Screenshots in the latest bages

Product class

```java
package project.sixth;

public class Product {
    protected int productId;
    protected String name;
    protected float price;
    public Product(){}
    public Product(int productId, String name, float price){
        this.productId=Math.abs(productId);
        this.name=name;
        this.price=Math.abs(price);
    }

    public void setProductId(int productId) {
        this.productId = Math.abs(productId);
    }

    public void setName(String name) {
        this.name = name;
    }

    public void setPrice(float price) {
        this.price = Math.abs(price);
    }

    public int getProductId() {
        return productId;
    }

    public String getName() {
        return name;
    }

    public float getPrice() {
        return price;
    }
```

```
}
```

Order class

```java
package project.sixth;

public class Order {
    protected int customerId;
    protected int orderId=1;
    protected Product []products;


    public void printOrderInfo(Cart cart,Customer customer){
        System.out.println(Math.abs(orderId));
        System.out.println(customer.customerId);
        System.out.println("Products :");
        for(int i=0;i<cart.products.length;i++){
        System.out.println(cart.products[i].getName()+" - "+cart.products[i].getPrice());
        }
        System.out.println("Total price : $"+cart.calculatePrice());

    }
}
```

ElectronicProduct class

```java
package project.sixth;

public class ElectronicProduct extends Product  {
    String brand;
    int warrantyPeriod;

    public ElectronicProduct(int productId, String name, float price, String brand, int
warrantyPeriod){
        super(productId,name,price);
        this.brand=brand;
        this.warrantyPeriod=Math.abs(warrantyPeriod);
    }

    public void setWarrantyPeriod(int warrantyPeriod) {
        this.warrantyPeriod = warrantyPeriod;
    }

    public void setBrand(String brand) {
        this.brand = brand;
    }

    public String getBrand() {
        return brand;
    }

    public int getWarrantyPeriod() {
        return warrantyPeriod;
    }
}
```

Customer class

```java
package project.sixth;

public class Customer {
    protected int customerId;
    protected String name;
    protected String address;

    public Customer(){}
    public Customer(int customerId, String name , String address){
        this.customerId=customerId;
        this.name=name;
        this.address=address;
    }

    public void setCustomerId(int customerId) {
        this.customerId = customerId;
    }

    public void setName(String name) {
        this.name = name;
    }

    public void setAddress(String address) {
        this.address = address;
    }


    public int getCustomerId() {
        return customerId;
```

```java
    }

    public String getName() {
        return name;
    }

    public String getAddress() {
        return address;
    }
}
```

ClothingProduct class

```java
package project.sixth;

public class ClothingProduct extends Product {
    String size;
    String fabric;

    public ClothingProduct(int productId, String name, float price, String size, String
fabric){
        super(productId,name,price);
        this.size=size;
        this.fabric=fabric;


    }

    public void setFabric(String fabric) {
        this.fabric = fabric;
    }

    public void setSize(String size) {
        this.size = size;
    }



    public String getSize() {
        return size;
    }
```

```
    public String getFabric() {
        return fabric;
    }
}
```

BookProduct class

```
package project.sixth;

public class BookProduct extends Product {
    String author;
    String publisher;

    public BookProduct(int productId, String name, float price, String author, String
publisher){
        super(productId,name,price);
        this.author=author;
        this.publisher=publisher;
    }

    public void setPublisher(String publisher) {
        this.publisher = publisher;
    }

    public void setAuthor(String author) {
        this.author = author;
    }


    public String getAuthor() {
```

```
        return author;
    }

    public String getPublisher() {
        return publisher;
    }
}
```

Cart class

```
package project.sixth;

public class Cart {
    protected int customerId;
    public int nProducts;
    protected Product products[];

    Cart(){}
    Cart(int getnProducts) {
        this.nProducts=getnProducts;
        this.products=new Product[nProducts];
    }


    public void setCustomerId(int customerId) {
        this.customerId = customerId;
    }

    public void setProducts(Product[] products) {
```

```java
        this.products = products;
    }


    public void setnProducts(int nProducts) {
        this.nProducts = nProducts;
    }



    public int getCustomerId() {
        return customerId;
    }


    public int getnProducts() {
        return nProducts;
    }


    public Product[] getProducts() {
        return products;
    }


    public void addProduct(Product product) {
        for (int i=0; i < products.length; i++) {
            if (products[i] == null) {
                products[i]=product;
                break;
            }
        }
    }
    public Product removeProduct(Product removing){
        for(int i=0;i<nProducts;i++){
            if (products[i]==removing){
                products[i]=null;
                break;
            }
        }
        return removing;
    }
    String calculatePrice(){
        float sum=0;
        for (int i=0;i<getnProducts();i++){
            sum=sum+products[i].getPrice();
        }
        return Float.toString(sum);
    }
    public void placeOrder(){
        System.out.println("Here is your order S summary:");
    }
}
```

