Name : Ahmed Mohamed Abdelmoaty Mahmoud

ID: 23012214

# **Class Product**

```
src > main > java > ecommerce > 👱 Product.java > ...
      package ecommerce;
      public class Product {
        private int id;
        private String name;
        private double price;
        Product(int id, String name, double price) {
          this.id = Math.abs(id);
          this.name = name;
          this.price = price;
        public int getId() {
        return id;
        public String getName() {
        return name;
        public double getPrice() {
        return price;
        public void setId(int id) {
        this.id = id;
        public void setName(String name) {
        this name = name;
        public void setPrice(double price) {
         this.price = price;
```

**Class ElectronicProduct** 

```
package ecommerce; You, 15 minutes ago • first commit
You, 15 minutes ago | 1 author (You)
public class ElectronicProduct extends Product {
   private String brand;
private int warantyPeriod;
   ElectronicProduct(
      int id,
      String name,
double price,
      String brand,
      int warantyPeriod
     super(id, name, price);
      this.brand = brand;
this.warantyPeriod = Math.abs(warantyPeriod);
  tabnine: test | explain | document | ask
public String getBrand() {
  return brand;
}
   tabnine:test|explain|document|ask
public void setBrand(String brand) {
  this.brand = brand;
}
  tabnine: test | explain | document | ask
public int getWarantyPeriod() {
   return warantyPeriod;
}
  tabnine:test|explain|document|ask
public void setWarantyPeriod(int warantyPeriod) {
   this.warantyPeriod = warantyPeriod;
```

# **Class ClothingProduct**

```
ain > java > ecommerce > 
□ ClothingProduct.java > {} ecommerce

You, 15 minutes ago | 1 author (You)

package ecommerce; You, 15 minutes ago • first commit

•
You, 15 minutes ago | 1 author (You)

public class ClothingProduct extends Product {
   private String size;
private String fabric;
  ClothingProduct(
int id,
String name,
       String size,
String fabric
    super(id, name, price);
this.size = size;
this.fabric = fabric;
   tabnine: test|explain|document|ask
public String getSize() {
   return size;
}
  tabnine: test | explain | document | ask
public String getFabric() {
    return fabric;
}
  public void setSize(String size) {
  this.size = size;
}
   tabnine:test|explain|document|ask
public void setFabric(String fabric) {
      this.fabric = fabric;
```

### **Class BookProduct**

```
am > java > ecommerce > ■ BookProduct.java > ॡ BookProduct > ♠ getPublisher()

You, 16 minutes ago | 1 author (You)

package ecommerce;
You, 16 minutes ago | 1 author (You)

public class BookProduct extends Product {
   private String author;
private String publisher;
   BookProduct(
      int id,
String name,
      String author,
      String publisher
     super(id, name, price);
this.author = author;
     this.publisher = publisher;
tabnine:test|explain|document|ask

public String getPublisher() {

return bublisher; You, 16 minutes ago * first commit
  tabnine:test|explain|document|ask
public String getAuthor() {
   return author;
}
  caprime.test|explain|document|ask
public void setAuthor(String author) {
   this.author = author;
}
   tabnine: test | explain | document | ask public void setPublisher(String publisher) {
     this.publisher = publisher;
```

### **Class Customer**

```
ain > java > ecommerce > 
Customerjava > {} ecommerce
You, 16 minutes ago | 1 author (You)
package ecommerce;
You, 16 minutes ago * first commit

•
You, 16 minutes ago | 1 author (You)
public class Customer {
  private int id;
private String name;
private String address;
   Customer(int id, String name, String address) {
  this.id = Math.abs(id);
       this.name = name;
      this.address = address;
   public int getId() {
   return id;
}
   public String getName() {
   return name;
}
   tabnine: test|explain|document|ask
public String getAddress() {
   return address;
}
   tabnine: test|explain|document|ask
public void setId(int id) {
   this.id = id;
   tabnine:test|explain|document|ask
public void setName(String name) {
   this.name = name;
}
   tabnine: test|explain|document|ask
public void setAddress(String address) {
  this.address = address;
}
```

# **Class Cart**

```
src > main > java > ecommerce > 🚩 Cart.java > 😭 Cart > 😭 addProduct(Product)
      package ecommerce;
      public class Cart {
       private int customerId;
        private int Nproducts;
        private Product[] products;
        private int pcount = \theta;
        Cart(int customerId, int Nproducts) {
          this.customerId = customerId;
          this.Nproducts = Math.abs(Nproducts);
          products = new Product[Nproducts];
        public void addProduct(Product p) {
          if (pcount == Nproducts) {
          products[pcount] = p;
      pcount++;
        public int getCustomerId() {
          return customerId;
        public int getNproducts() {
         return Nproducts;
        public int getPcount() {
          return pcount;
        public Product[] getProducts() {
          return products;
```

```
tabnine:test|explain|document|ask
public void setCustomerId(int customerId) {
  this.customerId = customerId;
 tabnine:test|explain|document|ask
public void setNproducts(int nproducts) {
   Nproducts = nproducts;
tabnine: test | explain | document | ask
public void removeProduct(Product p) {
  for (int i = 0; i < Nproducts; i++) {
    if (products[i].getId() == p.getId()) {
      products[i] = null;
    }
}</pre>
                break;
tabnine:test|explain|document|ask
public double calculatePrice() {
      for (int i = 0; i < pcount; i++) {
  sum += products[i].getPrice();</pre>
tabnine: test|explain|document|ask
boolean isFull() {
    return pcount == Nproducts;
tabnine:test|explain|document|ask
// Plce Order
public void placeOrder(int OrderId) {
   Order order = new Order(this, OrderId, this.calculatePrice());
   order.printOrderInfo();
```

