

E-Commerce

Database Design. Introduction to SQL.

Full Name: Daniil Kalts.

Group: IT2-2404SE.

Goal: Make a conceptual design of database and Visualize via ER-diagram.

Task: List all necessary tables and attributes for the Database. Visit the website [dbdiagram](#) and create the ER diagram .

View the final result: [ER-diagram](#).

1. What tables does the Database store?

1. The Database includes the following tables:

1. users
2. addresses
3. categories
4. products
5. product_attributes
6. cart
7. cart_item
8. orders
9. order_items
10. reviews
11. shipping

2. What attributes does the Database store?

2. The Database includes the following attributes for each table:

1. **users:**

- id: integer (PK)
- avatar: varchar
- first_name: varchar
- last_name: varchar
- patronymic: varchar
- username: varchar (not null, unique)
- email: varchar (not null, unique)
- password: varchar
- birth_of_date: date
- phone_number: varchar
- created_at: timestamp
- updated_at: timestamp

2. **addresses:**

- id: integer (PK)
- user_id: integer (FK to users.id)
- title: varchar
- country: varchar
- city: varchar
- phone_number: varchar
- created_at: timestamp
- updated_at: timestamp

3. **categories:**

- id: integer (PK)
- name: varchar
- description: varchar
- created_at: timestamp
- updated_at: timestamp

4. **products:**

- id: integer (PK)
- name: varchar
- description: varchar
- summary: varchar
- cover: varchar
- brand: varchar

- model: varchar
- category_id: integer (FK to categories.id)
- price: decimal
- quantity: integer
- created_at: timestamp
- updated_at: timestamp

5. **product_attributes:**

- id: integer (PK)
- product_id: integer (FK to products.id)
- attribute_name: varchar
- attribute_value: varchar
- created_at: timestamp
- updated_at: timestamp

6. **cart:**

- id: integer (PK)
- user_id: integer (FK to users.id)
- total: decimal
- created_at: timestamp
- updated_at: timestamp

7. **cart_item:**

- id: integer (PK)
- cart_id: integer (FK to cart.id)
- product_id: integer (FK to products.id)
- quantity: integer
- price: decimal
- created_at: timestamp
- updated_at: timestamp

8. **orders:**

- id: integer (PK)
- user_id: integer (FK to users.id)
- total: decimal
- status: varchar
- shipping_address_id: integer (FK to addresses.id)
- created_at: timestamp
- updated_at: timestamp

9. **order_items:**

- id: integer (PK)

- order_id: integer (FK to orders.id)
- product_id: integer (FK to products.id)
- quantity: integer
- price: decimal
- created_at: timestamp

10. **reviews:**

- id: integer (PK)
- user_id: integer (FK to users.id)
- product_id: integer (FK to products.id)
- rating: integer (1 to 5)
- comment: text
- created_at: timestamp
- updated_at: timestamp

11. **shipping:**

- id: integer (PK)
 - order_id: integer (FK to orders.id)
 - carrier: varchar
 - tracking_number: varchar
 - shipping_cost: decimal
 - status: varchar
 - shipped_at: timestamp
 - delivered_at: timestamp
 - created_at: timestamp
 - updated_at: timestamp
-

