Online Store Report

Database project, Group 40

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1. Class explanation

1.1. Main

Main class includes several methods that include switchtype for the user to interact and chose options from the textbased interaction system.

1.2. Menu

Menu class that contains several methods with "system out print" for the different options you make in the store. Several of the menus that are used are connected to a switch case that handles the different decisions.

1.3. Product

The product class contains a number of methods that are related to adding and removing a product, getting products from either the product ID, supplier name of product or the product name. Lasty the class includes a method to print/ show the customers all products in the store.

For the admin it's possible to add a product through our method, that includes that we prepare a statement to insert the required data for each column. The admin also has the function to remove a product with our method which first asks for the product ID to then check if it exists, and if it does then we delete the product where the column of the product ID is allocated.

For the customer its possible to get a product by entering the supplier-id where it show the customer all the products from the supplier. Then a customer can also get a product by just entering the product-id or its name.

1.4. Supplier

A class that handles the supplier so you can add a supplier with name, phone and address. Also print out a list of all the suppliers.

1.5. Utilities

The utilities class include methods to help get inputs from the textbased interaction system.

1.6. Discount

This class is made for the discount and the first method is made for creating discounts. Discounts are made of an id, period of the discount, code, reason and a start date. The discount class is only possible to be used if you are signed in as an admin. The "addDiscount" method is used in a switch case in the main class where it is asked all the questions for the variables that the discounts are made of.

The next method is "printActiveDiscounts" that lets the admin get a list of all the active discounts. It is built like the previous method, it calls the "getDatabase" in the main class and it starts the connection to the database and then it puts the value from the database into variables and then it is printed out.
Next method is "printAllDiscountsHistory" and it is similar to the last method except this shows all the discounts even if it has expired and it is only able to be used by admins.

1.7. Order

The class order includes methods that is used for when admin want statistics or when a customer is ordering a product.

2. Database explanation

First the product table, it stores information about different products that can be bought in the store. The products are made of name, quantities, base price and supplier ID. The supplier table stores information about the supplier as name, phone number and addresses.

Next is the customer table, it contains information about the customer that purchases items in the store. The customer is made up by name, addresses, phone number and email. The order table contains orders from the customer and it has the customer id and the date the order was placed.

The orderitems table has the information about the items in each order, including order id, product id, price of the product, supplier id as well as the quantity of the product ordered.

The discountreason table is made for the reason why the store is offering a discount on products. It contains a product id, discount amount and the period the discount is valid and the reason.

The confirmation contains the finalizing information about a purchase, the whole price, date of confirmation, the order id and whether or not the order has been confirmed.

There are several foreign keys that connect the database for example the product table includes p_supplier that is a reference to supplier_id. As well in the orderitems it has a supplier_id that reference to the supplier table and an order_id that references the order_id in the orders table.

3. Program instructions

- To start program, run main.java file.
- You can either login as Admin or Customer
    - Admins login ID is 123
    - Customer can either sign-up or sign-in
- If you login as Admin:
    - You have multiple choices that can be selected with entering the designated number from the menu.
- If you sign-up as Customer:
    - Fill in the information in the textbased interface
- If you sign-in as Customer:
    - Fill in the request information, which is the username and password.
    - You can select from the menu by typing in the designated number assigned to the option.