

Object Oriented Programming

E-Commerce Application Project

In this assignment, you are expected to benefit from OOP principles for an e-commerce application. Within the application;

- There must be a User class that holds the username, name, surname, date of birth, password, email address, home and work addresses, products ordered, favorite products, and credit card objects belonging to the user. In this class, there should also be two methods that perform the user's product ordering and product favorites.
- There must be a CreditCard class that contains the credit card number, credit card user, security code and expiration date of the credit cards.
- There must be a Product class that holds the product name, product color, product category, product stock information, product weight, product description information. In addition, when a product is ordered by users, a method should be written that reduces the number of stocks as much as the number of products purchased and controls the stock number.
- For order transactions, there must be an Order class that holds the ordering user object, the ordered product object, and the credit card objects to which the payment is made. In addition, a method must be used here that accesses the method that controls the product stock information of the Product class and accesses the purchasing method of the User class.
- You are also expected to develop a test class that checks all the operations you do. (For adding users, adding credit cards, adding products, purchasing products, favoring products)
- Getter and setter methods of variables in all classes should be written..

You need to write a homework report detailing all classes and methods of the application you have developed. It is very important that your project report is organized and your report should be in PDF format. You have to compress the project folder and report and upload the assignment until 1st June at 00:00.