

Software Engineering

E-Bazaar Final Project

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Full Project Package: <https://github.com/hantruongth/SWE-EBazaarFinal.git> (Please download full package to execute due to large files, cannot submit to Sakai)

I. To Run E-Bazaar Application

Execute **RUN.bat** to start application

```
cd bin
```

```
java --module-path javafx11\lib --add-modules javafx.controls launch.StartEbazaarApp
```

Final Project > FinalProject_610088_10.10.2020

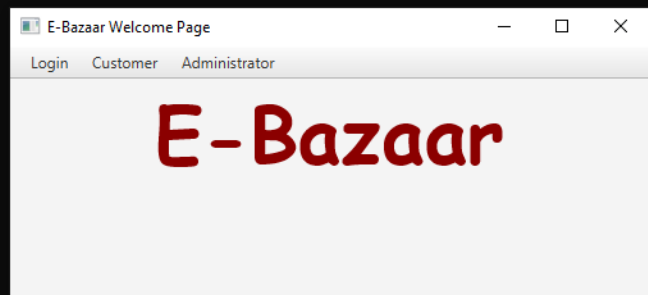
Search FinalProject_610088_10.10.2020

Name	Date modified	Type	Size
bin	10/10/2020 9:22 PM	File folder	
E-BazaarProject	10/10/2020 9:22 PM	File folder	
RUN.bat	10/10/2020 9:23 PM	Windows Batch File	1 KB

C:\WINDOWS\system32\cmd.exe

```
C:\MUM\SWE\HAN\Final Project\FinalProject_610088_10.10.2020>cd bin
```

```
C:\MUM\SWE\HAN\Final Project\FinalProject_610088_10.10.2020\bin>java --module-path javafx11\lib --add-modules javafx.controls launch.StartEbazaarApp
```



II. E-Bazaar project on Eclipse

The screenshot displays the Eclipse IDE interface for the 'E-BazaarFinalProject' project. The Project Explorer on the left shows a hierarchical structure of Java packages and classes. The main editor window displays the 'StartEbazaarApp.java' file, which contains Java code for a presentation GUI. A small window titled 'E-Bazaar Welcome Page' is overlaid on the code, showing a login form with fields for 'Login', 'Customer', and 'Administrator', and a large 'E-Bazaar' logo. The Console window at the bottom shows the output of the application, indicating that the 'E-Bazaar-Maven' project has been successfully built.

Project Explorer Structure:

- src/main/java
 - business
 - business.exceptions
 - business.externalinterfaces
 - Address.java
 - CartItem.java
 - Catalog.java
 - CatalogTypes.java
 - CreditCard.java
 - CustomerProfile.java
 - CustomerSubsystem.java
 - DbClassAddressForTest.java
 - DbClassCatalogForTest.java
 - DbClassCustomerProfileForTest.java
 - DbClassCustomerProfileTest.java
 - DbClassShoppingCartForTest.java
 - DynamicBean.java
 - IAAddress.java
 - IRules.java
 - IRulesSubsystem.java
 - Order.java
 - OrderItem.java
 - OrderSubsystem.java
 - Product.java
 - ProductFromGui.java
 - ProductSubsystem.java
 - Rules.java
 - RulesConfigKey.java
 - RulesConfigProperties.java
 - RulesSubsystem.java
 - ShoppingCart.java
 - ShoppingCartSubsystem.java
 - business.ordersubsystem
 - DbClassOrder.java
 - OrderImpl.java
 - OrderItemImpl.java
 - OrderSubsystemFacade.java
 - business.productsusubsystem
 - CatalogImpl.java
 - CatalogTypesImpl.java
 - DbClassCatalog.java
 - DbClassCatalogTypes.java
 - DbClassProduct.java
 - ProductImpl.java
 - ProductSubsystemFacade.java
 - business.rulesbeans
 - AddressBean.java
 - FinalOrderBean.java
 - PaymentBean.java

