Schema Overview

Important Notes

Permissions
• Is a static configuration, not a collection
• Maps roles to allowed actions

Users
• Has a `roles` field that determines permissions
• `user_id` is referenced by products, cart, and orders

Products
• Linked to seller by `seller_id`
• Can be listed in cart or orders

Cart
• `user_id` links to a user with a buyer role

Orders
• `user_id` references the buyer
• Contains product details
• Includes address, payment info, etc.

Relationships Between Collections

1. Users ↔ Products
Relationship Type: One-to-Many
A user with the "seller" role can list multiple products.
Link via: product.seller_id → user.user_id

2. Users ↔ Cart
Relationship Type: One-to-One or One-to-Many
A user with the "buyer" role has one or more carts (typically one active cart at a time).
Link via: cart.user_id → user.user_id

3. Cart ↔ Products
Relationship Type: Many-to-Many
Each cart includes a list of products with details such as product_id, name, quantity, and price.
Link via: cart.items[].product_id → product.product_id

4. Users ↔ Orders
Relationship Type: One-to-Many
A user with the "buyer" role can place multiple orders.

Link via: order.user_id → user.user_id

5. Orders ↔ Products
Relationship Type: Many-to-Many
Each order stores a snapshot of products at the time of purchase.
Link via: order.items[].product_id → product.product_id

6. Users ↔ Permissions
Relationship Type: One-to-One (Role-Based Mapping)
A user's roles field maps to a predefined set of permissions.
Link via: user.roles → permissions[role] (e.g., permissions["admin"])

Summary Table

From Collection	Field	To Collection	Target Field	Explanation
product	seller_id	user	user_id	Links product to the seller user
cart	user_id	user	user_id	Links cart to the buyer user
cart.items[]	product_id	product	product_id	Links cart items to actual products
order	user_id	user	user_id	Links order to the buyer user
order.items[]	product_id	product	product_id	Links ordered items to product data
user	roles	permissions	Role key (e.g., "admin")	Maps user role to allowed actions (from static config)