RELATIONAL DATABASES

DATABASE PROJECT FOR E-COMMERCE STORE SELLING COMPUTER HARDWARE

PJAIT | Subject Relational Databases | Wioletta Florkiewicz

This database is for an online hardware computer store. It contains tables that store information about addresses, suppliers, customers, products, shippers, orders, payment types

Customer address: We will store address information such as the street, apartment number, postal code, city and country of the customer concerned

Supplier: We will store information about suppliers, such as company name, tax identification number, KRS number and supplier's address.

Supplier address: We will store address information such as the street, postal code, city and country of the respective supplier.

Category: We will store product category information such as name and description.

Customer: We will store information about customers, such as address, login, password, name, surname, email, telephone number.

Product: We will store product information such as name, description, price, discount, quantity, category and supplier.

Payment type: We will store the payment types that are available in the store.

Freight Forwarder: We will store forwarder information such as company name and telephone number.

Orders: We will store information about orders such as date and status.

Sequence: We create sequences for each table to be able to use them when creating new records.

Such information will allow us to effectively manage the online store and provide relevant information to various users.

This database has the following table relationships:

• Customer and Address: A one-to-one relationship, meaning each customer has one address and each address belongs to one customer. In the Customer table, there is an ID\_Address column that corresponds to the primary key of the Address table.

• Product and Category: A one-to-many relationship, meaning that each category can have many products, and each product belongs to one category. In the Product table, there is a Category\_ID column that corresponds to the primary key of the Category table.

• Product and Supplier: A one-to-many relationship, meaning that each supplier can have many products and each product belongs to one supplier. In the Product table, there is a Supplier\_ID column that corresponds to the primary key of the Supplier table.

• Supplier and SupplierAddress: A one-to-one relationship, meaning that each supplier has one address and each address belongs to one supplier. In the Supplier table, there is a column AddressSupplierID that corresponds to the primary key of the AddressSupplier table.

• Customer, Product, PaymentType and Orders: Many-to-many relationship, meaning that a customer can place multiple orders, a product can be ordered multiple times, a payment type can be selected for multiple orders, and so on. The tables Customer, Product, Type of Payment and Orders contain foreign key columns referring to the primary key of the Orders table.

• Product, Payment Type and Orders: Many-to-many relationship, this means that a product can be a component of many orders, a payment type can be selected for many orders, and so on. In the Product, PaymentType and Orders tables there are foreign key columns referring to the primary key of the OrdersProducts table.

These relationships allow you to combine information from different tables and get a more complete picture of the data in the database.