

Group 8

Jarold Sabillon

Jeff Platel

Jonathan Mercer

Kelvin Dhomam

## Shoplet

A Shopping Cart Application - Functional Specification Document

The platform utilized: Java Swing



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## Glossary

- **Costs** – The sum of invoice prices for all items bought in the inventory.
- **User** – A member of the Shoplet application.
- **Product** – A good that is offered on the Shoplet application to purchase.
- **Revenues** – Sum of sell prices for all sold items purchased.
- **Profit** – Revenue minus costs.
- **Transaction** – An instance of buying or selling something between the Buyer and Seller.
- **Buyer** – Customer who is purchasing the products listed.
- **Seller** – Special user who is registered and allowed to post items to sell on the Shoplet Application.
- **Administrator** – Special user who is a staff member of Shoplet, can administrate accounts and manage users, products, and reviews within the application.

## 1. Introduction

### 1.1 Purpose

The purpose of this document is to specify the functional requirements that are required to be implemented within the Shoplet application along with use cases for features that are within the application for users. The content outlined in this document will reflect the Shoplet application sufficiently and will represent the final Shoplet shopping application.

## 2. Scope

### 2.1 Descriptions

#### Buyer

The Shoplet application provides buyers with a login window where they must provide a username and password. The system will verify the user's login credentials, or allow the user to register with a username, password, and email address. The system provides password complexity to ensure secure passwords are used. The user shall be able to update their personal information including name and address within their profile. The user once logged in can view a list of available products that are being sold, the detail of each product includes product name, price, and quantity. From this window, the user can add them to their shopping cart directly or select the item to view more details about the item. The full product description is shown when a product is selected, this includes the product's description, pricing, reviews, and quantity availability in a pop-up window, the buyer can add the product to this window also. The current total price of the user's products is listed in the corner of the main window. The buyer can navigate to the top corner of the window to check out and view their current cart items. If the cart icon is selected, they can check out where they are required to input their credit card information along with other personal information. The Buyer also can view seller profiles and other products that are being sold by that seller and the buyer is also able to leave product reviews and rate the product from 1-5 stars on their purchased

products and allow other users to rate if they agree or disagree with the specific review. The system does not arrange for any shipping of any kind.

### Seller

The Shoplet application system provides a secure seller portal where the seller will log in with their account credentials that were made when they registered. The seller creates their account; however, they must be verified by system administrators.

Once the seller is logged in the seller can view their inventory with current quantity amounts, and paid pending orders, along with adding, updating, and removing products. The seller can input information about a product such as product name, invoice price, and sell price, and update the availability of an item. The system keeps track of all costs, revenues, and profits. The seller can access this information for the dashboard. The seller can respond to reviews that are made under their products and create discount codes for their products if wanted.

### Administrators

The Shoplet application system provides administrator users who are staff members of Shoplet that can modify user accounts and details, modify item details, delete reviews, cancel orders and refund canceled orders to users, and serve as a support contact for the user along with deleting user reviews on products.

### 3. Functional Requirements

#### 3.1 Buyers

- Shoplet **shall** provide a registration system for the **buyer** to create an account.
  1. Buyers **shall** be able to use secure payment processing methods to be able to purchase the sold products.
  2. Buyers **shall** have an interface to view available products that are purchasable.
  3. Buyers **shall** have an edit profile form to input their personal information and save it to their accounts.
  4. Buyers **shall** be allowed to save their credit card information to their accounts for faster checkouts.
  5. Buyers **shall** be allowed to leave review products that were purchased.

#### 3.2 Sellers

- Shoplet **shall** have a **seller's** account that will be able to post new products and manage the product details.
  1. Sellers **shall** be able to edit their existing product details.
  2. Sellers **shall** be able to post new products on their page.
  3. Sellers **shall** be able to view their profits, costs, and revenues.
  4. Sellers **shall** be able to respond to reviews on their products.
  5. Sellers **shall** be able to create discount codes for their products

### 3.3 Administrators

- Shoplet **shall** have an **administrators** account that can manage users and sellers.
  1. Administrators **shall** be able to delete buyer and seller accounts.
  2. Administrators **shall** be able to edit product details.
  3. Administrators **shall** be able to cancel orders and refund the cost.
  4. Administrators **shall** be able to create new user/seller accounts.
  5. Administrators **shall** be able to delete reviews on product pages.

## 4. Essential Use Cases for the Shoplet Application

### Log In

1. The user opens the Shoplet desktop application
2. The user is presented with a Username and Password input box window, along with the choice of creating a new account with it being a buyer account, or a seller account.
3. The user enters their account information into the username and password field which accepts either buyer, seller, or administrator account login details.
4. The user selects the “Log In” button and depending on account type is granted access to their respective side of the application.

### Variation #1 Invalid Login Credentials

1. Start at step 3.
2. The user inputs the incorrect login information for their account.
3. The system prompts a warning message box that states “User already exists or does not meet criteria. Try again.”
4. Return to 2.

### Create a Buyer account

1. The user selects the “Create new account” button.
2. The user inputs their desired username, password, and email address into the field.
3. The user’s account is created.

### Variation #1 Existing User Credentials

- 1.1 Start at Step 2.
- 1.2 User inputs an email or username that already exists within the Shoplet application.
- 1.3 The system prompts a warning message box that states “Account already exists with that username or email. Try again.”
- 1.4 Return to 2.

## Create a Seller account

1. The user selects the “Create new account” button.
2. The user inputs their desired username, password, and email address into the field.
3. The user’s account is sent to be approved by an administrator account.

## Variation #1 Existing User Credentials

- 1.5 Start at Step 2.
- 1.6 The user inputs a username or password that already exists within the Shoplet application.
- 1.7 The system prompts a warning message box that states “Account already exists with that username or email. Try again.”
- 1.8 Return to 2.

## Item added to Shopping Cart

1. User is logged into the buyer portal of the shopping application.
2. User selects the “Products” tab of the window application.
3. User selects the desired product to add to the cart.
4. User sees a + or – box with quantity and a “+” cart symbol box with the product image.

5. An “Item added” box pop-ups to notify the user the item has been added to the cart.
6. The window refreshes and the cart reflect the added item with quantity.

#### Variation #1 Product is not in stock at the time of adding to the cart

1.1 Start at Step 4.

1.2 User tries to add an item that exceeds the stock of the item a message pops up saying: “Item out of stock”.

1.3 Return to 2.

#### Review a product

1. User is logged into the application and selected an item that was purchased.
2. User scrolls to the Reviews section of the items
3. User inputs their review in the textbox 1 – 5 stars, and their text review of the item purchased.
4. User selects the “Post” button and posts the review.

#### Display items in the shopping cart

1. User selects the cart icon in the top-right of the window.
2. User views current items within their shopping cart.
3. The total price is shown, along with the user’s ability to change the quantity of each product in the cart.

### Variation #1 – Remove the item from the shopping cart

1.1 Start at Step 2.

1.2 User selects the item that is currently in the shopping cart to remove.

1.3 User selects the “X” icon next to an item in the cart.

1.4 Return to 2.

### Checkout products in the cart

1. Customer navigates to the cart window.

2. Customer selects the “Checkout” button in the cart window.

3. Customer enters personal information, shipping and billing address, and payment details.

4. Customer submits payment.

### Variation #1 – Payment failed

1.1 Start at Step 4

1.2 User tries to submit payment and payment fails due to incorrect payment information.

1.3 User is prompted a message stating “Payment failed. Check payment details and try again”.

1.4 Return to 2.

### Update seller inventory

1. Seller logs in to the seller portal of the application.

2. Seller selects the “Catalog” area of the seller window.

3. Seller selected “View” on the respective item they want to update.

4. Seller clicks on the “Edit” button on the product window.

5. Seller changes the quantity available and selects “Update”.

#### Variation #1 Delete product

1.1 Start at Step 3.

1.2 Seller navigates to the desired product to delete.

1.3 Seller selects “Edit”

1.4 Seller selects “Delete”

1.5 System prompts a confirmation message to confirm deletion. Seller selects “Delete”.

1.6 Product is deleted.

#### Add new product

1. Seller logins to the seller portal of the application.

2. Seller selects the “Catalog” area of the seller window.

3. Seller selects the “Add Product” button on the catalog window.

4. Seller inputs the appropriate details of the item including description, and price

5. Product is created and added to the seller’s profile and public to buyers.

#### Variation #1 Invalid Item Details

1.1 Start at Step 4

- 1.2 Seller inputs incompatible information or an existing item exists then an “Item already exists.” warning message is prompted.

- 1.3 Return to 3.

#### [Create Discount Code](#)

1. Seller selects the “Catalog” area of the seller window.
2. Seller selects the “View” button next to the desired product.
3. Seller selects “Discount code”
4. Seller inputs discount code along with % off an item.
5. Seller selects “Create”.

#### [Create an account as an Administrator](#)

1. Administrator logs into the secure admin panel of the application
2. Administrator selects the “Create new user” window.
3. Administrator inputs account details along with account type
4. Administrator selects “Create new account”.
5. The new user account is created and can be logged into once given the details.

#### [Variation #1 User already exists](#)

- 1.1 Start at Step 3.

- 1.2 Administrator enters a username that already exists within the database and selects “Create new account”.

1.3 System prompts the message “User already exists. Try Again”.

1.4 Return to 2.

#### Delete user account as Administrator

1. Administrator logs into the secure admin panel of the application
2. Administrator selects the “Users” tab.
3. Administrator selects the user they wish to delete.
4. Administrator selects the “Delete” button next to the user’s account info row.

#### Approve seller account as Administrator

1. Administrator navigates to the “Users” area of the admin panel.
2. Administrator selects “Pending Users”
3. A list of current pending seller accounts is listed.
4. Administrator selects the “Approve” button near desired seller account.

#### Decline seller account as Administrator

1. Administrator navigates to the “Users” area of the admin panel.
2. Administrator selects “Pending Users”
3. A list of current pending seller accounts is listed.
4. Administrator selects the “Decline” button near desired seller account.

#### [Edit a product's detail as an Administrator](#)

1. Administrator navigates to the “Users” area of the admin panel.
2. Administrator selects “Sellers” account type area
3. Administrator selects the “Edit Seller Items” button
4. Administrator edits details and then selects “Save”.

#### [Cancel order as an Administrator](#)

1. Administrator navigates to the “Orders” area of the admin panel.
2. Administrator finds the specific order to cancel.
3. Administrator selects “Cancel”
4. Confirmation window pops up to confirm cancellation.
5. Administrator selects “Cancel” again.
6. Message is prompted to the administrator that the order has been canceled and the money refunded.

#### [Delete review as an Administrator](#)

1. Administrator navigates to review the item to edit.
2. Administrator selects “Delete” under review to delete
3. System prompts a confirmation message to delete the review.
4. Administrator selects “Delete” and the review is deleted.

[View overall profit report](#)

1. Seller logins to the seller portal of the application.
2. Seller selects the “Reports” area of the seller window.
3. Seller is presented with analytics of all products combined that are associated with their profile such as total revenue, total profit, and total sales.

[View specific product’s profit report](#)

1. Seller logins to the seller portal of the application.
2. Seller selects the “Reports” area of the seller window.
3. Seller selects the “Specific Product” button in the window.
4. Seller selects a specific product that the seller sells.
5. Seller is presented with analytics of that specific product such as its total revenue, total profit, and sales from that product.

## 5. Detailed Use Cases for the Shoplet Application

### Login

1. User starts the Shoplet application by clicking the desktop icon.
2. User selects the “Username” input field and enters the username.
3. User then navigate to the “Password” field and inputs their password.
4. User clicks “Login” and depending on the account type goes to the respective portal.

### Variation #1 Invalid Login Credentials

- 1.1 Start at step 3.
- 1.2 The user inputs the incorrect login information for their account.
- 1.3 The system prompts a warning message box that states “Invalid Username or Password. Try again.”
- 1.4 Return to 2.

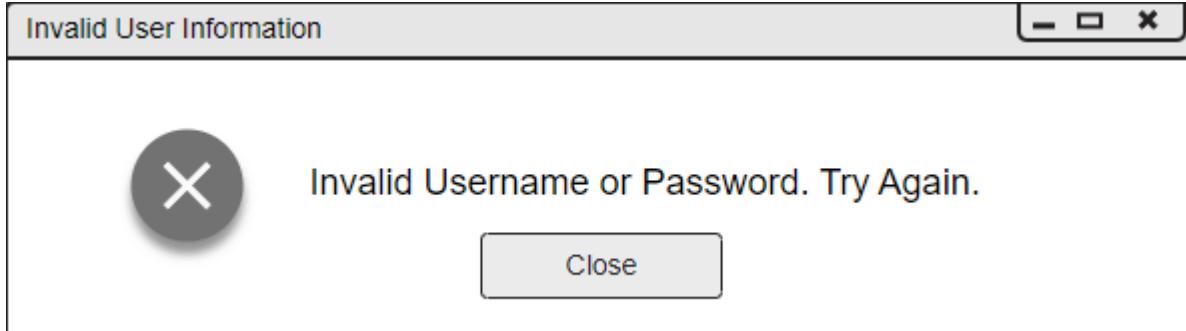
Shoplet



Username

Password

Login      Register



## Register Buyer Account

1. User starts the Shoplet application by clicking the desktop icon.
2. User clicks the “Register” button, and a new window pops up.
3. User fills out the preliminary fields for account type, username, password, and their email address.
4. User clicks “Continue” to proceed to the personal information window.
5. User clicks “Complete Registration” and is then returned to the Login window upon successful account creation.

### Variation #1 Existing User Credentials

- 1.5 Start at Step 3.
- 1.6 User inputs an email or username that already exists within the Shoplet application.
- 1.7 The system prompts a warning message box that states “User already exists or does not meet criteria. Try again.”
- 1.8 Return to 3.

## Register Seller Account

1. User starts the Shoplet application by clicking the desktop icon.
2. User clicks the “Register” button, and a new window pops up.
3. User fills out the preliminary fields for account type, username, password, and their email address.
4. User clicks “Continue” to proceed to the personal information window.
5. User clicks “Complete Registration” and is then returned to the Login window upon successful account creation.
6. User must then wait for a seller account to be approved by a administrator account to sell on Shoplet.

### Variation #1 Existing User Credentials

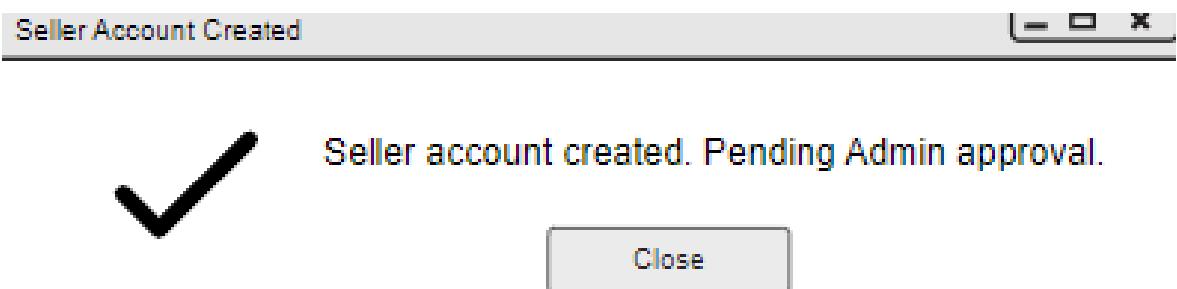
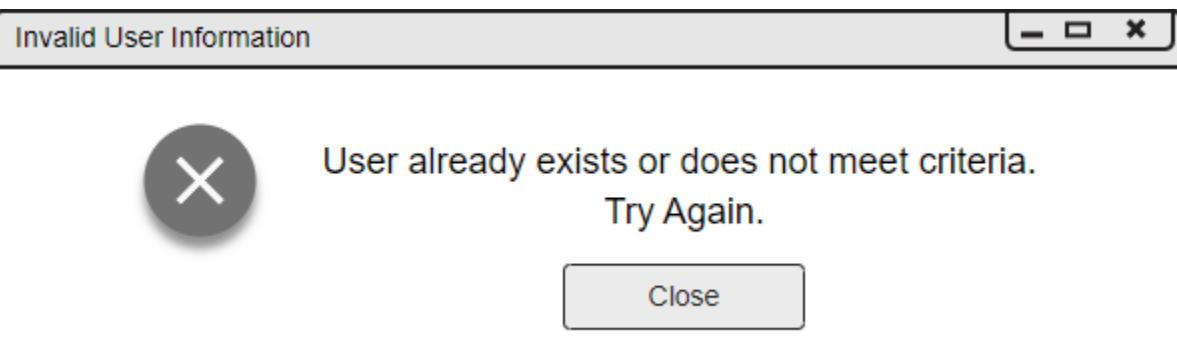
- 1.1 Start at Step 3.
- 1.2 User inputs an email or username that already exists within the Shoplet application.
- 1.3 The system prompts a warning message box that states “User already exists or does not meet criteria. Try again.”
- 1.4 Return to 3.

Shoplet - Register - Step 1 of 2

Account Type:	Buyer
Username:	Enter a username
Password:	Enter a password
Email:	Enter email address
<input type="button" value="Continue"/> <input type="button" value="Cancel"/>	

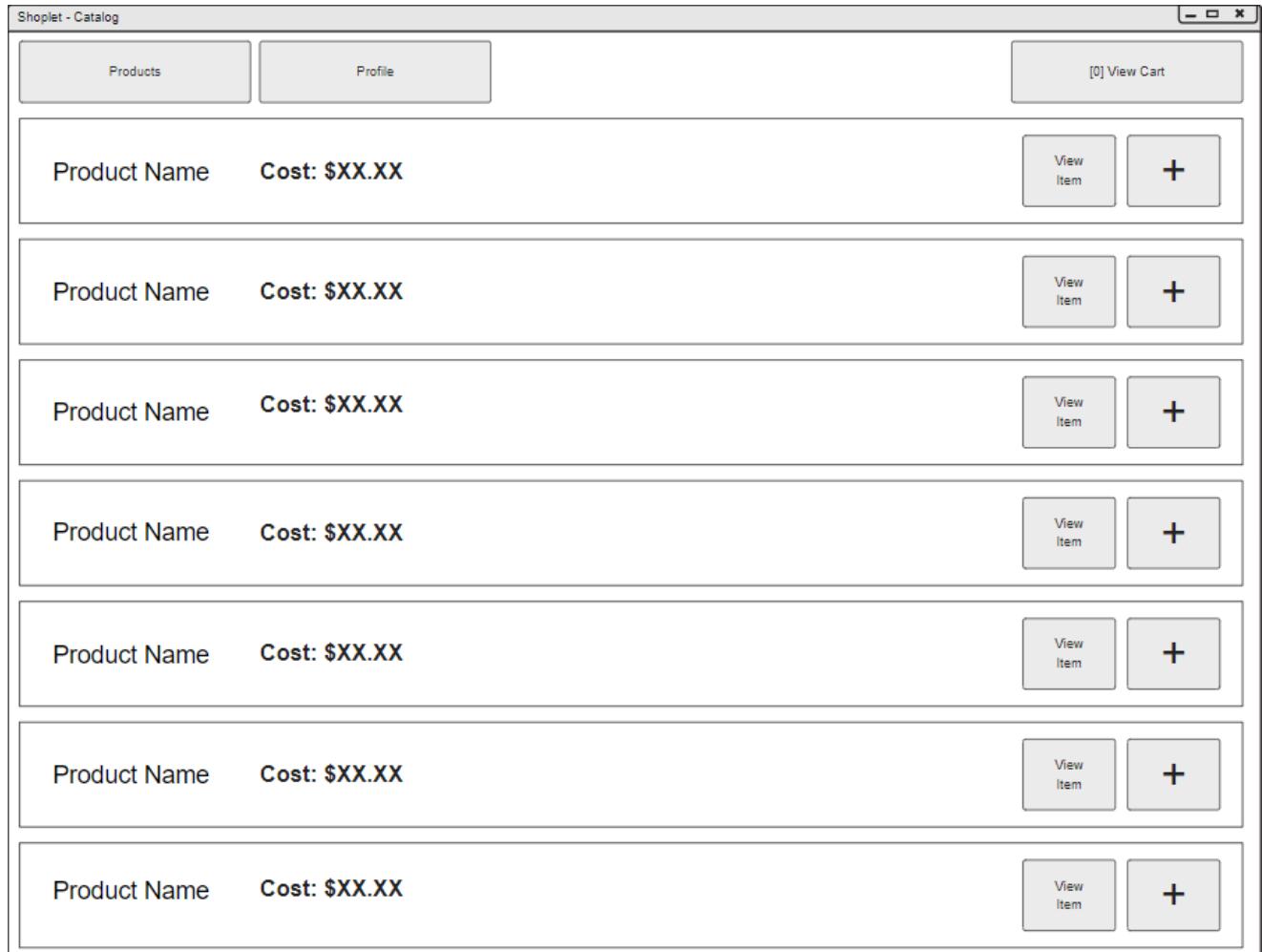
Shoplet - Register - Step 2 of 2

First Name:	First Name
Last Name:	Last Name
Street Address:	Street Address
City:	City
State:	FL - Florida
Zip Code:	Zipcode
Phone Number:	Phone
<input type="button" value="Complete Registration"/> <input type="button" value="Cancel"/>	



## [View Product Catalog](#)

1. Buyer logs in to the Shoplet application.
2. Buyer selects the “Products” tab to view the product catalog.
3. Buyer is presented with all products that are sold on the Shoplet application.



## Add Item to Shopping Cart

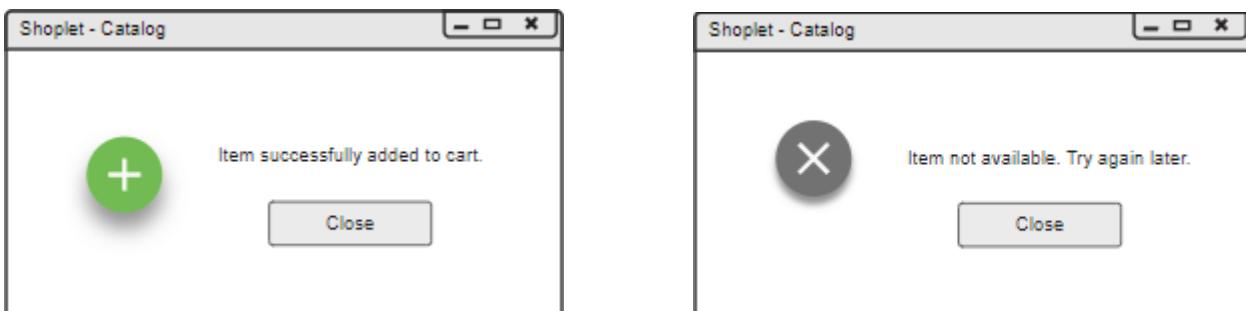
1. User is logged into the buyer portal of the shopping application.
2. Buyer selects the “Products” tab of the window application.
3. Buyer selects the desired product to add to the cart.
4. Buyer sees a “+” cart symbol box with the product image.
5. An “Item successfully added to cart.” box pop-ups to notify the user the item has been added to the cart.
6. The window refreshes and the cart [0] reflects the added item with quantity.

### Variation #1 Product is not in stock at the time of adding to the cart

1.4 Start at Step 4.

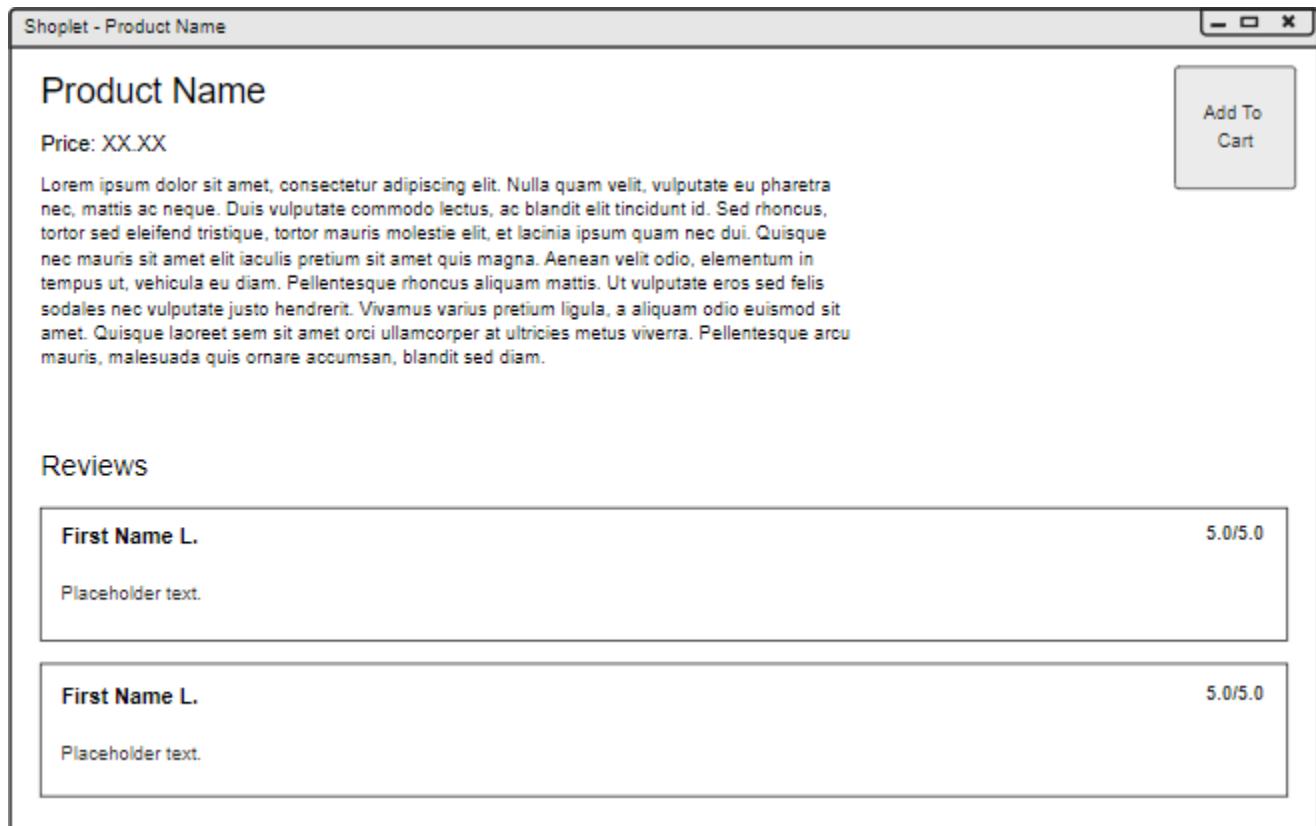
1.5 User tries to add an item that exceeds the stock of the item a message pops up saying: “Item not available. Try again later”.

1.6 Return to 2.



## View Product

1. User is logged into the buyer portal of the shopping application.
2. Buyer selects the “Products” tab of the window application.
3. Buyer selects the desired product to view and selects the “View Item” button.
4. A new window is presented with the product’s name, price, information, reviews, and a button to add it to the cart.



Shoplet - Product Name

## Product Name

Price: XX.XX

Lore ipsum dolor sit amet, consectetur adipiscing elit. Nulla quam velit, vulputate eu pharetra nec, mattis ac neque. Duis vulputate commodo lectus, ac blandit elit tincidunt id. Sed rhoncus, tortor sed eleifend tristique, tortor mauris molestie elit, et lacinia ipsum quam nec dui. Quisque nec mauris sit amet elit iaculis pretium sit amet quis magna. Aenean velit odio, elementum in tempus ut, vehicula eu diam. Pellentesque rhoncus aliquam mattis. Ut vulputate eros sed felis sodales nec vulputate justo hendrerit. Vivamus varius pretium ligula, a aliquam odio euismod sit amet. Quisque laoreet sem sit amet orci ullamcorper at ultricies metus viverra. Pellentesque arcu mauris, malesuada quis ornare accumsan, blandit sed diam.

Add To Cart

### Reviews

Leave a review

First Name L.	5.0/5.0
Placeholder text.	
First Name L.	5.0/5.0
Placeholder text.	

Shoplet - Product Name - Review

Review (1-5)

Review Text

## Review a Product

1. User is logged into the application and selected an item that has already been purchased.

2. User selects the “Leave a review” button that appears only on purchased items.
3. A new window pops up to enter their review from 1 to 5 and a text area to input their text review.
4. User selects the “Post” button and posts the review.
5. The window refreshes to reflect the newly added review.

#### [View items in the shopping cart](#)

1. User selects the cart button in the top-right of the window.
2. User is shown the current items within their shopping cart.
3. The total price is shown, along with the user’s ability to remove the item of each product in the cart.

#### [Variation #1 – Remove the item from the shopping cart](#)

1.5 Start at Step 2.

1.6 User selects the item that is currently in the shopping cart to remove.

1.7 User selects the “X” icon next to an item in the cart.

1.8 Return to 2.

Product Name	X	Price \$XX.XX Tax \$XX.XX
Product Name	X	
Product Name	X	
Product Name	X	Total Cost \$XX.XX
Product Name	X	Checkout

### Checkout products in the cart

1. Customer navigates to the cart window.
2. Customer selects the “Checkout” button in the cart window.
3. Customer enters personal information, shipping and billing address, and payment details.
4. Customer submits payment.

### Variation #1 – Payment failed

#### 1.5 Start at Step 4

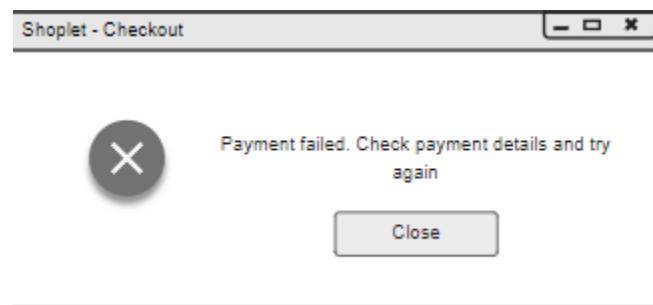
- 1.6 User tries to submit payment and payment fails due to incorrect payment information.

1.7 User is prompted a message stating “Payment failed. Check payment details and try again”.

1.8 Return to 2.

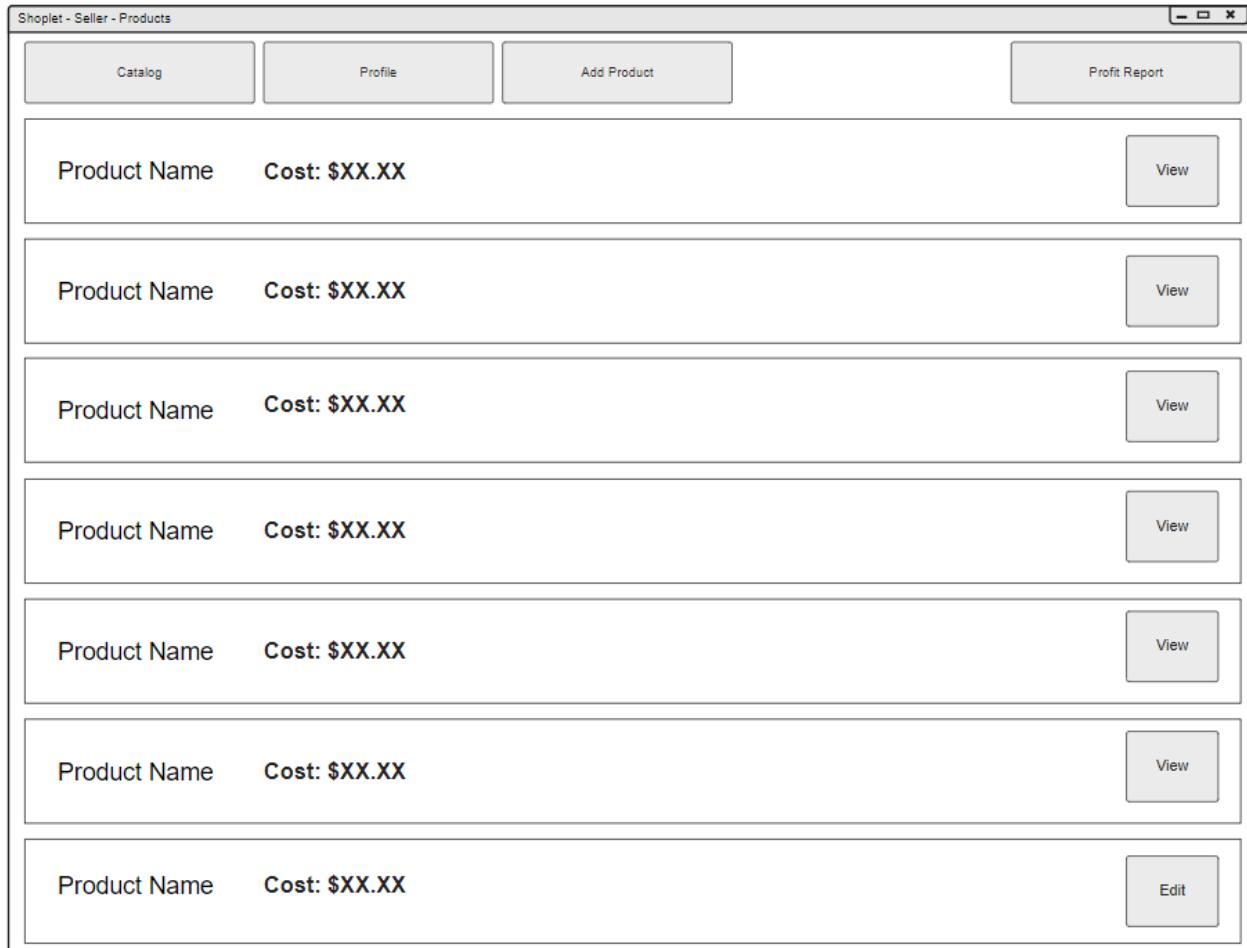
Shoplet - Checkout

First Name:	First Name
Last Name:	Last Name
Street Address	Street Address
City	City
State	FL - Florida
Zip Code	Zipcode
Phone Number	Phone
Credit Card #	Credit Card Info
CVV	CVV
Expiration Date	10/24/2022
Total: \$XX.XX	
<input type="button" value="Cancel"/> <input type="button" value="Confirm Order"/>	



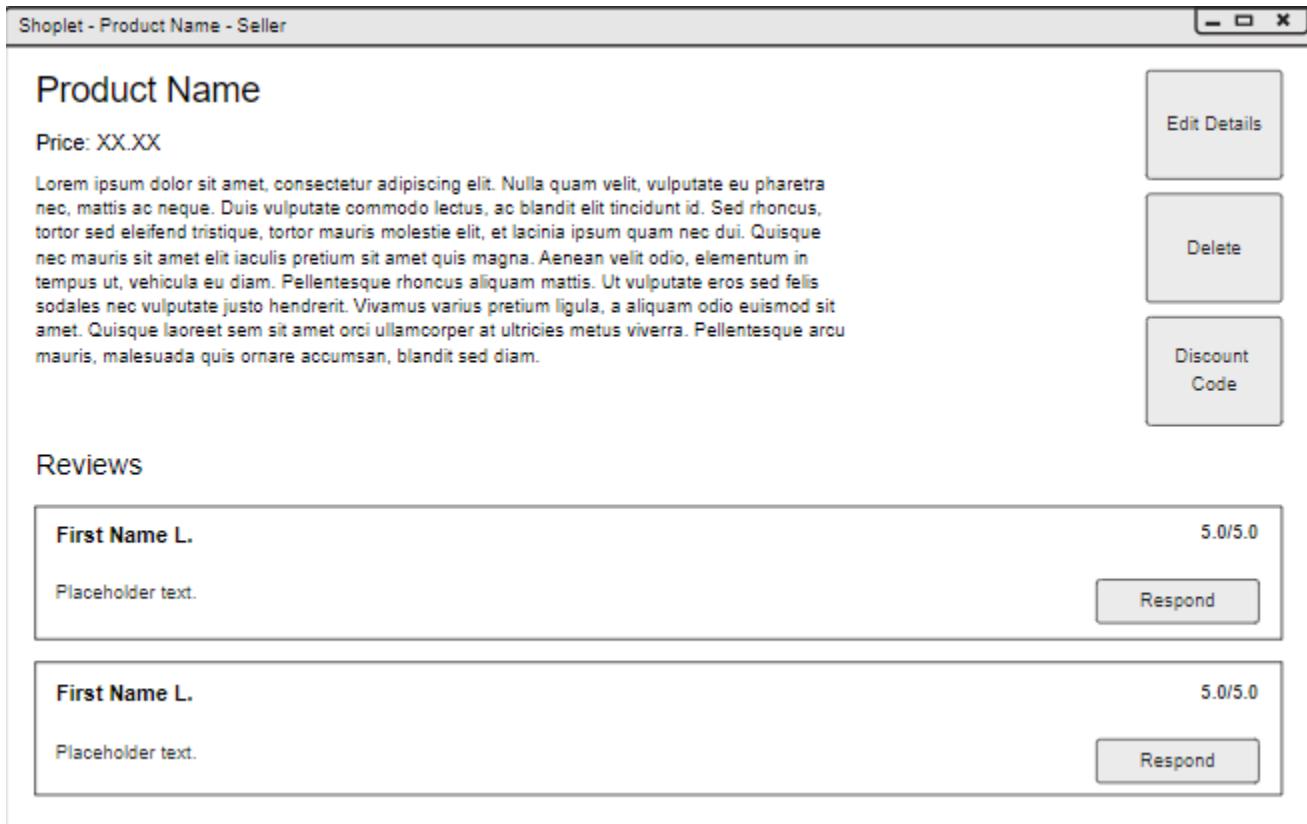
## View Seller Product Catalog

1. The Seller logs into their Seller portal with their username and password.
2. The Seller selects “Catalog” button at the top of the window.
3. The Seller is presented with all their available products that they have created.



