

Core Tables:

1. Users:

- **id**: Unique identifier for each user
- **first_name**: User's first name
- **last_name**: User's last name
- **email**: User's email address
- **password_hash**: Hashed password for security
- **created_at**: Timestamp of user creation
- **updated_at**: Timestamp of the last update
- **deleted_at**: Timestamp of the last delete

2. Products:

- **id**: Unique identifier for each product
- **name**: Product name
- **description**: Detailed description
- **price**: Product price
- **image_url**: URL of the product image
- **category**: Product category (e.g., sneakers, sandals, boots)
- **brand**: Product brand
- **is_active**: Indicates whether the product is available
- **is_featured**: Indicates whether the product is featured
- **created_at**: Timestamp of product creation
- **updated_at**: Timestamp of the last update
- **deleted_at**: Timestamp of the last delete

3. Orders:

- **id**: Unique identifier for each order
- **user_id**: Foreign key referencing the user who placed the order
- **billing_address_id**: Foreign key referencing the billing address
- **shipping_address_id**: Foreign key referencing the shipping address
- **order_status**: Order status (e.g., pending, processing, shipped, delivered)
- **total_amount**: Total amount of the order
- **created_at**: Timestamp of order creation
- **updated_at**: Timestamp of the last update
- **deleted_at**: Timestamp of the last delete

4. OrderItems:

- **id**: Unique identifier for each order item
- **order_id**: Foreign key referencing the order
- **product_id**: Foreign key referencing the product
- **quantity**: Quantity of the product ordered
- **price**: Price of the product at the time of purchase
- **created_at**: Timestamp of order item creation
- **updated_at**: Timestamp of the last update
- **deleted_at**: Timestamp of the last delete

5. Reviews:

- **id**: Unique identifier for each review
- **product_id**: Foreign key referencing the product
- **user_id**: Foreign key referencing the user

- **rating:** Rating given by the user (e.g., 1-5 stars)
 - **comment:** Review text
 - **created_at:** Timestamp of review creation
 - **updated_at:** Timestamp of the last update
 - **deleted_at:** Timestamp of the last delete
6. **Cart:**
- **id:** Unique identifier for each cart
 - **user_id:** Foreign key referencing the user
 - **created_at:** Timestamp of cart creation
 - **updated_at:** Timestamp of the last update
 - **deleted_at:** Timestamp of the last delete
7. **CartItem:**
- **id:** Unique identifier for each cart item
 - **cart_id:** Foreign key referencing the cart
 - **product_id:** Foreign key referencing the product
 - **quantity:** Quantity of the product in the cart
 - **created_at:** Timestamp of cart item creation
 - **updated_at:** Timestamp of the last update
 - **deleted_at:** Timestamp of the last delete
8. **Coupons:**
- **id:** Unique identifier for each promotion/discount
 - **code:** Promotion/discount code
 - **description:** Description of the promotion/discount
 - **discount_type:** Type of discount (e.g., percentage, fixed amount)
 - **discount_value:** Value of the discount
 - **start_date:** Start date of the promotion/discount
 - **end_date:** End date of the promotion/discount
 - **is_active:** Indicates whether the promotion/discount is active
9. **Sizes:**
- **id:** Unique identifier for each size
 - **size:** Size value (e.g., 6, 7, 8, 9, 10)
10. **Lots:**
- **id:** Unique identifier for each lot
 - **product_id:** Foreign key referencing the product
 - **purchase_date:** Date the lot was purchased
 - **quantity:** Total quantity in the lot
11. **ProductSize:**
- **id:** Unique identifier for each product-size combination
 - **product_id:** Foreign key referencing the product
 - **size_id:** Foreign key referencing the size
 - **quantity:** Available quantity in that size and lot
 - **created_at:** Timestamp of product-size combination creation
 - **updated_at:** Timestamp of the last update
12. **Addresses:**
- **id:** Unique identifier for each address
 - **address_line_1:** Address line 1
 - **address_line_2:** Address line 2
 - **city:** City

- **state:** State/Province
- **country:** Country
- **postal_code:** Postal code
- **created_at:** Timestamp of address creation
- **updated_at:** Timestamp of the last update

13. Variations:

- **id:** Unique identifier for each variation
- **product_id:** Foreign key referencing the product
- **variation_name:** Name of the variation (e.g., color, material)
- **variation_value:** Value of the variation (e.g., blue, leather)
- **created_at:** Timestamp of variation creation
- **updated_at:** Timestamp of the last update

14. Inventory:

- **id:** Unique identifier for each inventory item
- **product_id:** Foreign key referencing the product
- **size_id:** Foreign key referencing the size
- **lot_id:** Foreign key referencing the lot
- **quantity:** Available quantity
- **location:** Location of the inventory item
- **created_at:** Timestamp of inventory item creation
- **updated_at:** Timestamp of the last update
- **deleted_at:** Timestamp of the last delete

Relationships:

● One-to-many relationships:

- A user can have many orders.
- An order can have many order items.
- A product can have many reviews.
- A wishlist can have many wishlist items.
- A user can have many shipping addresses.
- An order can have one billing address and one shipping address.
- A product can have many variations.
- A product can have many inventory items.

● Many-to-many relationships:

- A product can be added to many wishlists.

This updated schema includes additional tables for variations and inventory, providing more granular control over product management and stock tracking.