

EcommerceSystem.java × Start Page × Product.java × ElectronicProduct.java × ClothingProduct.java × BookProduct.java × Customer.java × Cart.java × Order.java ×

Source History

```
1 package ecommerceSystem;
2 public class Product {
3     private int productId;
4     private String name;
5     private float price;
6
7     public Product(int productId, String name, float price) {
8         this.productId = Math.abs(productId);
9         this.name = name;
10        this.price = Math.abs(price);
11    }
12
13    public void setProductId(int productId) {
14        this.productId = Math.abs(productId);
15    }
16
17    public void setName(String name) {
18        this.name = name;
19    }
20
21    public void setPrice(float price) {
22        this.price = Math.abs(price);
23    }
24
25    public int getProductId() {
26        return productId;
27    }
28
29    public String getName() {
30        return name;
31    }
32
33    public double getPrice() {
34        return price;
35    }
36 }
```

EcommerceSystem.java × Start Page × Product.java × ElectronicProduct.java × ClothingProduct.java × BookProduct.java × Customer.java × Cart.java × Order.java ×

Source History

```
1 package ecommerceSystem;
2
3 public class ElectronicProduct extends Product {
4     private String brand;
5     private int warrantyPeriod;
6
7     public ElectronicProduct(int productId, String name, float price, String brand, int warrantyPeriod) {
8         super(productId, name, price);
9         this.brand = brand;
10        this.warrantyPeriod = Math.abs(warrantyPeriod);
11    }
12    public void setBrand(String brand) {
13        this.brand = brand;
14    }
15
16    public void setWarrantyPeriod(int warrantyPeriod) {
17        this.warrantyPeriod = Math.abs(warrantyPeriod);
18    }
19
20    public String getBrand() {
21        return brand;
22    }
23
24    public int getWarrantyPeriod() {
25        return warrantyPeriod;
26    }
27
28 }
29
```

EcommerceSystem.java x Start Page x Product.java x ElectronicProduct.java x ClothingProduct.java x BookProduct.java x Customer.java x Cart.java x Order.java x

Source History

```
1 package ecommerceSystem;
2
3 public class ClothingProduct extends Product {
4     private String size;
5     private String fabric;
6
7     public ClothingProduct(int productId, String name, float price, String size, String fabric) {
8         super(productId, name, price);
9         this.size = size;
10        this.fabric = fabric;
11    }
12    public void setSize(String size) {
13        this.size = size;
14    }
15
16    public void setFabric(String fabric) {
17        this.fabric = fabric;
18    }
19
20    public String getSize() {
21        return size;
22    }
23
24    public String getFabric() {
25        return fabric;
26    }
27
28 }
29
```

EcommerceSystem.java x Start Page x Product.java x ElectronicProduct.java x ClothingProduct.java x BookProduct.java x Customer.java x Cart.java x Order.java x

Source History

```
1 package ecommerceSystem;
2
3 public class BookProduct extends Product {
4     private String author;
5     private String publisher;
6
7     public BookProduct(int productId, String name, float price, String author, String publisher) {
8         super(productId, name, price);
9         this.author = author;
10        this.publisher = publisher;
11    }
12    public void setAuthor(String author) {
13        this.author = author;
14    }
15
16    public void setPublisher(String publisher) {
17        this.publisher = publisher;
18    }
19
20    public String getAuthor() {
21        return author;
22    }
23
24    public String getPublisher() {
25        return publisher;
26    }
27
28 }
29
```

EcommerceSystem.java X Start Page X Product.java X ElectronicProduct.java X ClothingProduct.java X BookProduct.java X Customer.java X Cart.java X Order.java X

Source History

```
2 package ecommerceSystem;
3 public class Customer {
4
5     private int customerId;
6     private String name;
7     private String address;
8
9     public Customer() {
10    }
11
12    public Customer(int customerId, String name, String address) {
13        this.customerId = Math.abs(customerId);
14        this.name = name;
15        this.address = address;
16    }
17    public void setCustomerId(int customerId) {
18        this.customerId = Math.abs(customerId);
19    }
20    public void setName(String name) {
21        this.name = name;
22    }
23    public void setAddress(String address) {
24        this.address = address;
25    }
26    public int getCustomerId() {
27        return customerId;
28    }
29    public String getName() {
30        return name;
31    }
32    public String getAddress() {
33        return address;
34    }
35 }
```

EcommerceSystem.java X | Start Page X | Product.java X | ElectronicProduct.java X | ClothingProduct.java X | BookProduct.java X | Customer.java X | Cart.java X | Order.java X