## Modify Product

1. The Seller logs into the Seller portal of the application.
2. The Seller selects “Catalog” button at the top of the window.
3. The Seller selects “View” on the product that is to be edited.
4. The Seller selects the “Edit Details” button in the top-right corner.
5. A new window pops up to edit the product’s details.
6. The seller selects “Save” and the product details are updated.



The screenshot shows a window titled "Shoplet - Product Name - Seller". Inside, there are four input fields arranged vertically. The first field is labeled "Product name" with the placeholder "Product Name". The second field is labeled "Price" with the placeholder "Price". The third field is labeled "Quantity" with the value "1". The fourth field is labeled "Description" with the placeholder "Type here". At the bottom right of the form is a "Update" button.

### Add New Product

1. The Seller logs into the Seller portal of the application.
2. The Seller selects “Add Product” on the product that is to be edited and a new window pops up.
3. The user fills out the “Product Name”, “Price”, “Quantity”, and “Description” fields and selects “Create” button.
4. The new product is created and updated to the Shoplet inventory.

### Variation #1 Invalid Item Details

1.4 Start at Step 3

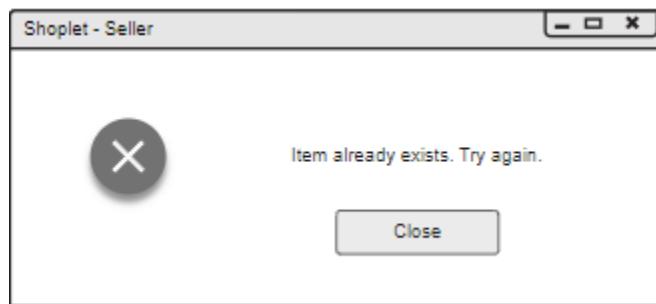
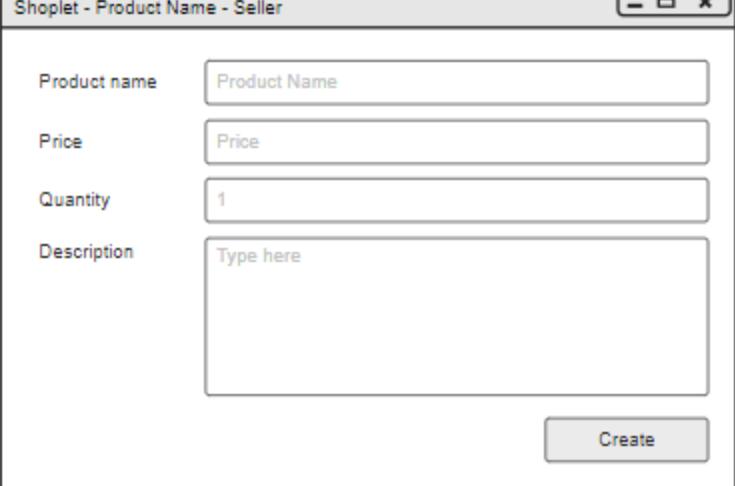
1.5 Seller inputs incompatible information or an existing item exists then an “Item already exists. Try again.” warning message is prompted.

1.6 Return to 2.

Shoplet - Product Name - Seller

Product name	Product Name
Price	Price
Quantity	1
Description	Type here

**Create**



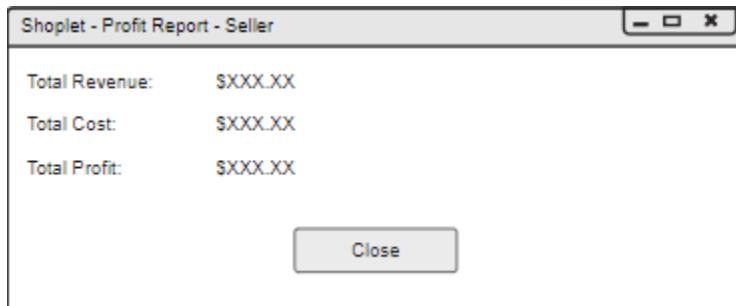
### Create Discount Code for Product

1. The Seller logs into the Seller portal of the application.
2. The Seller selects “Catalog” button at the top of the window.
3. The Seller selects “View” on the product that is to be edited.
4. The Seller selects the “Discount Code” button in the top-right corner.
5. A new window pops up to add a discount code to the product.
6. The seller selects “Create” and the product has a new discount code added.



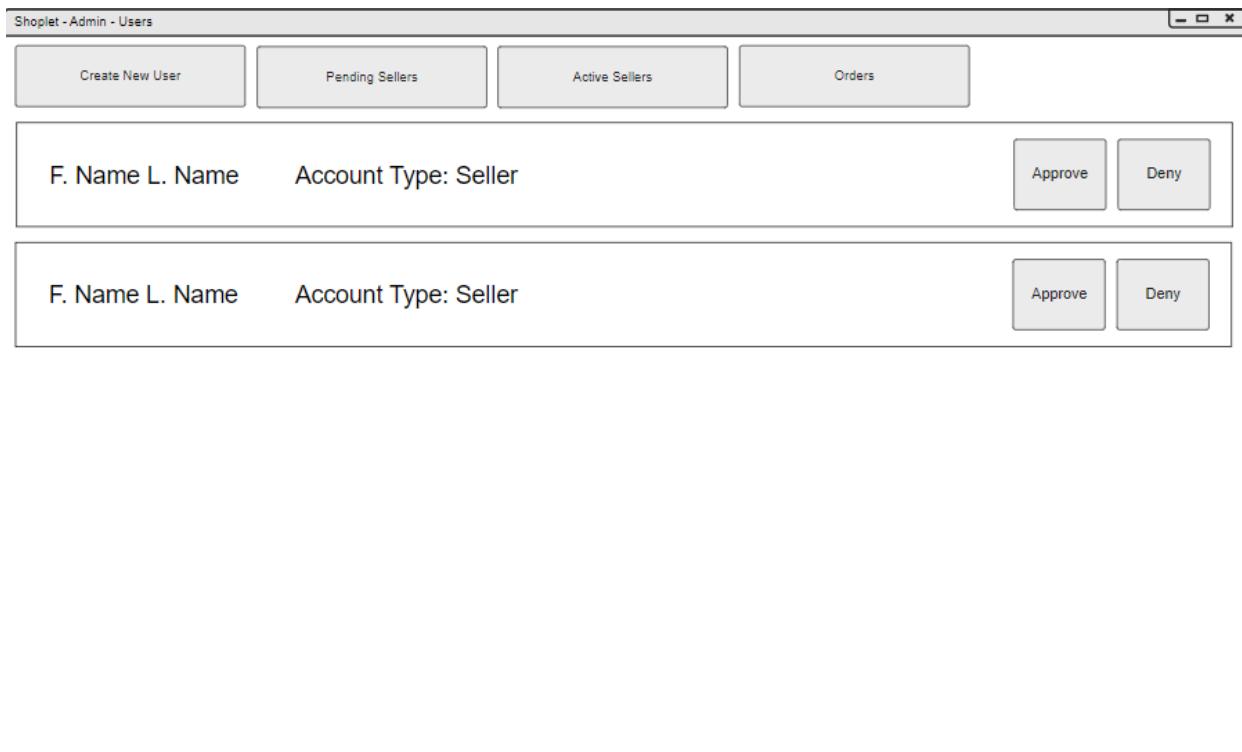
### [View Profit Report](#)

1. The Seller logs into the Seller portal of the application.
2. The Seller selects “Profit Report” button at the top of the window.
3. A new window appears that displays the profit details for the Seller account.



## [View Admin Panel](#)

1. The User logs into their administrator account with the special username and password.
2. The system verifies the administrator account's credentials.
3. The system opens a new window that is the admin panel that default view is the pending user's view.



## Admin Create New User

1. The admin logs into the admin portal of the application.
2. The admin selects “Create New User” button at the top of the window.
3. The admin specifies the account type that is being created.
4. The admin enters the user’s “Username”, “Password” and “Email” address for the specified account.
5. The admin selects the “Create” button and a new user is created with the information.

### Variation #1 User already exists

1.5 Start at Step 4.

1.6 Administrator enters a username or email that already exists within the database and selects “Create”.

1.7 System prompts the message “User already exists. Try Again”.

1.8 Return to 2.

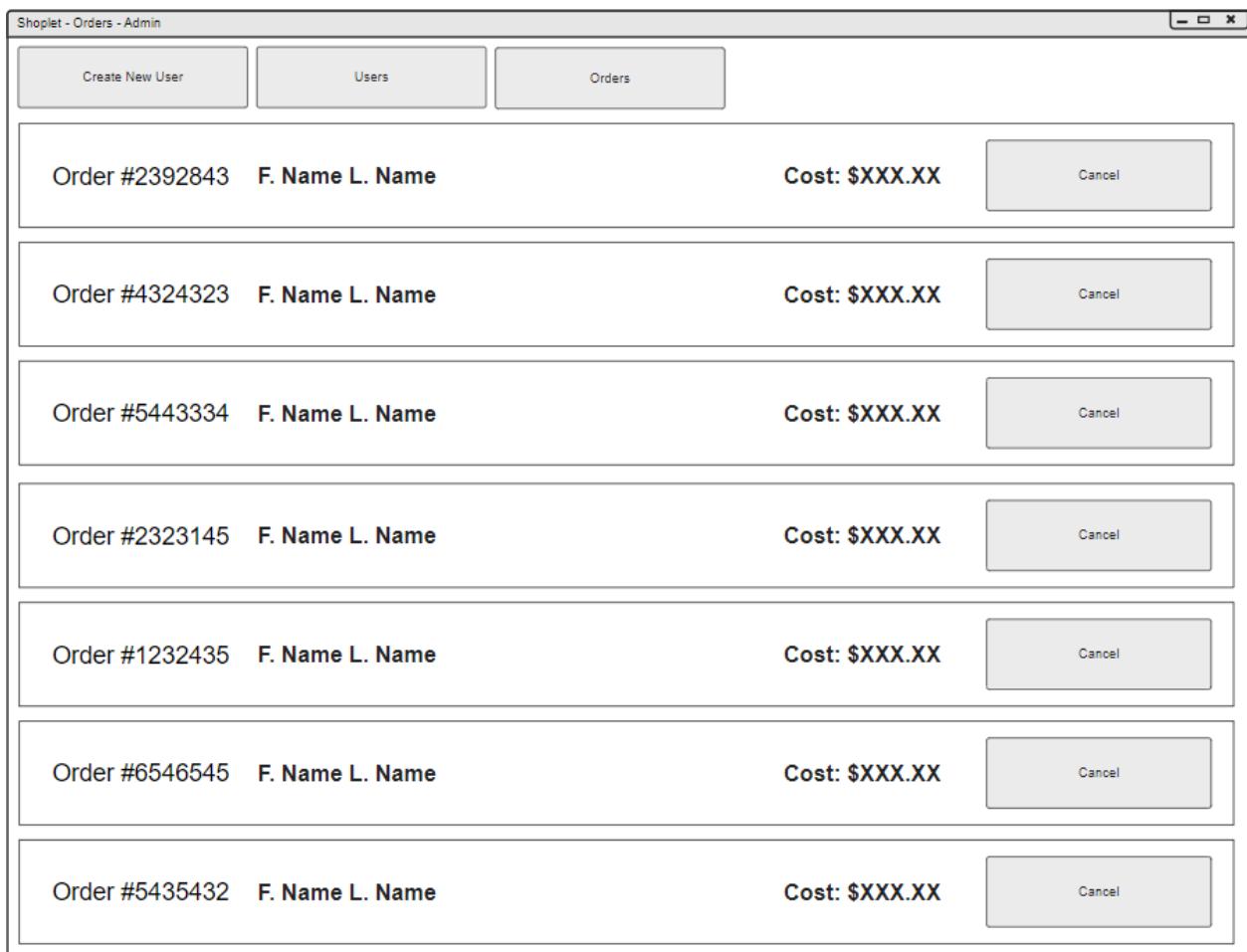
Shoplet - Admin - New User

Account Type:	Buyer
Username:	Enter a username
Password:	Enter a password
Email:	Enter email address
<input type="button" value="Create"/> <input type="button" value="Cancel"/>	



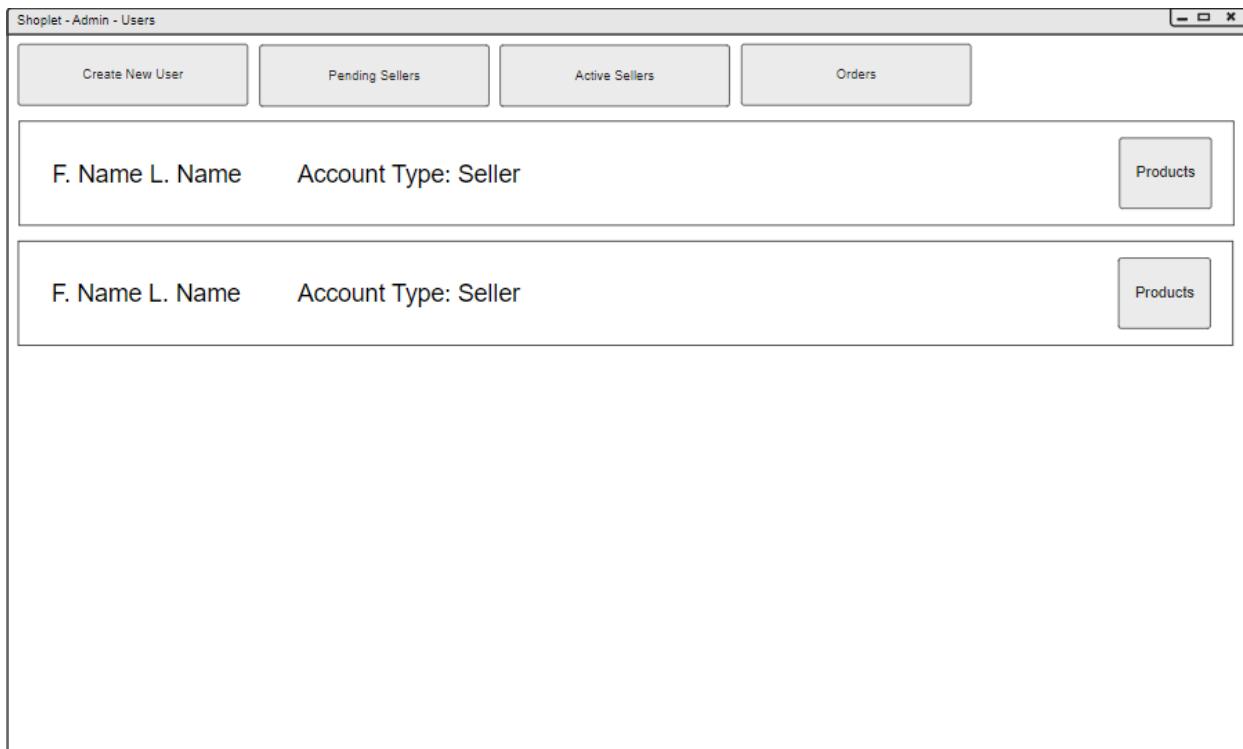
## View Admin Panel Orders

1. The admin logs into the admin portal of the application.
2. The admin selects “Orders” button at the top of the window.
3. The admin is presented with all the orders that are currently active.



## View Sellers through Admin Panel

1. The admin logs into the admin portal of the application.
2. The admin selects “Active Sellers” button at the top of the window.
3. The admin is presented with all active sellers and the option to view their products.



## Delete Review by Admin

1. Administrator navigates to “Users” to find the seller for the review to delete.
2. Administrator selects the “Products” button on the seller.
3. Administrator selects “View” under the product for the review to delete
4. System prompts a confirmation message to delete the review.
5. Administrator selects “Delete” and the review is deleted.

Shoplet - Admin - Seller Products		
Product Name	Cost: \$XX.XX	<a href="#">View</a>
Product Name	Cost: \$XX.XX	<a href="#">View</a>
Product Name	Cost: \$XX.XX	<a href="#">View</a>
Product Name	Cost: \$XX.XX	<a href="#">View</a>

Shoplet - Product Name - Admin

## Product Name

Price: XX.XX

ADMIN VIEW

*Placeholder text.*

*Placeholder text.*

**First Name L.** 5.0/5.0

**First Name L.** 5.0/5.0

Placeholder text.

Placeholder text.

Delete

Delete

Review Content	Rating	Action
Placeholder text.	5.0/5.0	Delete
Placeholder text.	5.0/5.0	Delete

## Edit Profile

1. The respective user selects “Profile” button at the top of their portal
2. The user is prompted with a new window with their account information.
3. The user selects “Update Account” once any new details are changed.

The screenshot shows a window titled "Shoplet - Profile". The window contains a form with the following fields:

Label	Input Field
Username:	Enter a username
Password:	Enter a password
Email:	Enter email address
First Name:	First Name
Last Name:	Last Name
Street Address	Street Address
City	City
State	FL - Florida
Zip Code	Zipcode
Phone Number	Phone
Update Account	

## 6. CRC Cards

<b>ShopletSystemManager</b>	
<ul style="list-style-type: none"><li>• Manages the creation of Buyer accounts.</li><li>• Manages the creation of Seller accounts.</li><li>• Connects to the database of all users that exist on the system.</li><li>• Manages the login process and validity for each account type (Buyer, Seller, Administrator).</li><li>• Notifies ItemDatabase to start a connection to the database of products once the user is validated.</li></ul>	<ul style="list-style-type: none"><li>• Buyer</li><li>• Product</li><li>• Seller</li><li>• Administrator</li><li>• Cart</li><li>• LoginUI</li><li>• RegisterUI</li></ul>

<b>Cart</b>	
<ul style="list-style-type: none"><li>• Display the Total Price of all items currently in the cart.</li><li>• Calculates the Total Price of all items in the cart.</li><li>• Presents information for each item that is in the cart.</li><li>• Displays a checkout button to complete purchase.</li></ul>	<ul style="list-style-type: none"><li>• ShopletSystemManager</li><li>• Buyer</li><li>• Product</li><li>• ViewCartUI</li></ul>

Interface	<b>User</b>
<ul style="list-style-type: none"><li>• Contains the user's personal information.</li><li>• Interface class for a Buyer, Seller, and Administrator</li></ul>	<ul style="list-style-type: none"><li>• ShopletSystemManager</li><li>• Buyer</li><li>• Seller</li><li>• Adminstrator</li></ul>

<b>Buyer</b>	
<ul style="list-style-type: none"> <li>• Adds Item to BuyerCart.</li> <li>• Removes Item from BuyerCart.</li> <li>• Creates an ItemReview for a specific product.</li> <li>• Interacts with the ProductCatalog to show available items.</li> <li>• Allow checkout of Cart</li> </ul>	<ul style="list-style-type: none"> <li>• ShopletSystemManager</li> <li>• Product</li> <li>• BuyerProfileUI</li> <li>• BuyerCheckoutUI</li> <li>• BuyerPartsCatalogUI</li> <li>• Cart</li> <li>• ItemReview</li> </ul>

<b>Seller</b>	
<ul style="list-style-type: none"> <li>• Manages the respective seller's inventory and item management which includes creating, editing, and deleting products.</li> <li>• Allows Sellers to comment on reviews of each product that they have listed.</li> <li>• Allows Seller to review the revenue/profit report</li> </ul>	<ul style="list-style-type: none"> <li>• ShopletSystemManager</li> <li>• SellerProfitReportUI</li> <li>• ProductDatabase</li> </ul>

<b>Administrator</b>	
<ul style="list-style-type: none"> <li>• Manage buyers' accounts and can edit and delete their respective account.</li> <li>• Manage the Seller's account and the items that they are selling.</li> <li>• Manage reviews on any product that is listed.</li> </ul>	<ul style="list-style-type: none"> <li>• ShopletSystemManager</li> <li>• Buyer</li> <li>• Seller</li> <li>• Product</li> <li>• ProductDatabase</li> <li>• ItemReview</li> <li>• AdminPanelUI</li> </ul>

<b>Product</b>	
<ul style="list-style-type: none"> <li>Contains information about the product such as name, description, and price.</li> </ul>	<ul style="list-style-type: none"> <li>ShopletSystemManager</li> <li>ProductCatalog</li> <li>ProductDatabase</li> <li>BuyerPartsCatalogUI</li> </ul>

<b>ItemReview</b>	
<ul style="list-style-type: none"> <li>Allows the creation of a review for a specific item that the user has purchased.</li> <li>Contains review information such as the unique product ID that was reviewed, a user that reviewed it, and their review.</li> </ul>	<ul style="list-style-type: none"> <li>ShopletSystemManager</li> <li>Buyer</li> <li>Seller</li> <li>Product</li> </ul>

<b>ProductCatalog</b>	
<ul style="list-style-type: none"> <li>Displays the products that are a part of the ProductDatabase for the Buyer to view.</li> <li>Allows products to be added to the cart for Buyer checkout.</li> </ul>	<ul style="list-style-type: none"> <li>ShopletSystemManager</li> <li>Product</li> <li>ProductDatabase</li> </ul>

### **SellerPortalUI**

- |   |  |
|---|--|
| <ul style="list-style-type: none"><li>• Displays the landing page for the Seller user once they log in.</li><li>• Displays buttons to view profit report and their items.</li></ul> | <ul style="list-style-type: none"><li>• ShopletSystemManager</li><li>• Seller</li><li>• SellerPortalListener</li></ul> |
|---|--|

### **SellerPortalListener**

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• Listener for the Seller Portal interactions with the other areas.</li></ul> | <ul style="list-style-type: none"><li>• SellerPortalUI</li><li>• ShopletSystemManager</li></ul> |
|---|---|

### **SellerProductUI**

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• Displays seller UI in order to add a new product.</li><li>• Displays fields such as item name, item description, and item price.</li><li>• Contains a field to enter the available quantity of each item.</li></ul> | <ul style="list-style-type: none"><li>• ModifyFieldListener</li><li>• ManageProductListener</li><li>• DeleteProductListener</li></ul> |
|---|---|

### **SellerProfitReportUI**

- |  |   |
|--|---|
| <ul style="list-style-type: none"><li>• Displays the current revenue of all the revenue that the seller has made.</li><li>• Shows the breakdown of each item and all their profit stats.</li></ul> | <ul style="list-style-type: none"><li>• ShopletSystemManager</li><li>• Seller</li><li>• ProductDatabase</li></ul> |
|--|---|

### **DeleteProductListener**

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• Handles the seller interacting with their product and deleting the item from the database.</li></ul> | <ul style="list-style-type: none"><li>• ProductDatabase</li><li>• ShopletSystemManager</li><li>• Product</li></ul> |
|--|--|

### **ModifyFieldListener**

- |   |  |
|---|--|
| <ul style="list-style-type: none"><li>Handles the seller interacting with their product and modifying the item and what the database currently has with the new values.</li></ul> | <ul style="list-style-type: none"><li>ProductDatabase</li><li>ShopletSystemManager</li><li>Product</li></ul> |
|---|--|

### **BuyerProductsCatalogUI**

- |   |  |
|---|--|
| <ul style="list-style-type: none"><li>Displays the window that displays all the available products for the Buyer to purchase.</li><li>Displays product information such as the name, and price.</li></ul> | <ul style="list-style-type: none"><li>AddToCartListener</li><li>ViewCartListener</li></ul> |
|---|--|

### **AddToCartListener**

- |   |  |
|---|--|
| <ul style="list-style-type: none"><li>Handles the action of adding an item to the cart.</li></ul> | <ul style="list-style-type: none"><li>Product</li><li>Cart</li></ul> |
|---|--|

### **ViewCartListener**

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>Handles the action of opening the application window for the cart and the user's current added products.</li></ul> | <ul style="list-style-type: none"><li>Product</li><li>Cart</li></ul> |
|--|--|

### **BuyerCheckoutUI**

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>Displays the checkout window for the Buyer to purchase the products within their cart.</li><li>Displays fields for the user to input their billing information to checkout with.</li></ul> | <ul style="list-style-type: none"><li>ModifyFieldListener</li><li>Buyer</li><li>Product</li><li>ShopletSystemManager</li></ul> |
|--|--|

### **ViewCartUI**

- Displays a cart window that shows the order total and items in the cart.
- Displays a "Checkout" button to go to the window to enter all billing information.

- BuyerCheckoutUI
- CheckoutListener
- Buyer

### **ManageProductListener**

- Handles interactivity for the Seller to create or modify a product.

- SellerProductUI
- SellerPortalUI

### **LoginUI**

- Provides the user interface for the login form and user interface when the application is initially opened. Contains buttons and user input fields for inputting user information and logging in, or registering.

- ShopletSystemManager
- LoginListener

### **LoginListener**

- Controls user interactions on the LoginPortalUI.

- ShopletSystemManager
- LoginUI

### **RegisterListener**

- Listener for the Register UI to display and control interaction for a user if they do not have an account.

- ShopletSystemManager
- LoginUI
- RegisterUI

### **RegisterUI**

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>Contains the UI for registering a new account, such as username, password, and account type.</li></ul> | <ul style="list-style-type: none"><li>ShopletSystemManager</li><li>User</li><li>Buyer</li><li>Seller</li></ul> |
|--|--|

### **AdminPanelUI**

- |   |  |
|---|--|
| <ul style="list-style-type: none"><li>Contains and displays the window for the Administrator panel for special Admin users.</li></ul> | <ul style="list-style-type: none"><li>ShopletSystemManager</li><li>Administrator</li></ul> |
|---|--|

### **BuyerProfileUI**

- |   |  |
|---|--|
| <ul style="list-style-type: none"><li>Displays the User's personal information.</li><li>Displays button to allow users to edit their respective account's personal information.</li></ul> | <ul style="list-style-type: none"><li>ShopletSystemManager</li><li>ModifyFieldListener</li></ul> |
|---|--|

### **ProductUI**

- |   |  |
|---|--|
| <ul style="list-style-type: none"><li>Displays the product in a separate window with all relevant information such as product name, description, and price.</li><li>Displays all reviews that were left for the product.</li><li>Allows the Buyer to add it to their shopping cart.</li></ul> | <ul style="list-style-type: none"><li>ShopletSystemManager</li><li>ProductDatabase</li><li>Product</li></ul> |
|---|--|

### **ConfirmOrderListener**

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• Displays the checkout screen where the Buyer will input their billing information.</li><li>• Buyer confirms the order and display the OrderConfirmedUI</li></ul> | <ul style="list-style-type: none"><li>• Product</li><li>• Buyer</li><li>• BuyerCheckoutUI</li><li>• OrderConfirmedUI</li></ul> |
|--|--|

### **OrderConfirmedUI**

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• Displays window that confirms that the Buyer has successfully completed an order.</li></ul> | <ul style="list-style-type: none"><li>• Product</li><li>• Buyer</li><li>• ProductInventory</li><li>• Cart</li></ul> |
|---|---|

### **SaveProfileListener**

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• User interaction for saving profile information when profile fields are edited.</li></ul> | <ul style="list-style-type: none"><li>• Buyer</li><li>• Seller</li><li>• ShopletSystemManager</li></ul> |
|---|---|

### **AdminManageUsersUI**

- |  |   |
|--|---|
| <ul style="list-style-type: none"><li>• Displays all users in the ShopletSystemManager user database.</li><li>• Allows a user to be edited, created, or deleted.</li></ul> | <ul style="list-style-type: none"><li>• Seller</li><li>• Buyer</li><li>• ShopletSystemManager</li><li>• ProductDatabase</li></ul> |
|--|---|

### DeleteUserListener

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• Admin interactivity for deleting a user.</li></ul> | <ul style="list-style-type: none"><li>• ShopletSystemManager</li></ul> |
|--|--|

### CreateUserListener

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• Admin interactivity for creating a user.</li></ul> | <ul style="list-style-type: none"><li>• ShopletSystemManager</li></ul> |
|--|--|

### AdminCreateUserUI

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• Display window for an admin to create a Buyer account with valid credentials if a user does not already exist with the inputted information.</li><li>• Display window for an admin to create a Seller account with valid credentials if a user does not already exist with the inputted information.</li></ul> | <ul style="list-style-type: none"><li>• ShopletSystemManager</li></ul> |
|--|--|

### AdminManageSellerProductUI

- |  |   |
|--|---|
| <ul style="list-style-type: none"><li>• Displays window to manage all products across sellers.</li><li>• Allows the admin to delete, edit, and modify a product.</li><li>• Allows the admin to manage a review to delete it.</li></ul> | <ul style="list-style-type: none"><li>• ShopletSystemManager</li><li>• Seller</li><li>• Product</li><li>• ProductDatabase</li></ul> |
|--|---|

### EditProductListener

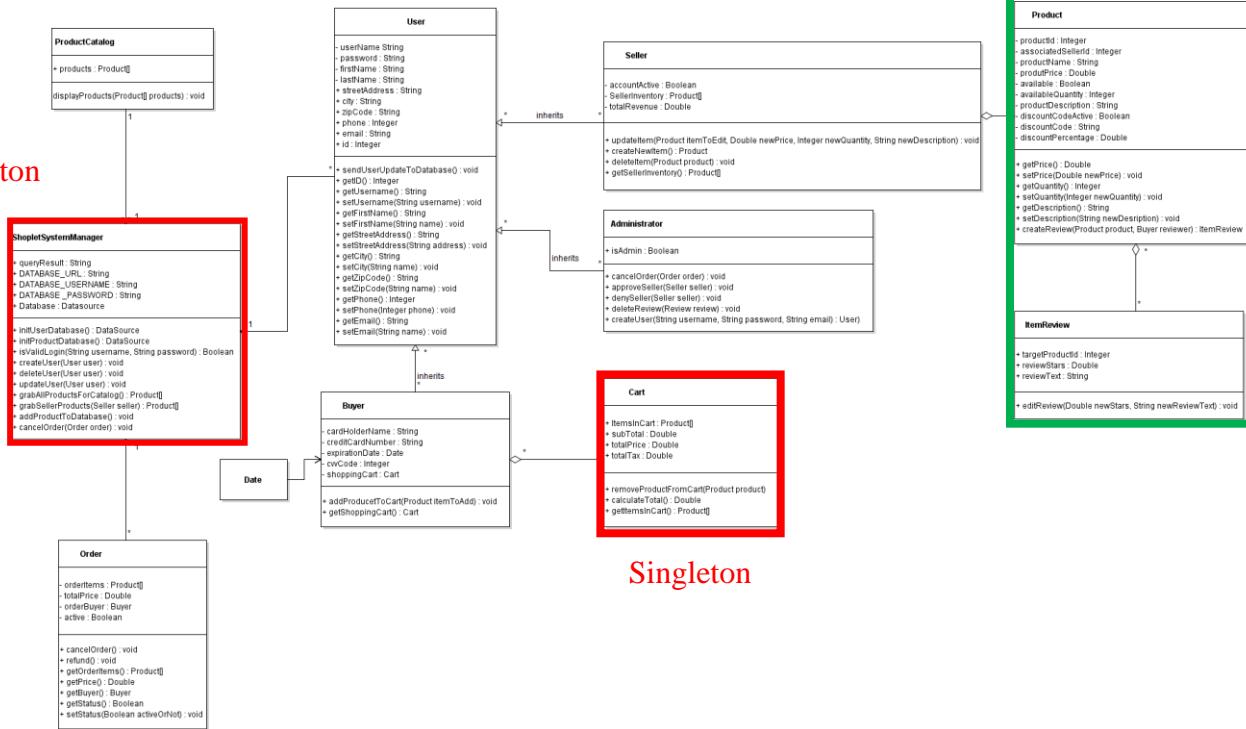
- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• Provides interactivity for editing a product.</li></ul> | <ul style="list-style-type: none"><li>• ModifyFieldListener</li><li>• SellerProductUI</li></ul> |
|---|---|

Order	
<ul style="list-style-type: none"> <li>• Keeps track of order information.</li> <li>• Contains a unique order id, the buyer, the products, and the price paid.</li> </ul>	<ul style="list-style-type: none"> <li>• ShopletSystemManager</li> <li>• ProductDatabase</li> <li>• Product</li> <li>• Buyer</li> <li>• Seller</li> </ul>
ProductListener	
<ul style="list-style-type: none"> <li>• Handles interactivity on a product's window interface.</li> </ul>	<ul style="list-style-type: none"> <li>• ShopletSystemManager</li> <li>• Product</li> <li>• Buyer</li> <li>• ItemReview</li> </ul>

