

## DATA MODEL DESIGN

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### 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.