#### Class Order

```
src > main > java > ecommerce > 💌 Order.java > {} ecommerce
      package ecommerce;
      public class Order {
        private int orderId;
        private double totalPrice;
        private Cart cart;
        Order(Cart cart, int orderId, double totalPrice) {
          this.orderId = orderId;
          this.cart = cart;
          this.totalPrice = this.cart.calculatePrice();
        public String printOrderInfo() {
          String s =
            "Here Is Your Order Summary : \n Order Id : " +
            this.orderId +
            "\nCustomer Id : " +
            this.cart.getCustomerId() +
            "\nProducts\n";
          System.out.println("Here Is Your Order Summary : ");
          System.out.println("Order Id :" + this.orderId);
          System.out.println("Customer Id : " + cart.getCustomerId());
          System.out.println("Products : ");
for (int i = 0; i < cart.getPcount(); i++) {</pre>
            System.out.println(
              cart.getProducts()[i].getName() +
              cart.getProducts()[i].getPrice() +
              " $"
            String t =
              cart.getProducts()[i].getName() +
              cart.getProducts()[i].getPrice() +
              " $";
            s += "\n";
          System.out.println("Total Price : " + this.totalPrice + " $");
          s += "Total Price : " + this.totalPrice + " $";
          return s;
```

## Class EcommerceSystem (No GUI)

```
src > main > java > ecommerce > 🥊 EcommerceSystemTerminal.java > 😭 EcommerceSystemTerminal > 😚 main(String[])
      package ecommerce;
      import java.util.Scanner;
      public class EcommerceSystemTerminal {
        public static void main(String[] args) {
          Scanner in = new Scanner(System.in);
          int ordersCount = 0;
          ecommerce.ElectronicProduct smartPhone = new ElectronicProduct(
            id:1,
            name: "smarthphone",
           price:599.99,
           brand: "samsung",
           warantyPeriod:1
          ClothingProduct tShirt = new ClothingProduct(
            name: "T-shirt",
            price:19.99,
            size: "Medium",
            fabric: "Cotton"
          BookProduct oop = new BookProduct(
           id:3,
            name: "OOP",
            price:39.99,
            author:"0[Reilly",
            publisher: "X Publications"
          int n, id;
          String name, address;
          System.out.println("Welcome To E-commerce System ! ");
          System.out.print("Please inter your id : ");
          id = in.nextInt();
          System.out.print("Please Enter Your Name : ");
          name = in.next();
          System.out.print("Please Enter Your Address : ");
          address = in.next();
          Customer customer = new Customer(id, name, address);
```

```
src > main > java > ecommerce > 🕊 EcommerceSystemTerminal.java > 🐈 EcommerceSystemTerminal > 😭 main(String[])
          System.out.print("How Many Products You Want To Add To The Cart : ");
          n = in.nextInt();
          Cart cart = new Cart(customer.getId(), n);
          int choice;
            System.out.println(
              "Which Product you want to add : 1 - smartphone 2 - T-shirt 3-00P "
            choice = in.nextInt();
            switch (choice) {
             case 1:
                cart.addProduct(smartPhone);
                break;
              case 2:
                cart.addProduct(tShirt);
                break;
              case 3:
                cart.addProduct(oop);
                break;
              default:
                System.out.println("Invalid Choice");
                break;
          System.out.println(
            "Your Total is " +
            cart.calculatePrice() +
            " $. Do You Want to Place an Order ? 1 - yes 2 - No"
          choice = in.nextInt();
          switch (choice) {
           case 1:
              cart.placeOrder(++ordersCount);
              break;
            case 2:
              System.out.println("Thank You ! ");
              break;
            default:
              System.out.println("Invalid Choice ! ");
              break;
          in.close();
```

### **CODE OUTPUT**

```
15 static Customer customer.
PROBLEMS 6 OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS COMMENTS
abdelmoaty@abdelmoaty-Lenovo-Z50-70:~/java_projects/demo$ cd /home/abdelmoaty/java_project
/bin/env /usr/lib/jvm/java-11-openjdk-amd64/bin/java @/tmp/cp b0tcnnmb4oa30tbrpbr8ydezb.arg
erce/ecommerce.EcommerceSystemTerminal
Welcome To E-commerce System !
Please inter your id : 23012214
Please Enter Your Name : Ahmed
Please Enter Your Address : Address
How Many Products You Want To Add To The Cart: 4
Which Product you want to add: 1 - smartphone 2 - T-shirt 3-00P
Which Product you want to add: 1 - smartphone 2 - T-shirt 3-00P
Which Product you want to add: 1 - smartphone 2 - T-shirt 3-00P
Which Product you want to add : 1 - smartphone 2 - T-shirt 3-00P
Your Total is 679.96 $. Do You Want to Place an Order ? 1 - yes 2 - No
Here Is Your Order Summary :
Order Id :1
Customer Id : 23012214
Products:
00P - 39.99 $
T-shirt - 19.99 $
T-shirt - 19.99 $
smarthphone - 599.99 $
Total Price : 679.96 $
abdelmoaty@abdelmoaty-Lenovo-Z50-70:~/java projects/demo$
```