## 7. UML Class Diagrams

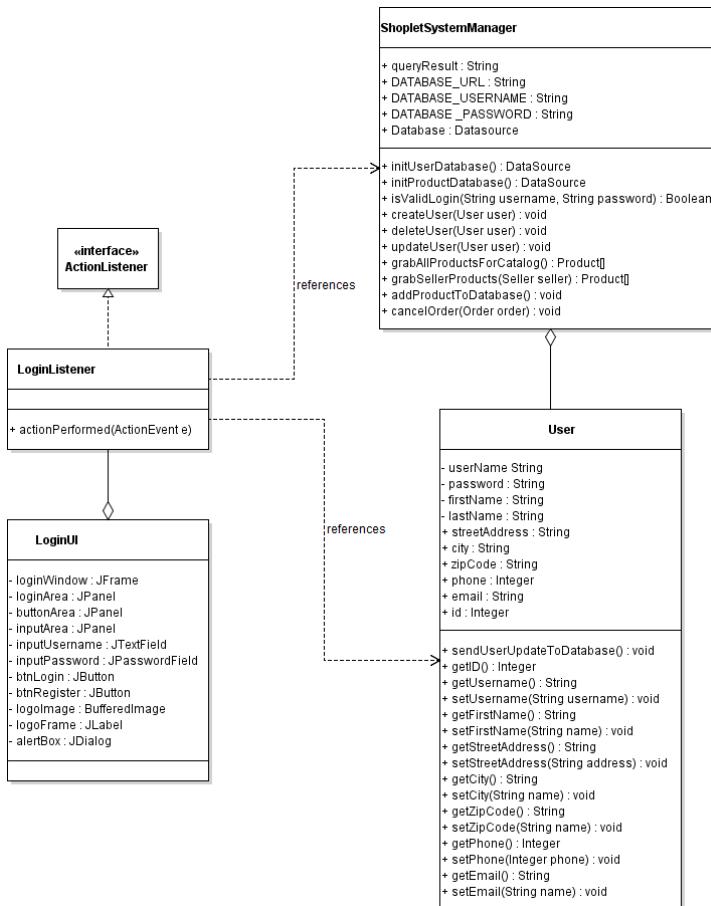
Shoplet General Class Diagram

Singleton

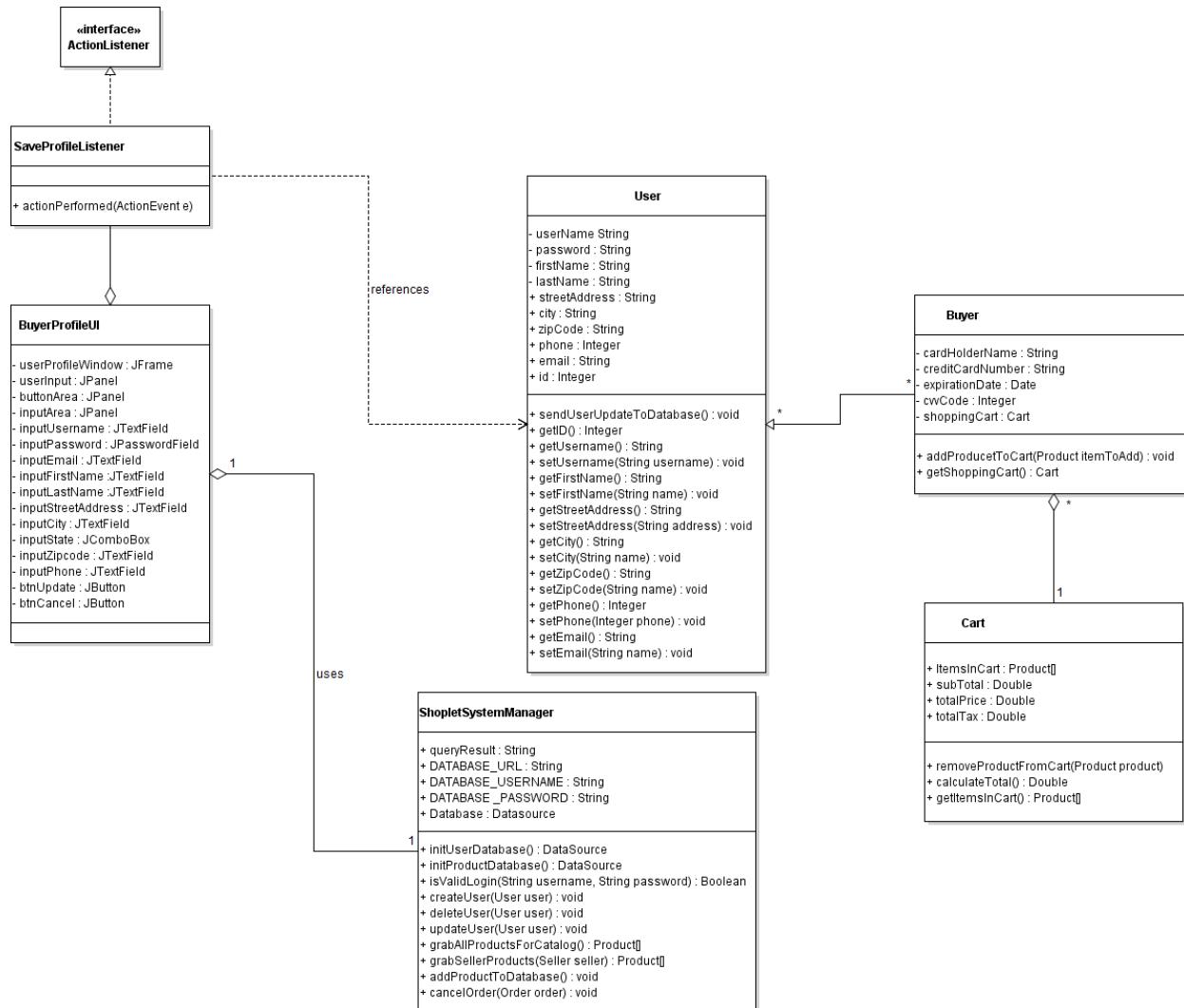


Composite

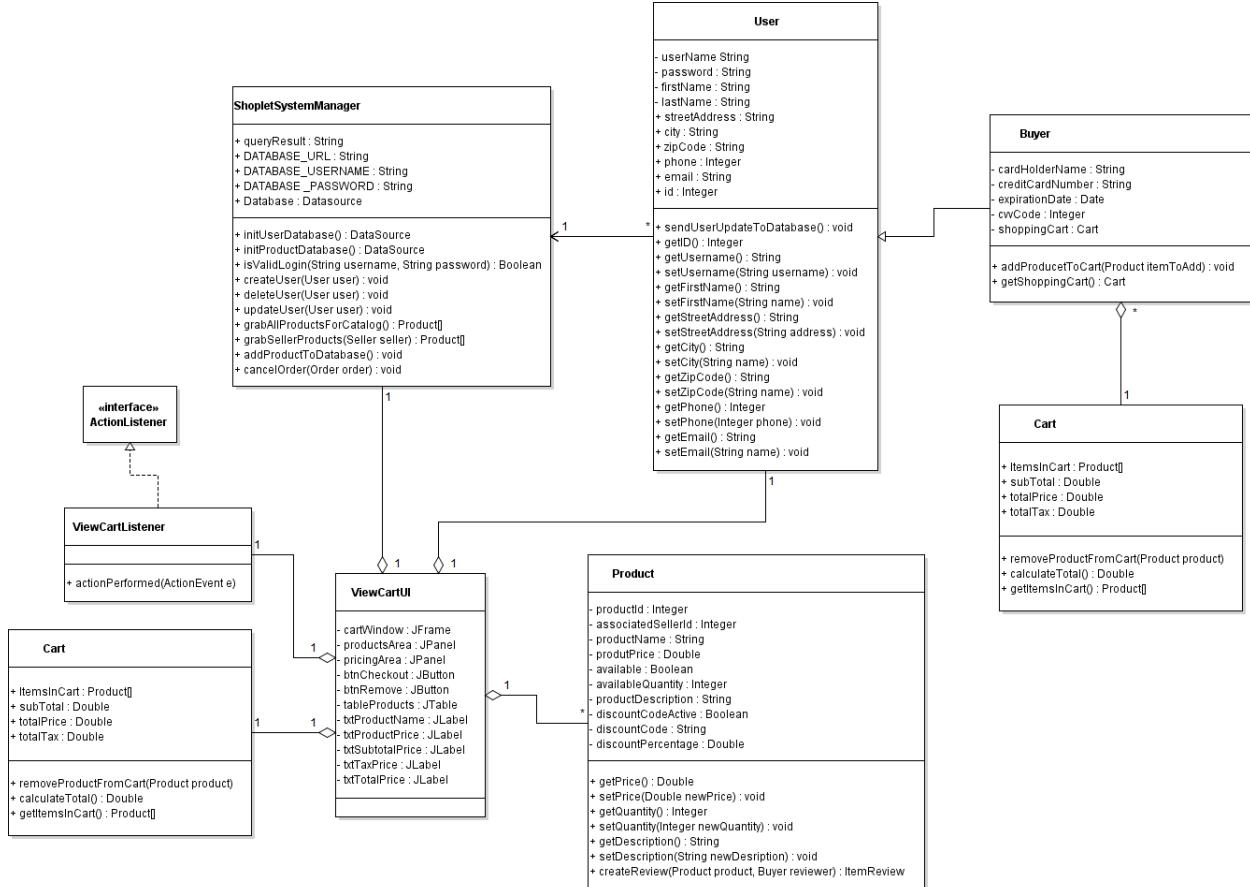
## Login Diagram



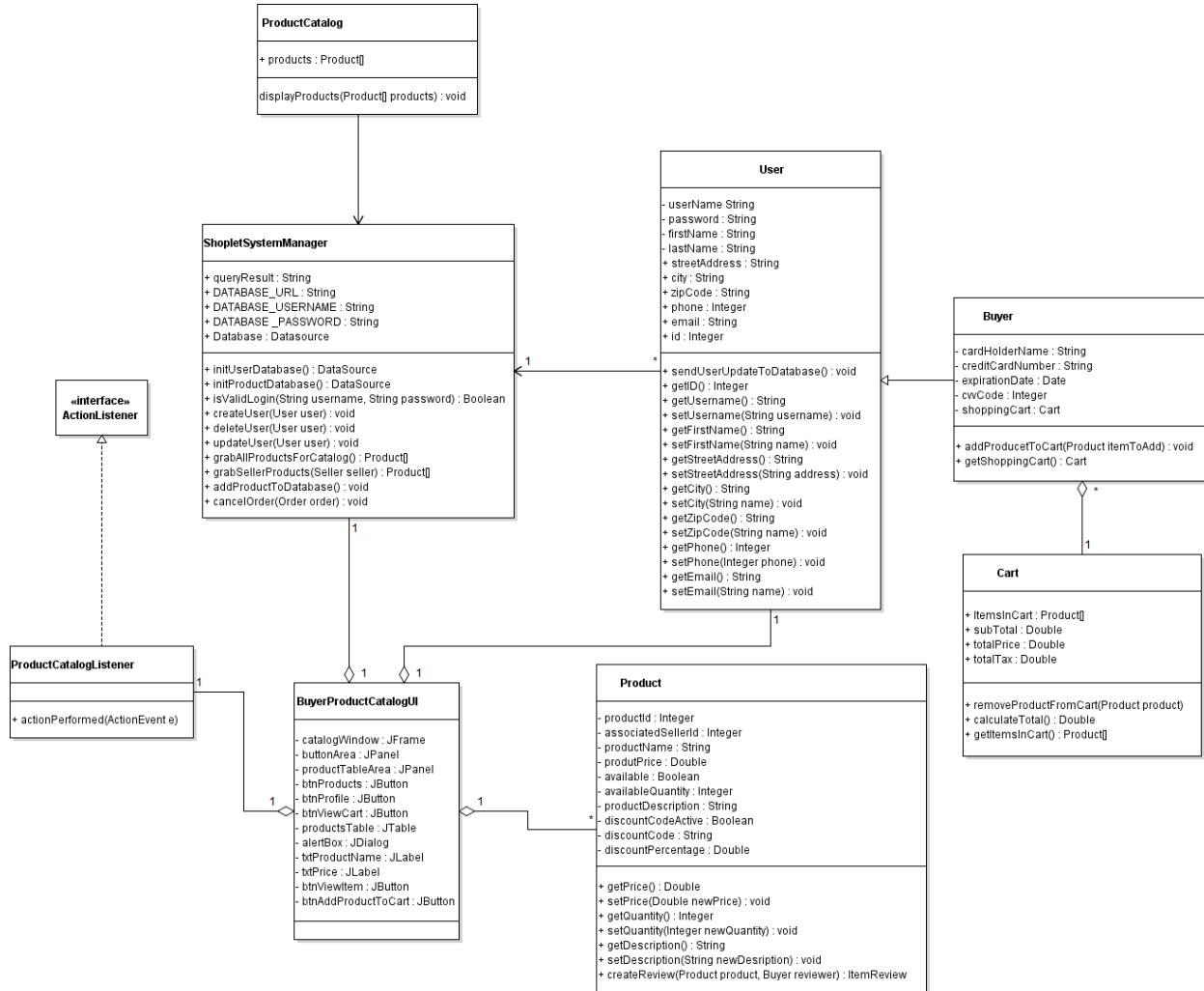
## View and Edit Buyer Profile



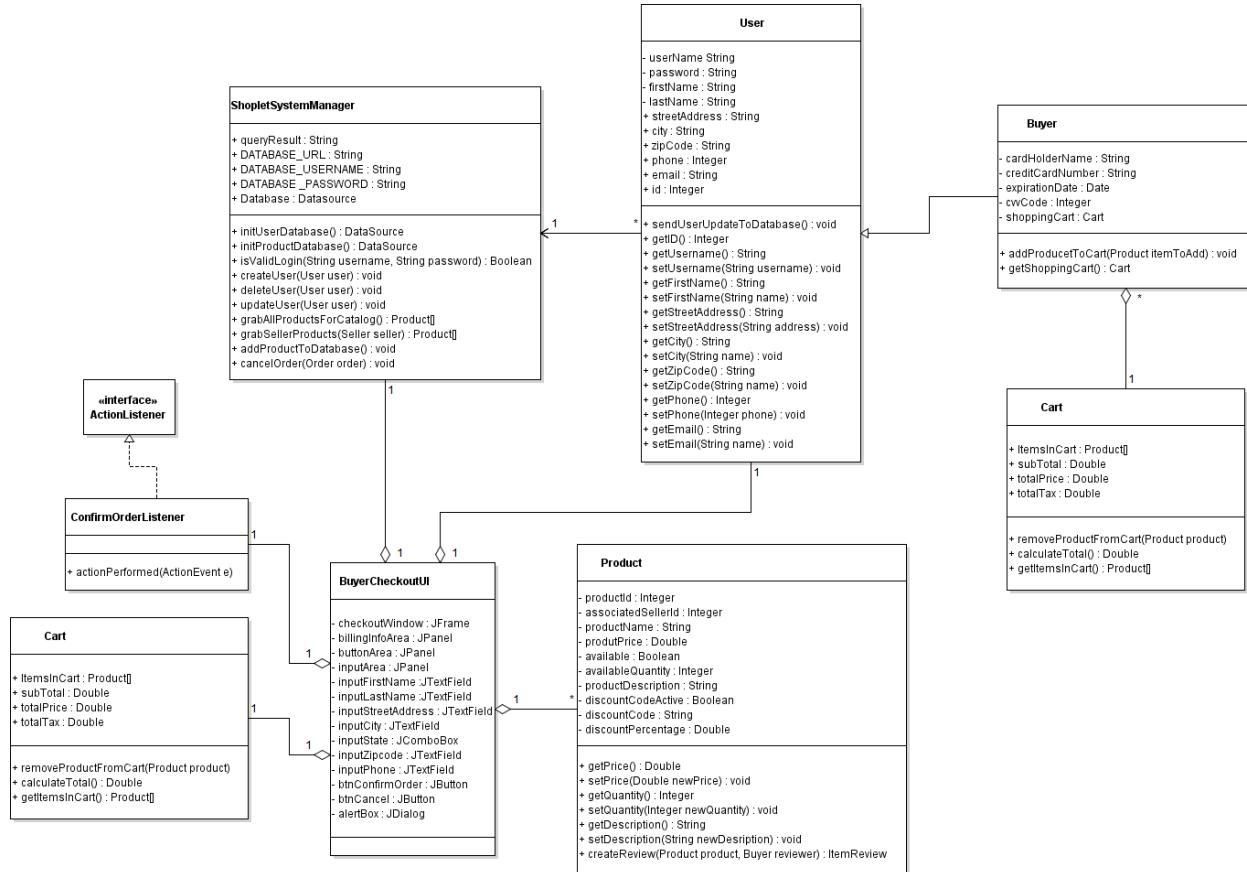
## View Cart Diagram



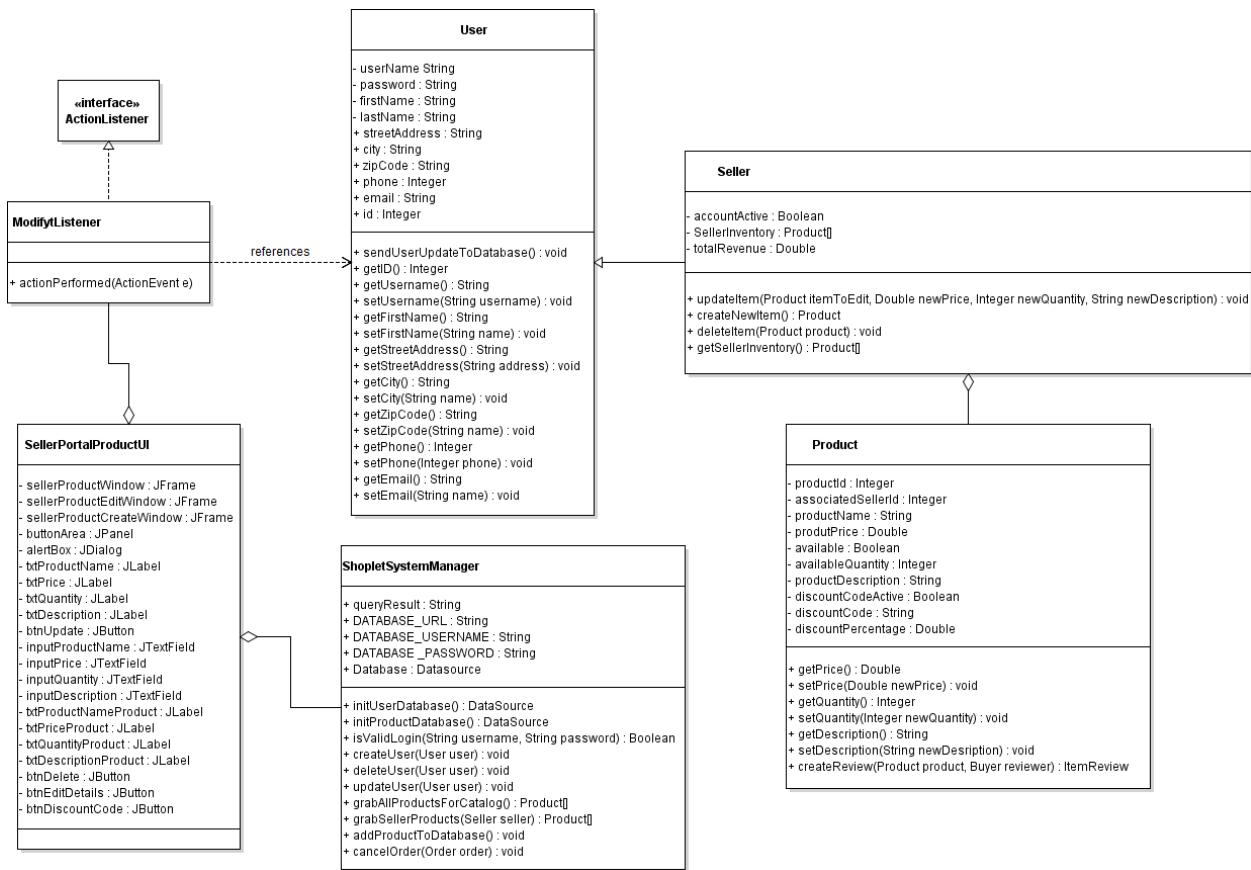
## Buyer Catalog Diagram



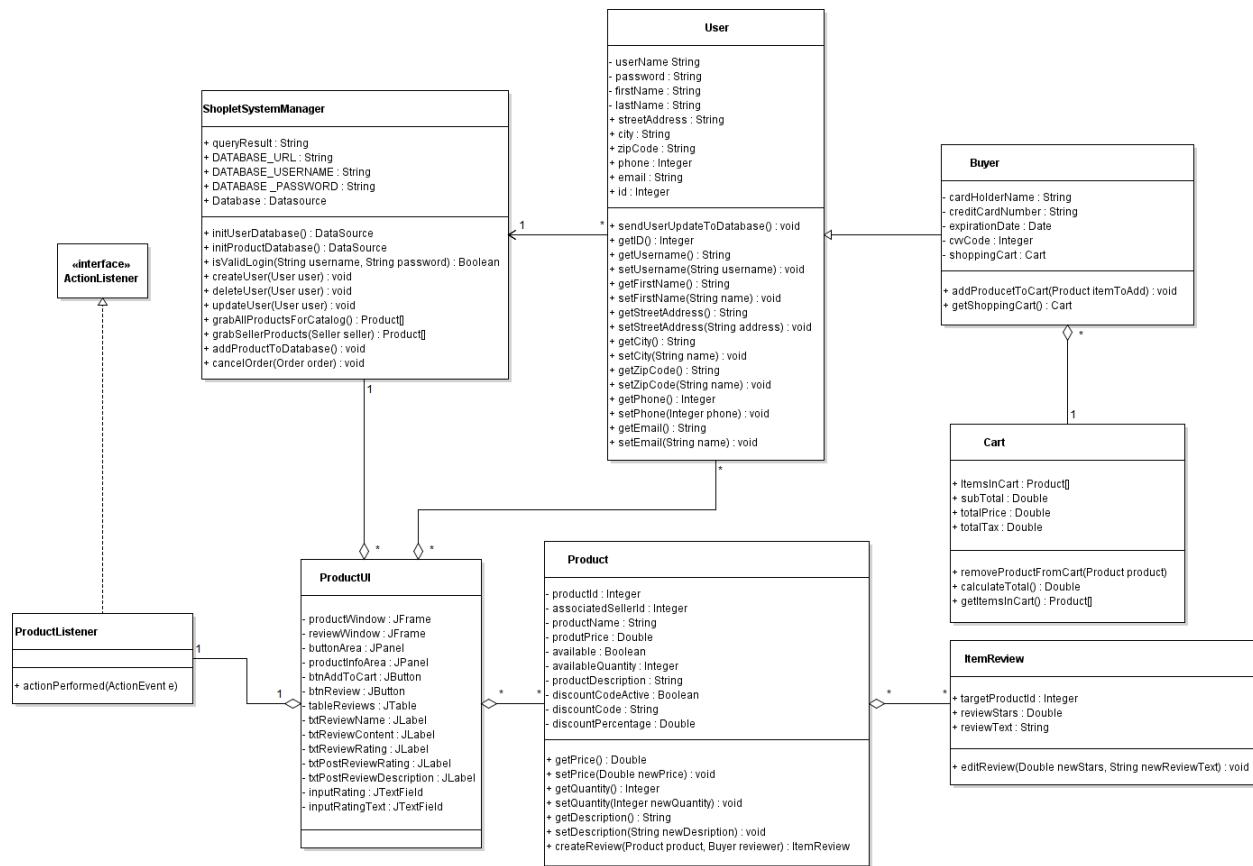
## Buyer Checkout Diagram



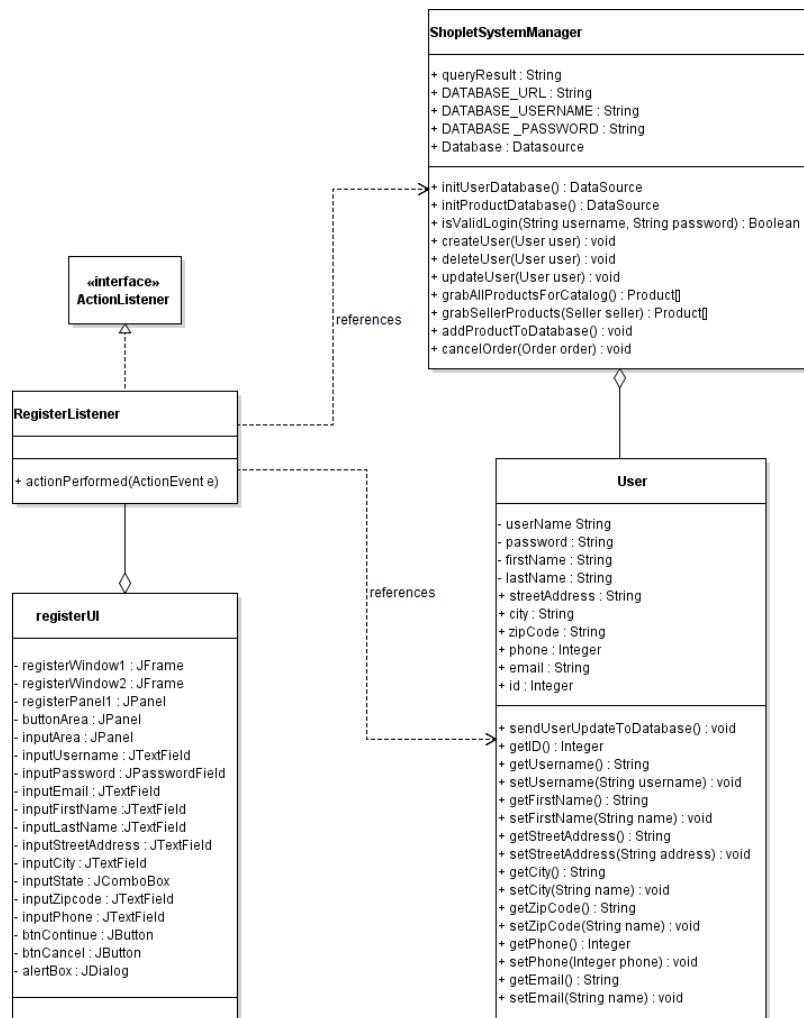
## Create and Edit Products Diagram



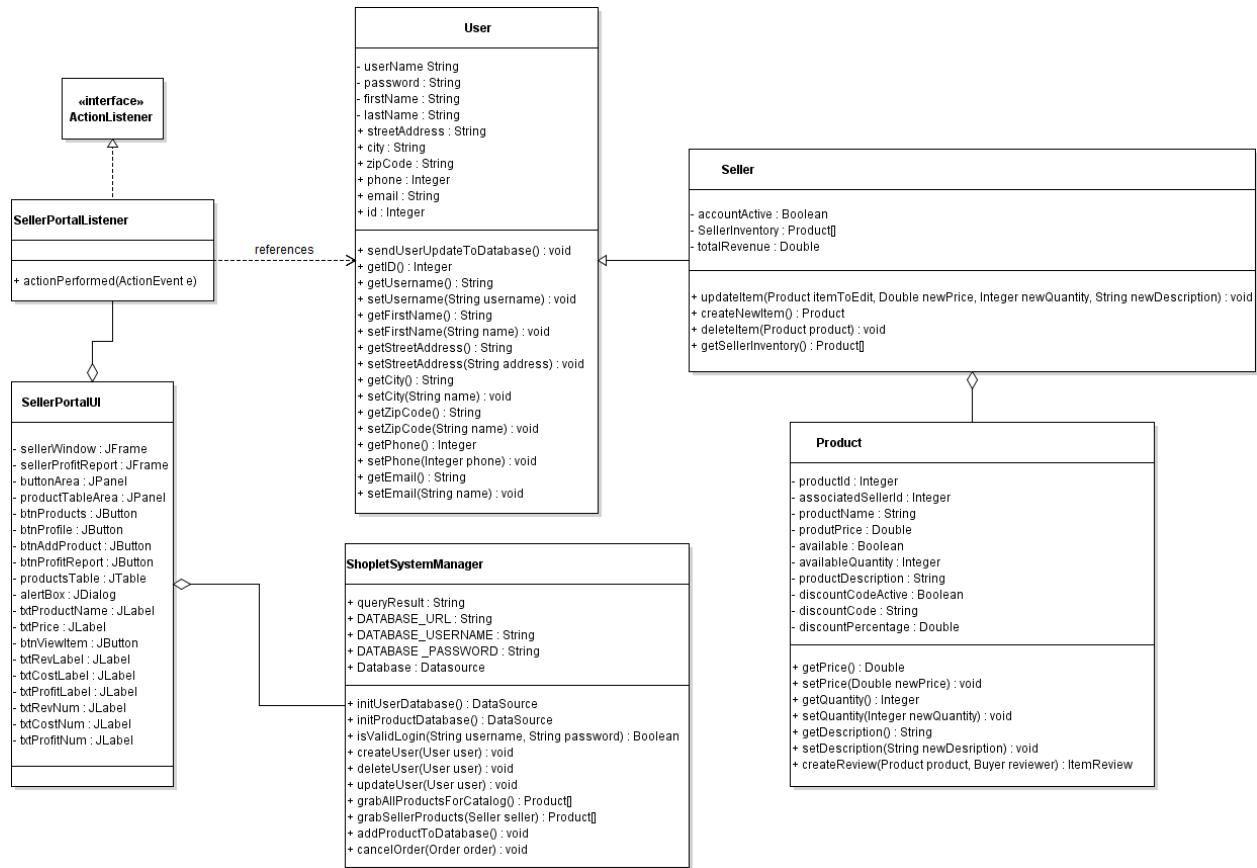
## Product Diagram



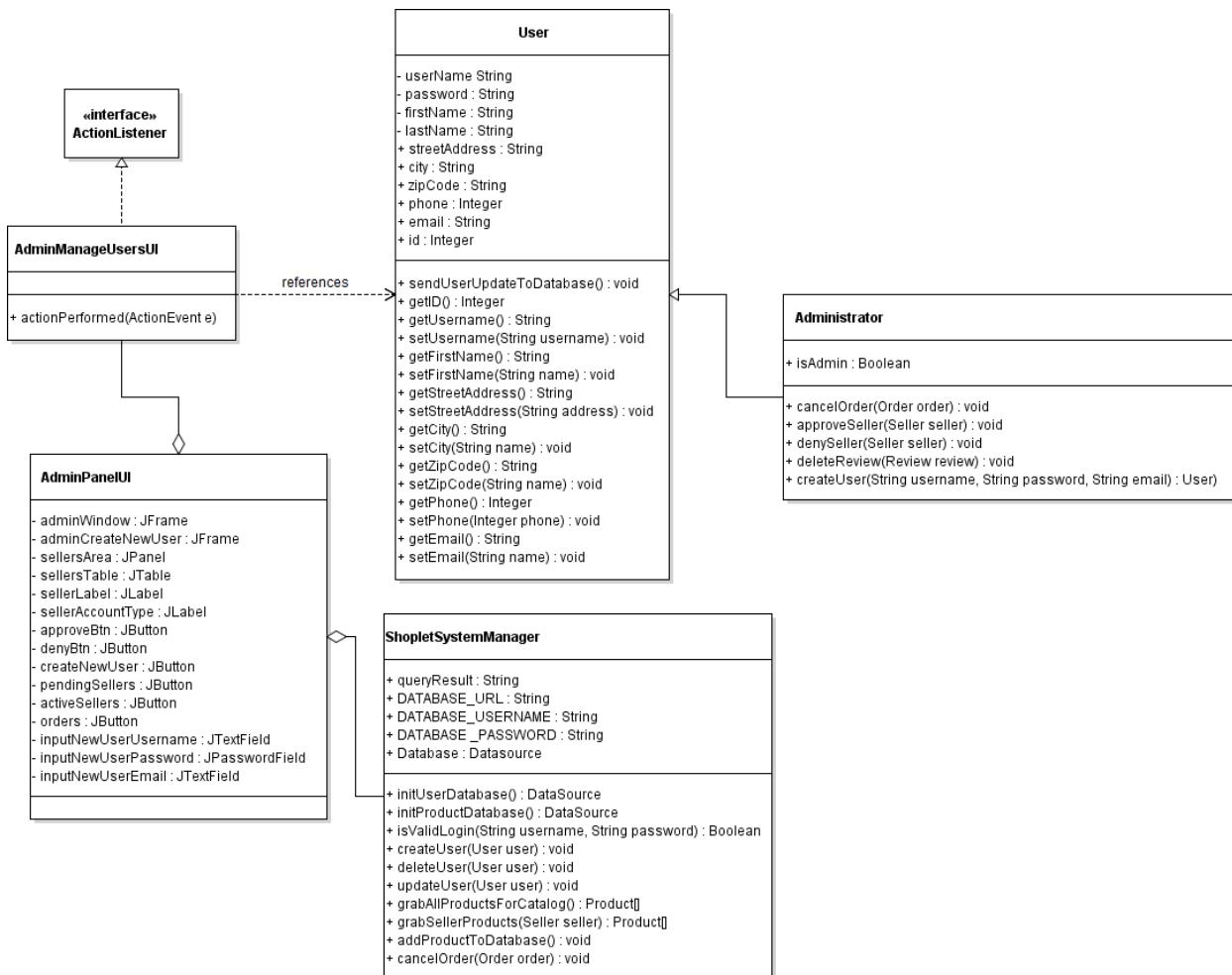
## Register Diagram



## Seller Portal Diagram

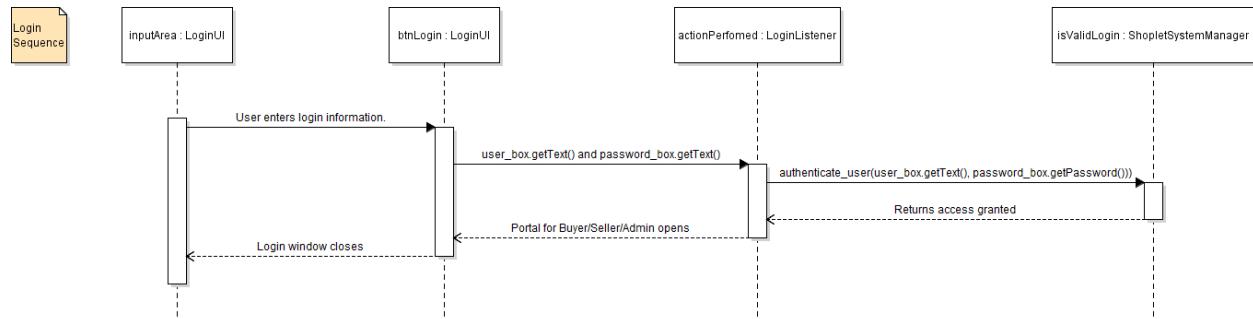


## Admin Panel Diagram

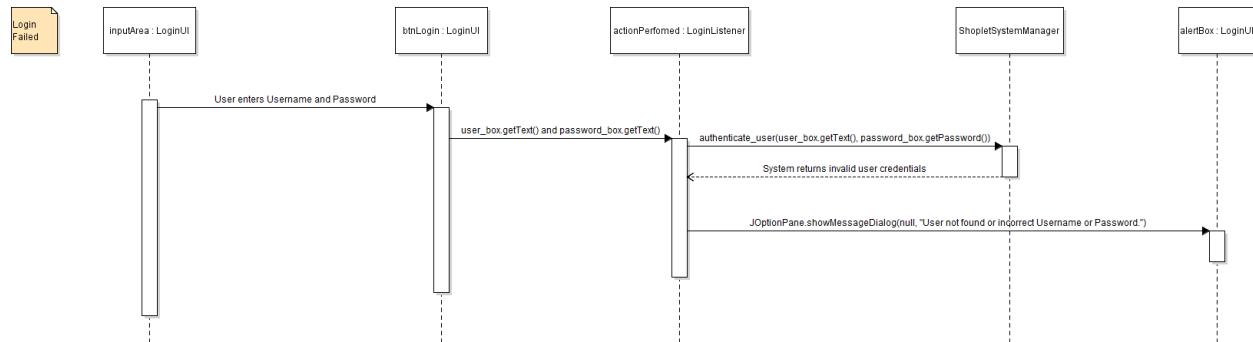


## 8. Sequence Diagrams

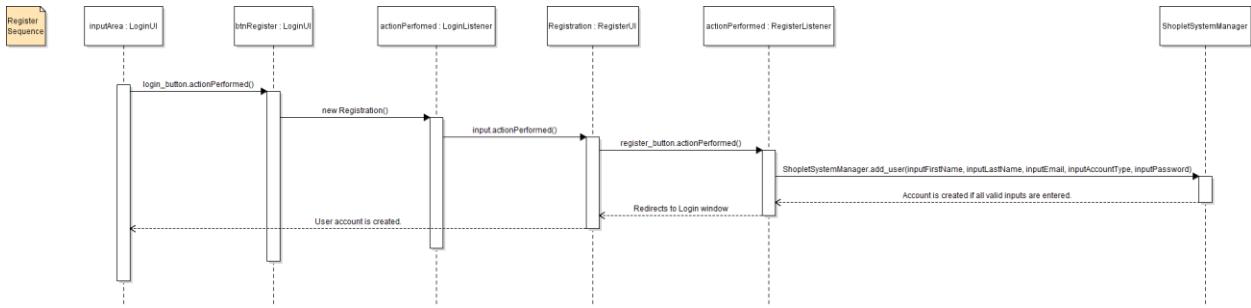
Login Sequence Diagram



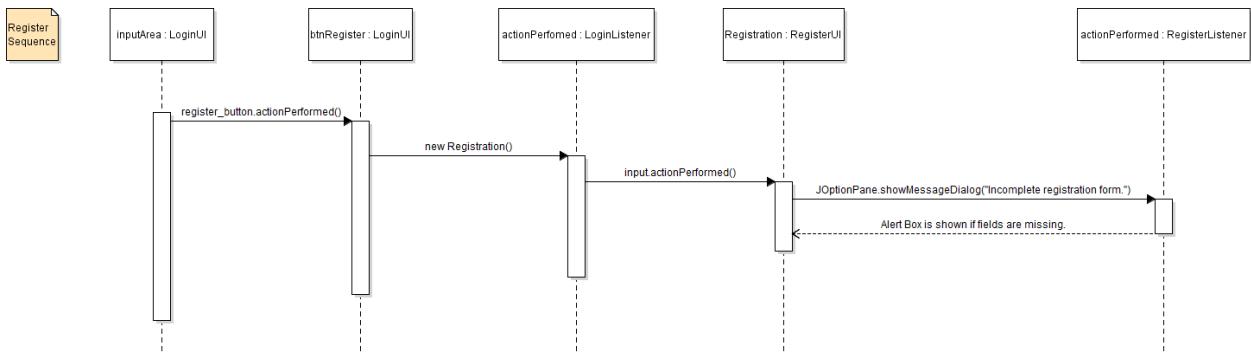
Login Failed Sequence Diagram



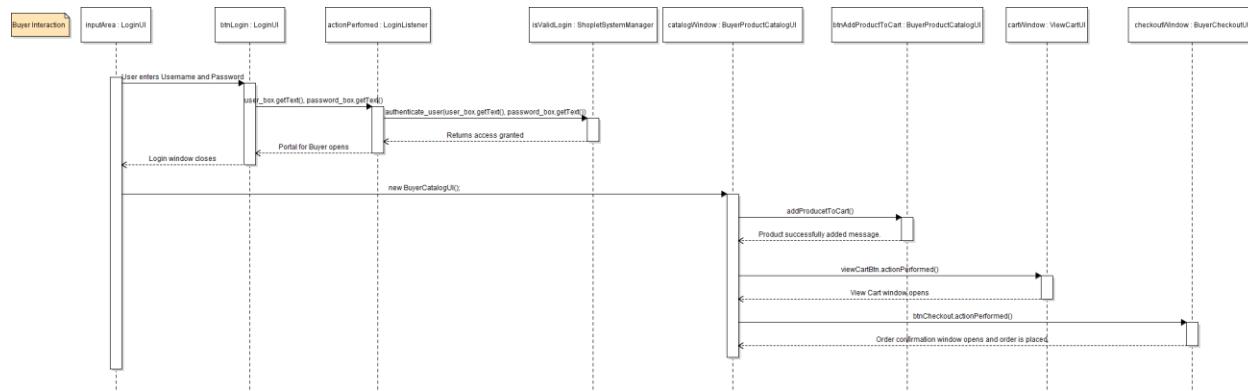
## Register Sequence Diagram



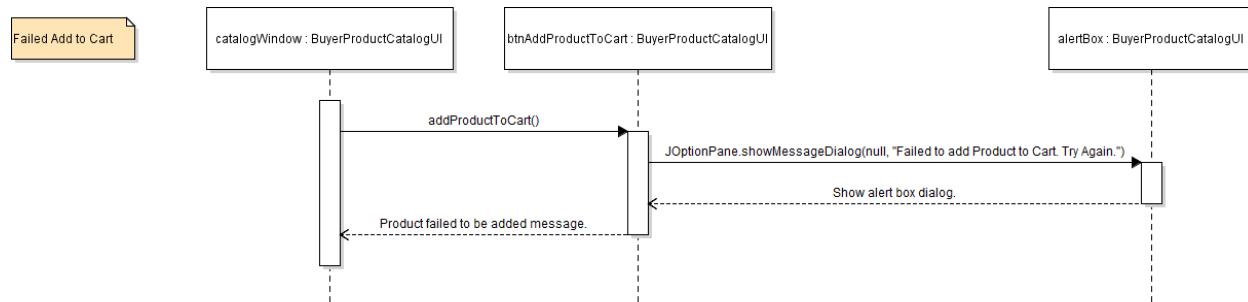
## Register Failed – Existing User Diagram