JavaFX

HelloController class

```java
package project.sixth;

import javafx.event.ActionEvent;
import javafx.fxml.FXML;
import javafx.fxml.FXMLLoader;
import javafx.scene.Node;
import javafx.scene.Parent;
import javafx.scene.Scene;
import javafx.scene.control.Label;
import javafx.scene.control.ListView;
import javafx.scene.control.TextField;
import javafx.scene.input.MouseEvent;



import javafx.stage.Stage;

import java.io.IOException;

public class HelloController {


    @FXML
    private ListView<String> listname;
    @FXML
    TextField customeridTextField;
    @FXML
    TextField nameTextField;
    @FXML
    TextField addressTextField;

    @FXML
    TextField nProductsTextField;
```

```java
    @FXML
    TextField productnameTextField;
    @FXML
    private Label myLAbel;
    @FXML
    private Label saveLabel;
    private Stage stage;
    private Scene scene;

    Cart order=new Cart(5);
    ElectronicProduct obj1=new ElectronicProduct(1,"smartphone",599.9F,"Samsung",1);
    ClothingProduct obj2=new ClothingProduct(2,"Tshirt",19.99F,"Medium","Cotton");
    BookProduct obj3=new BookProduct(3,"OOP",39.99F,"O,Reilly","X Publications");


    public void save(MouseEvent event){
        order.setnProducts(Integer.parseInt(nProductsTextField.getText()));
        saveLabel.setText("Saved");
    }
```

```java
@FXML
    void addname(MouseEvent event) throws IOException {



        if(productnameTextField.getText().equals("smartphone")){
            listname.getItems().add(productnameTextField.getText()+" $599.9");
            order.addProduct(obj1);}
        else if(productnameTextField.getText().equals("T-shirt")){
            listname.getItems().add(productnameTextField.getText()+" $19.99");
            order.addProduct(obj2);
        }else if(productnameTextField.getText().equals("OOP")){
            listname.getItems().add(productnameTextField.getText()+"$39.99");
            order.addProduct(obj3);
        }else{
            myLAbel.setText("Pls enter avalaible product");
        }




    }


    @FXML
```

```java
        void removename(MouseEvent event) {
            int selectID=listname.getSelectionModel().getSelectedIndex();
            listname.getItems().remove(selectID);


        }


        @FXML
        public void placeOrder(ActionEvent event) throws IOException {
        int ID=Integer.parseInt(customeridTextField.getText());
        String name=nameTextField.getText();
        String address=addressTextField.getText();



            FXMLLoader loader = new FXMLLoader(getClass().getResource("hello-
view2.fxml"));

            Parent root;
            root = loader.load();
            HelloController2 helloController2 = loader.getController();
            helloController2.displayInfo(order,ID,name,address);



            stage = (Stage) ((Node) event.getSource()).getScene().getWindow();
            scene = new Scene(root);
            stage.setScene(scene);
            stage.show();


        }



}
```

HelloControler2 class

```java
package project.sixth;


import javafx.event.ActionEvent;
import javafx.fxml.FXML;
import javafx.scene.Scene;
import javafx.scene.control.Button;
```

```java
import javafx.scene.control.Label;
import javafx.scene.control.ListView;
import javafx.scene.control.TextArea;
import javafx.scene.input.MouseEvent;
import javafx.scene.layout.AnchorPane;
import javafx.stage.Stage;

public class HelloController2 {
    private Button LogoutButton;
    private AnchorPane scenePane;
    Stage stage;


    @FXML
    private ListView<String> listorder;
@FXML
    private Label myLabel;



@FXML
    public void displayInfo(Cart cart,int ID,String name,String address){
        Customer customer=new Customer(ID,name,address);
        Order data=new Order();
        float sum=0;
        for (int i=0;i<cart.nProducts;i++){
            if (cart.products[i]==null){
                break;
            }
            sum+=cart.products[i].getPrice();
        }
        listorder.getItems().add("Customer ID \t"+(customer.customerId));
    for (int i=0;i<cart.nProducts;i++) {
        if (cart.products[i]==null){
            break;
        }
        listorder.getItems().add((cart.products[i].getName())+" - $" +
(cart.products[i].getPrice()));
    }
        listorder.getItems().add("Total Price : $"+sum);


}
public void logout(ActionEvent event){
    stage=(Stage) scenePane.getScene().getWindow();
    System.out.println("You successfully logged out!");
    stage.close();
}


}
```

EcommerceSystem class

```java
package project.sixth;

import javafx.application.Application;
import javafx.fxml.FXMLLoader;
import javafx.scene.Scene;
import javafx.stage.Stage;

import java.io.IOException;

public class EcommerceSystem extends Application {
    @Override
    public void start(Stage stage) throws IOException {
        FXMLLoader fxmlLoader = new FXMLLoader(EcommerceSystem.class.getResource("hello-view.fxml"));
        Scene scene = new Scene(fxmlLoader.load(), 750, 400);
        stage.setTitle("EcommerdeSystem");
        stage.setScene(scene);
        stage.show();
    }

    public static void main(String[] args) {
        Launch();
    }
}
```

Project by GUI

EcommerdeSystem

Welcome to the E-Commerce System

please enter your id

Please enter your name

Please enter your address

How many products you want to add to your cart ?

submit

Avalaiblle product

1-smartphone

2-T-shirt

3-OOP

Enter product name

Add

Remove

Placeorder

EcommerdeSystem

Welcome to the E-Commerce System

please enter your id
`23011563`

Please enter your name
`Monzer mahmoud yousri`

Please enter your address
`address`

How many products you want to add to your cart ? `4`

[submit]

Saved

Avalaiblle product

1-smartphone

2-T-shirt

3-OOP

Enter product name
`|`

[Add]

[Remove]

OOP$39.99
T-shirt $19.99
smartphone $599.9
smartphone $599.9

[Placeorder]

EcommerdeSystem

Here is your order,s summary :

order ID : 1

Customer ID   23011563
OOP - $39.99
Tshirt - $19.99
smartphone - $599.9
smartphone - $599.9
Total Price : $1259.78

[Logout]