**Jewelry Shop Data Model Brief Description**

***Avinash Verma***

The model of the **JEWELRY SHOP MANAGEMENT SYSTEM** Entity is represented by this ER (Entity Relationship) Diagram. Jewelry Shop Management System's entity-relationship diagram depicts all of the database table's visual instruments as well as the relationships between Products, Customers, Sales, Service, and Vendors. It made use of structured data to define relationships between structured data groupings in the Jewelry Shop Management System's features. PRODUCTS, CUSTOMER, SALES, SERVICE, and VENDOR are the primary components of the Jewelry Shop Management System.

1. **Entity 1 – PRODUCTS:** Product is an entity of the jewelry shop model, and I've added three subtypes: NECKLACE, RING, and BRACELET. These are the model's primary products. PRODUCT ID, PRODUCT NAME, PRODUCT TYPE, COMMODITY TYPE and PRODUCT PRICE are some of the properties I've utilized in the product entity. Where product id is both a main and a foreign key for subtypes. Relationship between product, sales and vendor is **many to many (M:N)**.
2. **Entity 2 – CUSTOMER:** Customers is a second entity of the jewelry shop data model. I have used many attributes as a CUSTOMER ID, CUSTOMER NAME, CUSTOMER ADDRESS, PURCHASE TYPE and CONTACT DETAILS. These are the main attributes of this entity. In this entity CUSTOMER ID is primary key. This entity is creating many to many relation between customer and service. Also it’s creating **1:N** relation between customer to sales.
3. **Entity 3 – SALES:** This entity relationship model is **1:N** between sales and customer and second relationship is **many to many (M:N)** between sale and customer. INVOICE NO, CUSTOMER ID, CUSTOMER NAME, PURCHASE ITEMS, MSRP, DISCOUNTS AND PRODUCT ID are attributes of sales entity where INVOICE NO is primary key.
4. **Entity 4 – SERVICE:** In this entity SERVICE ID, SERVICE TYPE, PRODUCT TYPE, PROBLEM DESCRIPTION, DATE & TIME and COST OF SERVICE are the main attributes where SERVICE ID is primary key. In this model we have created **many to many (M:N)** relation between service and customer and **1:N** relation between service and sales.
5. **Entity 5 – VENDOR:** Vendor entity is related for REPLENISHMENT ORDER when stock goes down then system creates new order automatically for re-stock. This entity has multiple attributes as VENDOR ID, VENDOR NAME, VENDOR ITEMS, PRODUCT ID and PRODUCT NAME. Vendor id is a primary key. This entity relation is **many to many (M:N)** between vendor to products.