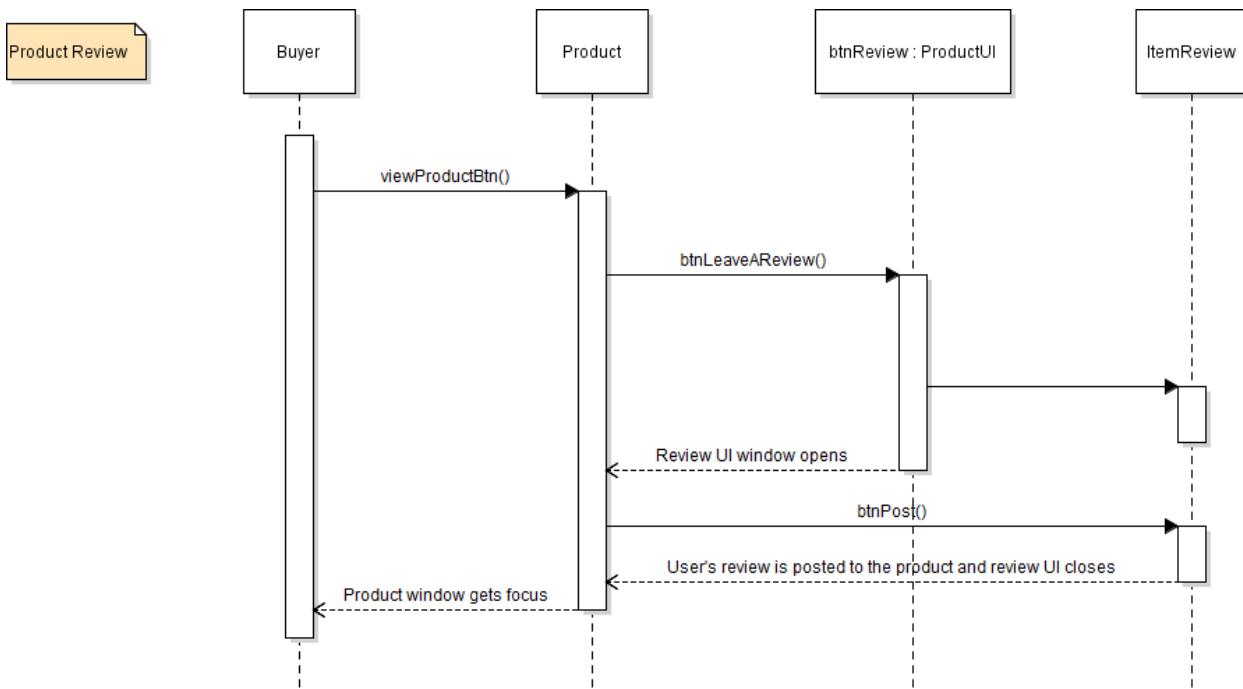
## Buyer Interactions Diagram



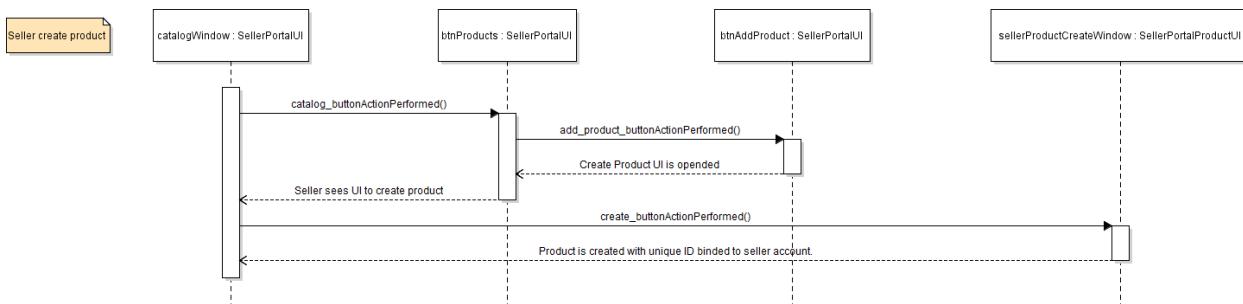
## Add To Cart Failure Diagram



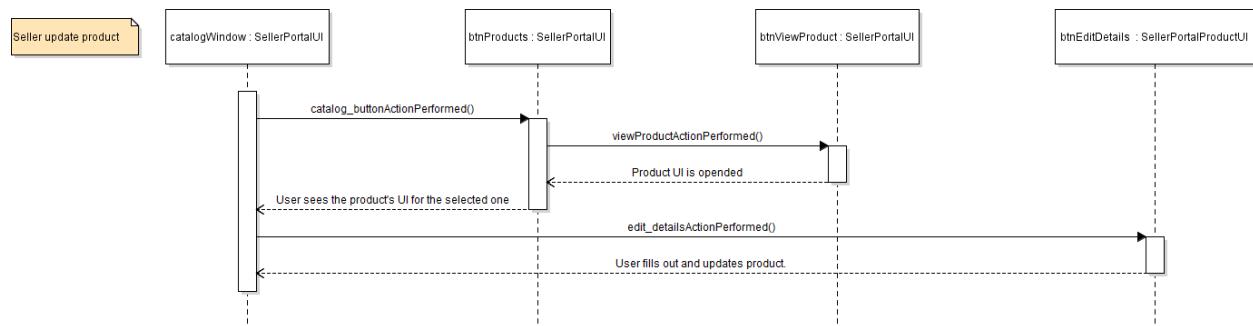
## Review Product Diagram



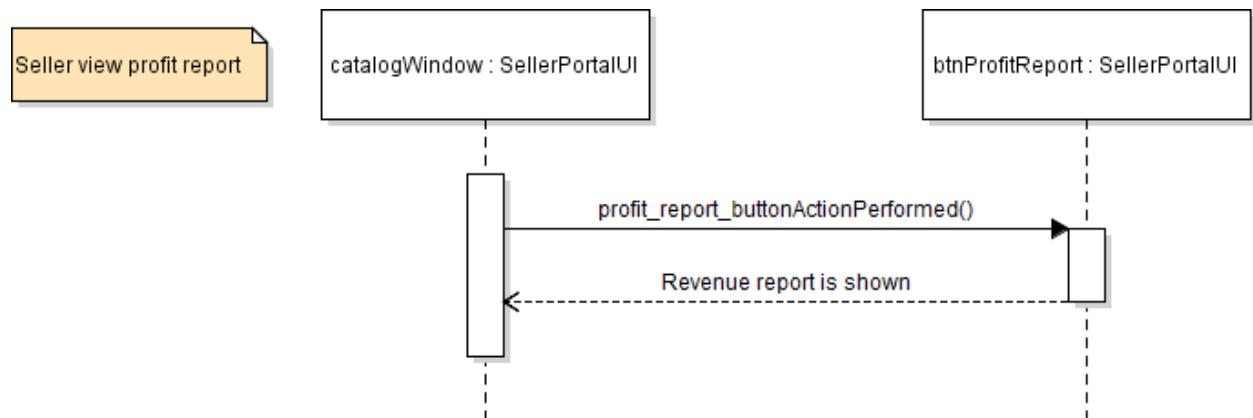
## Seller Create Product Diagram



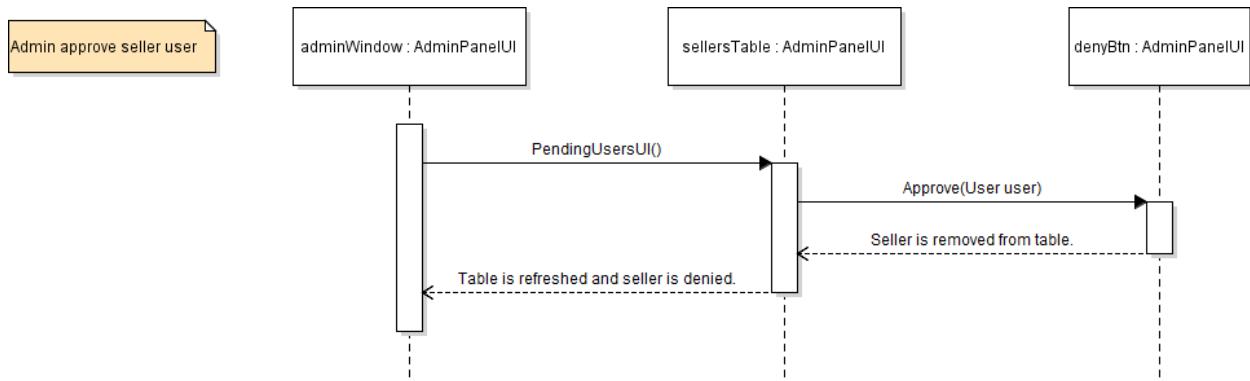
## Seller Edit Product Diagram



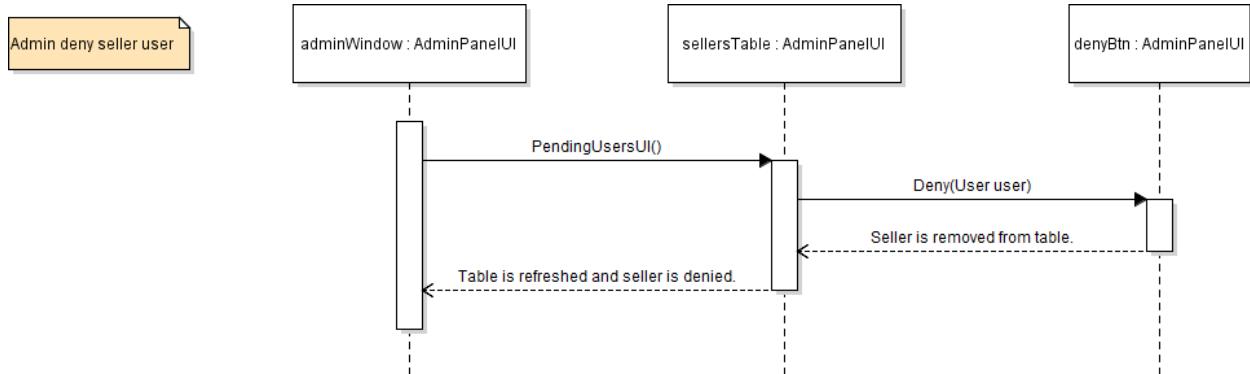
## Seller Revenue Report Diagram



Admin approves Seller Diagram

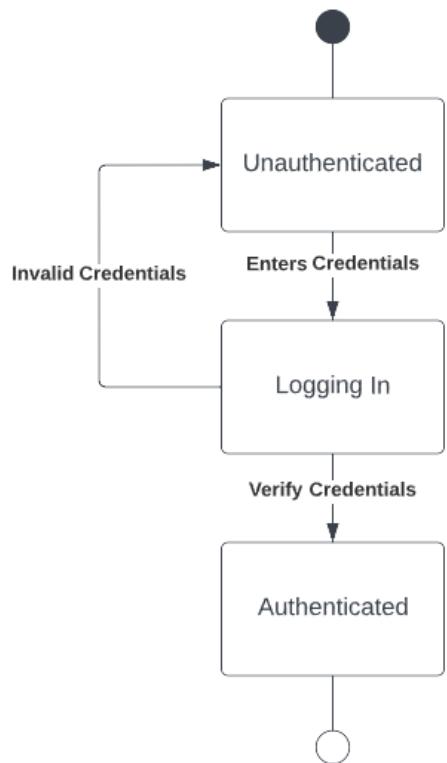


Admin denies Seller Diagram

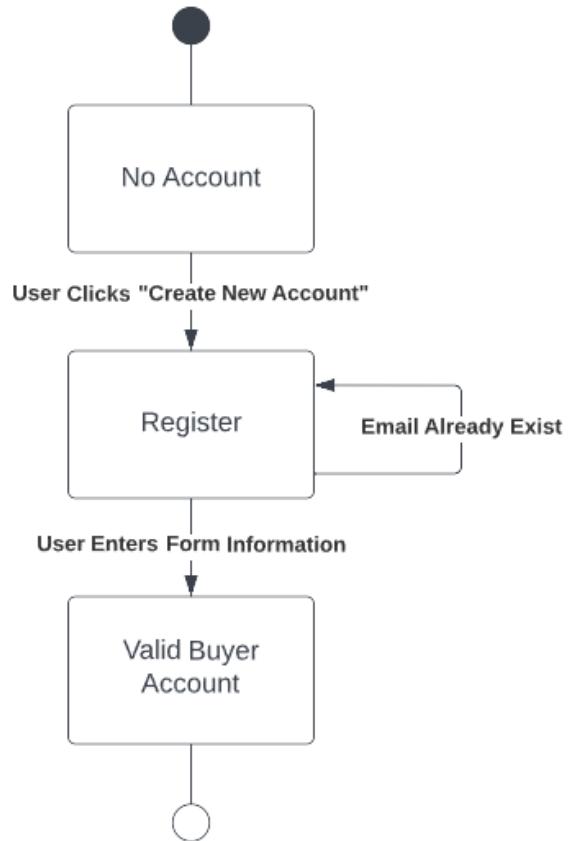


## 9. State Diagrams

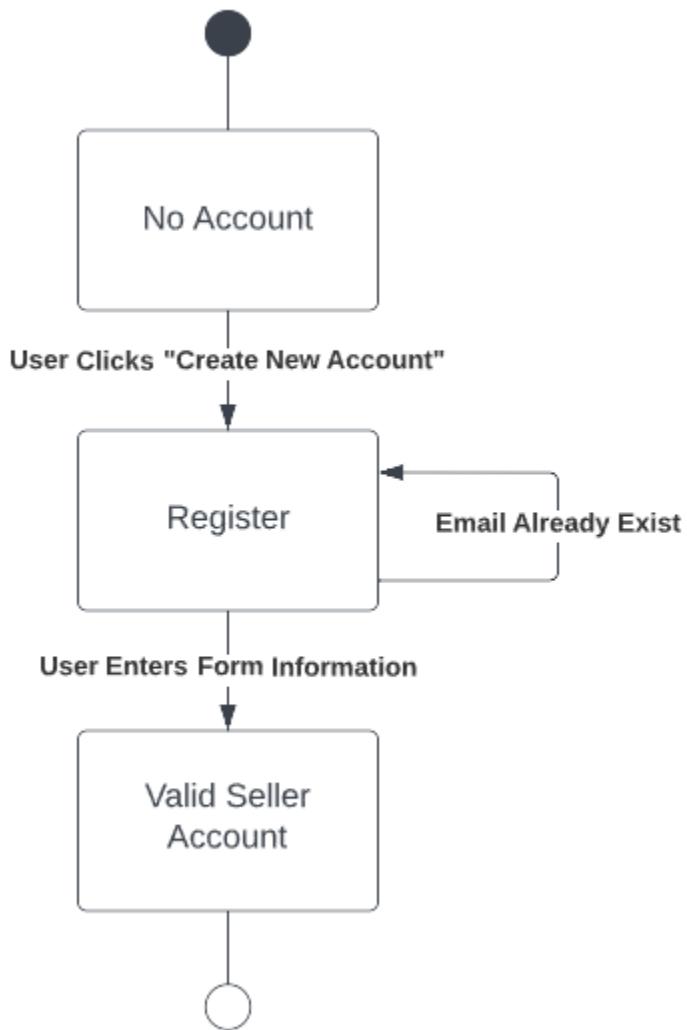
Login State Diagram



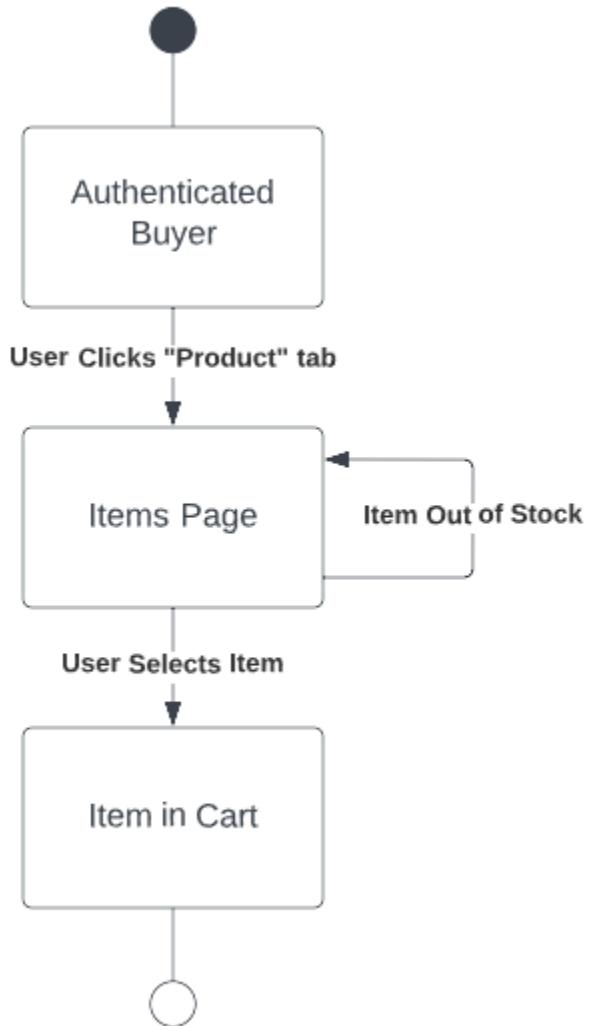
## Register Buyer State Diagram



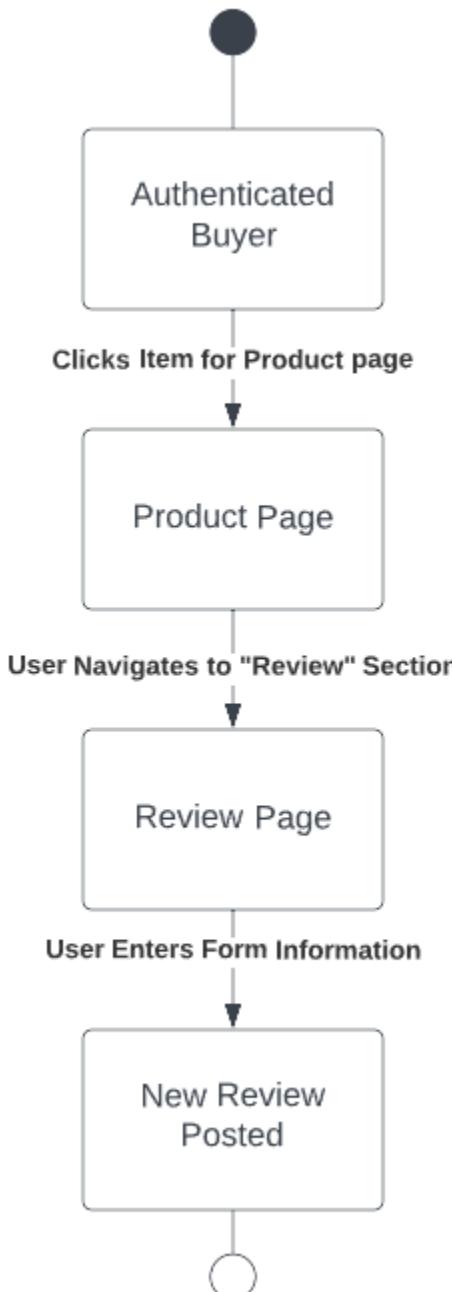
## Register Seller State Diagram



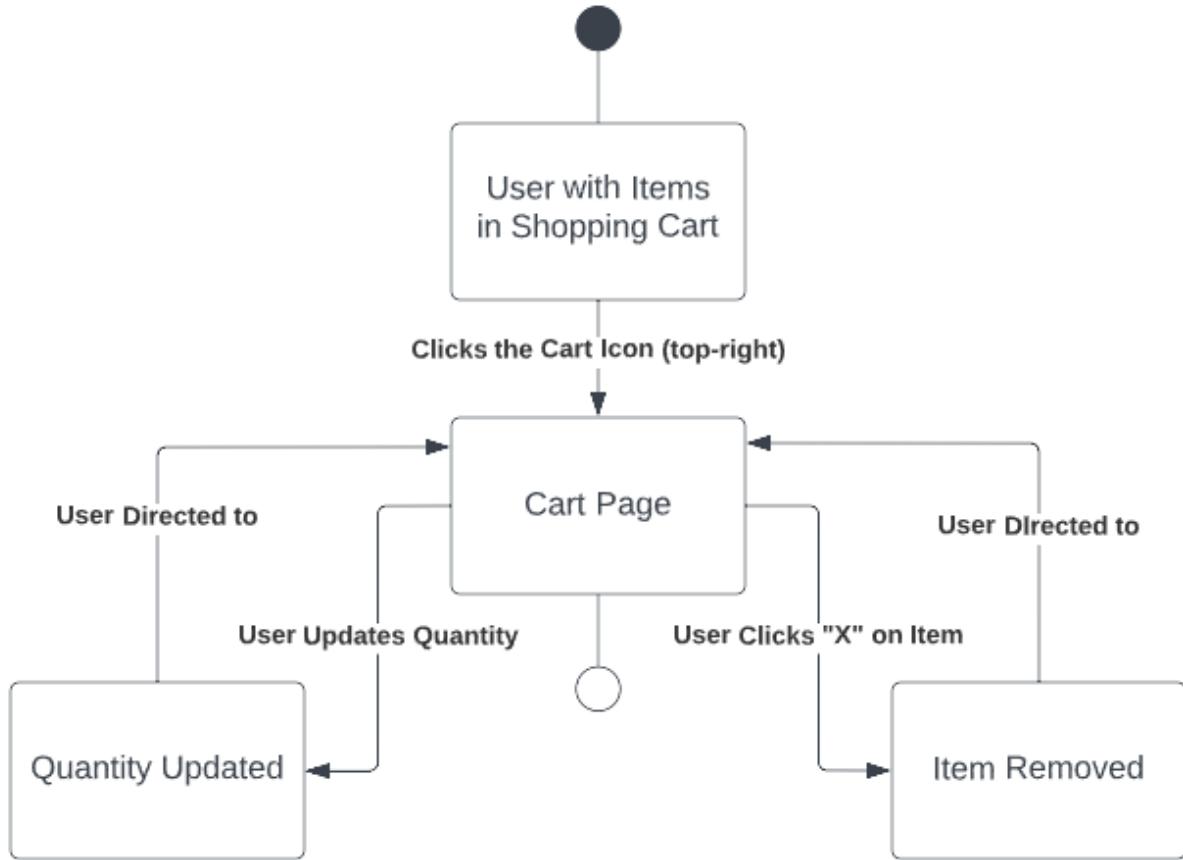
## Buyer Add to Cart State Diagram



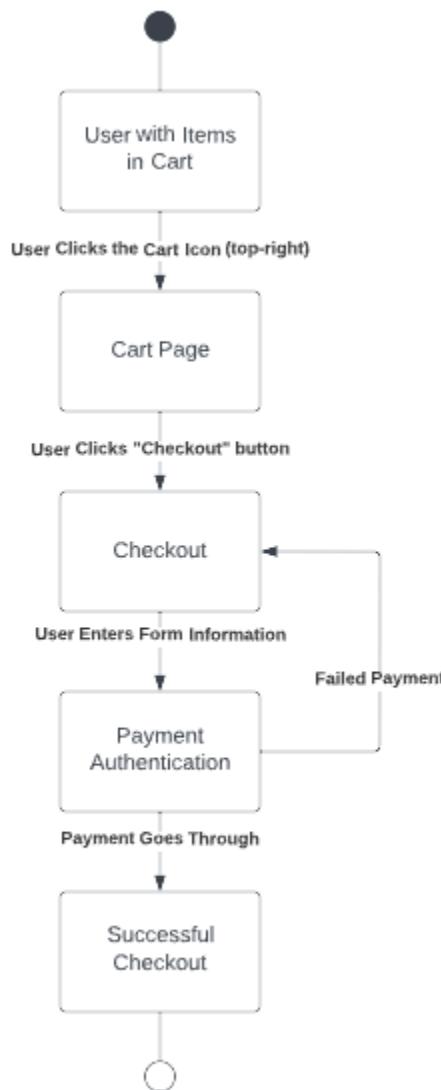
## Buyer Review State Diagram



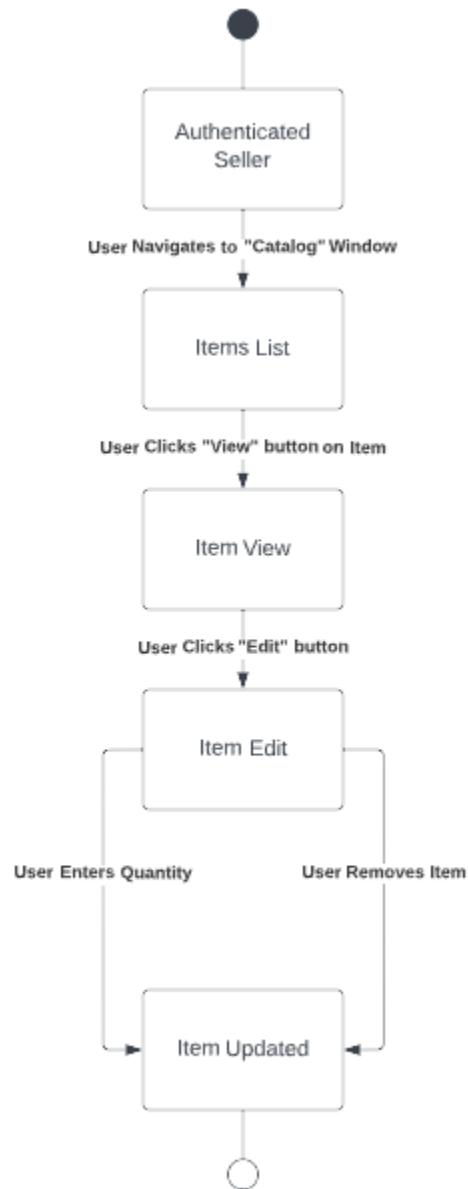
## Buyer Modify Cart State Diagram



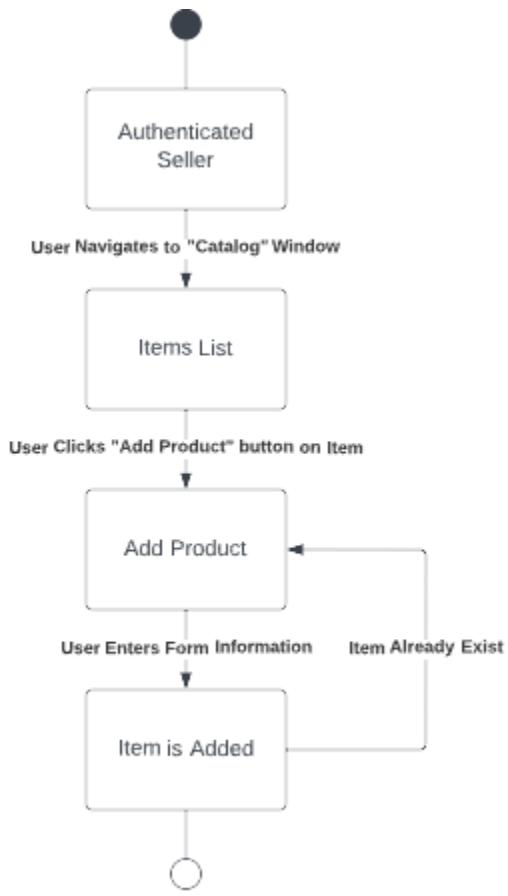
## Buyer Checkout State Diagram



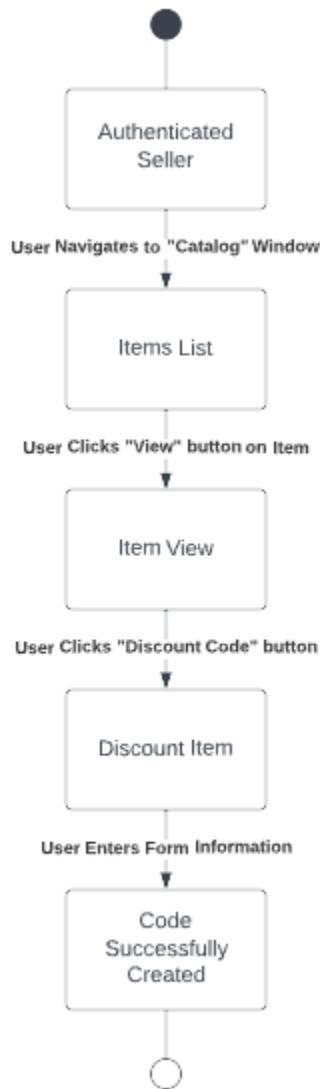
## Seller Modify Product State Diagram



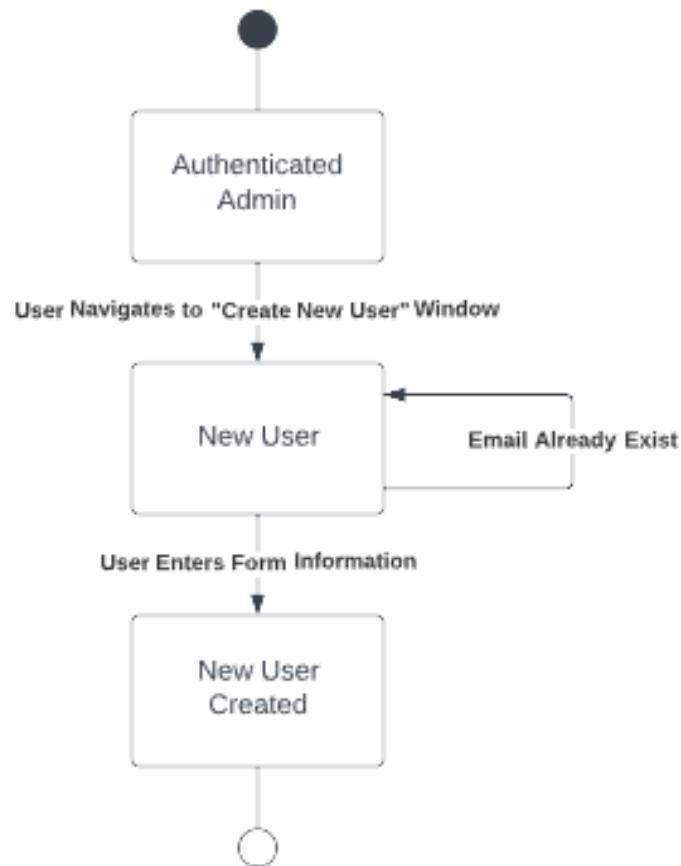
## Seller Create Product State Diagram



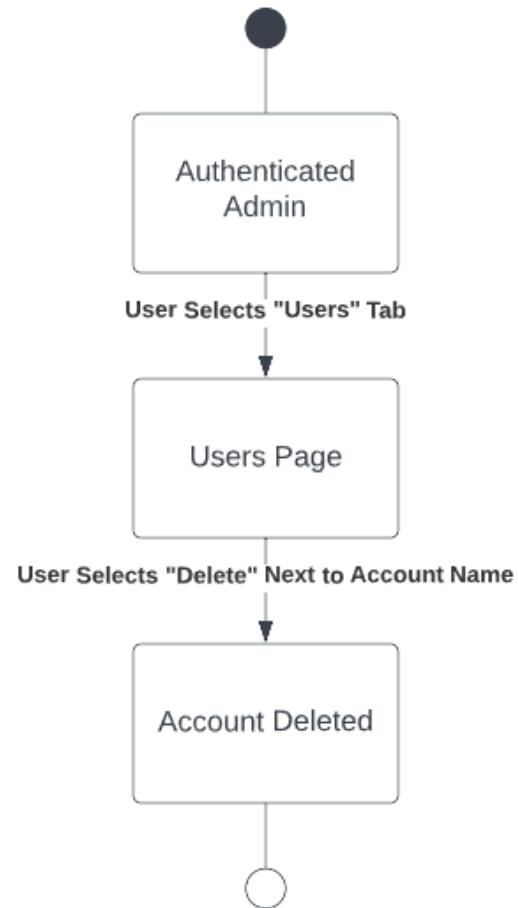
## Seller Create Discount Code State Diagram



