Company PavlodarNaturProduct

Frequent_shopper
- FK customer_ID NOT NULL
- name
  - first_name
  - second_name
- { phone_number }
- address
  - country
  - city
  - street
  - number
- add_info

Customers
- PK customer_ID
- FK store_ID NOT NULL
- products
- FK UPC_code NOT NULL
  - amount NOT NULL
- sum NOT NULL

Online_orders
- PK order_ID
- FK customers NOT NULL
- FK UPC_code NOT NULL
- amount NOT NULL
- date NOT NULL

Brands
- PK brand_ID
- brand_name NOT NULL
- FK products NOT NULL

Products
- PK UPC_code
- name NOT NULL
- packaging NOT NULL
- size NOT NULL
- description

Stores
- PK store_ID
- address
  - country NOT NULL
  - city NOT NULL
  - street NOT NULL
- products
- FK UPC_code NOT NULL
  - amount NOT NULL
- opening hours
  - {
  - start_time NOT NULL
  - end_time NOT NULL
  - }
- employees NOT NULL
- FK vendors NOT NULL

Product_types
- PK type_ID
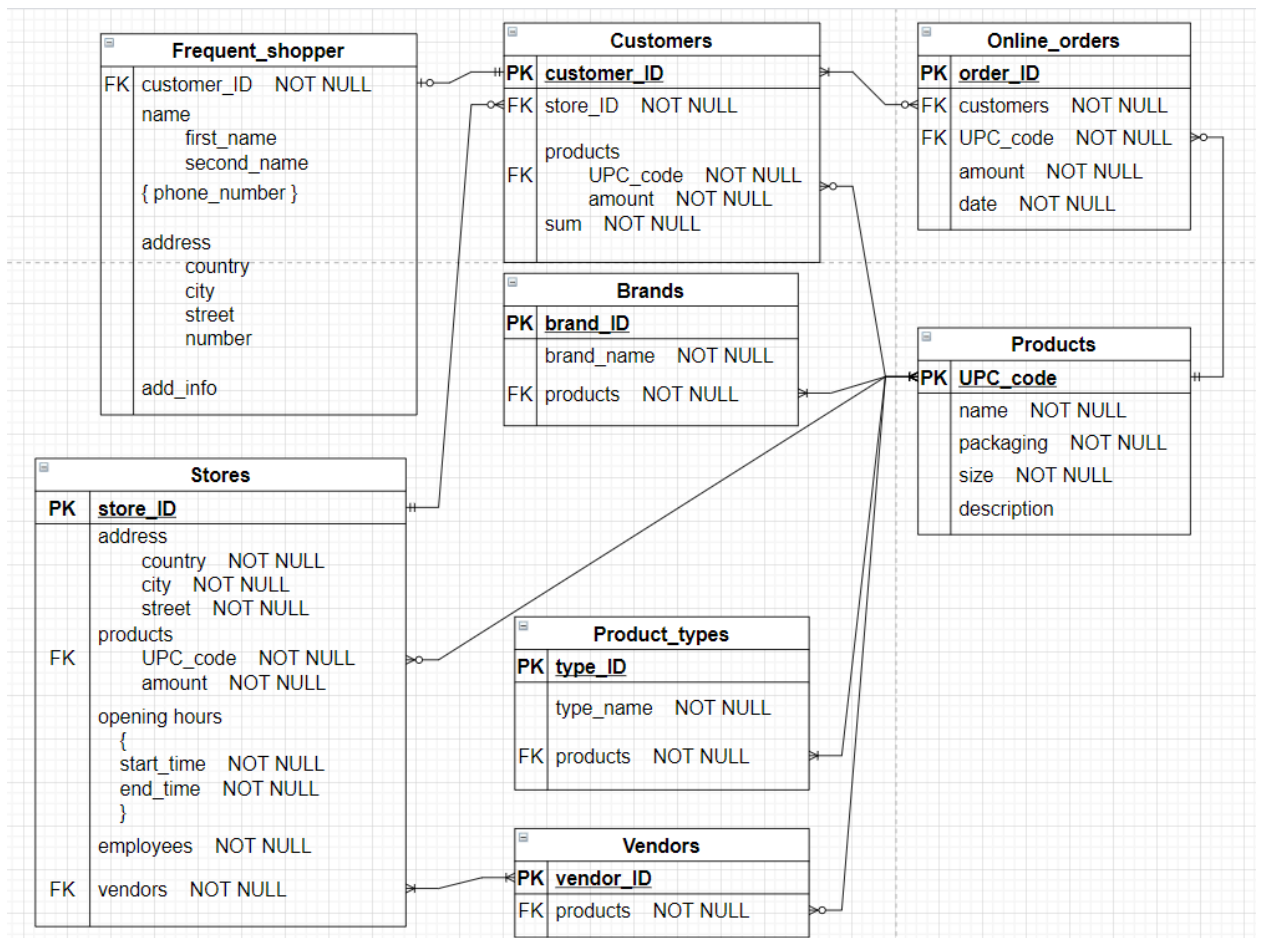- type_name NOT NULL
- FK products NOT NULL

Vendors
- PK vendor_ID
- FK products NOT NULL

Products can be from one to several **types and brands**. Since the **products** in the **prod_types and brands** tables are **lists**, the relationship will be **one or many to one or many**.

The relationship between **products and stores, customers, vendors** is **zero or many to one or many**, because these lists do not necessarily have all products.

The relationship between **products and online orders** is **one and only one to zero or many**, because each order is placed one product at a time for several customers.

The connection between **vendors and stores** is **one or many to one or many**, because both can have several partners.

The connection between **freq_shopper and customer**, because not all customers are freq_shopper.

The connection between **store and customers** is **one and only one to zero or many**, because the customer comes to a particular store.

Communication between **customers and online orders** is **one or many to zero or many**, because several people can order a product.