

## Explanation of the Schema:

### PRODUCT:

Added fields for customization options, sustainability score, and manufacturer, includes arrays for material and images.

### PRODUCT-VARIANT:

Allows for different variation of a Products. (eg, colour, size)

### CATEGORY:

Hierarchical structure for organizing products.

### MANUFACTURER:

Information about furniture suppliers.

### CUSTOMER:

Expanded to include more detailed information and multiple addresses.

### ORDER and ORDER-ITEM

Enhanced with additional fields for a more comprehensive order.



## REVIEWS.

Allows customers to leave products reviews and ratings.

## DELIVERY\_ZONE and DELIVERY.

More detailed delivery management system.

## DRIVER.

Information about delivery personal, including skills for assembly.

## PROMOTIONS.

Manages discounts and promotional offers.

## Entities And Their Relationships

### PRODUCT

Represents furniture items with field id, name, price, stock, category, description, dimension and material.

### CUSTOMER

stores customer information including id, name, email, phone, and address.

### ORDER

Represents a customer's with field like id, customer-id, order-date, total-amount and status.

### ORDER-ITEM

Represents individual items in an order linking ORDERS and Products with quantity and unit-price.



## DELIVERY-ZONE -

Define delivery areas with id, name and coverage - areas.

DELIVERY. Represent the delivery process for an order, linked to order, Delivery-Zone and driver.

DRIVER. stores information about delivery drivers.

## Relationships Between Entities ~

A CUSTOMER ~ can place multiple orders (one-to-many)

An-ORDER ~ contains multiple ORDER-ITEMS

A-PRODUCT ~ can be included in multiple ORDER-ITEM

ONE-ORDER ~ has one DELIVERY (one-to-one)

A DELIVERY-ZONE ~ covers multiple Deliveries.

A DRIVER ~ can be assigned to multiple Deliveries



| PRODUCT |                |
|---------|----------------|
| String  | ID             |
| String  | NAME           |
| String  | CATEGORY       |
| Num     | PRICE-PRICE    |
| String  | DESCRIPTION    |
| String  | MATERIAL       |
| Number  | QUANTITY-STOCK |
| String  | IMAGES         |
| String  | WEIGHT         |
| String  | TAGS           |

| CUSTOMER |                   |
|----------|-------------------|
| String   | FIRST-NAME        |
| String   | LAST-NAME         |
| String   | EMAIL             |
| Num      | PHONE             |
| String   | SHIPPING-ADDRESS  |
| String   | BILLING-ADDRESS   |
| Num      | LOCATION-POINTS   |
| Date     | REGISTRATION-DATE |

| PRODUCT-VARIANT |            |
|-----------------|------------|
| Str             | ID         |
| Str             | PRODUCT-ID |
| Num             | PRICE      |
| Num             | STOCK      |

| CATEGORY |           |
|----------|-----------|
| Str      | ID        |
| Str      | NAME      |
| Str      | PARENT-ID |

| MANUFACTURE |             |
|-------------|-------------|
| Str         | ID          |
| Str         | NAME        |
| Str         | DESCRIPTION |
| Num         | RATING      |

| REVIEW |                   |
|--------|-------------------|
| Str    | ID                |
| Str    | PRODUCT-ID        |
| Str    | CUSTOMER-ID       |
| Num    | RATING            |
| Str    | COMMENT           |
| Date   | REVIEW-DATE       |
| Num    | HELPFULNESS-SCORE |

| ORDER |                     |
|-------|---------------------|
| Str   | ID                  |
| Str   | CUSTOMER-ID         |
| Date  | ORDER-DATE          |
| Num   | TOTAL-AMOUNT        |
| Str   | STATUS              |
| Str   | PAYMENT-METHOD      |
| Str   | SHIPPING-ADDRESS-ID |
| Str   | BILLING-ADDRESS-ID  |

| SHIPMENT |               |
|----------|---------------|
| Str      | SHIPMENT-ID   |
| Str      | ORDER-ID      |
| Str      | STATUS        |
| Date     | DELIVERY-DATE |

| DELIVERY-ZONE |                |
|---------------|----------------|
| Str           | ID             |
| Str           | NAME           |
| Str           | COVERABLE-AREA |
| Num           | DELIVERY-FEE   |

| DRIVER |        |
|--------|--------|
| Str    | ID     |
| Str    | NAME   |
| Str    | PHONE  |
| Num    | RATING |
| Str    | SKILLS |

| ORDER-ITEM |                       |
|------------|-----------------------|
| Str        | ID                    |
| Str        | ORDER-ID              |
| Str        | PRODUCT-ID            |
| Num        | QUANTITY              |
| Num        | UNIT-PRICE            |
| Str        | CUSTOMIZATION-DETAILS |

| PROMOTION |                 |
|-----------|-----------------|
| Str       | ID              |
| Str       | CODE            |
| Num       | DISCOUNT-AMOUNT |
| Str       | DISCOUNT-FIXE   |
| Date      | START-DATE      |
| Date      | END-DATE        |

| DELIVERY |                |
|----------|----------------|
| Str      | ID             |
| Str      | ORDER-ID       |
| Str      | ZONE-ID        |
| Str      | DRIVER-ID      |
| Date     | SCHEDULED-DATE |
| Str      | STATUS         |
| Num      | DELIVERY-FEE   |