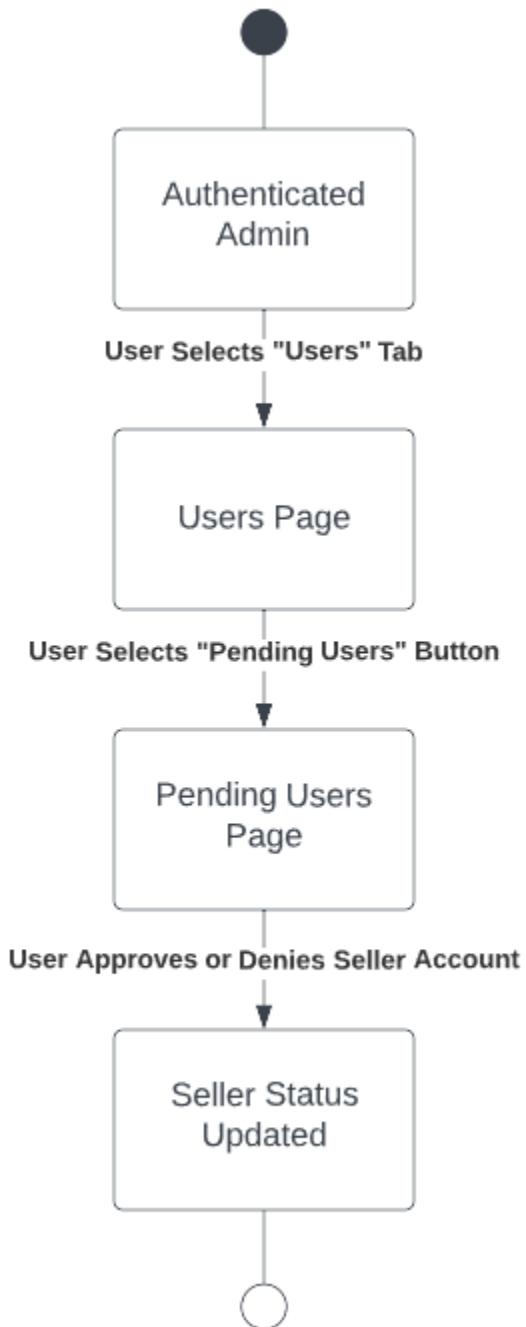
## Admin Create New User State Diagram



## Admin Delete User State Diagram



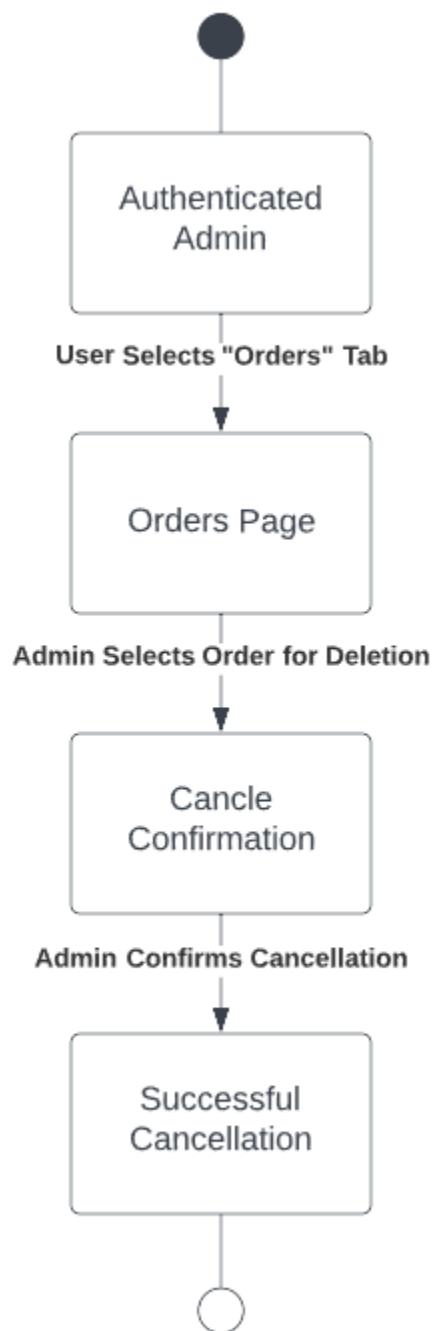
## Admin Approve/Deny Sellers State Diagram



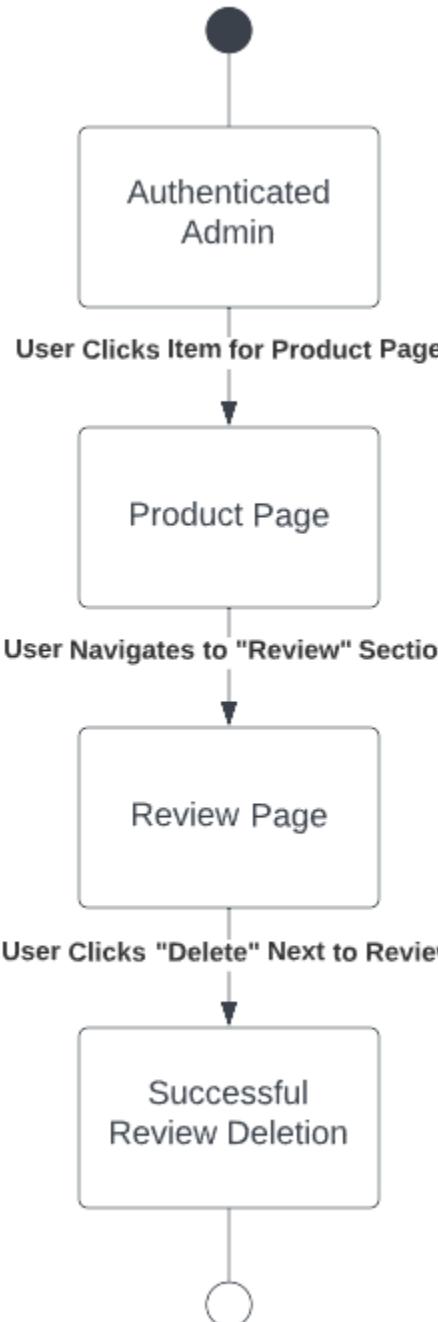
## Admin Edit Product State Diagram



## Admin Cancels Order State Diagram



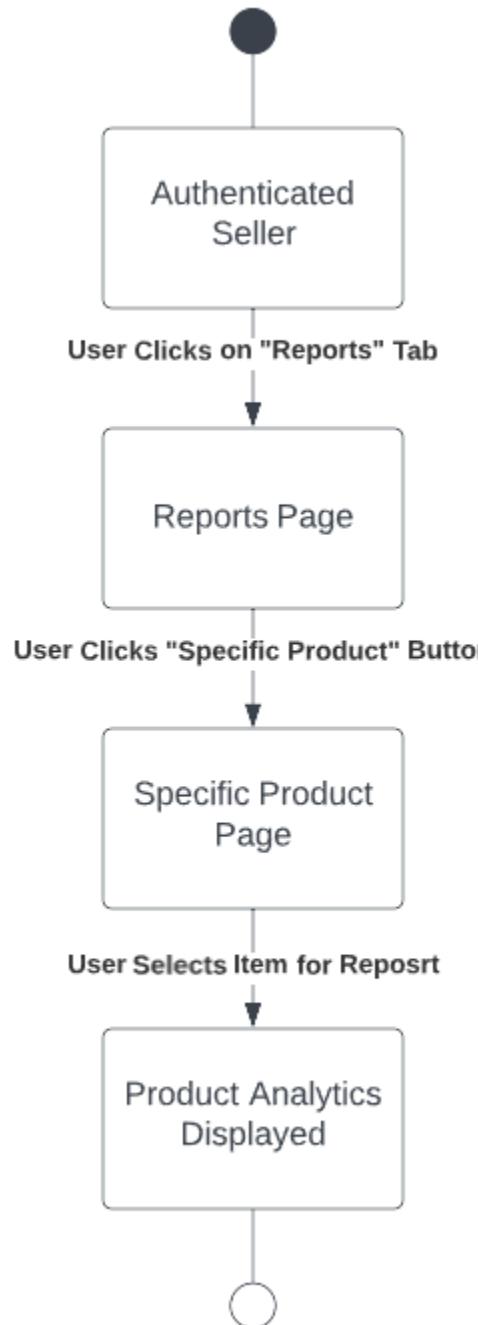
## Admin Deletes Review Diagram



## Seller Views Overall Profit Report State Diagram



## Seller Views Specific Product's Profit Report State Diagram



## 10. Source Code

ShopletSystemManager.java

```
package database_jon;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;
import java.util.List;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.security.MessageDigest;
import java.security.NoSuchAlgorithmException;
import java.nio.charset.StandardCharsets;
import java.util.ArrayList;
import java.util.Arrays;

public class ShopletSystemManager {

    public Integer current_user_id;

    private static ShopletSystemManager _instance = null;

    /**
     * Retrieves the singleton instance of a Cart object.
     * @return The current user's cart.
     */
    public static synchronized ShopletSystemManager getInstance()
    {
        if (_instance == null)
            _instance = new ShopletSystemManager();

        return _instance;
    }

    /**
     * connect to existing database
     * @return connection object
     */
    private Connection connect() {
        // SQLite connection string
        String url = "jdbc:sqlite:sqlite.sqlite";
        Connection conn = null;
        try {
            conn = DriverManager.getConnection(url);
        } catch (SQLException e) {
            System.out.println(e.getMessage());
        }
        return conn;
    }
}
```

```

/**
 * add a new user to the database
 * @param firstname first name of user
 * @param lastname last name of user
 * @param email email of user
 * @param password password of user
 * @param account_type account_type of user (seller, buyer, admin)
 * @param approval approval of user (this is for when a seller is approved or not)
 * @return a "success" response message
 */
public String add_user(String firstname, String lastname, String email, String password, String
account_type, Boolean approval) {

    String sql = "INSERT INTO users(firstname, lastname, email, password, account_type, approval)
VALUES(?,?,?,?,?,?)";

    try (Connection conn = this.connect()) {
        PreparedStatement pstmt = conn.prepareStatement(sql)) {
            pstmt.setString(1, firstname.toLowerCase());
            pstmt.setString(2, lastname.toLowerCase());
            pstmt.setString(3, email.toLowerCase());

            try {
                MessageDigest messageDigest = MessageDigest.getInstance("SHA-256");
                messageDigest.update(password.getBytes(StandardCharsets.UTF_8));
                byte[] passwordHashBytes = messageDigest.digest();
                String passwordHashString = "";

                // Iterating through each byte in the array
                for (byte i : passwordHashBytes) {
                    passwordHashString += String.format("%02X", i);
                }
                pstmt.setString(4, passwordHashString);
            } catch (NoSuchAlgorithmException e){
                System.out.println(e.getMessage());
            }

            pstmt.setString(5, account_type.toLowerCase());
            pstmt.setBoolean(6, approval);
            pstmt.executeUpdate();

            return "User has been added";
        } catch (SQLException e) {
            System.out.println(e.getMessage());
            return "no database connection";
        }
    }
}

/**
 * compare username and password to database
 * @param email email of the user
 * @param password password of the user
 * @return a user object with information
 */
public User authenticate_user(String email, String password){

```

```

User user = new User();
String sql = "SELECT * FROM users WHERE email = ?";

try (Connection conn = this.connect();
      PreparedStatement pstmt = conn.prepareStatement(sql)) {

    pstmt.setString(1, email.toLowerCase());

    ResultSet results = pstmt.executeQuery();

    try {
        MessageDigest messageDigest = MessageDigest.getInstance("SHA-256");
        messageDigest.update(password.getBytes(StandardCharsets.UTF_8));
        byte[] passwordHashBytes = messageDigest.digest();
        String passwordHashString = "";

        // Iterating through each byte in the array
        for (byte i : passwordHashBytes) {
            passwordHashString += String.format("%02X", i);
        }

        if (passwordHashString.equals(results.getString("password"))){
            System.out.println("User account found");
            user.user_id = results.getInt("user_id");
            user.firstname = results.getString("firstname");
            user.lastname = results.getString("lastname");
            user.email = results.getString("email");
            user.account_type = results.getString("account_type");
            user.approval = results.getBoolean("approval");
            user.authenticated = true;
            current_user_id = user.user_id;
            return user;
        } else {
            System.out.println("User not found, possible incorrect username or password");
            user.authenticated = false;
            return user;
        }
    } catch (NoSuchAlgorithmException e){
        System.out.println(e.getMessage());
        user.authenticated = false;
        return user;
    }

} catch (SQLException e) {
    System.out.println(e.getMessage());
    user.authenticated = false;
    return user;
}
}

/**
 * get a list of approved or unapproved sellers
 * @param approved boolean of whether the sellers are approved or not
 * @return list of user objects

```

```

/*
public List<User> grab_sellers(Boolean approved){
    String sql = "SELECT * FROM users WHERE approval = ?";

    List<User> sellerList = new ArrayList<User>();

    try (Connection conn = this.connect();
        PreparedStatement pstmt = conn.prepareStatement(sql)) {

        if (approved) {
            pstmt.setString(1, "1");
        } else {
            pstmt.setString(1, "0");
        }
        ResultSet results = pstmt.executeQuery();

        while(results.next()) {
            User user = new User();
            user.user_id = results.getInt("user_id");
            user.firstname = results.getString("firstname");
            user.lastname = results.getString("lastname");
            user.email = results.getString("email");
            user.account_type = results.getString("account_type");
            user.approval = results.getBoolean("approval");
            sellerList.add(user);
        }
    }

    return sellerList;
} catch (SQLException e) {
    System.out.println(e.getMessage());
    return sellerList;
}
}

/**
 * edit an existing user's information
 * @param user_id user's id as it is in the database
 * @param firstname first name of user
 * @param lastname last name of user
 * @param email email of user
 * @param password password of user
 * @param account_type account_type of user (seller, buyer, admin)
 * @param approval approval of user (this is for when a seller is approved or not)
 * @return a user object with current users updated information
 */
public User edit_user(Integer user_id, String firstname, String lastname, String email, String password,
String account_type, Boolean approval){

    User user = new User();

    String query1 = "SELECT user_id FROM users WHERE user_id = ?";
    try (Connection connQuery1 = this.connect(); PreparedStatement pstmt1 =
connQuery1.prepareStatement(query1)) {
        pstmt1.setInt(1, user_id);
        ResultSet results1 = pstmt1.executeQuery();

```

```

        if (results1.next() == false) {
            System.out.println("User does not exist");
            return user;
        }
    } catch (SQLException e) {
        System.out.println(e.getMessage());
    }

    if (firstname != null){
        String query2 = "UPDATE users SET firstname = ? WHERE user_id = ?";
        try (Connection connQuery2 = this.connect(); PreparedStatement pstmt2 =
connQuery2.prepareStatement(query2)){
            pstmt2.setString(1, firstname);
            pstmt2.setInt(2, user_id);
            pstmt2.executeUpdate();
        } catch (SQLException e) {
            System.out.println(e.getMessage());
        }
    }

    if (lastname != null){
        String query3 = "UPDATE users SET lastname = ? WHERE user_id = ?";
        try (Connection connQuery3 = this.connect(); PreparedStatement pstmt3 =
connQuery3.prepareStatement(query3)){
            pstmt3.setString(1, lastname);
            pstmt3.setInt(2, user_id);
            pstmt3.executeUpdate();
        } catch (SQLException e) {
            System.out.println(e.getMessage());
        }
    }

    if (email != null){
        String query4 = "UPDATE users SET email = ? WHERE user_id = ?";
        try (Connection connQuery4 = this.connect(); PreparedStatement pstmt4 =
connQuery4.prepareStatement(query4)){
            pstmt4.setString(1, email);
            pstmt4.setInt(2, user_id);
            pstmt4.executeUpdate();
        } catch (SQLException e) {
            System.out.println(e.getMessage());
        }
    }

    if (password != null){
        String passwordHashString = "";
        try {
            MessageDigest messageDigest = MessageDigest.getInstance("SHA-256");
            messageDigest.update(password.getBytes(StandardCharsets.UTF_8));
            byte[] passwordHashBytes = messageDigest.digest();

            // Iterating through each byte in the array
            for (byte i : passwordHashBytes) {
                passwordHashString += String.format("%02X", i);
            }
        } catch (NoSuchAlgorithmException e){

```

```

        System.out.println(e.getMessage());
    }

    String query5 = "UPDATE users SET password = ? WHERE user_id = ?";
    try (Connection connQuery5 = this.connect(); PreparedStatement pstmt5 =
connQuery5.prepareStatement(query5)){
        pstmt5.setString(1, passwordHashString);
        pstmt5.setInt(2, user_id);
        pstmt5.executeUpdate();
    } catch (SQLException e) {
        System.out.println(e.getMessage());
    }
}

if (account_type != null){
    String query6 = "UPDATE users SET account_type = ? WHERE user_id = ?";
    try (Connection connQuery6 = this.connect(); PreparedStatement pstmt6 =
connQuery6.prepareStatement(query6)){
        pstmt6.setString(1, account_type);
        pstmt6.setInt(2, user_id);
        pstmt6.executeUpdate();
    } catch (SQLException e) {
        System.out.println(e.getMessage());
    }
}

if (approval != null){
    String query7 = "UPDATE users SET approval = ? WHERE user_id = ?";
    try (Connection connQuery7 = this.connect(); PreparedStatement pstmt7 =
connQuery7.prepareStatement(query7)){
        pstmt7.setBoolean(1, approval);
        pstmt7.setInt(2, user_id);
        pstmt7.executeUpdate();
    } catch (SQLException e) {
        System.out.println(e.getMessage());
    }
}

String queryFinal = "SELECT * FROM users WHERE user_id = ?";
try (Connection connQueryFinal = this.connect(); PreparedStatement pstmt1 =
connQueryFinal.prepareStatement(queryFinal)) {
    pstmt1.setInt(1, user_id);
    ResultSet resultsFinal = pstmt1.executeQuery();

    user.user_id = resultsFinal.getInt("user_id");
    user.firstname = resultsFinal.getString("firstname");
    user.lastname = resultsFinal.getString("lastname");
    user.email = resultsFinal.getString("email");
    user.account_type = resultsFinal.getString("account_type");
    user.approval = resultsFinal.getBoolean("approval");

    return user;
} catch (SQLException e) {
    System.out.println(e.getMessage());
}

```

```

        return user;
    }

}

/***
 * remove a product from the database
 * @param product_id id of the product as it is in the database
 * @return a "success" response message
 */
public String delete_user(Integer user_id){

    String query1 = "SELECT user_id FROM users WHERE user_id = ?";
    try (Connection connQuery1 = this.connect(); PreparedStatement pstmt1 =
connQuery1.prepareStatement(query1)) {
        pstmt1.setInt(1, user_id);
        ResultSet results1 = pstmt1.executeQuery();
        if (results1.next() == false) {
            System.out.println("User does not exist");
            return "User does not exist";
        }
    } catch (SQLException e) {
        System.out.println(e.getMessage());
    }

    String sql = "DELETE FROM users WHERE user_id = ?";
    try (Connection conn = this.connect();
         PreparedStatement pstmt = conn.prepareStatement(sql)) {
        pstmt.setInt(1, user_id);
        pstmt.executeUpdate();
        System.out.println("User has been deleted");
        return "User has been deleted";
    } catch (SQLException e) {
        System.out.println(e.getMessage());
        return "No db connection";
    }
}

/***
 * get a user from the database
 * @param user_id user's id as it is in the database
 * @return a user object with information
 */
public User grab_user_info(Integer user_id){
    String sql = "SELECT * FROM users WHERE user_id = ?";
    User user = new User();

    try (Connection conn = this.connect();
         PreparedStatement pstmt = conn.prepareStatement(sql)) {

        pstmt.setInt(1, user_id);

        ResultSet results = pstmt.executeQuery();

        user.user_id = results.getInt("user_id");
        user.firstname = results.getString("firstname");
        user.lastname = results.getString("lastname");
    }
}

```

```

        user.email = results.getString("email");
        user.account_type = results.getString("account_type");
        user.approval = results.getBoolean("approval");

        System.out.println(results.getInt("user_id") + " " + results.getString("firstname") + " " +
results.getString("lastname") + " " + results.getString("email") + " " + results.getString("account_type") + " "
+ results.getString("approval"));
        return user;

    } catch (SQLException e) {
        System.out.println(e.getMessage());
        return user;
    }
}

/**
 * add a new product to the database
 * @param name name of product
 * @param description description of product
 * @param price price of product
 * @param amount_sold amount_sold of product
 * @param user_id user id of seller as it is in database
 * @return a product object with information
 */
public Product add_product(String name, String description, Integer price, Integer amount_sold, Integer
user_id){
    String sql = "INSERT INTO products(name, description, price, amount_sold, seller_id)
VALUES(?,?,?,?,?)";
    Product product = new Product();

    try (Connection conn = this.connect(); PreparedStatement pstmt = conn.prepareStatement(sql)) {
        pstmt.setString(1, name);
        pstmt.setString(2, description);
        pstmt.setInt(3, price);
        pstmt.setInt(4, amount_sold);
        pstmt.setInt(5, user_id);
        pstmt.executeUpdate();

        String sql2 = "SELECT MAX(product_id) AS product_id FROM products";
        try (Connection conn2 = this.connect(); PreparedStatement pstmt2 =
conn2.prepareStatement(sql2)) {
            ResultSet results = pstmt2.executeQuery();

            product.product_id = results.getInt("product_id");

            String sql3 = "SELECT * FROM products WHERE product_id = ?";
            try (Connection conn3 = this.connect(); PreparedStatement pstmt3 =
conn3.prepareStatement(sql3)) {
                pstmt3.setInt(1, product.product_id);
                ResultSet results3 = pstmt3.executeQuery();

                product.name = results3.getString("name");
                product.description = results3.getString("description");
                product.price = results3.getInt("price");
                product.amount_sold = results3.getInt("amount_sold");
            }
        }
    }
}

```

```

        product.seller_id = results3.getInt("seller_id");
        return product;
    }

} catch (SQLException e) {
    System.out.println(e.getMessage());
    return product;
}
} catch (SQLException e) {
    System.out.println(e.getMessage());
    return product;
}
}

/**
 * add a review to the database
 * @param user_id user_id of author as it is in the database
 * @param product_id product_id if the product as it is in the database
 * @param review_name name of review
 * @param review_rating rating of review
 * @param review_content content of review
 * @return a review object with information
 */
public Review add_review(Integer user_id, Integer product_id, String review_name, String
review_rating, String review_content){
    String sql = "INSERT INTO reviews(product_id, review_rating, review_content,
review_author_name, review_author_id) VALUES(?, ?, ?, ?, ?)";
    Review review = new Review();

    try (Connection conn = this.connect(); PreparedStatement pstmt = conn.prepareStatement(sql)) {
        pstmt.setInt(1, product_id);
        pstmt.setString(2, review_rating);
        pstmt.setString(3, review_content);
        pstmt.setString(4, review_name);
        pstmt.setInt(5, user_id);
        pstmt.executeUpdate();

        String sql2 = "SELECT MAX(review_id) AS review_id FROM reviews";
        try (Connection conn2 = this.connect(); PreparedStatement pstmt2 =
conn2.prepareStatement(sql2)) {
            ResultSet results = pstmt2.executeQuery();

            review.review_id = results.getInt("review_id");

            String sql3 = "SELECT * FROM reviews WHERE review_id = ?";
            try (Connection conn3 = this.connect(); PreparedStatement pstmt3 =
conn3.prepareStatement(sql3)) {
                pstmt3.setInt(1, review.review_id);
                ResultSet results3 = pstmt3.executeQuery();

                review.product_id = results3.getInt("product_id");
                review.review_rating = results3.getString("review_rating");
                review.review_content = results3.getString("review_content");
                review.reviewer_name = results3.getString("review_author_name");
                review.user_id = results3.getInt("review_author_id");
                return review;
            }
        }
    }
}

```

```

        }

    } catch (SQLException e) {
        System.out.println(e.getMessage());
        return review;
    }
} catch (SQLException e) {
    System.out.println(e.getMessage());
    return review;
}
}

/***
 * Grabs a list of the reviews from a product id
 * @param product_id the id of the product
 * @return a list of review objects
 */
public List<Review> grab_reviews(Integer product_id){
    String sql = "SELECT * FROM reviews WHERE product_id = ?";

    List<Review> reviewList = new ArrayList<Review>();

    try (Connection conn = this.connect();
         PreparedStatement pstmt = conn.prepareStatement(sql)) {

        pstmt.setInt(1, product_id);

        ResultSet results = pstmt.executeQuery();

        while(results.next()) {
            Review review = new Review();
            review.user_id = results.getInt("review_author_id");
            review.product_id = results.getInt("product_id");
            review.review_content = results.getString("review_content");
            review.review_rating = results.getString("review_rating");
            review.reviewer_name = results.getString("review_author_name");
            review.review_id = results.getInt("review_id");
            reviewList.add(review);
        }
        return reviewList;
    } catch (SQLException e) {
        System.out.println(e.getMessage());
        return reviewList;
    }
}

/***
 * add a order to the database
 * @param buyer_id user_id of buyer as it is in the database
 * @param total_cost total_cost of order
 * @param product_ids product_ids of products in order
 * @return an order object with information
 */
public Order add_order(Integer buyer_id, String total_cost, String product_ids){
    String sql = "INSERT INTO orders(buyer_id, total_cost, product_ids) VALUES(?, ?, ?)";

```

```

Order order = new Order();

try (Connection conn = this.connect(); PreparedStatement pstmt = conn.prepareStatement(sql)) {
    pstmt.setInt(1, buyer_id);
    pstmt.setString(2, total_cost);
    pstmt.setString(3, product_ids);
    pstmt.executeUpdate();

    String sql2 = "SELECT MAX(order_id) AS order_id FROM orders";
    try (Connection conn2 = this.connect(); PreparedStatement pstmt2 =
conn2.prepareStatement(sql2)) {
        ResultSet results = pstmt2.executeQuery();

        order.order_id = results.getInt("order_id");

        String sql3 = "SELECT * FROM orders WHERE order_id = ?";
        try (Connection conn3 = this.connect(); PreparedStatement pstmt3 =
conn3.prepareStatement(sql3)) {
            pstmt3.setInt(1, order.order_id);
            ResultSet results3 = pstmt3.executeQuery();

            order.buyer_id = results3.getInt("buyer_id");
            order.total_cost = results3.getString("total_cost");
            order.product_ids = results3.getString("product_ids");
            return order;
        }
    }
} catch (SQLException e) {
    System.out.println(e.getMessage());
    return order;
}
} catch (SQLException e) {
    System.out.println(e.getMessage());
    return order;
}
}

/**
 * edit an existing product's information
 * @param product_id product_id of the product as it is in the database
 * @param name name of product
 * @param description description of product
 * @param price price of product
 * @param amount_sold amount_sold of product
 * @return a "success" response message
 */
public String edit_product(Integer product_id, String name, String description, Integer price, Integer amount_sold){
    String query1 = "SELECT product_id FROM products WHERE product_id = ?";
    try (Connection connQuery1 = this.connect(); PreparedStatement pstmt1 =
connQuery1.prepareStatement(query1)) {
        pstmt1.setInt(1, product_id);
        ResultSet results1 = pstmt1.executeQuery();
        if (results1.next() == false) {
            System.out.println("Product does not exist");
        }
    }
}

```

```

        return "Product does not exist";
    }
} catch (SQLException e) {
    System.out.println(e.getMessage());
}

if (name != null){
    String query2 = "UPDATE products SET name = ? WHERE product_id = ?";
    try (Connection connQuery2 = this.connect(); PreparedStatement pstmt2 =
connQuery2.prepareStatement(query2)){
        pstmt2.setString(1, name);
        pstmt2.setInt(2, product_id);
        pstmt2.executeUpdate();
    } catch (SQLException e) {
        System.out.println(e.getMessage());
    }
}

if (description != null){
    String query3 = "UPDATE products SET description = ? WHERE product_id = ?";
    try (Connection connQuery3 = this.connect(); PreparedStatement pstmt3 =
connQuery3.prepareStatement(query3)){
        pstmt3.setString(1, description);
        pstmt3.setInt(2, product_id);
        pstmt3.executeUpdate();
    } catch (SQLException e) {
        System.out.println(e.getMessage());
    }
}

if (price != null){
    String query3 = "UPDATE products SET price = ? WHERE product_id = ?";
    try (Connection connQuery3 = this.connect(); PreparedStatement pstmt3 =
connQuery3.prepareStatement(query3)){
        pstmt3.setInt(1, price);
        pstmt3.setInt(2, product_id);
        pstmt3.executeUpdate();
    } catch (SQLException e) {
        System.out.println(e.getMessage());
    }
}

if (amount_sold != null){
    String query4 = "UPDATE products SET amount_sold = ? WHERE product_id = ?";
    try (Connection connQuery4 = this.connect(); PreparedStatement pstmt4 =
connQuery4.prepareStatement(query4)){
        pstmt4.setInt(1, amount_sold);
        pstmt4.setInt(2, product_id);
        pstmt4.executeUpdate();
    } catch (SQLException e) {
        System.out.println(e.getMessage());
    }
}

return "Item has been updated";
}

```

```

/**
 * add the amount of sells a product has
 * @param product_id product_id of the product as it is in the database
 * @param amount quantity of product sold
 * @return a "success" response message
 */
public String add_product_sale(Integer product_id, Integer amount){

    Integer ogAmount = 0;
    String query1 = "SELECT amount_sold FROM products WHERE product_id = ?";
    try (Connection connQuery1 = this.connect(); PreparedStatement pstmt1 =
connQuery1.prepareStatement(query1)) {
        pstmt1.setInt(1, product_id);
        ResultSet results1 = pstmt1.executeQuery();
        if (results1.next() == false) {
            System.out.println("Product does not exist");
            return "Product does not exist";
        } else {
            ogAmount = results1.getInt("amount_sold");
        }
    } catch (SQLException e) {
        System.out.println(e.getMessage());
    }

    String sql = "UPDATE products SET amount_sold = ? WHERE product_id = ?";
    try (Connection conn = this.connect(); PreparedStatement pstmt = conn.prepareStatement(sql)){
        pstmt.setInt(1, ogAmount + amount);
        pstmt.setInt(2, product_id);
        pstmt.executeUpdate();
        return "Count updated!";
    } catch (SQLException e) {
        System.out.println(e.getMessage());
        return "Count updated!";
    }
}

/**
 * remove a product from the database
 * @param product_id product_id of the product as it is in the database
 * @return a "success" response message
 */
public String delete_product(Integer product_id){
    String query1 = "SELECT product_id FROM products WHERE product_id = ?";
    try (Connection connQuery1 = this.connect(); PreparedStatement pstmt1 =
connQuery1.prepareStatement(query1)) {
        pstmt1.setInt(1, product_id);
        ResultSet results1 = pstmt1.executeQuery();
        if (results1.next() == false) {
            System.out.println("Product does not exist");
            return "Product does not exist";
        }
    } catch (SQLException e) {
        System.out.println(e.getMessage());
    }
}

```

```

String sql = "DELETE FROM products WHERE product_id = ?";
try (Connection conn = this.connect();
     PreparedStatement pstmt = conn.prepareStatement(sql)) {
    pstmt.setInt(1, product_id);
    pstmt.executeUpdate();
    System.out.println("Product has been deleted");
    return "Product has been deleted";
} catch (SQLException e) {
    System.out.println(e.getMessage());
    return "No db connection";
}

/**
 * get all orders in the database
 * @return list of order objects
 */
public List<Order> get_all_orders(){
    List<Order> order_list = new ArrayList<Order>();
    String sql = "SELECT * FROM orders";
    try (Connection conn = this.connect();
         PreparedStatement pstmt = conn.prepareStatement(sql)) {
        ResultSet results = pstmt.executeQuery();

        while(results.next()){
            Order order = new Order();
            order.order_id = results.getInt("order_id");
            order.buyer_id = results.getInt("buyer_id");
            order.total_cost = results.getString("total_cost");
            order.product_ids = results.getString("product_ids");
            order_list.add(order);
        }
    }

    return order_list;
} catch (SQLException e) {
    System.out.println(e.getMessage());
    return order_list;
}

/**
 * remove a order from the database
 * @param order_id product_id of the product as it is in the database
 * @return a "success" response message
 */
public String delete_order(Integer order_id){
    String query1 = "SELECT order_id FROM orders WHERE order_id = ?";
    try (Connection connQuery1 = this.connect(); PreparedStatement pstmt1 =
connQuery1.prepareStatement(query1)) {
        pstmt1.setInt(1, order_id);
        ResultSet results1 = pstmt1.executeQuery();
        if (results1.next() == false) {
            System.out.println("Order does not exist");
            return "Order does not exist";
        }
    }
}

```

```

        }
    } catch (SQLException e) {
        System.out.println(e.getMessage());
    }

    String sql = "DELETE FROM orders WHERE order_id = ?";
    try (Connection conn = this.connect()) {
        PreparedStatement pstmt = conn.prepareStatement(sql) {
            pstmt.setInt(1, order_id);
            pstmt.executeUpdate();
            System.out.println("Order has been deleted");
            return "Order has been deleted";
        } catch (SQLException e) {
            System.out.println(e.getMessage());
            return "No db connection";
        }
    }

    /**
     * get all products in the database
     * @return list of product objects
     */
    public List<Product> get_list_of_products(){
        List<Product> product_list = new ArrayList<Product>();
        String sql = "SELECT * FROM products";
        try (Connection conn = this.connect()) {
            PreparedStatement pstmt = conn.prepareStatement(sql) {
                ResultSet results = pstmt.executeQuery();

                while(results.next()){
                    Product product = new Product();
                    product.product_id = results.getInt("product_id");
                    product.name = results.getString("name");
                    product.description = results.getString("description");
                    product.price = results.getInt("price");
                    product.amount_sold = results.getInt("amount_sold");
                    product.seller_id = results.getInt("seller_id");
                    product_list.add(product);
                }
            }

            return product_list;
        } catch (SQLException e) {
            System.out.println(e.getMessage());
            return product_list;
        }
    }

    /**
     * get current user's products in the database
     * @return list of product objects
     */
    public List<Product> get_list_of_own_products(Integer user_id){
        List<Product> product_list = new ArrayList<Product>();
        String sql = "SELECT * FROM products WHERE seller_id = ?";

```

```

try (Connection conn = this.connect();
     PreparedStatement pstmt = conn.prepareStatement(sql)) {
    pstmt.setInt(1, user_id);
    ResultSet results = pstmt.executeQuery();

    while(results.next()){
        Product product = new Product();
        product.product_id = results.getInt("product_id");
        product.name = results.getString("name");
        product.description = results.getString("description");
        product.price = results.getInt("price");
        product.amount_sold = results.getInt("amount_sold");
        product.seller_id = results.getInt("seller_id");
        product_list.add(product);
    }
}

return product_list;

} catch (SQLException e) {
    System.out.println(e.getMessage());
    return product_list;
}
}

/**
 * Main function
 * @param args arguments
 * @throws Exception exception
 */
public static void main(String[] args) throws Exception {
    ShopletSystemManager db = new ShopletSystemManager();
    // add user
    // refer to method to see arguments. All must be filled out or else error will raise.
    //db.add_user("jon", "mercer", "test@email.com", "password", "buyer", true);

    // authenticate_user
    // must use given email and password as arguments

    //User user = db.authenticate_user("test@email.com", "passwordd");
    // System.out.println(user.user_id);
    // System.out.println(user.firstname);
    // System.out.println(user.lastname);
    // System.out.println(user.email);
    // System.out.println(user.account_type);
    // System.out.println(user.approval);

    // grab_user_info
    // give user id and all information will be printed to console
    //db.grab_user_info(1);

    // edit_user
    // refer to method to see arguments. All must be filled out but if there is an attribute you dont want to
    change you can set the argument to null.
}

```

```

//db.edit_user(1, "jon_edit", "mercer_edit" , "test-edit@email.com", "password1", "seller", false);

// delete_user
// give a user id and the user will be deleted from the database
//db.delete_user(1);

// add product
// refer to method to see arguments. All must be filled out or else error will raise.
// db.add_product("product", "This is the description" , 0, 0, 2);
// db.add_product("product1", "This is the description1" , 1, 1, 1);
// db.add_product("product2", "This is the description2" , 2, 2, 1);
// db.add_product("product3", "This is the description3" , 3, 3, 1);
// db.add_product("product4", "This is the description4" , 4, 4, 1);

// edit_product
// refer to method to see arguments. All must be filled out but if there is an attribute you dont want to
change you can set the arugment to null.
//db.edit_product(1, "product-edit", null , 999, 99);

// add_product_sale
// give a product id, and amount sold and the amount_sold will increment by the argument
//db.add_product_sale(1, 7);

// delete_product
// give a product id and the product will be deleted from the database
//db.delete_product(1);

//get_list_of_products
/**
List<Product> list = db.get_list_of_products();
System.out.println(Arrays.toString(list.toArray()));
for (int i = 0; i < list.size(); i++) {
    System.out.printf("%s %s %s %d %d %d \n", list.get(i).product_id, list.get(i).name,
list.get(i).description, list.get(i).price, list.get(i).amount_sold, list.get(i).seller_id);
}
*/
}
}

```

## Order.java

```

package database_jon;

/**
 * Order class
 * @author Kelvin Doman
 */
public class Order {
    public Integer order_id;
    public Integer buyer_id;
    public String total_cost;
}