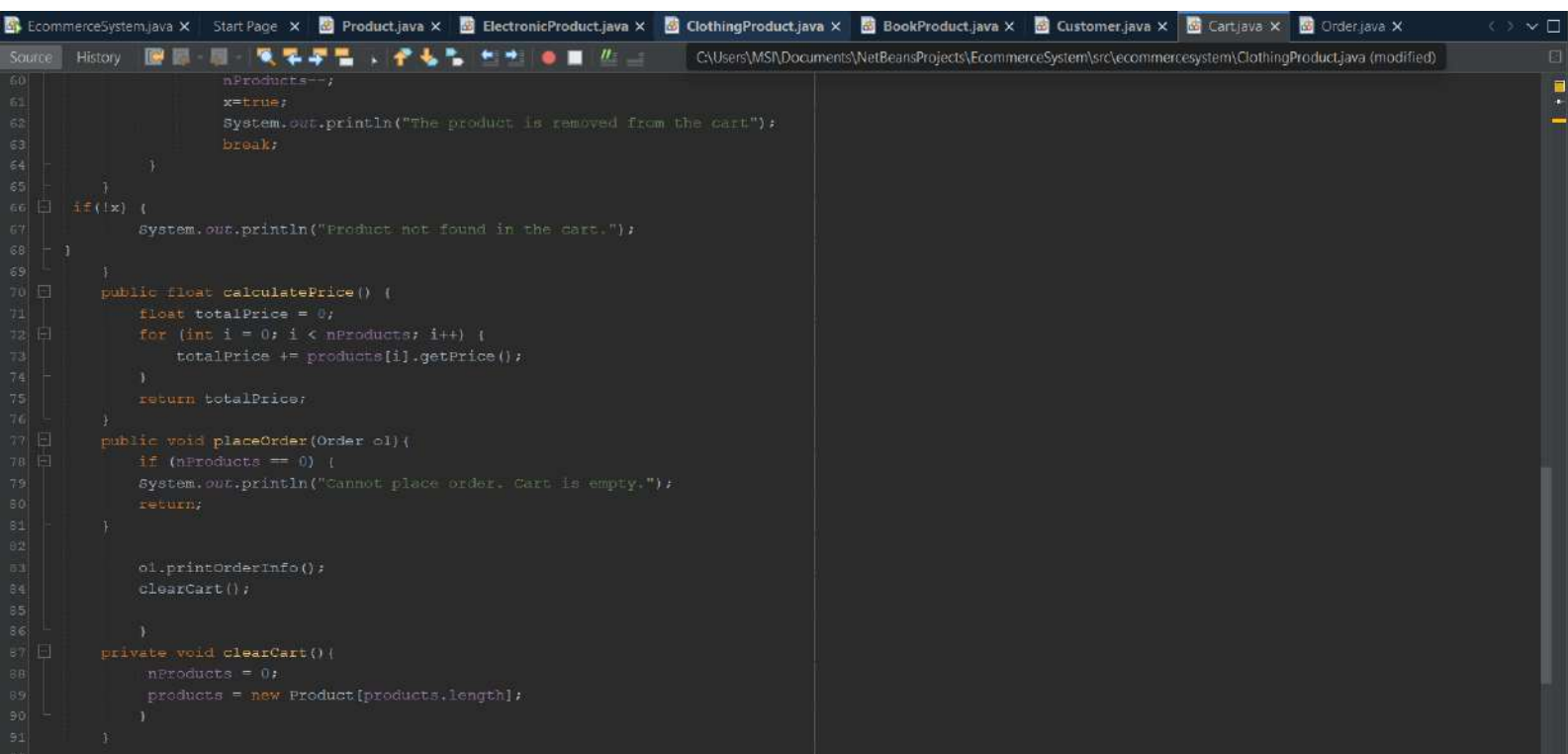
Source | History | [Icons]

```
1 package ecommerceSystem;
2
3
4
5 import ecommerceSystem.Product;
6
7 public class Cart {
8     private int customerId;
9     private int nProducts;
10    private Product[] products;
11
12    public Cart() {
13    }
14
15
16    public Cart(int customerId, int nProducts) {
17        this.customerId = Math.abs(customerId);
18        this.nProducts = Math.abs(nProducts);
19        this.products = new Product[nProducts];
20    }
21
22    public void setCustomerId(int customerId) {
23        this.customerId = Math.abs(customerId);
24    }
25
26    public void setnProducts(int nProducts) {
27        this.nProducts = Math.abs(nProducts);
28    }
29
30    public void setProducts(Product[] products) {
31        this.products = products;
32    }
33
```

EcommerceSystem.java X Start Page X Product.java X ElectronicProduct.java X ClothingProduct.java X BookProduct.java X Customer.java X Cart.java X Order.java X

