

DATA MODEL DESIGN

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Project Name	CRM Application for Jewel Management

Data Model Design

The data model defines how jewelry-related data is structured, stored, and related across different business entities.

Core Entities:

- Customer – Stores customer details such as Name, Email, Contact Number, and Purchase History.
- Jewelry Item – Maintains information like Jewelry Type, Metal Purity, Weight, Price, and Stock Quantity.
- Order – Connects customers to jewelry purchases and contains details like Order Date, Total Amount, and Payment Status.
- Payment – Tracks payments made for orders, including Mode of Payment, Amount, and Transaction ID.

Relationships:

- One Customer → Many Orders
- One Order → Many Jewelry Items
- One Order → Many Payments
- One Jewelry Item → Many Orders (via Junction Relationship)

This model ensures data normalization, integrity, and easy report generation.

3.4 Security Model Design

Given the sensitivity of financial and customer data, Salesforce's security features are applied rigorously.

Key Security Components:

- **Profiles & Permission Sets:** Define CRUD access (Create, Read, Update, Delete) for each role.
- **Admin** – Full access to all modules.
- **Gold Smith** – Can update stock details and work status.
- **Worker** – Limited to task and job progress updates.
- **Role Hierarchy:** Ensures that higher roles (Managers, Admins) can view subordinate records while lower roles can only access assigned data.
- **Validation Rules:** Prevent incorrect or incomplete entries, e.g., Jewelry weight cannot be zero or negative.
- **Field-Level Security:** Restricts visibility of sensitive fields like customer contact numbers and payment details.
- **Login Authentication:** Enforces user verification via Salesforce login credentials and optional two-factor authentication.
- This structure maintains both data integrity and operational security, ensuring that only authorized users can access or modify records.