```

```
    public String product_ids;  
}
```

## Product.java

```
package database_jon;  
  
/**  
 * Class representing a product  
 * @author Kelvin Dhomam  
 *  
 */  
public class Product {  
    public Integer product_id;  
    public Integer seller_id;  
    public Integer amount_sold;  
    public String name;  
    public Integer price;  
    public boolean available;  
    public Integer availableQuantity;  
    public boolean discountCodeActive;  
    public String discountCode;  
    public Double discountPercentage;  
    public String description;  
  
    /**  
     * Default Constructor  
     */  
    public Product()  
    {  
    }  
  
    /**  
     * A Product Item that will be created by GUI and then sent to the database.  
     * @param associatedSellerId The Seller ID.  
     * @param productName The Product Name.  
     * @param productPrice the Product Price.  
     * @param productDescription The Product description.  
     * @param available If available or not.  
     * @param availableQuantity The available quantity.  
     * @param discountCodeActive If a discount code exists for the product.  
     */  
    public Product(Integer productId, String productName, Integer productPrice, String productDescription,  
boolean available, Integer availableQuantity, boolean discountCodeActive)  
    {  
        this.product_id = productId;  
        this.name = productName;  
        this.description = productDescription;  
        this.price = productPrice;  
        this.available = available;  
        this.availableQuantity = availableQuantity;  
        this.discountCodeActive = discountCodeActive;  
    }  
}
```

```

}

/**
 * Returns the product price.
 * @return Product price
 */
public Integer getProductPrice() {
    return price;
}

/**
 * Sets the product's price
 * @param productPrice The new product price.
 */
public void setProductPrice(Integer productPrice) {
    this.price = productPrice;
}

/**
 * Returns the item's available quantity.
 * @return The quantity of the item available.
 */
public Integer getQuantity() {
    return availableQuantity;
}

/**
 * Set the quantity of the item available.
 * @param availableQuantity The available quantity.
 */
public void setQuantity(Integer availableQuantity) {
    this.availableQuantity = availableQuantity;
}

/**
 * Gets the product description.
 * @return Returns the product description.
 */
public String getProductDescription() {
    return description;
}

/**
 * Sets the product description of the product.
 * @param productDescription The product description.
 */
public void setProductDescription(String productDescription) {
    this.description = productDescription;
}

```

## Review.java

```

package database_jon;

public class Review {
    public Integer review_id;
    public Integer user_id;
    public Integer product_id;
    public String reviewer_name;
    public String review_rating;
    public String review_content;

    public Review()
    {

    }

    public Review(Integer review_id, Integer user_id, Integer product_id, String reviewerName, String
review_rating, String review_content)
    {
        this.review_id = review_id;
        this.user_id = user_id;
        this.product_id = product_id;
        this.reviewer_name = reviewerName;
        this.review_rating = review_rating;
        this.review_content = review_content;
    }
}

```

## Seller.java

```

package database_jon;

public class Seller extends User {

    Integer seller_id;
    Boolean accountActive;
    Product[] sellerInventory;
    Double totalRevenue;

    public Seller()
    {
        super();
        seller_id = user_id;
        accountActive = approval;
    }

    public void updateItem(Product itemToEdit, Double newPrice, Integer newQuantity, String
newDescription)
    {
    }

    public Product createNewItem()
    {

```

```

        return null;
    }

    public void deleteProduct(Product product)
    {

    }

    public void setSellerInventory()
    {

    }

    public Product[] getSellerInventory()
    {
        return sellerInventory;
    }
}

```

## Admin.java

```

package database_jon;

/**
 * Admin User element
 * @author Kelvin Dhomam
 *
 */
public class Admin extends User {

    Boolean isAdmin;

    /**
     * Constructor for an admin user
     */
    public Admin()
    {
        super();
        isAdmin = true;
    }

    /**
     * Function to cancel an order
     * @param order the order to cancel.
     */
    public void cancelorder(Order order)
    {

    }

    /**
     * Approve a seller's account
     * @param seller The seller account to approve.
     */
}

```

```

    */
public void approveSeller(Seller seller)
{
}

/**
 * Deny a seller's account
 * @param seller The seller account to deny.
 */
public void denySeller(Seller seller)
{

}

/**
 * Delete a review
 * @param review The review to delete
 */
public void deleteReview(Review review)
{

}

/**
 * Create a user
 * @param username The username to create a user with
 * @param password The password for the new user
 * @param email The email of the new user
 * @return A user object that is created
 */
public User createUser(String username, String password, String email)
{
    return null;
}
}

```

## User.java

```

package database_jon;

public class User {
    public int user_id;
    public String firstname;
    public String lastname;
    public String email;
    public String account_type;
    public Boolean approval;
    public Boolean authenticated;
}

```

## FailedLoginPrompt.java

```
package pages_jarold;

import java.awt.EventQueue;

import javax.swing.ImageIcon;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JLabel;
import java.awt.Font;
import java.awt.Image;

/**
 * Failed login prompt UI
 * @author Kelvin Dhomam
 *
 */
public class FailedLoginPrompt extends JFrame {

    /**
     * 
     */
    private static final long serialVersionUID = 1L;
    private JPanel contentPane;

    /**
     * Launch the application.
     */
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    FailedLoginPrompt frame = new FailedLoginPrompt();
                    frame.setTitle("Shoplet - Login Failed");
                    frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }

    /**
     * Create the frame.
     */
    public FailedLoginPrompt() {

        setBounds(100, 100, 392, 108);
        contentPane = new JPanel();
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

        setContentPane(contentPane);
        contentPane.setLayout(null);
    }
}
```

```

JLabel lblNewLabel = new JLabel("Wrong username or password!");
lblNewLabel.setFont(new Font("Tahoma", Font.PLAIN, 17));
lblNewLabel.setBounds(115, 11, 251, 37);
contentPane.add(lblNewLabel);

JLabel logo_label = new JLabel("");
logo_label.setBounds(29, 11, 50, 48);
contentPane.add(logo_label);
Image logo = new ImageIcon(this.getClass().getResource("x.png")).getImage();
Image scaledImage = logo.getScaledInstance(50, 50, Image.SCALE_DEFAULT);
logo_label.setIcon(new ImageIcon(scaledImage));
}
}

```

## HomePage.java

```

package pages_jarold;

import java.awt.EventQueue;

import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JLabel;
import java.awt.Font;

public class HomePage extends JFrame {

    private JPanel contentPane;

    /**
     * Launch the application.
     */
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    HomePage frame = new HomePage();
                    frame.setTitle("Shoplet");
                    frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }

    /**
     * Create the frame.
     */
    public HomePage() {
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

```

```

        setBounds(100, 100, 689, 478);
        contentPane = new JPanel();
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

        setContentPane(contentPane);
        contentPane.setLayout(null);

        JLabel lblNewLabel = new JLabel("Log in successful!");
        lblNewLabel.setFont(new Font("Tahoma", Font.PLAIN, 30));
        lblNewLabel.setBounds(148, 102, 355, 161);
        contentPane.add(lblNewLabel);
    }

}

```

## Login.java

```

package pages_jarold;

import java.awt.EventQueue;

import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JLabel;
import java.awt.Font;

public class HomePage extends JFrame {

    private JPanel contentPane;

    /**
     * Launch the application.
     */
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    HomePage frame = new HomePage();
                    frame.setTitle("Shoplet");
                    frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }

    /**
     * Create the frame.
     */
    public HomePage() {
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

```

```

        setBounds(100, 100, 689, 478);
        contentPane = new JPanel();
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

        setContentPane(contentPane);
        contentPane.setLayout(null);

        JLabel lblNewLabel = new JLabel("Log in successful!");
        lblNewLabel.setFont(new Font("Tahoma", Font.PLAIN, 30));
        lblNewLabel.setBounds(148, 102, 355, 161);
        contentPane.add(lblNewLabel);
    }

}

```

## Registration.java

```

package pages_jarold;

import java.awt.EventQueue;

import javax.swing.ImageIcon;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;

import database_jon.ShopletSystemManager;

import javax.swing.JLabel;
import java.awt.Font;
import java.awt.Image;
import javax.swing.JPopupMenu;
import java.awt.Component;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import javax.swing.JComboBox;
import javax.swing.JMenuBar;
import javax.swing.JMenuItem;
import java.awt.Color;
import javax.swing.DefaultComboBoxModel;
import javax.swing.JButton;
import javax.swing.JPasswordField;
import javax.swing.JTextField;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;

public class Registration extends JFrame {

    private JPanel contentPane;
    private JPasswordField password2_box;
    private JPasswordField password_box;
    private JTextField inputFirstName;
    private JTextField email_box;

```

```

private JTextField inputLastName;

/**
 * Launch the application.
 */
public static void main(String[] args) {
    EventQueue.invokeLater(new Runnable() {
        public void run() {
            try {
                Registration frame = new Registration();
                frame.setTitle("Shoplet - Registration");
                frame.setVisible(true);
            } catch (Exception e) {
                e.printStackTrace();
            }
        }
    });
}

/**
 * Create the frame.
 */
public Registration() {
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    setBounds(100, 100, 464, 534);
    contentPane = new JPanel();
    contentPane.setBackground(new Color(240, 240, 240));
    contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

    setContentPane(contentPane);
    contentPane.setLayout(null);

    JLabel registration_desc = new JLabel("Create a Shoplet account");
    registration_desc.setBounds(184, 36, 231, 42);
    registration_desc.setFont(new Font("Tahoma", Font.PLAIN, 15));
    contentPane.add(registration_desc);

    JLabel logo_label = new JLabel("");
    logo_label.setBounds(10, 11, 148, 144);
    contentPane.add(logo_label);
    Image logo = new ImageIcon(this.getClass().getResource("logo.png")).getImage();
    Image scaledImage = logo.getScaledInstance(150, 150, Image.SCALE_DEFAULT);
    logo_label.setIcon(new ImageIcon(scaledImage));

    JLabel account_label = new JLabel("Account type :");
    account_label.setBounds(48, 166, 128, 28);
    account_label.setFont(new Font("Tahoma", Font.PLAIN, 15));
    contentPane.add(account_label);

    JComboBox account_box = new JComboBox();
    account_box.setModel(new DefaultComboBoxModel(new String[] {"Buyer", "Seller"}));
    account_box.setMaximumRowCount(2);
    account_box.setBounds(186, 171, 201, 22);
    contentPane.add(account_box);

    JLabel email_label = new JLabel("Email :");

```

```

email_label.setFont(new Font("Tahoma", Font.PLAIN, 15));
email_label.setBounds(48, 205, 128, 28);
contentPane.add(email_label);

JButton cancel_button = new JButton("Cancel");
cancel_button.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        Login login = new Login();
        login.setVisible(true);
        dispose();
    }
});
cancel_button.setBounds(297, 407, 89, 23);
contentPane.add(cancel_button);

JButton register_button = new JButton("Register");
register_button.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        boolean match = false;

        if(String.valueOf(password_box.getPassword()) == String.valueOf(password_box.getPassword()))
{
            match = true;
        }
        else {
            match = false;
        }

        if ((String.valueOf(account_box.getSelectedItem()).equals("Seller")))
{
            System.out.println("Test");
            ShopletSystemManager.getInstance().add_user(inputFirstName.getText(),
inputLastName.getText(), email_box.getText(), String.valueOf(password_box.getPassword()),
String.valueOf(account_box.getSelectedItem()), false);
        }
        else if ((String.valueOf(account_box.getSelectedItem()).equals("Buyer")))
{
            System.out.println("Test1");
            ShopletSystemManager.getInstance().add_user(inputFirstName.getText(),
inputLastName.getText(), email_box.getText(), String.valueOf(password_box.getPassword()),
String.valueOf(account_box.getSelectedItem()), true);
        }
        //String firstname, String lastname, String email, String password, String account_type, Boolean
approval
    }
});
register_button.setBounds(183, 407, 89, 23);
contentPane.add(register_button);

JLabel user_label = new JLabel("First Name:");
user_label.setFont(new Font("Tahoma", Font.PLAIN, 15));
user_label.setBounds(48, 244, 128, 28);
contentPane.add(user_label);

JLabel pass_label = new JLabel("Password : ");

```

```

pass_label.setFont(new Font("Tahoma", Font.PLAIN, 15));
pass_label.setBounds(48, 318, 128, 28);
contentPane.add(pass_label);

JLabel confpass_label = new JLabel("Confirm password :");
confpass_label.setFont(new Font("Tahoma", Font.PLAIN, 15));
confpass_label.setBounds(51, 357, 148, 28);
contentPane.add(confpass_label);

password2_box = new JPasswordField();
password2_box.setColumns(25);
password2_box.setBounds(184, 363, 203, 20);
contentPane.add(password2_box);

password_box = new JPasswordField();
password_box.setColumns(25);
password_box.setBounds(184, 324, 203, 20);
contentPane.add(password_box);

inputFirstName = new JTextField();
inputFirstName.setColumns(20);
inputFirstName.setBounds(184, 250, 203, 20);
contentPane.add(inputFirstName);

email_box = new JTextField();
email_box.setBounds(184, 211, 203, 20);
contentPane.add(email_box);
email_box.setColumns(30);

JLabel user_label_1 = new JLabel("Last Name:");
user_label_1.setFont(new Font("Tahoma", Font.PLAIN, 15));
user_label_1.setBounds(48, 282, 128, 28);
contentPane.add(user_label_1);

inputLastName = new JTextField();
inputLastName.setColumns(20);
inputLastName.setBounds(184, 281, 203, 20);
contentPane.add(inputLastName);
}

private static void addPopup(Component component, final JPopupMenu popup) {
    component.addMouseListener(new MouseAdapter() {
        public void mousePressed(MouseEvent e) {
            if (e.isPopupTrigger()) {
                showMenu(e);
            }
        }

        public void mouseReleased(MouseEvent e) {
            if (e.isPopupTrigger()) {
                showMenu(e);
            }
        }
    });

    private void showMenu(MouseEvent e) {
        popup.show(e.getComponent(), e.getX(), e.getY());
    }
});
}

```

```
}
```

## ActiveSellersUI.java

```
package pages_Jeff_Admin;

import javax.swing.*;
import java.awt.event.*;
import java.util.List;

import javax.swing.GroupLayout.Alignment;
import javax.swing.LayoutStyle.ComponentPlacement;
import javax.swing.border.Border;

import database_jon.ShopletSystemManager;
import database_jon.User;
import net.miginfocom.swing.MigLayout;

import java.awt.Color;
import java.awt.Dimension;
import java.awt.Font;

public class ActiveSellersUI extends JFrame implements ActionListener{

    /**
     * Creates new form ActiveSellersUI
     */
    public ActiveSellersUI() {
        setTitle("Admin Panel - Active Sellers");
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    //@SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        contentPane = new javax.swing.JPanel();
        menuPane = new javax.swing.JPanel();
        active_sellersPane = new javax.swing.JPanel();

        contentPane.setBackground(new Color(240, 240, 240));

        menuPane.setBackground(new Color(240, 240, 240));
        back_button = new javax.swing.JButton();
        back_button.setForeground(new Color(255, 255, 255));

        back_button.setBackground(new java.awt.Color(102, 102, 102));
    }
}
```

```

back_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
back_button.setText("Close");
back_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        back_buttonActionPerformed(evt);
    }
});

javax.swing.GroupLayout menuPaneLayout = new javax.swing.GroupLayout(menuPane);
menuPaneLayout.setHorizontalGroup(
    menuPaneLayout.createParallelGroup(Alignment.LEADING)
    .addGroup(menuPaneLayout.createSequentialGroup()
        .addContainerGap()
        .addComponent(back_button, GroupLayout.PREFERRED_SIZE, 111,
GroupLayout.PREFERRED_SIZE)
        .addContainerGap(776, Short.MAX_VALUE))
);
menuPaneLayout.setVerticalGroup(
    menuPaneLayout.createParallelGroup(Alignment.LEADING)
    .addGroup(menuPaneLayout.createSequentialGroup()
        .addContainerGap()
        .addComponent(back_button, GroupLayout.DEFAULT_SIZE, 51, Short.MAX_VALUE)
        .addContainerGap())
);
menuPane.setLayout(menuPaneLayout);

active_sellersPane.setBackground(new Color(240, 240, 240));

javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);
contentPaneLayout.setHorizontalGroup(
    contentPaneLayout.createParallelGroup(Alignment.LEADING)
    .addGroup(contentPaneLayout.createSequentialGroup()
        .addContainerGap()
        .addGroup(contentPaneLayout.createParallelGroup(Alignment.LEADING)
            .addComponent(active_sellersPane, GroupLayout.DEFAULT_SIZE,
GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addGroup(contentPaneLayout.createSequentialGroup()
                .addComponent(menuPane, GroupLayout.PREFERRED_SIZE, 897,
GroupLayout.PREFERRED_SIZE)
                .addContainerGap())))
);
contentPaneLayout.setVerticalGroup(
    contentPaneLayout.createParallelGroup(Alignment.LEADING)
    .addGroup(contentPaneLayout.createSequentialGroup()
        .addContainerGap()
        .addComponent(menuPane, GroupLayout.PREFERRED_SIZE, GroupLayout.DEFAULT_SIZE,
GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(ComponentPlacement.RELATED, 18, Short.MAX_VALUE)
        .addComponent(active_sellersPane, GroupLayout.PREFERRED_SIZE, 547,
GroupLayout.PREFERRED_SIZE)
        .addContainerGap())
);
active_sellersPane.setLayout(new BoxLayout(active_sellersPane, BoxLayout.X_AXIS));
contentPane.setLayout(contentPaneLayout);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());

```

```

getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(contentPane, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
);

active_sellersPane.setLayout(new BoxLayout(active_sellersPane, BoxLayout.Y_AXIS));

//Active Users
List<User> pendingSellers = ShopletSystemManager.getInstance().grab_sellers(true);

for (int i = 0; i < pendingSellers.size(); i++)
{
    active_sellersPane.add(addActiveSeller(pendingSellers.get(i).firstname,
pendingSellers.get(i).lastname, pendingSellers.get(i).user_id), "span, growx");
}

pack();
}// </editor-fold>//GEN-END:initComponents
private void back_buttonActionPerformed(ActionEvent evt){
this.setVisible(false);
}

/**
 * Creates a Pending User UI component
 * @param firstName First name of user
 * @param lastName Last name of user
 * @param user_id User's id
 * @return A JPanel element to approve or deny a user
 */
public JPanel addActiveSeller(String firstName, String lastName, Integer user_id)
{
    // Convert price to 2 decimal places
    Border border = BorderFactory.createLineBorder(Color.black);

    // Build product entry
    JPanel newProductPanel = new JPanel(new MigLayout("", "[push][15]", ""));
    newProductPanel.setPreferredSize(new Dimension(1000, 60));
    newProductPanel.setMaximumSize(new Dimension(1000, 60));
    newProductPanel.setBackground(Color.white);

    JLabel productLabel = new JLabel(firstName + " " + lastName);
    productLabel.setFont(new Font("Arial", Font.PLAIN, 28));
    productLabel.setMaximumSize(new Dimension(200, 100));

    newProductPanel.add(productLabel);
    newProductPanel.add(new JLabel("Account Type: Seller")).setFont(new Font("Arial", Font.PLAIN,
16));
}

```

```

JButton productsBtn = new JButton("Products");
newProductPanel.add(productsBtn);

productsBtn.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        SellerProductUI newSellerUI = new
SellerProductUI(ShopletSystemManager.getInstance().grab_user_info(user_id));
        newSellerUI.setVisible(true);
    }
});

newProductPanel.setBorder(border);

// Return the product panel
return newProductPanel;
}

public static void main(String args[]) {
/* Set the Nimbus look and feel */
//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
/* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
 * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
 */
try {
    for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
        if ("Nimbus".equals(info.getName())) {
            javax.swing.UIManager.setLookAndFeel(info.getClassName());
            break;
        }
    }
} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(ActiveSellersUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(ActiveSellersUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(ActiveSellersUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(ActiveSellersUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
}

//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new ActiveSellersUI().setVisible(true);
    }
});
}

```

```

        });
    }
    private javax.swing.JPanel active_sellersPane;
    private javax.swing.JButton back_button;
    private javax.swing.JPanel contentPane;
    private javax.swing.JPanel menuPane;
    // End of variables declaration//GEN-END:variables

    @Override
    public void actionPerformed(ActionEvent e) {

        //throw new UnsupportedOperationException("Not supported yet."); // Generated from nbfs://nbhost/SystemFileSystem/Templates/Classes/Code/GeneratedMethodBody
    }
}

```

## AdminPanelUI.java

```

package pages_Jeff_Admin;

import javax.swing.*;

//import java.awt.Window;
import java.awt.event.*;
import java.util.List;
import java.awt.Color;
import java.awt.Dimension;
import java.awt.Font;

import javax.swing.GroupLayout.Alignment;
import javax.swing.LayoutStyle.ComponentPlacement;
import javax.swing.border.Border;

import database_jon.Product;
import database_jon.Review;
import database_jon.ShopletSystemManager;
import database_jon.User;
import net.miginfocom.swing.MigLayout;
import pages_Jeff_Seller.ProductUI;
import pages_kelvin.Cart;

import java.awt.FlowLayout;

/**
 * Admin Panel UI class
 * @author Kelvin Dhomam
 *
 */
public class AdminPanelUI extends JFrame {

    /**
     */

```

```

        * Creates new form AdminPanelUI
        */
    public AdminPanelUI() {
        setTitle("Admin Panel Dashboard");
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    //@SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        jSlider1 = new javax.swing.JSlider();
        contentPane = new javax.swing.JPanel();
        logoPane = new javax.swing.JPanel();
        logo = new javax.swing.JLabel();
        head_Administrator = new javax.swing.JLabel();
        head_Dashboard = new javax.swing.JLabel();
        logout_button = new javax.swing.JButton();
        logout_button.setForeground(new Color(255, 255, 255));
        pending_sellersPane = new javax.swing.JPanel();
        menuPane = new javax.swing.JPanel();
        create_new_user = new javax.swing.JButton();
        create_new_user.setForeground(new Color(255, 255, 255));
        active_sellers = new javax.swing.JButton();
        active_sellers.setForeground(new Color(255, 255, 255));
        orders = new javax.swing.JButton();
        orders.setForeground(new Color(255, 255, 255));
        pending_sellers = new javax.swing.JPanel();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        contentPane.setBackground(new Color(240, 240, 240));

        logoPane.setBackground(new Color(240, 240, 240));

        logo.setIcon(new
        ImageIcon(getClass().getResource("/pages_Jeff_Seller/icon/logo1.png"))); // NOI18N

        head_Administrator.setFont(new java.awt.Font("Helvetica Neue", 1, 24)); // NOI18N
        head_Administrator.setForeground(new java.awt.Color(204, 0, 51));
        head_Administrator.setText("Administrator");

        head_Dashboard.setBackground(new java.awt.Color(255, 255, 255));
        head_Dashboard.setFont(new java.awt.Font("Helvetica Neue", 1, 18)); // NOI18N
        head_Dashboard.setText("Dashboard (Pending Sellers)");

        logout_button.setBackground(new java.awt.Color(102, 102, 102));
        logout_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
        logout_button.setText("Logout");
        logout_button.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {

```

```

        logout_buttonActionPerformed(evt);
    });
});

javax.swing.GroupLayout logoPanelLayout = new javax.swing.GroupLayout(logoPane);
logoPanelLayout.setHorizontalGroup(
    logoPanelLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(logoPanelLayout.createSequentialGroup()
            .addContainerGap()
            .addComponent(logo)
            .addPreferredGap(ComponentPlacement.UNRELATED)
            .addComponent(head_Administrator)
            .addGap(68)
            .addComponent(head_Dashboard, GroupLayout.PREFERRED_SIZE, 269,
GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(ComponentPlacement.RELATED, 167, Short.MAX_VALUE)
            .addComponent(logout_button, GroupLayout.PREFERRED_SIZE, 93,
GroupLayout.PREFERRED_SIZE)
            .addContainerGap())
    );
logoPanelLayout.setVerticalGroup(
    logoPanelLayout.createParallelGroup(Alignment.LEADING)
        .addComponent(logo)
        .addComponent(logout_button, GroupLayout.PREFERRED_SIZE, 35,
GroupLayout.PREFERRED_SIZE)
        .addGroup(logoPanelLayout.createSequentialGroup()
            .addGap(16)
            .addGroup(logoPanelLayout.createParallelGroup(Alignment.BASELINE)
                .addComponent(head_Administrator, GroupLayout.PREFERRED_SIZE, 46,
GroupLayout.PREFERRED_SIZE)
                .addComponent(head_Dashboard, GroupLayout.PREFERRED_SIZE, 36,
GroupLayout.PREFERRED_SIZE)))
    );
logoPane.setLayout(logoPanelLayout);

pending_sellersPane.setBackground(new Color(240, 240, 240));
pending_sellersPane.addAncestorListener(new javax.swing.event.AncestorListener() {
    public void ancestorAdded(javax.swing.event.AncestorEvent evt) {
        pending_sellersPaneAncestorAdded(evt);
    }
    public void ancestorMoved(javax.swing.event.AncestorEvent evt) {
    }
    public void ancestorRemoved(javax.swing.event.AncestorEvent evt) {
    }
});
menuPane.setBackground(new Color(240, 240, 240));

create_new_user.setBackground(new java.awt.Color(102, 102, 102));
create_new_user.setFont(new java.awt.Font("Helvetica Neue", 1, 12)); // NOI18N
create_new_user.setText("Create New User");
create_new_user.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        create_new_userActionPerformed(evt);
    }
});

```

```

active_sellers.setBackground(new java.awt.Color(102, 102, 102));
active_sellers.setFont(new java.awt.Font("Helvetica Neue", 1, 12)); // NOI18N
active_sellers.setText("Active Sellers");
active_sellers.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        active_sellersActionPerformed(evt);
    }
});

orders.setBackground(new java.awt.Color(102, 102, 102));
orders.setFont(new java.awt.Font("Helvetica Neue", 1, 12)); // NOI18N
orders.setText("Orders");
orders.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ordersActionPerformed(evt);
    }
});

javax.swing.GroupLayout menuPaneLayout = new javax.swing.GroupLayout(menuPane);
menuPaneLayout.setHorizontalGroup(
    menuPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(menuPaneLayout.createSequentialGroup()
            .addContainerGap(GridLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(create_new_user, GroupLayout.PREFERRED_SIZE, 160,
GroupLayout.PREFERRED_SIZE)
            .addGap(132)
            .addComponent(active_sellers, GroupLayout.PREFERRED_SIZE, 160,
GroupLayout.PREFERRED_SIZE)
            .addGap(136)
            .addComponent(orders, GroupLayout.PREFERRED_SIZE, 160,
GroupLayout.PREFERRED_SIZE))
        );
    menuPaneLayout.setVerticalGroup(
        menuPaneLayout.createParallelGroup(Alignment.LEADING)
            .addGroup(menuPaneLayout.createSequentialGroup()
                .addContainerGap()
                .addGroup(menuPaneLayout.createParallelGroup(Alignment.LEADING)
                    .addGroup(menuPaneLayout.createParallelGroup(Alignment.LEADING,
false)
                        .addComponent(create_new_user, GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                        .addComponent(orders, GroupLayout.DEFAULT_SIZE, 47, Short.MAX_VALUE))
                    .addComponent(active_sellers, GroupLayout.DEFAULT_SIZE,
GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addContainerGap())
    );
    menuPane.setLayout(menuPaneLayout);

pending_sellers.setBackground(new Color(240, 240, 240));

javax.swing.GroupLayout pending_sellersPaneLayout = new
javax.swing.GroupLayout(pending_sellersPane);
pending_sellersPaneLayout.setHorizontalGroup(
    pending_sellersPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(pending_sellersPaneLayout.createSequentialGroup()
            .addContainerGap(47)

```

```

        .addComponent(menuPane, GroupLayout.PREFERRED_SIZE, GroupLayout.DEFAULT_SIZE,
        GroupLayout.PREFERRED_SIZE)
        .addContainerGap(38, Short.MAX_VALUE)
        .addComponent(pending_sellers, GroupLayout.DEFAULT_SIZE, 843, Short.MAX_VALUE)
    );
    pending_sellersPaneLayout.setVerticalGroup(
        pending_sellersPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(pending_sellersPaneLayout.createSequentialGroup()
            .addContainerGap()
            .addComponent(menuPane, GroupLayout.PREFERRED_SIZE, GroupLayout.DEFAULT_SIZE,
            GroupLayout.PREFERRED_SIZE)
            .addGap(24)
            .addComponent(pending_sellers, GroupLayout.DEFAULT_SIZE, 492, Short.MAX_VALUE)
            .addContainerGap())
    );
    pending_sellers.setLayout(new BoxLayout(pending_sellers, BoxLayout.X_AXIS));
    pending_sellersPane.setLayout(pending_sellersPaneLayout);

    javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);
    contentPane.setLayout(contentPaneLayout);
    contentPaneLayout.setHorizontalGroup(
        contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(logoPane, javax.swing.GroupLayout.DEFAULT_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addGap(16, 16, 16)
            .addComponent(pending_sellersPane, javax.swing.GroupLayout.PREFERRED_SIZE,
            javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(15, Short.MAX_VALUE))
    );
    contentPaneLayout.setVerticalGroup(
        contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addGap(16, 16, 16)
            .addComponent(logoPane, javax.swing.GroupLayout.PREFERRED_SIZE,
            javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, javax.swing.LayoutStyle.ComponentPlacement.RELATED, 18,
            Short.MAX_VALUE)
            .addComponent(pending_sellersPane, javax.swing.GroupLayout.PREFERRED_SIZE,
            javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
    );
    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(contentPane, javax.swing.GroupLayout.PREFERRED_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(contentPane, javax.swing.GroupLayout.PREFERRED_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
    );
    pending_sellers.setLayout(new BoxLayout(pending_sellers, BoxLayout.Y_AXIS));

```

```

//Pending Users
List<User> pendingSellers = ShopletSystemManager.getInstance().grab_sellers(false);

for (int i = 0; i < pendingSellers.size(); i++)
{
    pending_sellers.add(addPendingSeller(pendingSellers.get(i).firstname,
pendingSellers.get(i).lastname, pendingSellers.get(i).user_id), "span, growx");
}

pack();
}// </editor-fold>//GEN-END:initComponents

private void pending_sellersPaneAncestorAdded(javax.swing.event.AncestorEvent evt) {//GEN-FIRST:event_pending_sellersPaneAncestorAdded
    // TODO add your handling code here:
}//GEN-LAST:event_pending_sellersPaneAncestorAdded

//GEN-FIRST:event_ordersActionPerformed

//GEN-LAST:event_ordersActionPerformed

private void active_sellersActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_active_sellersActionPerformed
    ActiveSellersUI obj = new ActiveSellersUI();
    obj.setVisible(true);
}//GEN-LAST:event_active_sellersActionPerformed

private void create_new_userActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_create_new_userActionPerformed
    CreateNewUserUI obj = new CreateNewUserUI();
    obj.setVisible(true);
}//GEN-LAST:event_create_new_userActionPerformed
private void ordersActionPerformed(ActionEvent evt){
    OrdersUI obj = new OrdersUI();
    obj.setVisible(true);
}
private void logout_buttonActionPerformed(ActionEvent evt){
    Logout obj = new Logout();
    if(logout_button.getMouseListeners() != null){
        System.exit(0);
        obj.getClass();
        //AdminPanelUI.dispose();
    }
}

/* */
private void displayPaneAncestorAdded(javax.swing.event.AncestorEvent evt) {
    PendingSellersUI obj = new PendingSellersUI();
    obj.setVisible(true);
}
/***
 * Creates a Pending User UI component
 * @param firstName First name of user
*/

```

```

    * @param lastName Last name of user
    * @param user_id User's id
    * @return A JPanel element to approve or deny a user
*/
public JPanel addPendingSeller(String firstName, String lastName, Integer user_id)
{
    // Convert price to 2 decimal places
    Border border = BorderFactory.createLineBorder(Color.black);

    // Build product entry
    JPanel newProductPanel = new JPanel(new MigLayout("", "[]push[]15", "[]"));
    newProductPanel.setPreferredSize(new Dimension(1000, 60));
    newProductPanel.setMaximumSize(new Dimension(1000, 60));
    newProductPanel.setBackground(Color.white);

    JLabel productLabel = new JLabel(firstName + " " + lastName);
    productLabel.setFont(new Font("Arial", Font.PLAIN, 28));
    productLabel.setMaximumSize(new Dimension(200, 100));

    newProductPanel.add(productLabel);
    newProductPanel.add(new JLabel("Account Type: Seller")).setFont(new Font("Arial", Font.PLAIN, 16));

    JButton approveBtn = new JButton("Approve");
    JButton denyBtn = new JButton("Deny");

    newProductPanel.add(approveBtn);
    newProductPanel.add(denyBtn);

    approveBtn.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            ShopletSystemManager.getInstance().edit_user(user_id, null, null, null, null, null, true);
            JOptionPane.showMessageDialog(null, "User has been approved.", "Shoplet",
JOptionPane.INFORMATION_MESSAGE);
            refreshPendingUserList();
        }
    });

    denyBtn.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            ShopletSystemManager.getInstance().edit_user(user_id, null, null, null, null, "buyer", false);
            JOptionPane.showMessageDialog(null, "User has been denied.", "Shoplet",
JOptionPane.INFORMATION_MESSAGE);
            refreshPendingUserList();
        }
    });

    newProductPanel.setBorder(border);

    // Return the product panel
    return newProductPanel;
}

/**
 * Refreshes Pending User list UI
 */

```

```

public void refreshPendingUserList()
{
    pending_sellers.removeAll();

    //Pending Sellers
    List<User> pendingSellers = ShopletSystemManager.getInstance().grab_sellers(false);

    for (int i = 0; i < pendingSellers.size(); i++)
    {
        pending_sellers.add(addPendingSeller(pendingSellers.get(i).firstname,
        pendingSellers.get(i).lastname, pendingSellers.get(i).user_id, "span, growx"));
    }

    pending_sellers.revalidate();
    pending_sellers.repaint();
}

public static void main(String args[])
{
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
        javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

        java.util.logging.Logger.getLogger(AdminPanelUI.class.getName()).log(java.util.logging.Level.SEVERE,
        null, ex);
    } catch (InstantiationException ex) {

        java.util.logging.Logger.getLogger(AdminPanelUI.class.getName()).log(java.util.logging.Level.SEVERE,
        null, ex);
    } catch (IllegalAccessException ex) {

        java.util.logging.Logger.getLogger(AdminPanelUI.class.getName()).log(java.util.logging.Level.SEVERE,
        null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

        java.util.logging.Logger.getLogger(AdminPanelUI.class.getName()).log(java.util.logging.Level.SEVERE,
        null, ex);
    }
    //
```

//</editor-fold>

/\* Create and display the form \*/

```

java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new AdminPanelUI().setVisible(true);
    }
});

//AdminPanelUI obj = new AdminPanelUI();
//JFrame frame = new AdminPanelUI();

```

```

    }
    private javax.swing.JButton active_sellers;
    private javax.swing.JPanel contentPane;
    private javax.swing.JButton create_new_user;
    private javax.swing.JLabel head_Administrator;
    private javax.swing.JLabel head_Dashboard;
    private javax.swing.JSlider jSlider1;
    private javax.swing.JLabel logo;
    private javax.swing.JPanel logoPane;
    private javax.swing.JButton logout_button;
    private javax.swing.JPanel menuPane;
    private javax.swing.JButton orders;
    private javax.swing.JPanel pending_sellers;
    private javax.swing.JPanel pending_sellersPane;
    // End of variables declaration//GEN-END:variables
}

```

## CreateNewUserUI.java

```

package pages_Jeff_Admin;

import javax.swing.*;
import database_jon.ShopletSystemManager;

import java.awt.event.*;
import java.awt.Color;
import javax.swing.GroupLayout.Alignment;
import javax.swing.LayoutStyle.ComponentPlacement;

/**
 * Creates a new user class UI
 * @author Kelvin Doman
 *
 */
public class CreateNewUserUI extends JFrame implements ActionListener{

    /**
     * Creates new form CreateNewUserUI
     */
    public CreateNewUserUI() {
        setTitle("Admin - Create User");
        getContentPane().setBackground(new Color(240, 240, 240));
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    // @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents

