Beirut Arab University
Faculty of Science
Department of Computer Science

Course: CMPS342 - DataBase Systems

Semester: Spring 2019-2020

Project Description

System for Online Shopping Stores

The project is about designing a system that provides an online platform for creating many online shopping stores. There are two types of users for the system.

Online store owners:

- ✓Any user can create through the system his/her own online store and become the owner of the ✓online store. Below are the requirements for Online store owners.
- ✓ An owner can sign up in the System and create his/her profile.
- ✓ An owner can log in the System using his/her username and password.
- ✓ An owner can create one or more online shopping stores.
- ✓ An owner can post new products into one of his/her store.
- ✓ An owner can update the info of existing products, e.g. the price, the picture, the description...
- An owner can remove a product from his/her store.
- An owner can view ordered items from customers. He should only see the items ordered from his/her shops.
 - An owner can dispatch the item to the customer and mark the order as sent.

Customers:

Customers are those who will use the system to visit shops browsing for products with a buying intention. Below are the requirements for the customers.

- ✓ A customer can sign up in the System and create his/her profile.
- A customer can log in the System using his/her username and password.
- A customer can visit any of the created online stores in the system.
- A customer can browse the posted products in any of the online stores.
- ✓ A customer can compare products from different online stores.
- A customer can shop for products from one single store or several stores and add them to the same shopping cart.
- ✓ A customer can add stores to his/her favorite list of shops.
- ✓ A customer will receive notifications about discounts from stores in his/her favorite list.
- A customer can view his/her shopping cart with the total price he/she should pay.
- ✓ A customer can search for specific stores by name.
- A customer can search for specific products by name.
- ✓ A customer can rate a given online store based on his/her shopping experience.
 - A customer can view his/her purchase history.

Other Requirements:

- Every store has a name, a headquarter address, a phone number.
- The system will store for each owner and each customer his username, password, name, birthdate, address, phone number.
- The system will store for each product a picture, a price and a description, the discount if any. Moreover, it will store the cost of the product. The profit the owner makes on a certain product is equal to price cost.
- Every order contains a list of items, each with the ordered quantity, paid price, and discount if any.

Sales Reports:

In addition to the SQL queries that should handle the above system requirements, you will need to add the following SQL queries.

- 1- An owner should be able to view the sale he/she made for a given month, e.g. the sale of the month of January 2020.
- 2- An owner should be able to view the sale he/she made per month over a period of time, e.g. the sale of every month between October 2019 and February 2020.
- 3- An owner should be able to view the sale he/she made for a given year, e.g. the sale of the year 2019.
- 4- An owner should be able to view the sale he/she made per year over a period of time, e.g. the sale of every year between 2016 and 2019.
- 5- An owner should be able to view the sale he/she made per product.
- 6- An owner should be able to view the sale he/she made per product, per month or per year over a period of time.

Your task is to develop the above described system. In order to do so, you need to design your database, create your tables and populate them with data. Then you need to implement the queries that will be issued from the webpages.

You will need to submit a report containing your designed ER diagram and the tables, the data used in your tables, and the queries. You will also need to present a demo of your system.