StartEbazaarApp.java Code:

```
1 package presentation.gui;
2
3 import java.time.LocalDate;
4
5 public class AddProductPopup extends Popup {
6     MaintainProductsWindow maintainProductsWindow;
7     TextField catalogName = new TextField();
8     TextField id = new TextField();
9     TextField name = new TextField();
10    TextField manufactureDate = new TextField();
11    TextField sumAvail = new TextField();
12
13    Test
14
15    HB
16    HB
17    Test
18    pr
19
20    }
21
22    }
23
24    }
25
26    }
27
28    }
29
30    }
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92    }
93
94    }
95
96    }
97
98    }
99
100   }
```

E-Bazaar Welcome Page:

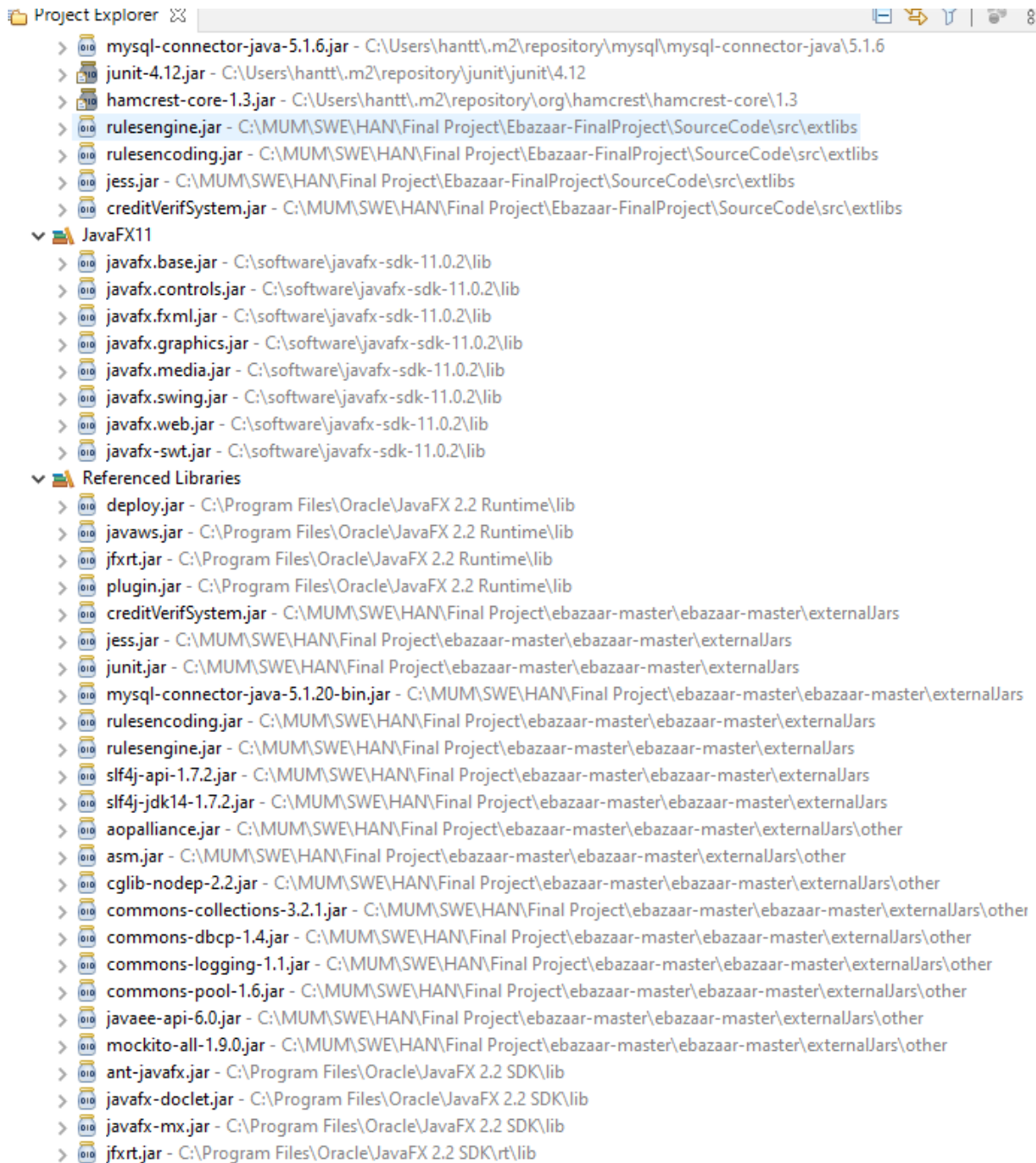
Login Customer Administrator

E-Bazaar

Console:

```
@author pcorazza - 29 matches in workspace
> E-Bazaar-Maven
> MainProjectFX
```