```

```

private void initComponents() {

    contentPane = new javax.swing.JPanel();
    logoPane = new javax.swing.JPanel();
    logo = new javax.swing.JLabel();
    header_message = new javax.swing.JLabel();
    inforPane = new javax.swing.JPanel();
    account_type = new javax.swing.JLabel();
    account_type.setBounds(31, 11, 132, 32);
    email = new javax.swing.JLabel();
    email.setBounds(31, 61, 126, 32);
    username = new javax.swing.JLabel();
    username.setBounds(31, 191, 126, 31);
    password = new javax.swing.JLabel();
    password.setBounds(31, 233, 126, 32);
    confirm_password = new javax.swing.JLabel();
    confirm_password.setBounds(31, 277, 126, 30);
    account_typeCombo = new javax.swing.JComboBox<>();
    account_typeCombo.setBounds(181, 16, 218, 22);
    email_TextField = new javax.swing.JTextField();
    email_TextField.setBounds(181, 69, 218, 16);
    username_TextField = new javax.swing.JTextField();
    username_TextField.setBounds(179, 198, 218, 16);
    passwor_PasswordField = new javax.swing.JPasswordField();
    passwor_PasswordField.setBounds(179, 241, 218, 16);
    comfirm_passwor_PasswordField = new javax.swing.JPasswordField();
    comfirm_passwor_PasswordField.setBounds(179, 284, 218, 16);
    create = new javax.swing.JButton();
    create.setBounds(179, 324, 100, 32);
    cancel = new javax.swing.JButton();
    cancel.setBounds(297, 324, 100, 32);

    contentPane.setBackground(new Color(240, 240, 240));

    logoPane.setBackground(new Color(240, 240, 240));

    logo.setIcon(new
    ImageIcon(CreateNewUserUI.class.getResource("/pages_Jeff_Admin/logo1.png"))); // NOI18N

    header_message.setBackground(new java.awt.Color(255, 255, 255));
    header_message.setFont(new java.awt.Font("Helvetica Neue", 1, 14)); // NOI18N
    header_message.setText("Create a SHOPLET Account");

    javax.swing.GroupLayout logoPaneLayout = new javax.swing.GroupLayout(logoPane);
    logoPane.setLayout(logoPaneLayout);
    logoPaneLayout.setHorizontalGroup(
        logoPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(logoPaneLayout.createSequentialGroup()
                .addGroup(logoPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(logoPaneLayout.createSequentialGroup()
                        .addGap(143, 143, 143)
                        .addComponent(logo))
                    .addGroup(logoPaneLayout.createSequentialGroup()
                        .addGap(26, 26, 26)
                        .addComponent(header_message)))
                .addGap(76, 76, 76)
            )
    );
    logoPaneLayout.setVerticalGroup(
        logoPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(logoPaneLayout.createSequentialGroup()
                .addGap(143, 143, 143)
                .addComponent(logo))
            .addGroup(logoPaneLayout.createSequentialGroup()
                .addGap(26, 26, 26)
                .addComponent(header_message))
            .addGap(76, 76, 76)
    );
}

```

```

        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
logoPaneLayout.createSequentialGroup()
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(header_message, javax.swing.GroupLayout.PREFERRED_SIZE, 45,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(42, 42, 42))
    .addGroup(logoPaneLayout.createSequentialGroup()
        .addComponent(logo)
        .addGap(0, 16, Short.MAX_VALUE))
);
}

inforPane.setBackground(new Color(240, 240, 240));

account_type.setText("Account Type :");

email.setText("Email :");

username.setText("Username :");

password.setText("Password :");

confirm_password.setText("Confirm Password :");

account_typeCombo.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "Buyer",
"Seller", "Admin" }));
account_typeCombo.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0,
0, 0)));
email_TextField.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0,
0)));
username_TextField.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0,
0, 0)));
passwor_PasswordField.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));
comfirm_passwor_PasswordField.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));

create.setBackground(new java.awt.Color(153, 204, 255));
create.setFont(new java.awt.Font("Helvetica Neue", 1, 14)); // NOI18N
create.setText("Create");
create.setBorder(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
create.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        createActionPerformed(evt);
    }
});
cancel.setBackground(new java.awt.Color(153, 204, 255));
cancel.setFont(new java.awt.Font("Helvetica Neue", 1, 14)); // NOI18N
cancel.setText("Cancel");
cancel.setBorder(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));

```

```

cancel.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        cancelActionPerformed(evt);
    }
});

javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);
contentPaneLayout.setHorizontalGroup(
    contentPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addGap(53)
            .addComponent(logoPane, GroupLayout.PREFERRED_SIZE, GroupLayout.DEFAULT_SIZE, GroupLayout.PREFERRED_SIZE)
            .addGap(115)
            .addComponent(inforPane, GroupLayout.PREFERRED_SIZE, 557, GroupLayout.PREFERRED_SIZE))
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addGap(79, Short.MAX_VALUE)
            .addContainerGap(79, Short.MAX_VALUE))
);
contentPaneLayout.setVerticalGroup(
    contentPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addGap(37)
            .addComponent(logoPane, GroupLayout.PREFERRED_SIZE, GroupLayout.DEFAULT_SIZE, GroupLayout.PREFERRED_SIZE)
            .addGap(373, Short.MAX_VALUE)
            .addContainerGap())
);
inforPane.setLayout(null);
inforPane.add(confirm_password);
inforPane.add(password);
inforPane.add(username);
inforPane.add(email);
inforPane.add(account_type);
inforPane.add(account_typeCombo);
inforPane.add(email_TextField);
inforPane.add(username_TextField);
inforPane.add(passwor_PasswordField);
inforPane.add(comfirm_passwor_PasswordField);
inforPane.add(create);
inforPane.add(cancel);

inputLastName = new JTextField();
inputLastName.setBounds(179, 150, 218, 20);
inforPane.add(inputLastName);
inputLastName.setColumns(10);

inputFirstName = new JTextField();
inputFirstName.setColumns(10);
inputFirstName.setBounds(181, 108, 218, 20);
inforPane.add(inputFirstName);

firstNameLbl = new JLabel();

```

```

firstNameLbl.setText("First Name:");
firstNameLbl.setBounds(33, 104, 126, 32);
inforPane.add(firstNameLbl);

lastNameLbl = new JLabel();
lastNameLbl.setText("Last Name:");
lastNameLbl.setBounds(31, 148, 126, 32);
inforPane.add(lastNameLbl);
contentPane.setLayout(contentPaneLayout);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(contentPane, javax.swing.GroupLayout.PREFERRED_SIZE, 751,
        javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addContainerGap())
);
pack();
}// </editor-fold>//GEN-END:initComponents

private void cancelActionPerformed(ActionEvent evt){
    this.setVisible(false);
}

private void createActionPerformed(ActionEvent evt){
    if (email_TextField.getText().isEmpty() || inputFirstName.getText().isEmpty() ||
    inputLastName.getText().isEmpty() || username_TextField.getText().isEmpty() ||
    passwor_PasswordField.getText().isEmpty() ||
    comfirm_passwor_PasswordField.getText().isEmpty())
    {
        JOptionPane.showMessageDialog(null, "One or more fields are empty.", "Shoplet",
        JOptionPane.ERROR_MESSAGE);
        return;
    }
    else if (!(passwor_PasswordField.getText().equals(comfirm_passwor_PasswordField.getText())))
    {
        JOptionPane.showMessageDialog(null, "Password fields do not match.", "Shoplet",
        JOptionPane.ERROR_MESSAGE);
        return;
    }
    else
    {
        ShopletSystemManager.getInstance().add_user(inputFirstName.getText(),
        inputLastName.getText(), email_TextField.getText(), passwor_PasswordField.getText(),
        account_typeCombo.getSelectedItem().toString(), true);
    }
}

```

```

        JOptionPane.showMessageDialog(null, "User successfully created.", "Shoplet",
JOptionPane.INFORMATION_MESSAGE);
        this.setVisible(false);
    }
}

public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) "
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(CreateNewUserUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(CreateNewUserUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(CreateNewUserUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(CreateNewUserUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }
    //

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new CreateNewUserUI().setVisible(true);
        }
    });
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JLabel account_type;
private javax.swing.JComboBox<String> account_typeCombo;
private javax.swing.JButton cancel;
private javax.swing.JPasswordField comfirm_passwor_PasswordField;
private javax.swing.JLabel confirm_password;
private javax.swing.JPanel contentPane;
private javax.swing.JButton create;
private javax.swing.JLabel email;

```

```

private javax.swing.JTextField email_TextField;
private javax.swing.JLabel header_message;
private javax.swing.JPanel inforPane;
private javax.swing.JLabel logo;
private javax.swing.JPanel logoPane;
private javax.swing.JPasswordField passwor_PasswordField;
private javax.swing.JLabel password;
private javax.swing.JLabel username;
private javax.swing.JTextField username_TextField;
private JTextField inputLastName;
private JTextField inputFirstName;
private JLabel firstNameLbl;
private JLabel lastNameLbl;
// End of variables declaration//GEN-END:variables
@Override
public void actionPerformed(ActionEvent e) {
    // TODO Auto-generated method stub
}
}

```

## Logout.java

```

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package pages_Jeff_Admin;

import javax.swing.JFrame;
import javax.swing.JOptionPane;

/**
 *
 * @author jeffplate
 */
public class Logout {
    Logout(){
        JFrame frame = new JFrame();
        JOptionPane.showMessageDialog(frame, "You've successfully logged out!");
    }
    public static void main(String[] args) {
        Logout logout = new Logout();
    }
}

```

## OrdersUI.java

```

package pages_Jeff_Admin;
import javax.swing.*;
import java.awt.event.*;
import java.util.List;
import java.awt.Color;
import java.awt.Dimension;
import java.awt.Font;

import javax.swing.GroupLayout.Alignment;
import javax.swing.LayoutStyle.ComponentPlacement;
import javax.swing.border.Border;

import database_jon.Order;
import database_jon.Product;
import database_jon.ShopletSystemManager;
import net.miginfocom.swing.MigLayout;
import pages_Jeff_Seller.ProductUI;

public class OrdersUI extends JFrame implements ActionListener{

    //private Refund refund;
    /**
     * Creates new form OrdersUI
     */
    public OrdersUI() {
        setTitle("Admin Panel - Orders");
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    // @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        contentPane = new javax.swing.JPanel();
        menuPane = new javax.swing.JPanel();
        home = new javax.swing.JButton();
        home.setForeground(new Color(255, 255, 255));
        ordersPane = new javax.swing.JPanel();

        contentPane.setBackground(new Color(240, 240, 240));

        menuPane.setBackground(new Color(240, 240, 240));

        home.setBackground(new java.awt.Color(102, 102, 102));
        home.setFont(new java.awt.Font("Helvetica Neue", 1, 12)); // NOI18N
        home.setText("Close");
        home.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                homeActionPerformed(evt);
            }
        });
    }
}

```

```

javax.swing.GroupLayout menuPaneLayout = new javax.swing.GroupLayout(menuPane);
menuPaneLayout.setHorizontalGroup(
    menuPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(menuPanelLayout.createSequentialGroup()
            .addContainerGap()
            .addComponent(home, GroupLayout.PREFERRED_SIZE, 201,
GroupLayout.PREFERRED_SIZE)
            .addContainerGap(497, Short.MAX_VALUE))
    );
menuPaneLayout.setVerticalGroup(
    menuPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(menuPanelLayout.createSequentialGroup()
            .addContainerGap()
            .addComponent(home, GroupLayout.DEFAULT_SIZE, 50, Short.MAX_VALUE)
            .addContainerGap())
    );
menuPane.setLayout(menuPaneLayout);

ordersPane.setBackground(new Color(240, 240, 240));

javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);
contentPaneLayout.setHorizontalGroup(
    contentPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addGroup(contentPaneLayout.createParallelGroup(Alignment.TRAILING)
                .addGroup(Alignment.LEADING, contentPaneLayout.createSequentialGroup()
                    .addContainerGap()
                    .addComponent(ordersPane, GroupLayout.DEFAULT_SIZE, 762, Short.MAX_VALUE))
            .addGroup(Alignment.LEADING, contentPaneLayout.createSequentialGroup()
                .addGap(64)
                .addComponent(menuPane, GroupLayout.PREFERRED_SIZE,
GroupLayout.DEFAULT_SIZE, GroupLayout.PREFERRED_SIZE)))
        .addContainerGap())
    );
contentPaneLayout.setVerticalGroup(
    contentPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addContainerGap()
            .addComponent(menuPane, GroupLayout.PREFERRED_SIZE, GroupLayout.DEFAULT_SIZE,
GroupLayout.PREFERRED_SIZE)
            .addGap(18)
            .addComponent(ordersPane, GroupLayout.PREFERRED_SIZE, 536,
GroupLayout.PREFERRED_SIZE)
            .addContainerGap(GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );
contentPane.setLayout(contentPaneLayout);
ordersPane.setLayout(new BoxLayout(ordersPane, BoxLayout.X_AXIS));

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );

```

```

        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
                javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        );

        ordersPane.setLayout(new BoxLayout(ordersPane, BoxLayout.Y_AXIS));

        //Orders
        List<Order> orders = ShopletSystemManager.getInstance().get_all_orders();

        for (int i = 0; i < orders.size(); i++)
        {
            ordersPane.add(addOrderItem(orders.get(i).order_id, orders.get(i).buyer_id,
            orders.get(i).total_cost, orders.get(i).product_ids, "span, growx"));
        }

        pack();
    } // </editor-fold> //GEN-END:initComponents

    /**
     * Adds an order item UI element
     * @param order_id the order_id of the order
     * @param buyer_id the buyer_id of the order
     * @param total_cost the total_cost of the order
     * @param productIds the product ids involved in the order
     * @return A JPanel element reperesnting a order
     */
    public JPanel addOrderItem(Integer order_id, Integer buyer_id, String total_cost, String productIds)
    {
        // Convert price to 2 decimal places
        Border border = BorderFactory.createLineBorder(Color.black);

        // Build product entry
        JPanel orderPanel = new JPanel(new MigLayout("", "[push][]15", "["));
        orderPanel.setPreferredSize(new Dimension(1000, 60));
        orderPanel.setMaximumSize(new Dimension(1000, 60));
        orderPanel.setBackground(Color.white);

        JLabel orderNumber = new JLabel("Order #000" + order_id.toString());
        orderNumber.setMaximumSize(new Dimension(200, 100));
        orderPanel.add(orderNumber);

        JLabel orderBuyer = new JLabel("Buyer ID: " + buyer_id.toString());
        orderBuyer.setMaximumSize(new Dimension(200, 100));
        orderPanel.add(orderBuyer);

        JLabel orderTotalCost = new JLabel("Total cost: $" + total_cost);
        orderTotalCost.setMaximumSize(new Dimension(200, 100));
        orderPanel.add(orderTotalCost);

        JLabel productsIdsInCart = new JLabel("Order Products: " + productIds);
        productsIdsInCart.setMaximumSize(new Dimension(200, 100));
        orderPanel.add(productsIdsInCart);

        JButton cancelOrder = new JButton("Cancel Order");
    }

```

```

cancelOrder.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        ShopletSystemManager.getInstance().delete_order(order_id);
        refreshOrdersUI();
        JOptionPane.showMessageDialog(null, "Order has been cancelled. Refund in process...", "Shoplet", JOptionPane.INFORMATION_MESSAGE);
    }
});

orderPanel.add(cancelOrder);
orderPanel.setBorder(border);

// Return the product panel
return orderPanel;
}

void refreshOrdersUI()
{
    ordersPane.removeAll();

    //Orders
    List<Order> orders = ShopletSystemManager.getInstance().get_all_orders();

    for (int i = 0; i < orders.size(); i++)
    {
        ordersPane.add(addOrderItem(orders.get(i).order_id, orders.get(i).buyer_id,
orders.get(i).total_cost, orders.get(i).product_ids, "span, growx"));
    }

    ordersPane.revalidate();
    ordersPane.repaint();
}

private void homeActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_homeActionPerformed
    this.setVisible(false);
} //GEN-LAST:event_homeActionPerformed

/** 
 * Main
 * @param args
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    // <editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    }
}

```

```

        } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(OrdersUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(OrdersUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(OrdersUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(OrdersUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
}
//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new OrdersUI().setVisible(true);
    }
});
private javax.swing.JPanel contentPane;
private javax.swing.JButton home;
private javax.swing.JPanel menuPane;
private javax.swing.JPanel ordersPane;
// End of variables declaration//GEN-END:variables
@Override
public void actionPerformed(ActionEvent e) {
    // TODO Auto-generated method stub
}
}
}

```

## PendingSellersUI.java

```

package pages_Jeff_Admin;

import javax.swing.*;
//import javax.swing.event.AncestorEvent;
//import javax.swing.event.AncestorListener;

import java.awt.event.*;
import java.awt.Color;
import javax.swing.GroupLayout.Alignment;
import javax.swing.LayoutStyle.ComponentPlacement;

/**

```

```

 * Pending Sellers UI class
 * @author Kelvin Dhomam
 *
 */
public class PendingSellersUI extends JFrame implements ActionListener{
    /**
     * Creates new form PendingSellersUI
     */
    public PendingSellersUI() {
        setTitle("Admin - Pending Users");
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    // @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        contentPane = new javax.swing.JPanel();
        menuPane = new javax.swing.JPanel();
        back_button = new javax.swing.JButton();
        back_button.setForeground(new Color(255, 255, 255));
        pending_sellersPane = new javax.swing.JPanel();
        pending_sellers1 = new javax.swing.JPanel();
        fname_lname1 = new javax.swing.JLabel();
        account_type1 = new javax.swing.JLabel();
        accept1 = new javax.swing.JButton();
        accept1.setForeground(new Color(255, 255, 255));
        decline1 = new javax.swing.JButton();
        decline1.setForeground(new Color(255, 255, 255));
        pending_sellers2 = new javax.swing.JPanel();
        fname_lname2 = new javax.swing.JLabel();
        account_type2 = new javax.swing.JLabel();
        accept2 = new javax.swing.JButton();
        accept2.setForeground(new Color(255, 255, 255));
        decline2 = new javax.swing.JButton();
        decline2.setForeground(new Color(255, 255, 255));
        pending_sellers3 = new javax.swing.JPanel();
        fname_lname3 = new javax.swing.JLabel();
        account_type3 = new javax.swing.JLabel();
        accept3 = new javax.swing.JButton();
        accept3.setForeground(new Color(255, 255, 255));
        decline3 = new javax.swing.JButton();
        decline3.setForeground(new Color(255, 255, 255));
        pending_sellers4 = new javax.swing.JPanel();
        fname_lname4 = new javax.swing.JLabel();
        account_type4 = new javax.swing.JLabel();
        accept4 = new javax.swing.JButton();
        accept4.setForeground(new Color(255, 255, 255));
        decline4 = new javax.swing.JButton();
        decline4.setForeground(new Color(255, 255, 255));
        pending_sellers5 = new javax.swing.JPanel();
    }
}

```

```

fname_lname5 = new javax.swing.JLabel();
account_type5 = new javax.swing.JLabel();
accept5 = new javax.swing.JButton();
accept5.setForeground(new Color(255, 255, 255));
decline5 = new javax.swing.JButton();
decline5.setForeground(new Color(255, 255, 255));
pending_sellers6 = new javax.swing.JPanel();
fname_lname6 = new javax.swing.JLabel();
account_type6 = new javax.swing.JLabel();
accept6 = new javax.swing.JButton();
accept6.setForeground(new Color(255, 255, 255));
decline6 = new javax.swing.JButton();
decline6.setForeground(new Color(255, 255, 255));
pending_sellers7 = new javax.swing.JPanel();
fname_lname7 = new javax.swing.JLabel();
account_type7 = new javax.swing.JLabel();
accept7 = new javax.swing.JButton();
accept7.setForeground(new Color(255, 255, 255));
decline7 = new javax.swing.JButton();
decline7.setForeground(new Color(255, 255, 255));
pending_sellers8 = new javax.swing.JPanel();
fname_lname8 = new javax.swing.JLabel();
account_type8 = new javax.swing.JLabel();
accept8 = new javax.swing.JButton();
accept8.setForeground(new Color(255, 255, 255));
decline8 = new javax.swing.JButton();
decline8.setForeground(new Color(255, 255, 255));

//setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

contentPane.setBackground(new Color(240, 240, 240));

menuPane.setBackground(new Color(240, 240, 240));

back_button.setBackground(new java.awt.Color(102, 102, 102));
back_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
back_button.setText("Close");
back_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        back_buttonActionPerformed(evt);
    }
});

javax.swing.GroupLayout menuPaneLayout = new javax.swing.GroupLayout(menuPane);
menuPaneLayout.setHorizontalGroup(
    menuPaneLayout.createParallelGroup(Alignment.TRAILING)
        .addGroup(Alignment.LEADING, menuPaneLayout.createSequentialGroup()
            .addGap(21)
            .addComponent(back_button, GroupLayout.PREFERRED_SIZE, 91, GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(LayoutStyle.ComponentPlacement.RELATED, Short.MAX_VALUE)
            .addGap(826))
);
menuPaneLayout.setVerticalGroup(
    menuPaneLayout.createParallelGroup(Alignment.TRAILING)
        .addGroup(menuPaneLayout.createSequentialGroup()
            .addGap(21)
            .addComponent(back_button, GroupLayout.PREFERRED_SIZE, 91, GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(LayoutStyle.ComponentPlacement.RELATED, Short.MAX_VALUE)
            .addGap(826))
);

```

```

        .addComponent(back_button, GroupLayout.PREFERRED_SIZE, 50,
GroupLayout.PREFERRED_SIZE))
);
menuPane.setLayout(menuPaneLayout);

pending_sellersPane.setBackground(new Color(240, 240, 240));

pending_sellers1.setBackground(new java.awt.Color(255, 255, 255));
pending_sellers1.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0,
0)));
fname_lname1.setText("F. Name L. Name");

account_type1.setText("Account Type: Seller");

accept1.setBackground(new java.awt.Color(102, 102, 102));
accept1.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
accept1.setText("Accept");
accept1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        accept1ActionPerformed(evt);
    }
});
decline1.setBackground(new java.awt.Color(102, 102, 102));
decline1.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
decline1.setText("Decline");
decline1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        decline1ActionPerformed(evt);
    }
});

javax.swing.GroupLayout pending_sellers1Layout = new
javax.swing.GroupLayout(pending_sellers1);
pending_sellers1.setLayout(pending_sellers1Layout);
pending_sellers1Layout.setHorizontalGroup(
    pending_sellers1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(pending_sellers1Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(account_type1, javax.swing.GroupLayout.PREFERRED_SIZE, 191,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(accept1, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(decline1, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(fname_lname1, javax.swing.GroupLayout.PREFERRED_SIZE, 186,
javax.swing.GroupLayout.PREFERRED_SIZE)
        )
        .addGroup(pending_sellers1Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(accept1, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(decline1, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(account_type1, javax.swing.GroupLayout.PREFERRED_SIZE, 191,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(fname_lname1, javax.swing.GroupLayout.PREFERRED_SIZE, 186,
javax.swing.GroupLayout.PREFERRED_SIZE)
        )
    )
);
pending_sellers1Layout.setVerticalGroup(
    pending_sellers1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(pending_sellers1Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(account_type1, javax.swing.GroupLayout.PREFERRED_SIZE, 191,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(accept1, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(decline1, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(fname_lname1, javax.swing.GroupLayout.PREFERRED_SIZE, 186,
javax.swing.GroupLayout.PREFERRED_SIZE)
        )
        .addGroup(pending_sellers1Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(accept1, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(decline1, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(account_type1, javax.swing.GroupLayout.PREFERRED_SIZE, 191,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(fname_lname1, javax.swing.GroupLayout.PREFERRED_SIZE, 186,
javax.swing.GroupLayout.PREFERRED_SIZE)
        )
    )
);

```

```

        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
pending_sellers1Layout.createSequentialGroup()
        .addContainerGap()

.addGroup(pending_sellers1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
        .addComponent(account_type1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(fname_lname1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(accept1, javax.swing.GroupLayout.DEFAULT_SIZE, 48,
Short.MAX_VALUE)
        .addComponent(decline1, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        .addContainerGap())
);

pending_sellers2.setBackground(new java.awt.Color(255, 255, 255));
pending_sellers2.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0,
0)));

fname_lname2.setText("F. Name L. Name");

account_type2.setText("Account Type: Seller");

accept2.setBackground(new java.awt.Color(102, 102, 102));
accept2.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
accept2.setText("Accept");
accept2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        accept2ActionPerformed(evt);
    }
});

decline2.setBackground(new java.awt.Color(102, 102, 102));
decline2.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
decline2.setText("Decline");
decline2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        decline2ActionPerformed(evt);
    }
});

javax.swing.GroupLayout pending_sellers2Layout = new
javax.swing.GroupLayout(pending_sellers2);
pending_sellers2.setLayout(pending_sellers2Layout);
pending_sellers2Layout.setHorizontalGroup(
pending_sellers2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(pending_sellers2Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(fname_lname2, javax.swing.GroupLayout.PREFERRED_SIZE, 186,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(account_type2, javax.swing.GroupLayout.PREFERRED_SIZE, 191,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(327, 327, 327)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 327,
327)
        )
);

```

```

Short.MAX_VALUE)
    .addComponent(accept2, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addGap(18, 18, 18)
    .addComponent(decline2, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addContainerGap())
);
pending_sellers2Layout.setVerticalGroup(
    pending_sellers2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(pending_sellers2Layout.createSequentialGroup()

.addGroup(pending_sellers2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(account_type2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addGroup(pending_sellers2Layout.createSequentialGroup()
        .addContainerGap()

.addGroup(pending_sellers2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
pending_sellers2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(decline2, javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(accept2, javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addComponent(fname_lname2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))
        .addContainerGap())
);
pending_sellers3.setBackground(new java.awt.Color(255, 255, 255));
pending_sellers3.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));
fname_lname3.setText("F. Name L. Name");
account_type3.setText("Account Type: Seller");
accept3.setBackground(new java.awt.Color(102, 102, 102));
accept3.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
accept3.setText("Accept");
accept3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        accept3ActionPerformed(evt);
    }
});
decline3.setBackground(new java.awt.Color(102, 102, 102));
decline3.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
decline3.setText("Decline");
decline3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        decline3ActionPerformed(evt);
    }
});

```

```

        javax.swing.GroupLayout pending_sellers3Layout = new
javax.swing.GroupLayout(pending_sellers3);
pending_sellers3.setLayout(pending_sellers3Layout);
pending_sellers3Layout.setHorizontalGroup(
    pending_sellers3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(pending_sellers3Layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(fname_lname3, javax.swing.GroupLayout.PREFERRED_SIZE, 186,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(account_type3, javax.swing.GroupLayout.PREFERRED_SIZE, 191,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(accept3, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(decline3, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap())
    );
pending_sellers3Layout.setVerticalGroup(
    pending_sellers3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(pending_sellers3Layout.createSequentialGroup()
        .addContainerGap()

.addGroup(pending_sellers3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(fname_lname3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(account_type3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

.addGroup(pending_sellers3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(accept3, javax.swing.GroupLayout.DEFAULT_SIZE, 48,
Short.MAX_VALUE)
    .addComponent(decline3, javax.swing.GroupLayout.DEFAULT_SIZE, 48,
Short.MAX_VALUE)))
    .addContainerGap()
);

pending_sellers4.setBackground(new java.awt.Color(255, 255, 255));
pending_sellers4.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0,
0)));
fname_lname4.setText("F. Name L. Name");
account_type4.setText("Account Type: Seller");

accept4.setBackground(new java.awt.Color(102, 102, 102));
accept4.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
accept4.setText("Accept");
accept4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        accept4ActionPerformed(evt);
    }
});

```

```

decline4.setBackground(new java.awt.Color(102, 102, 102));
decline4.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
decline4.setText("Decline");
decline4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        decline4ActionPerformed(evt);
    }
});

javax.swing.GroupLayout pending_sellers4Layout = new
javax.swing.GroupLayout(pending_sellers4);
pending_sellers4.setLayout(pending_sellers4Layout);
pending_sellers4Layout.setHorizontalGroup(
    pending_sellers4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(pending_sellers4Layout.createSequentialGroup()
        .addGap(18, 18, 18)
        .addComponent(fname_lname4, javax.swing.GroupLayout.PREFERRED_SIZE, 186,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(account_type4, javax.swing.GroupLayout.PREFERRED_SIZE, 191,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(accept4, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(decline4, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
    )
    .addGroup(pending_sellers4Layout.createSequentialGroup()
        .addGap(18, 18, 18)
        .addComponent(fname_lname4, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addGap(18, 18, 18)
        .addComponent(account_type4, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addGap(18, 18, 18)
        .addComponent(accept4, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addGap(18, 18, 18)
        .addComponent(decline4, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addGap(18, 18, 18)
    )
    .addGroup(pending_sellers4Layout.createSequentialGroup()
        .addGap(18, 18, 18)
        .addComponent(fname_lname4, javax.swing.GroupLayout.BASELINE,
Short.MAX_VALUE)
        .addGap(18, 18, 18)
        .addComponent(accept4, javax.swing.GroupLayout.DEFAULT_SIZE, 48,
Short.MAX_VALUE)
        .addGap(18, 18, 18)
        .addComponent(decline4, javax.swing.GroupLayout.DEFAULT_SIZE, 48,
Short.MAX_VALUE))
    )
);

pending_sellers4Layout.setVerticalGroup(
    pending_sellers4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(pending_sellers4Layout.createSequentialGroup()
        .addGap(18, 18, 18)
        .addComponent(fname_lname4, javax.swing.GroupLayout.PREFERRED_SIZE, 186,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(account_type4, javax.swing.GroupLayout.PREFERRED_SIZE, 191,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(accept4, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(decline4, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
    )
    .addGroup(pending_sellers4Layout.createSequentialGroup()
        .addGap(18, 18, 18)
        .addComponent(fname_lname4, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addGap(18, 18, 18)
        .addComponent(account_type4, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addGap(18, 18, 18)
        .addComponent(accept4, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addGap(18, 18, 18)
        .addComponent(decline4, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addGap(18, 18, 18)
    )
    .addGroup(pending_sellers4Layout.createSequentialGroup()
        .addGap(18, 18, 18)
        .addComponent(fname_lname4, javax.swing.GroupLayout.BASELINE,
Short.MAX_VALUE)
        .addGap(18, 18, 18)
        .addComponent(accept4, javax.swing.GroupLayout.DEFAULT_SIZE, 48,
Short.MAX_VALUE)
        .addGap(18, 18, 18)
        .addComponent(decline4, javax.swing.GroupLayout.DEFAULT_SIZE, 48,
Short.MAX_VALUE))
    )
);

pending_sellers5.setBackground(new java.awt.Color(255, 255, 255));
pending_sellers5.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));
fname_lname5.setText("F. Name L. Name");

```

```
account_type5.setText("Account Type: Seller");

accept5.setBackground(new java.awt.Color(102, 102, 102));
accept5.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
accept5.setText("Accept");
accept5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        accept5ActionPerformed(evt);
    }
});

decline5.setBackground(new java.awt.Color(102, 102, 102));
decline5.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
decline5.setText("Decline");
decline5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        decline5ActionPerformed(evt);
    }
});

javax.swing.GroupLayout pending_sellers5Layout = new javax.swing.GroupLayout(pending_sellers5);
pending_sellers5.setLayout(pending_sellers5Layout);
pending_sellers5Layout.setHorizontalGroup(
    pending_sellers5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(pending_sellers5Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(account_type5, javax.swing.GroupLayout.PREFERRED_SIZE, 186, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(accept5, javax.swing.GroupLayout.PREFERRED_SIZE, 78, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(decline5, javax.swing.GroupLayout.PREFERRED_SIZE, 78, javax.swing.GroupLayout.PREFERRED_SIZE)
        )
        .addGroup(pending_sellers5Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(fname_lname5, javax.swing.GroupLayout.PREFERRED_SIZE, 191, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(account_type5, javax.swing.GroupLayout.PREFERRED_SIZE, 186, javax.swing.GroupLayout.PREFERRED_SIZE)
        )
    )
);

pending_sellers5Layout.setVerticalGroup(
    pending_sellers5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(pending_sellers5Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addGroup(pending_sellers5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(account_type5, javax.swing.GroupLayout.PREFERRED_SIZE, 186, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(accept5, javax.swing.GroupLayout.PREFERRED_SIZE, 78, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(decline5, javax.swing.GroupLayout.PREFERRED_SIZE, 78, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
            .addGroup(pending_sellers5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(fname_lname5, javax.swing.GroupLayout.PREFERRED_SIZE, 191, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(account_type5, javax.swing.GroupLayout.PREFERRED_SIZE, 186, javax.swing.GroupLayout.PREFERRED_SIZE)))
        )
    )
);
```



```

        .addComponent(account_type6, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addGroup(pending_sellers6Layout.createSequentialGroup()
                .addContainerGap()

.addGroup(pending_sellers6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(fname_lname6, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

.addGroup(pending_sellers6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(accept6, javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(decline6, javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE)))))
            .addContainerGap())
);

pending_sellers7.setBackground(new java.awt.Color(255, 255, 255));
pending_sellers7.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0,
0)));

fname_lname7.setText("F. Name L. Name3");

account_type7.setText("Account Type: Seller");

accept7.setBackground(new java.awt.Color(102, 102, 102));
accept7.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
accept7.setText("Accept");
accept7.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        accept7ActionPerformed(evt);
    }
});

decline7.setBackground(new java.awt.Color(102, 102, 102));
decline7.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
decline7.setText("Decline");
decline7.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        decline7ActionPerformed(evt);
    }
});

javax.swing.GroupLayout pending_sellers7Layout = new
javax.swing.GroupLayout(pending_sellers7);
pending_sellers7.setLayout(pending_sellers7Layout);
pending_sellers7Layout.setHorizontalGroup(
    pending_sellers7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(pending_sellers7Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(fname_lname7, javax.swing.GroupLayout.PREFERRED_SIZE, 186,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(account_type7, javax.swing.GroupLayout.PREFERRED_SIZE, 191,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGapPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED),
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        )
);

```

```

javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(accept7, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addGap(18, 18, 18)
    .addComponent(decline7, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addContainerGap())
);
pending_sellers7Layout.setVerticalGroup(
    pending_sellers7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(pending_sellers7Layout.createSequentialGroup()
        .addContainerGap()

.addGroup(pending_sellers7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(fname_lname7, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(account_type7, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

.addGroup(pending_sellers7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(accept7, javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(decline7, javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE)))
    .addContainerGap())
);

pending_sellers8.setBackground(new java.awt.Color(255, 255, 255));
pending_sellers8.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));
);

fname_lname8.setText("F. Name L. Name");
account_type8.setText("Account Type: Seller");

accept8.setBackground(new java.awt.Color(102, 102, 102));
accept8.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
accept8.setText("Accept");
accept8.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        accept8ActionPerformed(evt);
    }
});

decline8.setBackground(new java.awt.Color(102, 102, 102));
decline8.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
decline8.setText("Decline");
decline8.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        decline8ActionPerformed(evt);
    }
});

javax.swing.GroupLayout pending_sellers8Layout = new
javax.swing.GroupLayout(pending_sellers8);
pending_sellers8.setLayout(pending_sellers8Layout);

```

```

pending_sellers8Layout.setHorizontalGroup(
    pending_sellers8Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(pending_sellers8Layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(fname_lname8, javax.swing.GroupLayout.PREFERRED_SIZE, 186,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(account_type8, javax.swing.GroupLayout.PREFERRED_SIZE, 191,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(accept8, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(decline8, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap())
        );
    pending_sellers8Layout.setVerticalGroup(
        pending_sellers8Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(pending_sellers8Layout.createSequentialGroup()
                .addContainerGap()

.addGroup(pending_sellers8Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(fname_lname8, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(account_type8, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

.addGroup(pending_sellers8Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(accept8, javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(decline8, javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE)))
    .addContainerGap()
);

    javax.swing.GroupLayout pending_sellersPaneLayout = new
javax.swing.GroupLayout(pending_sellersPane);
    pending_sellersPane.setLayout(pending_sellersPaneLayout);
    pending_sellersPaneLayout.setHorizontalGroup(
        pending_sellersPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
pending_sellersPaneLayout.createSequentialGroup()
            .addContainerGap()

.addGroup(pending_sellersPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
    .addComponent(pending_sellers2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(pending_sellers1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(pending_sellers3, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    .addComponent(pending_sellers4, javax.swing.GroupLayout.Alignment.LEADING,

```



```

javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(menuPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    .addContainerGap()
);
contentPaneLayout.setVerticalGroup(
    contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(contentPaneLayout.createSequentialGroup()
        .addContainerGap()
        .addComponent(menuPane, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(24, 24, 24)
        .addComponent(pending_sellersPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addContainerGap()
    );
    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addComponent(contentPane, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        )
        .addGroup(layout.createSequentialGroup()
            .addGap(24, 24, 24)
            .addComponent(pending_sellersPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE, Short.MAX_VALUE)
        )
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(contentPane, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(24, 24, 24)
        .addComponent(pending_sellersPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE, Short.MAX_VALUE)
    );
}
pack();
}// </editor-fold>//GEN-END:initComponents

private void back_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_back_buttonActionPerformed
    this.setVisible(false);
}//GEN-LAST:event_back_buttonActionPerformed

private void decline1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_decline1ActionPerformed
    if(decline1.getMouseListeners() != null){
        pending_sellers1.setVisible(false);
    }
}//GEN-LAST:event_decline1ActionPerformed

private void decline3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_decline3ActionPerformed
    if(decline3.getMouseListeners() != null){
        pending_sellers3.setVisible(false);
    }
}//GEN-LAST:event_decline3ActionPerformed

private void decline4ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_decline4ActionPerformed
    if(decline4.getMouseListeners() != null){
        pending_sellers4.setVisible(false);
    }
}

