer interactions and orders
Inventory Manager	Tracks jewelry stock and product details
Accountant	Needs billing and payment records
Customers	Interact via CRM portal for orders, support

Stakeholder	Role / Interest
Developers & QA Team	Build and test the CRM system
Admin / IT Team	Manages user access and system maintenance

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4. Requirement Gathering Techniques

- **Interviews:** with jewelry store owners, managers, and sales staff.
- **Questionnaires:** to collect feedback on needed CRM features.
- **Observation:** of existing jewelry store operations and sales workflows.
- **Document Analysis:** studying invoices, stock records, and customer data.
- **Workshops / Prototyping:** to visualize screens and workflows.

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5. Functional Requirements

A. Customer Management

- Create, view, update, and delete customer records.
- Track customer purchase history and preferences.
- Manage loyalty programs and personalized offers.
- Maintain contact information and communication logs.

B. Product & Inventory Management

- Add, edit, and categorize jewelry items (gold, diamond, silver).
- Manage stock levels and set reorder alerts.
- Track jewelry certifications and supplier information.
- Handle barcode/QR code-based tracking.

C. Sales & Order Management

- Create and manage quotations and invoices.
- Track customer orders and payment status.
- Manage returns, exchanges, and receipts.
- Integration with POS and accounting systems.

D. CRM Features

- Customer follow-up reminders and notifications.
- Lead tracking and conversion pipeline.
- Task assignments for sales teams.
- Campaign management for promotions.

E. Reporting & Analytics

- Sales reports (daily, monthly, yearly).
- Inventory valuation reports.
- Customer insights and buying trends.
- Dashboard with key performance indicators (KPIs).

F. User Management & Security

- Role-based access control (Admin, Sales, Manager).
- Secure authentication and authorization.
- Audit trail for all activities.

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6. Non-Functional Requirements

Category	Requirement Description
Performance	The system should handle 100+ concurrent users smoothly.
Scalability	Should support expansion to multiple branches or stores.
Security	Encryption of customer and financial data.
Usability	User-friendly interface, easy navigation for non-technical staff.
Availability	99.9% uptime for online CRM.
Compatibility	Should work on web, mobile, and tablet devices.
Backup & Recovery	Daily automatic backups and recovery mechanism.

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7. Data Requirements

- Customer master data (Name, contact, address, purchase history).
- Product catalog (item code, type, weight, material, price).
- Transaction data (invoice, payment, receipt).
- Supplier data and certification records.

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8. Constraints

- Budget and timeline limitations.
- Compliance with jewelry hallmarking and tax regulations (e.g., GST).
- Integration with existing systems (if any).

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9. Tools and Technologies (Indicative)

- **Platform:** Salesforce CRM / Custom Web App (e.g., React + Node.js)
- **Database:** MySQL / PostgreSQL / Salesforce Data Cloud
- **Integration:** Payment Gateway, Accounting System (Tally, QuickBooks)
- **Deployment:** Cloud-based (AWS / Salesforce Cloud)

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10. Deliverables

- **Requirement Specification Document (SRS)**
- **Use Case Diagrams / User Stories**
- **Process Flow Diagrams**
- **Data Flow Diagram (DFD)**
- **Prototype (Wireframes or Mockups)**

Sure 👍 — to make your **Requirement Analysis Phase** for the **CRM Jewel Management Application** more visual, I can create **diagrams and pictures** that represent the main parts, such as:

1. **System Architecture Diagram**
2. **Use Case Diagram** (showing interactions between users and the system)
3. **Data Flow Diagram (DFD – Level 0 & Level 1)**

4. **Entity Relationship Diagram (ERD)**

Please confirm which of these you want me to generate first 👇

- 🧭 **Use Case Diagram** (shows Admin, Sales Executive, Customer interactions)
- 💾 **Data Flow Diagram** (shows flow of data between modules)
- 🏗 **System Architecture Diagram** (overview of CRM components)
- 🔗 **ER Diagram** (shows relationships between entities like Customer, Product, Sales, etc.)