III. All external jars and dependencies



IV. DB Configuration

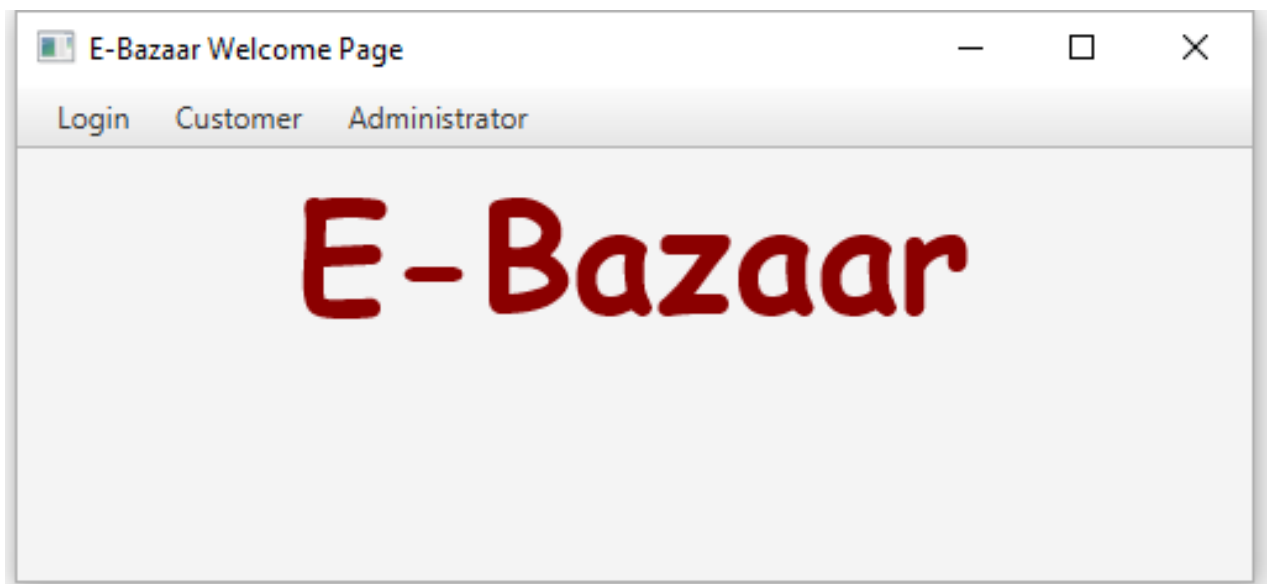
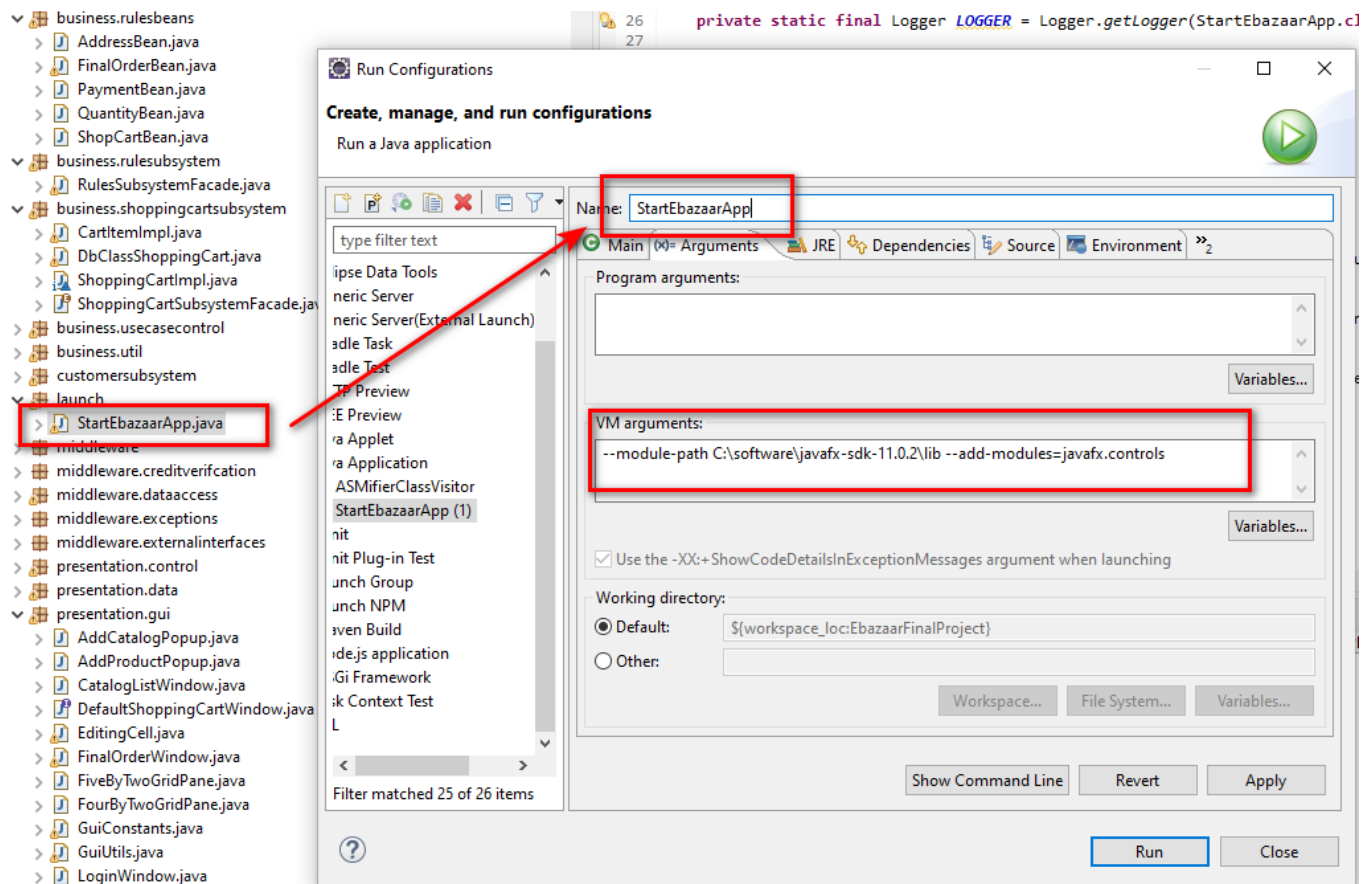
```
address-rul...  quantity-rul...  shopcart-rul...  rulesconfig...  Customer
1 account_dburl =jdbc:mysql://localhost:3306/AccountsDb
2 product_dburl =jdbc:mysql://localhost:3306/ProductsDb
3 max_connections=4
4 driver=com.mysql.jdbc.Driver
5 dbuser=root
6 dbpassword=
7
8
```