Source History

```
33
34 public int getCustomerId() {
35     return customerId;
36 }
37
38 public int getnProducts() {
39     return nProducts;
40 }
41
42 public Product[] getProducts() {
43     return products;
44 }
45
46 public void addProduct(Product product) {
47     for(int i=0;i<nProducts;i++){
48         if(products[i]==null){
49             products[i]=product;
50             break;
51         }
52     }
53 }
54
55 public void removeProduct(Product product) {
56     boolean x = false;
57     for (int i = 0; i < nProducts; i++) {
58         if (products[i]==product) {
59             for (int j = i; j < nProducts - 1; j++) {
60                 products[j] = products[j + 1];
61             }
62             nProducts--;
63             x=true;
64             System.out.println("The product is removed from the cart");
65             break;
66         }
67     }
68 }
```



```
60         nProducts--;
61         x=true;
62         System.out.println("The product is removed from the cart.");
63         break;
64     }
65 }
66 if(!x) {
67     System.out.println("Product not found in the cart.");
68 }
69 }
70 public float calculatePrice() {
71     float totalPrice = 0;
72     for (int i = 0; i < nProducts; i++) {
73         totalPrice += products[i].getPrice();
74     }
75     return totalPrice;
76 }
77 public void placeOrder(Order o1){
78     if (nProducts == 0) {
79         System.out.println("Cannot place order. Cart is empty.");
80         return;
81     }
82
83     o1.printOrderInfo();
84     clearCart();
85 }
86
87 private void clearCart() {
88     nProducts = 0;
89     products = new Product[products.length];
90 }
91 }
```


EcommerceSystem.java × Start Page × Product.java × ElectronicProduct.java × ClothingProduct.java × BookProduct.java × Customer.java × Cart.java × Order.java ×

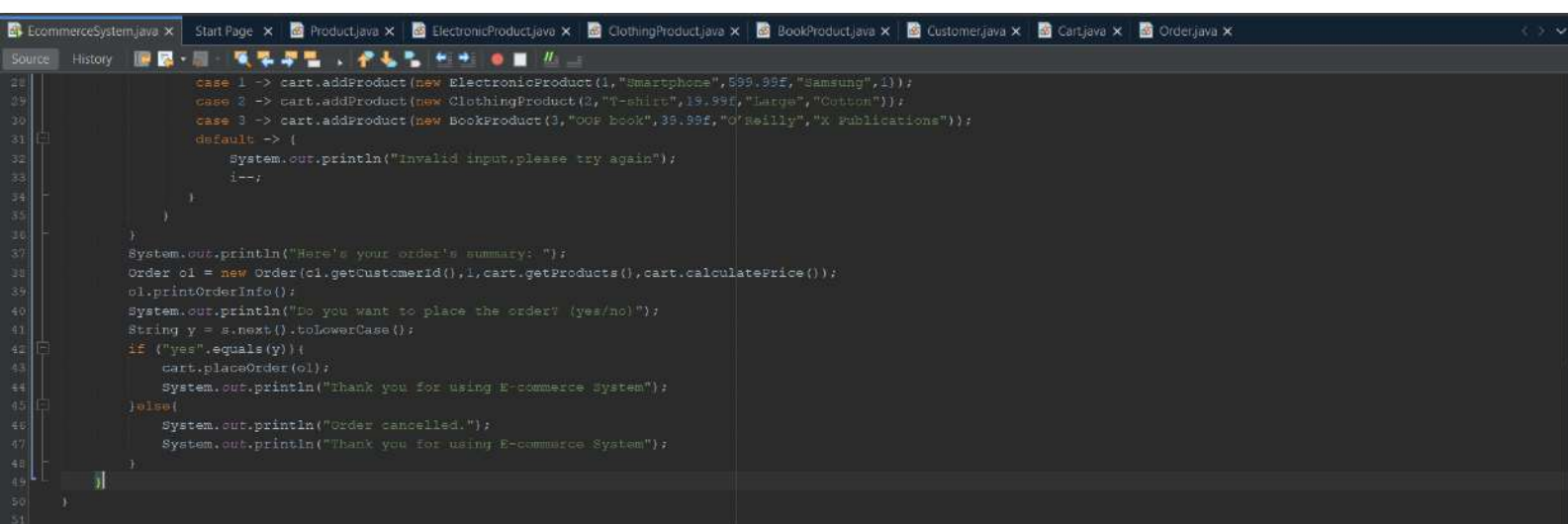
Source History

```
1 package ecommerceSystem;
2
3 public class Order {
4     private int customerId;
5     private int orderId;
6     private Product[] products;
7     private float totalPrice;
8
9     public Order() {}
10    public Order(int customerId, int orderId, Product[] products, float totalPrice) {
11        this.customerId = Math.abs(customerId);
12        this.orderId = Math.abs(orderId);
13        this.products = products;
14        this.totalPrice = Math.abs(totalPrice);
15    }
16
17    public void printOrderInfo() {
18        System.out.println("Order ID: " + orderId);
19        System.out.println("Customer ID: " + customerId);
20        System.out.println("Products:");
21        for (Product product : products) {
22            System.out.println("- " + product.getName() + product.getPrice() + ": $" );
23        }
24        System.out.println("Total Price: $" + totalPrice);
25    }
26 }
27
```