IV. Some Rules

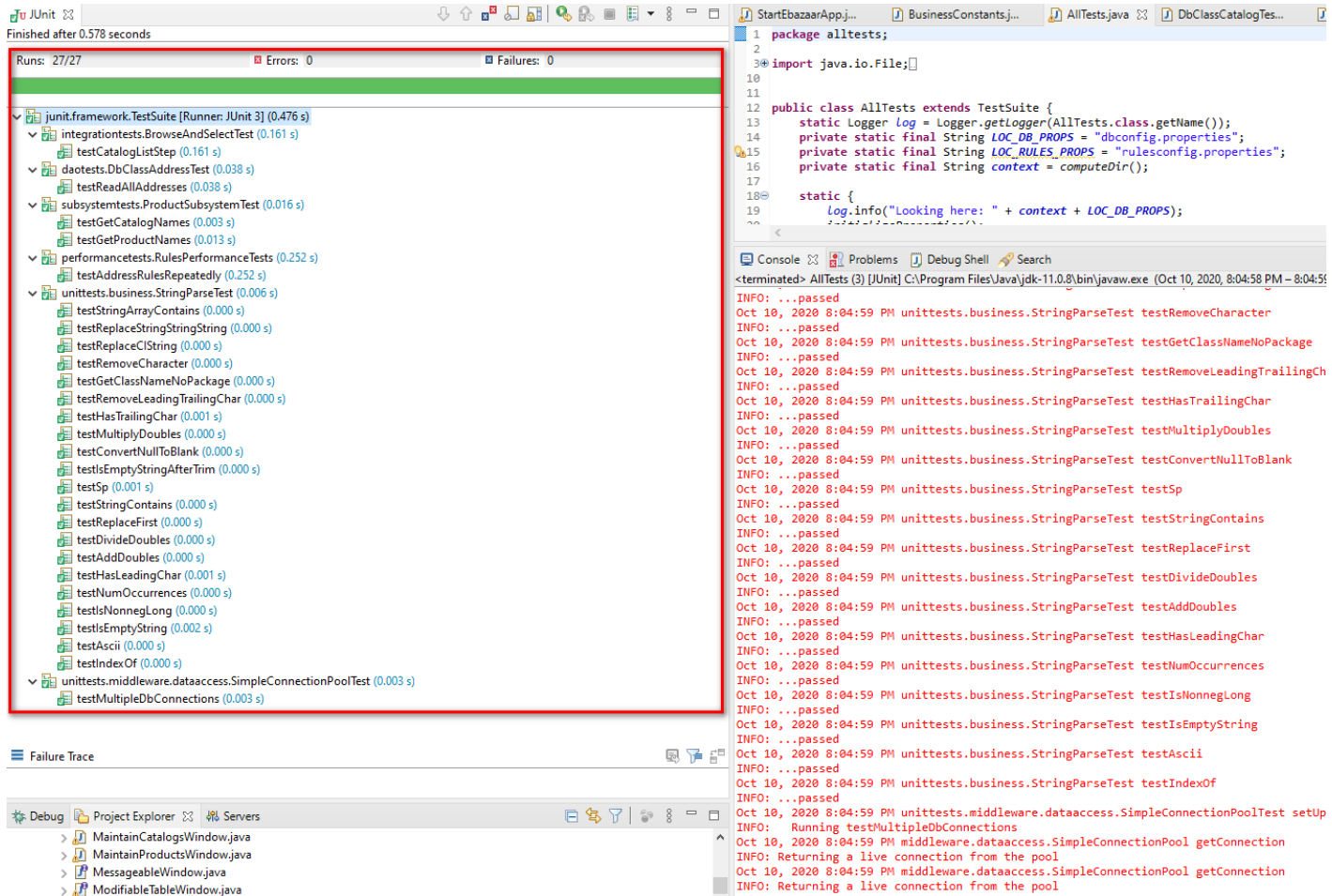
```
src/main/resources
└─ rulefiles
   ├── address-rules.clp
   ├── finalorder-rules.clp
   ├── payment-rules.clp
   ├── quantity-rules.clp
   └── shopcart-rules.clp
```

```
address-rul...  quantity-rul...  shopcart-rul...  DbClassOrde...  ShippingBill...  CustomerPre...
3 (defmodule rules-quantity)
4
5 (defrule non-blank
6   (declare (salience 10))
7   (quantity-template (quantityRequested ?r&:(= (call ?r length) 0)))
8   =>
9   (throw (new rulesengine.ValidationException "This is a required field.")))
10
11 (defrule numeric
12   (declare (salience 5))
13   (quantity-template (quantityRequested ?r&:(not (isNumeric ?r))))
14   =>
15   (throw (new rulesengine.ValidationException "The value must be numeric.")))
16
17 (defrule bigger-than-zero
18   (declare (salience 3))
19   (quantity-template (quantityRequested ?r))
20   (test (<= (call ?r compareTo "0") 0))
21   =>
22   (throw (new rulesengine.ValidationException "The value must be a positive number.")))
23
24 (defrule sufficient-quantity
25   (declare (salience 0))
26   (quantity-template (quantityAvailable ?a) (quantityRequested ?r))
27   (test (and (isNumeric ?r) (> (call Integer parseInt ?r) ?a)))
28   =>
29   (throw (new rulesengine.ValidationException "Quantity requested exceeds quantity available")))
30
31 (defunction isNumeric(?str)
32   (if (= (call ?str length) 0) then (return FALSE)
33   else
34     (try (call Integer parseInt ?str)
35       (return TRUE))
```