Output - EcommerceSystem (run) X

```
run:
Welcome to the E-commerce system!
Please enter your ID:
23011573
Please enter your name :
Moussa Sobhy Solaiman موسى صبحي سليمان
Please enter your adress:
Adress
How many products would you like to add to your cart?
4
Which product would you like to add? 1- Smartphone 2- T-shirt 3- OOP book
2
Which product would you like to add? 1- Smartphone 2- T-shirt 3- OOP book
3
Which product would you like to add? 1- Smartphone 2- T-shirt 3- OOP book
2
Which product would you like to add? 1- Smartphone 2- T-shirt 3- OOP book
1
Here's your order's summary:
Order ID: 1
Customer ID: 23011573
Products:
- T-shirt19.989999771118164: $
- OOP book39.9900016784668: $
- T-shirt19.989999771118164: $
- Smartphone599.989990234375: $
Total Price: $679.95996
Do you want to place the order? (yes/no)
yes
Order ID: 1
Customer ID: 23011573
Products:
- T-shirt19.989999771118164: $
- OOP book39.9900016784668: $
- T-shirt19.989999771118164: $
- Smartphone599.989990234375: $
Total Price: $679.95996
Thank you for using E-commerce System
BUILD SUCCESSFUL (total time: 1 minute 5 seconds)
```

```
EcommerceSystem.java X Start Page X Product.java X ElectronicProduct.java X ClothingProduct.java X BookProduct.java X Customer.java X Cart.java X Order.java X
Source History
1 package ecommerceSystem;
2
3
4 import java.util.Scanner;
5 public class EcommerceSystem {
6
7     public static void main(String[] args) {
8         Scanner s = new Scanner(System.in);
9         System.out.println("Welcome to the E-commerce system!");
10        System.out.println("Please enter your ID: ");
11        Customer c1 = new Customer();
12        int id = s.nextInt();
13        c1.setCustomerId(id);
14        s.nextLine();
15        System.out.println("Please enter your name :");
16        String name = s.nextLine();
17        c1.setName(name);
18        System.out.println("Please enter your adress: ");
19        String a = s.next();
20        c1.setAddress(a);
21        System.out.println("How many products would you like to add to your cart?");
22        int numProduct = s.nextInt();
23        Cart cart = new Cart(c1.getCustomerId(), numProduct);
24        for(int i=0; i<numProduct; i++) {
25            System.out.println("Which product would you like to add? 1- Smartphone 2- T-shirt 3- OOF book");
26            int x = s.nextInt();
27            switch(x) {
28                case 1 -> cart.addProduct(new ElectronicProduct(1, "Smartphone", 599.99f, "Samsung", 1));
29                case 2 -> cart.addProduct(new ClothingProduct(2, "T-shirt", 19.99f, "Large", "Cotton"));
30                case 3 -> cart.addProduct(new BookProduct(3, "OOF book", 39.99f, "O'Reilly", "X Publications"));
31            default -> {
32                System.out.println("Invalid input, please try again");
33                i--;
34            }
35        }
36    }
37 }
```



```
EcommerceSystem.java x Start Page x Product.java x ElectronicProduct.java x ClothingProduct.java x BookProduct.java x Customer.java x Cart.java x Order.java x
Source History
28 case 1 -> cart.addProduct(new ElectronicProduct(1,"Smartphone",599.99f,"Samsung",1));
29 case 2 -> cart.addProduct(new ClothingProduct(2,"T-shirt",19.99f,"Large","Cotton"));
30 case 3 -> cart.addProduct(new BookProduct(3,"OOF book",39.99f,"O'Reilly","X Publications"));
31 default -> {
32     System.out.println("invalid input, please try again");
33     i--;
34 }
35 }
36 }
37 System.out.println("Here's your order's summary: ");
38 Order oi = new Order(ci.getCustomerId(),1, cart.getProducts(), cart.calculatePrice());
39 oi.printOrderInfo();
40 System.out.println("Do you want to place the order? (yes/no)");
41 String y = s.next().toLowerCase();
42 if ("yes".equals(y)){
43     cart.placeOrder(oi);
44     System.out.println("Thank you for using E-commerce System");
45 }else{
46     System.out.println("Order cancelled.");
47     System.out.println("Thank you for using E-commerce System");
48 }
49 }
50 }
51 }
```