V. Start Application



VI. All Test cases executed and passed



VII. Some screenshots of actions in E-Bazaar



Product List

Available Books

Books
Gone With The Wind
Messiah of Dune
Garden of Rama

Select Product

Go Back to Catalogs

Shopping Cart

Shopping Cart

Item Name	Quantity	Unit Price	Total Price
Garden of Rama	1	50.0	50.0
Skirts	1	30.0	30.0
Pants	1	25.0	25.0
Garden of Rama	1	50.0	50.0
Messiah of Dune	3	15.0	45.0
Gone With The Wind	2	20.0	40.0

Total: 240.00

Proceed to Checkout

Continue Shopping

Save Cart

Delete Selected

Shipping and Billing Addresses

Shipping and Billing Addresses

Shipping Address

Name	Han Truong
Street	300 W. Washingto
City	Fairfield
State	IA
Zip	52556

Billing Address

Name	John Smith
Street	3449 W Bryn Mawr
City	Chicago
State	IL
Zip	60659

☒ Billing Same As Shipping?

☐ Save Shipping Address

☐ Save Billing Address

Select Ship Address

Select Bill Address

Checkout

Back to Cart

Shopping Cart

Shopping Cart

Item Name	Quantity	Unit Price	Total Price
Garden of Rama	1	50.0	50.0
Skirts	1	30.0	30.0
Pants	1	25.0	25.0
Garden of Rama	1	50.0	50.0
Messiah of Dune	3	15.0	45.0
Gone With The Wind	2	20.0	40.0

Total: 240.00

Proceed to Checkout

Continue Shopping

Save Cart

Delete Selected

Orders

All Orders

Order ID	Date of Order	Total Price
1	11/11/2002	50.00

View Details

Back to Welcome Screen

Final Order

Final Order

Item Name	Quantity	Unit Price	Total Price
Garden of Rama	1	50.0	50.0
Skirts	1	30.0	30.0
Pants	1	25.0	25.0
Garden of Rama	1	50.0	50.0
Messiah of Dune	3	15.0	45.0
Gone With The Wind	2	20.0	40.0

Total: 240.00

Submit Order

Cancel

Back to Shopping Cart

Maintain Products

Maintain Products

Books

Name	Unit Price	Mfg Date	Quantity
Gone With The Wind	20.00	10/10/2001	200
Messiah of Dune	15.00	05/20/2000	30
Garden of Rama	50.00	02/20/1995	200

Add New Product

Delete Product

Back to Main

Product List

Available Clothing

Clothing

Pants

T-Shirts

Skirts

Select Product

Go Back to Catalogs

Order Details

Product Name	Quantity	Unit Price	Total Price
Gone With The ...	1	20.0	20.00
Messiah of Dune	2	15.0	30.00

OK