```

```

        }
}//GEN-LAST:event_decline4ActionPerformed

private void decline5ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_decline5ActionPerformed
    if(decline5.getMouseListeners() != null){
        pending_sellers5.setVisible(false);
    }
}//GEN-LAST:event_decline5ActionPerformed

private void decline6ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_decline6ActionPerformed
    if(decline6.getMouseListeners() != null){
        pending_sellers6.setVisible(false);
    }
}//GEN-LAST:event_decline6ActionPerformed

private void decline7ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_decline7ActionPerformed
    if(decline7.getMouseListeners() != null){
        pending_sellers7.setVisible(false);
    }
}//GEN-LAST:event_decline7ActionPerformed

private void decline8ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_decline8ActionPerformed
    if(decline8.getMouseListeners() != null){
        pending_sellers8.setVisible(false);
    }
}//GEN-LAST:event_decline8ActionPerformed

private void accept1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_accept1ActionPerformed
    if(accept1.getMouseListeners() != null){
        pending_sellers1.setVisible(false);
    }
}//GEN-LAST:event_accept1ActionPerformed

private void accept2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_accept2ActionPerformed
    if(accept2.getMouseListeners() != null){
        pending_sellers2.setVisible(false);
    }
}//GEN-LAST:event_accept2ActionPerformed

private void accept3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_accept3ActionPerformed
    if(accept3.getMouseListeners() != null){
        pending_sellers3.setVisible(false);
    }
}//GEN-LAST:event_accept3ActionPerformed

private void accept4ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_accept4ActionPerformed
    if(accept4.getMouseListeners() != null){
        pending_sellers4.setVisible(false);
    }
}

```

```

        }
    }//GEN-LAST:event_accept4ActionPerformed

    private void accept5ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_accept5ActionPerformed
        if(accept5.getMouseListeners() != null){
            pending_sellers5.setVisible(false);
        }
    }//GEN-LAST:event_accept5ActionPerformed

    private void accept6ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_accept6ActionPerformed
        if(accept6.getMouseListeners() != null){
            pending_sellers6.setVisible(false);
        }
    }//GEN-LAST:event_accept6ActionPerformed

    private void accept7ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_accept7ActionPerformed
        if(accept7.getMouseListeners() != null){
            pending_sellers7.setVisible(false);
        }
    }//GEN-LAST:event_accept7ActionPerformed

    private void accept8ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_accept8ActionPerformed
        if(accept8.getMouseListeners() != null){
            pending_sellers8.setVisible(false);
        }
    }//GEN-LAST:event_accept8ActionPerformed

    private void decline2ActionPerformed(ActionEvent evt){
        if(decline2.getMouseListeners() != null){
            pending_sellers2.setVisible(false);
        }
    }

/*
private void accept1ActionPerformed(ActionEvent evt){
    if(accept1.getMouseListeners() != null){
        //pending_sellers1.add();
    }
}
*/
/** 
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());

```

```

        break;
    }
}
} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(PendingSellersUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(PendingSellersUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(PendingSellersUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(PendingSellersUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
}

//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new PendingSellersUI().setVisible(true);
    }
});

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton accept1;
private javax.swing.JButton accept2;
private javax.swing.JButton accept3;
private javax.swing.JButton accept4;
private javax.swing.JButton accept5;
private javax.swing.JButton accept6;
private javax.swing.JButton accept7;
private javax.swing.JButton accept8;
private javax.swing.JLabel account_type1;
private javax.swing.JLabel account_type2;
private javax.swing.JLabel account_type3;
private javax.swing.JLabel account_type4;
private javax.swing.JLabel account_type5;
private javax.swing.JLabel account_type6;
private javax.swing.JLabel account_type7;
private javax.swing.JLabel account_type8;
private javax.swing.JButton back_button;
private javax.swing.JPanel contentPane;
private javax.swing.JButton decline1;
private javax.swing.JButton decline2;
private javax.swing.JButton decline3;
private javax.swing.JButton decline4;
private javax.swing.JButton decline5;
private javax.swing.JButton decline6;
private javax.swing.JButton decline7;

```

```

private javax.swing.JButton decline8;
private javax.swing.JLabel fname_Iname1;
private javax.swing.JLabel fname_Iname2;
private javax.swing.JLabel fname_Iname3;
private javax.swing.JLabel fname_Iname4;
private javax.swing.JLabel fname_Iname5;
private javax.swing.JLabel fname_Iname6;
private javax.swing.JLabel fname_Iname7;
private javax.swing.JLabel fname_Iname8;
private javax.swing.JPanel menuPane;
private javax.swing.JPanel pending_sellers1;
private javax.swing.JPanel pending_sellers2;
private javax.swing.JPanel pending_sellers3;
private javax.swing.JPanel pending_sellers4;
private javax.swing.JPanel pending_sellers5;
private javax.swing.JPanel pending_sellers6;
private javax.swing.JPanel pending_sellers7;
private javax.swing.JPanel pending_sellers8;
private javax.swing.JPanel pending_sellersPane;
// End of variables declaration//GEN-END:variables
@Override
public void actionPerformed(ActionEvent e) {
    // TODO Auto-generated method stub
}
}

```

## ProductUI.java

```

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package pages_Jeff_Admin;

/**
 *
 * @author jeffplatel
 */

import java.awt.event.*;

public class ProductUI extends javax.swing.JFrame {

    /**
     * Creates new form ProductUI
     */
    public ProductUI() {
        initComponents();
    }

    /**

```

```

 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
//@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    contentPane = new javax.swing.JPanel();
    product_name = new javax.swing.JLabel();
    price = new javax.swing.JLabel();
    jScrollPane1 = new javax.swing.JScrollPane();
    description = new javax.swing.JTextArea();
    reviews = new javax.swing.JLabel();
    review1 = new javax.swing.JPanel();
    review_name1 = new javax.swing.JLabel();
    comment1 = new javax.swing.JLabel();
    stars1 = new javax.swing.JLabel();
    delete1 = new javax.swing.JButton();
    review2 = new javax.swing.JPanel();
    review_name2 = new javax.swing.JLabel();
    comment2 = new javax.swing.JLabel();
    stars2 = new javax.swing.JLabel();
    delete2 = new javax.swing.JButton();
    back_button = new javax.swing.JButton();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

    contentPane.setBackground(new java.awt.Color(255, 255, 255));

    product_name.setFont(new java.awt.Font("Helvetica Neue", 1, 18)); // NOI18N
    product_name.setText("Product Name");

    price.setText("Price: $XXX.XX");

    description.setColumns(20);
    description.setRows(5);
    description.setText("Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor  
incididunt ut labore et dolore magna aliqua.\nUt enim ad minim veniam, quis nostrud exercitation ullamco  
laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure \ndolor in reprehenderit in voluptate velit  
esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non \nproident, sunt in culpa  
qui officia deserunt mollit anim id est laborum. Ultrices dui sapien eget mi proin sed libero enim sed.  
\nHendrerit gravida rutrum quisque non tellus orci ac auctor augue. Sed cras ornare arcu dui vivamus  
arcu felis. Quis viverra nibh \ncras pulvinar mattis nunc sed blandit libero. Porta lorem mollis aliquam ut.  
Ante metus dictum at tempor commodo. Neque \naliquam vestibulum morbi blandit cursus risus at ultrices  
mi. Ligula ullamcorper malesuada proin libero nunc. ");
    description.setBorder(null);
    jScrollPane1.setViewportView(description);

    reviews.setFont(new java.awt.Font("Helvetica Neue", 0, 18)); // NOI18N
    reviews.setText("Reviews");

    review1.setBackground(new java.awt.Color(255, 255, 255));
    review1.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

    review_name1.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
}

```

```

review_name1.setText("First name L.");
comment1.setText("Placeholder Text");
stars1.setText("5.0/5.0");

delete1.setBackground(new java.awt.Color(204, 0, 51));
delete1.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
delete1.setText("Delete");
delete1.setBorder(new javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
delete1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        delete1ActionPerformed(evt);
    }
});
javax.swing.GroupLayout review1Layout = new javax.swing.GroupLayout(review1);
review1.setLayout(review1Layout);
review1Layout.setHorizontalGroup(
    review1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(review1Layout.createSequentialGroup()
            .addGroup(review1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(review1Layout.createSequentialGroup()
                    .addComponent(review_name1, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(comment1, javax.swing.GroupLayout.DEFAULT_SIZE, 185, Short.MAX_VALUE)
                    .addGap(18, 18, 18)
                    .addComponent(delete1, javax.swing.GroupLayout.PREFERRED_SIZE, 135, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(18, 18, 18)
                    .addComponent(stars1, javax.swing.GroupLayout.PREFERRED_SIZE, 16, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(18, 18, 18)
                    .addComponent(delete1, javax.swing.GroupLayout.PREFERRED_SIZE, 45, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(review1Layout.createSequentialGroup()
                    .addComponent(review_name1, javax.swing.GroupLayout.PREFERRED_SIZE, 30, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(18, 18, 18)
                    .addComponent(comment1, javax.swing.GroupLayout.PREFERRED_SIZE, 37, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(18, 18, 18)
            .addComponent(stars1, javax.swing.GroupLayout.PREFERRED_SIZE, 16, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(delete1, javax.swing.GroupLayout.PREFERRED_SIZE, 45, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(review1Layout.createSequentialGroup()
            .addComponent(review_name1, javax.swing.GroupLayout.PREFERRED_SIZE, 30, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(comment1, javax.swing.GroupLayout.PREFERRED_SIZE, 37, javax.swing.GroupLayout.PREFERRED_SIZE)))
    .addGroup(review1Layout.createSequentialGroup()
        .addComponent(stars1, javax.swing.GroupLayout.PREFERRED_SIZE, 16, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(delete1, javax.swing.GroupLayout.PREFERRED_SIZE, 45, javax.swing.GroupLayout.PREFERRED_SIZE))
);
review1Layout.setVerticalGroup(
    review1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(review1Layout.createSequentialGroup()
            .addGroup(review1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(review_name1, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(comment1, javax.swing.GroupLayout.DEFAULT_SIZE, 185, Short.MAX_VALUE)
                .addComponent(delete1, javax.swing.GroupLayout.PREFERRED_SIZE, 135, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(stars1, javax.swing.GroupLayout.PREFERRED_SIZE, 16, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(delete1, javax.swing.GroupLayout.PREFERRED_SIZE, 45, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
            .addComponent(stars1, javax.swing.GroupLayout.PREFERRED_SIZE, 16, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(delete1, javax.swing.GroupLayout.PREFERRED_SIZE, 45, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(review1Layout.createSequentialGroup()
            .addComponent(review_name1, javax.swing.GroupLayout.PREFERRED_SIZE, 30, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(comment1, javax.swing.GroupLayout.PREFERRED_SIZE, 37, javax.swing.GroupLayout.PREFERRED_SIZE)))
    .addGroup(review1Layout.createSequentialGroup()
        .addComponent(stars1, javax.swing.GroupLayout.PREFERRED_SIZE, 16, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(delete1, javax.swing.GroupLayout.PREFERRED_SIZE, 45, javax.swing.GroupLayout.PREFERRED_SIZE))
);

```

```
review2.setBackground(new java.awt.Color(255, 255, 255));
review2.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

review_name2.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
review_name2.setText("First Name L.");

comment2.setText("Placeholder Text");

stars2.setText("4.5/5.0");

delete2.setBackground(new java.awt.Color(204, 0, 51));
delete2.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
delete2.setText("Delete");
delete2.set_border(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
delete2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        delete2ActionPerformed(evt);
    }
});

javax.swing.GroupLayout review2Layout = new javax.swing.GroupLayout(review2);
review2.setLayout(review2Layout);
review2Layout.setHorizontalGroup(
    review2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(review2Layout.createSequentialGroup()
            .addGap(185, 185, 185)
            .addComponent(comment2, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addGap(135, 135, 135)
            .addComponent(delete2, javax.swing.GroupLayout.PREFERRED_SIZE, 135, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(135, 135, 135)
            .addComponent(stars2, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        )
        .addGroup(review2Layout.createSequentialGroup()
            .addGap(185, 185, 185)
            .addComponent(review_name2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        )
    ).setVerticalGroup(
    review2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(review2Layout.createSequentialGroup()
            .addGap(30, 30, 30)
            .addComponent(review_name2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(comment2, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addGap(18, 18, 18)
            .addComponent(stars2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        )
        .addGroup(review2Layout.createSequentialGroup()
            .addGap(30, 30, 30)
            .addComponent(delete2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(delete2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(stars2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        )
    )
);
```



```

        javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(price, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
        javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 138,
        javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(reviews, javax.swing.GroupLayout.PREFERRED_SIZE, 40,
        javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(review1, javax.swing.GroupLayout.PREFERRED_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(review2, javax.swing.GroupLayout.PREFERRED_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(contentPane, javax.swing.GroupLayout.PREFERRED_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(contentPane, javax.swing.GroupLayout.PREFERRED_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
    );
    pack();
}// </editor-fold>//GEN-END:initComponents

private void delete1ActionPerformed(ActionEvent evt){
    if(delete1.getMouseListeners() != null){
        review1.setVisible(false);
    }
}
private void delete2ActionPerformed(ActionEvent evt){
    if(delete2.getMouseListeners() != null){
        review2.setVisible(false);
    }
}

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
    */
}

```

```

try {
    for (javax.swing.UIManager.LookAndFeelInfo info :
        javax.swing.UIManager.getInstalledLookAndFeels()) {
        if ("Nimbus".equals(info.getName())) {
            javax.swing.UIManager.setLookAndFeel(info.getClassName());
            break;
        }
    }
} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(ProductUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(ProductUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(ProductUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(ProductUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
}

//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new ProductUI().setVisible(true);
    }
});
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton back_button;
private javax.swing.JLabel comment1;
private javax.swing.JLabel comment2;
private javax.swing.JPanel contentPane;
private javax.swing.JButton delete1;
private javax.swing.JButton delete2;
private javax.swing.JTextArea description;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JLabel price;
private javax.swing.JLabel product_name;
private javax.swing.JPanel review1;
private javax.swing.JPanel review2;
private javax.swing.JLabel review_name1;
private javax.swing.JLabel review_name2;
private javax.swing.JLabel reviews;
private javax.swing.JLabel stars1;
private javax.swing.JLabel stars2;
// End of variables declaration//GEN-END:variables
}

```

## Refund.java

```
/*
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 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package pages_Jeff_Admin;

/**
 *
 * @author jeffplate
 */

import javax.swing.*;
import javax.swing.JOptionPane;

public class Refund {
    Refund(){
        JFrame frame = new JFrame();
        JOptionPane.showMessageDialog(frame, "Order cancelled. Refund wil be given.");
    }
    public static void main(String[] args) {
        new Refund();
    }
}
```

## SellersProductUI.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
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 */
package pages_Jeff_Admin;

import java.awt.Color;
import java.awt.Dimension;
import java.awt.Font;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.awt.event.WindowAdapter;
import java.awt.event.WindowEvent;
import java.util.List;

import database_jon.Product;
import database_jon.ShopletSystemManager;
import database_jon.User;
import net.miginfocom.swing.MigLayout;
import pages_Jeff_Seller.ProductUI;

import javax.swing.GroupLayout.Alignment;
```

```

import javax.swing.BorderFactory;
import javax.swing.GroupLayout;
import javax.swing.JButton;
import javax.swing.JLabel;
import javax.swing.JPanel;
import javax.swing.LayoutStyle.ComponentPlacement;
import javax.swing.border.Border;
import javax.swing.BoxLayout;

/**
 *
 * @author jeffplate
 */
public class SellerProductUI extends javax.swing.JFrame {

    /**
     * Creates new form SellerProductUI
     */
    public SellerProductUI(User user) {
        setTitle("Seller Products");
        this.user = user;

        addWindowListener(new WindowAdapter() {
            @Override
            public void windowActivated(WindowEvent e) {
                // Update cart text button when user focuses on window.
                System.out.println("Product list refreshed");
                refreshProductsList();
            }
        });
    }

    initComponents();
}

User user;

/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
//@@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    contentPane = new javax.swing.JPanel();
    back_button = new javax.swing.JButton();
    back_button.setForeground(new Color(255, 255, 255));
    product_listPane = new javax.swing.JPanel();

    contentPane.setBackground(new Color(240, 240, 240));

    back_button.setBackground(new java.awt.Color(102, 102, 102));
    back_button.setFont(new java.awt.Font("Helvetica Neue", 1, 12)); // NOI18N
    back_button.setText("Close");
    back_button.addActionListener(new java.awt.event.ActionListener() {

```

```

        public void actionPerformed(java.awt.event.ActionEvent evt) {
            setVisible(false);
        }
    });

product_listPane.setBackground(new Color(240, 240, 240));

javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);
contentPaneLayout.setParallelGroup(
    contentPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addContainerGap()
            .addGroup(contentPaneLayout.createParallelGroup(Alignment.LEADING)
                .addComponent(product_listPane, GroupLayout.PREFERRED_SIZE, 515,
GroupLayout.PREFERRED_SIZE)
                .addComponent(back_button, GroupLayout.PREFERRED_SIZE, 67,
GroupLayout.PREFERRED_SIZE))
            .addContainerGap(GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );
contentPaneLayout.setSequentialGroup(
    contentPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addContainerGap()
            .addComponent(back_button, GroupLayout.PREFERRED_SIZE, 35,
GroupLayout.PREFERRED_SIZE)
            .addGap(18)
            .addComponent(product_listPane, GroupLayout.PREFERRED_SIZE, 416,
GroupLayout.PREFERRED_SIZE))
        .addContainerGap(GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );
contentPane.setLayout(contentPaneLayout);
product_listPane.setLayout(new BoxLayout(product_listPane, BoxLayout.X_AXIS));

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setParallelGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
layout.setSequentialGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
product_listPane.setLayout(new BoxLayout(product_listPane, BoxLayout.Y_AXIS));

//Products
List<Product> products =
ShopletSystemManager.getInstance().get_list_of_own_products(user.user_id);

for (int i = 0; i < products.size(); i++)
{
    product_listPane.add(ProductItem(products.get(i).product_id ,products.get(i).name,
products.get(i).price, products.get(i).description), "span, growx");
}

```

```

        }

    pack();
}// </editor-fold>//GEN-END:initComponents

public void refreshProductsList()
{
    product_listPane.removeAll();

    //Products for Sellers
    List<Product> products =
ShopletSystemManager.getInstance().get_list_of_own_products(user.user_id);

    for (int i = 0; i < products.size(); i++)
    {
        product_listPane.add(ProductItem(products.get(i).product_id ,products.get(i).name,
products.get(i).price, products.get(i).description), "span, growx");
    }

    product_listPane.revalidate();
    product_listPane.repaint();
}

/**
 * The JPanel object that represents a product item entry in the product catalog.
 * @param productName The name of the product to show
 * @param productPrice The price of the product to show
 * @return
 */
public JPanel ProductItem(Integer productId, String productName, Integer productPrice, String
productDescription)
{
    Product product = new Product(productId, productName, productPrice, productDescription, true, 1,
false);

    // Convert price to 2 decimal places
    Border border = BorderFactory.createLineBorder(Color.black);

    // Build product entry
    JPanel newProductPanel = new JPanel(new MigLayout("", "[[]push[]][15]", "["));
    newProductPanel.setPreferredSize(new Dimension(1000, 60));
    newProductPanel.setMaximumSize(new Dimension(1000, 60));
    newProductPanel.setBackground(Color.white);

    JLabel productLabel = new JLabel(productName);
    productLabel.setFont(new Font("Arial", Font.PLAIN, 28));
    productLabel.setMaximumSize(new Dimension(200, 100));

    newProductPanel.add(productLabel);
    newProductPanel.add(new JLabel("Cost: $" + productPrice)).setFont(new Font("Arial", Font.PLAIN,
16));

    JButton viewProduct = new JButton("View Product");
    viewProduct.addActionListener(new ActionListener() {

```

```

        public void actionPerformed(ActionEvent e) {
            ProductUI obj = new ProductUI(product);
            obj.setVisible(true);
        }
    });

newProductPanel.add(viewProduct);
newProductPanel.setBorder(border);

// Return the product panel
return newProductPanel;
}



```

```

}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton back_button;
private javax.swing.JPanel contentPane;
private javax.swing.JPanel product_listPane;
// End of variables declaration//GEN-END:variables
}

```

## SuccessUI.java

```

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package pages_Jeff_Admin;

/**
 *
 * @author jeffplate
 */
public class SuccessUI extends javax.swing.JFrame {

    /**
     * Creates new form Success
     */
    public SuccessUI() {
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    // @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        contentPane = new javax.swing.JPanel();
        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        back_button = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        contentPane.setBackground(new java.awt.Color(255, 255, 255));

        jLabel1.setBackground(new java.awt.Color(255, 255, 255));
        jLabel1.setFont(new java.awt.Font("Helvetica Neue", 1, 18)); // NOI18N
        jLabel1.setText("Account Created Successfully!");

        jLabel2.setI

```

```

javax.swing.ImageIcon(getClass().getResource("/com/mycompany/cop4331/project_final/check.jpeg"))); // NOI18N

back_button.setBackground(new java.awt.Color(102, 102, 102));
back_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
back_button.setText("Back");
back_button.setBorder(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
back_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        AdminPanelUI obj = new AdminPanelUI();
        obj.setVisible(true);
    }
});

javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);
contentPane.setLayout(contentPaneLayout);
contentPaneLayout.setHorizontalGroup(
    contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(contentPaneLayout.createSequentialGroup()
                    .addComponent(jLabel1)
                    .addGap(160, 160, 160))
                .addGroup(contentPaneLayout.createSequentialGroup()
                    .addComponent(jLabel2)
                    .addGap(230, 230, 230)))
            .addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addGroup(contentPaneLayout.createSequentialGroup()
                    .addComponent(back_button, javax.swing.GroupLayout.PREFERRED_SIZE, 92,
                        javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGapGap(254, 254, 254)))
            .addGapGap(166, Short.MAX_VALUE)
        )
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(contentPaneLayout.createSequentialGroup()
                    .addComponent(jLabel1)
                    .addGapContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(jLabel2)
                    .addGapGap(18, 18, 18)
                    .addComponent(back_button, javax.swing.GroupLayout.PREFERRED_SIZE, 67,
                        javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGapPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(back_button, javax.swing.GroupLayout.PREFERRED_SIZE, 38,
                        javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGapGap(114, 114, 114)))
            .addGapVerticalGroup(
                contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(contentPaneLayout.createSequentialGroup()
                        .addGapContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(jLabel2)
                        .addGapGap(18, 18, 18)
                        .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 67,
                            javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGapPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(back_button, javax.swing.GroupLayout.PREFERRED_SIZE, 38,
                            javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGapGap(114, 114, 114)))
            .addGapGap(254, 254, 254)))
);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

```

```

        .addComponent(contentPane, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(contentPane, javax.swing.GroupLayout.PREFERRED_SIZE, 275,
javax.swing.GroupLayout.PREFERRED_SIZE)
    );
}

pack();
}// </editor-fold>//GEN-END:initComponents

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(SuccessUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(SuccessUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(SuccessUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(SuccessUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    }
    //</editor-fold>
    //</editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new SuccessUI().setVisible(true);
        }
    });
}

```

```

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton back_button;
private javax.swing.JPanel contentPane;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
// End of variables declaration//GEN-END:variables
}

```

## UserExistUI.java

```

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package pages_Jeff_Admin;

/**
 *
 * @author jeffplate
 */
public class UserExistUI extends javax.swing.JFrame {

    /**
     * Creates new form UserExistUI
     */
    public UserExistUI() {
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    // @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        contentPane = new javax.swing.JPanel();
        x_logo = new javax.swing.JLabel();
        error_message = new javax.swing.JLabel();
        try_again = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        contentPane.setBackground(new java.awt.Color(255, 255, 255));

        x_logo.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/mycompany/cop4331/project_final/x.jpg"))); // NOI18N

        error_message.setFont(new java.awt.Font("Helvetica Neue", 1, 14)); // NOI18N

```

```

error_message.setText("User already exists.");

try_again.setBackground(new java.awt.Color(102, 102, 102));
try_again.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
try_again.setText("Try Again");
try_again.setBorder(new javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
try_again.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        CreateNewUserUI obj = new CreateNewUserUI();
        obj.setVisible(true);
    }
});

javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);
contentPane.setLayout(contentPaneLayout);
contentPaneLayout.setHorizontalGroup(
    contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(contentPaneLayout.createSequentialGroup()
                    .addGap(170, 170, 170)
                    .addComponent(x_logo)
                    .addGap(44, 44, 44)
                    .addComponent(error_message, javax.swing.GroupLayout.PREFERRED_SIZE, 142, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(contentPaneLayout.createSequentialGroup()
                    .addGap(230, 230, 230)
                    .addComponent(try_again, javax.swing.GroupLayout.PREFERRED_SIZE, 101, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(145, Short.MAX_VALUE)
        );
    contentPaneLayout.setVerticalGroup(
        contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(contentPaneLayout.createSequentialGroup()
                .addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(x_logo)
                    .addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(error_message, javax.swing.GroupLayout.PREFERRED_SIZE, 41, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(try_again, javax.swing.GroupLayout.PREFERRED_SIZE, 43, javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGap(41, 41, 41)
            );
        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        );
    }
);

```

```

);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
);

pack();
}// </editor-fold>//GEN-END:initComponents

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
        javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(UserExistUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(UserExistUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(UserExistUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(UserExistUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }
    //</editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new UserExistUI().setVisible(true);
        }
    });
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JPanel contentPane;

```

```

private javax.swing.JLabel error_message;
private javax.swing.JButton try_again;
private javax.swing.JLabel x_logo;
// End of variables declaration//GEN-END:variables
}

```

## AddProductUI.java

```

/*
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 */
package pages_Jeff_Seller;

/**
 *
 * @author jeffplate1
 */
import javax.swing.*;
import database_jon.ShopletSystemManager;
import java.awt.Color;
public class AddProductUI extends javax.swing.JFrame {

    SellersPanelUI sellersPanel;

    /**
     * Creates a new add product UI component
     * @param sellersPanel The sellers panel parent UI object
     */
    public AddProductUI(SellersPanelUI sellersPanel) {
        setTitle("Add Product");
        this.sellersPanel = sellersPanel;
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    //@@SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        contentPane = new javax.swing.JPanel();
        product_name = new javax.swing.JLabel();
        price = new javax.swing.JLabel();
        quantity = new javax.swing.JLabel();
        description = new javax.swing.JLabel();
        product_name_text = new javax.swing.JTextField();
        price_text = new javax.swing.JTextField();
    }
}

```

```
quantity_text = new javax.swing.JTextField();
description_text = new javax.swing.JTextField();
create_button = new javax.swing.JButton();
create_button.setForeground(Color.WHITE);
cancel_button = new javax.swing.JButton();
cancel_button.setForeground(Color.WHITE);

contentPane.setBackground(new Color(240, 240, 240));

product_name.setText("Product Name:");

price.setText("Price:");

quantity.setText("Quantity:");

description.setText("Description:");

create_button.setBackground(new java.awt.Color(102, 102, 102));
create_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
create_button.setText("Create");
create_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        create_buttonActionPerformed(evt);
    }
});

cancel_button.setBackground(new java.awt.Color(102, 102, 102));
cancel_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
cancel_button.setText("Cancel");
cancel_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        cancel_buttonActionPerformed(evt);
    }
});

javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);
contentPane.setLayout(contentPaneLayout);
contentPaneLayout.setHorizontalGroup(
    contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
contentPaneLayout.createSequentialGroup()
    .addGroupGap(69, 69, 69)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
    .addComponent(description, javax.swing.GroupLayout.DEFAULT_SIZE, 163,
Short.MAX_VALUE)
    .addComponent(quantity, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(price, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    .addComponent(product_name, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
```

```

.addGroup(contentPaneLayout.createSequentialGroup()
    .addComponent(cancel_button, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(create_button, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addComponent(description_text, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, 352, Short.MAX_VALUE)
    .addComponent(quantity_text, javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(price_text, javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(product_name_text, javax.swing.GroupLayout.Alignment.LEADING))
    .addGap(25, 25, 25))
);
contentPaneLayout.setVerticalGroup(
    contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(contentPaneLayout.createSequentialGroup()
        .addGap(56, 56, 56)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
    .addComponent(product_name_text, javax.swing.GroupLayout.DEFAULT_SIZE, 40,
Short.MAX_VALUE)
    .addComponent(product_name, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    .addGap(18, 18, 18)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
    .addComponent(price_text, javax.swing.GroupLayout.DEFAULT_SIZE, 40,
Short.MAX_VALUE)
    .addComponent(price, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    .addGap(18, 18, 18)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
    .addComponent(quantity_text, javax.swing.GroupLayout.DEFAULT_SIZE, 38,
Short.MAX_VALUE)
    .addComponent(quantity, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    .addGap(18, 18, 18)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(description, javax.swing.GroupLayout.PREFERRED_SIZE, 40,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(description_text, javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addGap(18, 18, 18)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
    .addComponent(create_button, javax.swing.GroupLayout.DEFAULT_SIZE, 40,
Short.MAX_VALUE)
    .addComponent(cancel_button, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))

```

```

    .addContainerGap(34, Short.MAX_VALUE))
);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(contentPane, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
);
pack();
}// </editor-fold>//GEN-END:initComponents

private void create_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_create_buttonActionPerformed
    boolean match = false;
    if(String.valueOf(product_name_text.getText()).isEmpty()){
        if(String.valueOf(price_text.getText()).isEmpty()){
            if(String.valueOf(quantity_text.getText()).isEmpty()){
                if(String.valueOf(description_text.getText()).isEmpty()){
                    match = false;
                    JFrame frame = new JFrame();
                    JOptionPane.showMessageDialog(frame, "You left a field empty!");
                }
            }
        }
    }
    else {
        match = true;
        JFrame frame = new JFrame();
        JOptionPane.showMessageDialog(frame, "Item successfully added.");
        ShopletSystemManager.getInstance().add_product(product_name_text.getText(),
description_text.getText(), Integer.parseInt(price_text.getText()), 0,
ShopletSystemManager.getInstance().current_user_id);
        this.setVisible(false);
        sellersPanel.refreshProductList();
    }
    //ShopletSystemManager.getInstance().add_product(product_name_text.getText(),
price_text.getText(), String.valueOf(quantity_text.getText()), String.valueOf(description_text.getText()),
match);
}
}//GEN-LAST:event_create_buttonActionPerformed

private void cancel_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_cancel_buttonActionPerformed
    this.setVisible(false);
    JFrame frame = new JFrame();
    JOptionPane.showMessageDialog(frame, "Creation cancelled. No product was created.");
}
}//GEN-LAST:event_cancel_buttonActionPerformed

```

```

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(AddProductUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(AddProductUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(AddProductUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(AddProductUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new AddProductUI(new SellersPanelUI()).setVisible(true);
        }
    });
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton cancel_button;
private javax.swing.JPanel contentPane;
private javax.swing.JButton create_button;
private javax.swing.JLabel description;
private javax.swing.JTextField description_text;
private javax.swing.JLabel price;
private javax.swing.JTextField price_text;
private javax.swing.JLabel product_name;
private javax.swing.JTextField product_name_text;
private javax.swing.JLabel quantity;

```

```
    private javax.swing.JTextField quantity_text;
    // End of variables declaration//GEN-END:variables
}
```

## CatalogUI.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package pages_Jeff_Seller;
import java.awt.Color;

import database_jon.Product;

/**
 *
 * @author jeffplatel
 */
//import javax.swing.*;
public class CatalogUI extends javax.swing.JFrame {

    /**
     * Creates new form CatalogUI
     */
    public CatalogUI() {
        setTitle("Your Seller Products");
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    // @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        contentPane = new javax.swing.JPanel();
        back_button = new javax.swing.JButton();
        back_button.setForeground(new Color(255, 255, 255));
        product1 = new javax.swing.JPanel();
        view1 = new javax.swing.JButton();
        view1.setForeground(new Color(255, 255, 255));
        product_name1 = new javax.swing.JLabel();
        cost1 = new javax.swing.JLabel();
        product2 = new javax.swing.JPanel();
        view2 = new javax.swing.JButton();
        view2.setForeground(new Color(255, 255, 255));
        product_name2 = new javax.swing.JLabel();
        cost2 = new javax.swing.JLabel();
        product3 = new javax.swing.JPanel();
        view3 = new javax.swing.JButton();
        view3.setForeground(new Color(255, 255, 255));
        product_name3 = new javax.swing.JLabel();
    }
}
```

```

cost3 = new javax.swing.JLabel();
product4 = new javax.swing.JPanel();
view4 = new javax.swing.JButton();
view4.setForeground(new Color(255, 255, 255));
product_name4 = new javax.swing.JLabel();
cost4 = new javax.swing.JLabel();
product5 = new javax.swing.JPanel();
view5 = new javax.swing.JButton();
view5.setForeground(new Color(255, 255, 255));
product_name5 = new javax.swing.JLabel();
cost5 = new javax.swing.JLabel();
product6 = new javax.swing.JPanel();
view6 = new javax.swing.JButton();
view6.setForeground(new Color(255, 255, 255));
product_name6 = new javax.swing.JLabel();
cost6 = new javax.swing.JLabel();
product7 = new javax.swing.JPanel();
view7 = new javax.swing.JButton();
view7.setForeground(new Color(255, 255, 255));
product_name7 = new javax.swing.JLabel();
cost7 = new javax.swing.JLabel();
product8 = new javax.swing.JPanel();
view8 = new javax.swing.JButton();
view8.setForeground(new Color(255, 255, 255));
product_name8 = new javax.swing.JLabel();
cost8 = new javax.swing.JLabel();

contentPane.setBackground(new Color(240, 240, 240));

back_button.setBackground(new java.awt.Color(102, 102, 102));
back_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
back_button.setText("Back");
back_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        back_buttonActionPerformed(evt);
    }
});

product1.setBackground(new java.awt.Color(255, 255, 255));
product1.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

view1.setBackground(new java.awt.Color(102, 102, 102));
view1.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
view1.setText("View");
view1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        view1ActionPerformed(evt);
    }
});

product_name1.setText("Poduct Name");

cost1.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
cost1.setText("Cost: XXX.XX");

javax.swing.GroupLayout product1Layout = new javax.swing.GroupLayout(product1);

```

```

product1.setLayout(product1Layout);
product1Layout.setHorizontalGroup(
    product1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING),
product1Layout.createSequentialGroup()
    .addContainerGap()
    .addComponent(product_name1, javax.swing.GroupLayout.PREFERRED_SIZE, 182,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addGap(18, 18, 18)
    .addComponent(cost1)
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 440,
Short.MAX_VALUE)
    .addComponent(view1, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addContainerGap())
);
product1Layout.setVerticalGroup(
    product1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(product1Layout.createSequentialGroup()
        .addContainerGap()

.addGroup(product1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(view1, javax.swing.GroupLayout.DEFAULT_SIZE, 48, Short.MAX_VALUE)
    .addComponent(product_name1)
    .addComponent(cost1))
    .addContainerGap())
);

product2.setBackground(new java.awt.Color(255, 255, 255));
product2.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

view2.setBackground(new java.awt.Color(102, 102, 102));
view2.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
view2.setText("View");
view2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        view2ActionPerformed(evt);
    }
});

product_name2.setText("Product Name");

cost2.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
cost2.setText("Cost: XXX.XX");

javax.swing.GroupLayout product2Layout = new javax.swing.GroupLayout(product2);
product2.setLayout(product2Layout);
product2Layout.setHorizontalGroup(
    product2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING),
product2Layout.createSequentialGroup()
    .addContainerGap()
    .addComponent(product_name2, javax.swing.GroupLayout.PREFERRED_SIZE, 182,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addGap(18, 18, 18)
    .addComponent(cost2)
);

```

```

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(view2, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap()
    );
product2Layout.setVerticalGroup(
    product2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(product2Layout.createSequentialGroup()
        .addContainerGap()

.addGroup(product2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(view2, javax.swing.GroupLayout.DEFAULT_SIZE, 50, Short.MAX_VALUE)
        .addComponent(product_name2)
        .addComponent(cost2))
        .addContainerGap()
    );
}

product3.setBackground(new java.awt.Color(255, 255, 255));
product3.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

view3.setBackground(new java.awt.Color(102, 102, 102));
view3.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
view3.setText("View");
view3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        view3ActionPerformed(evt);
    }
});

product_name3.setText("Product Name");

cost3.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
cost3.setText("Cost: XXX.XX");

javax.swing.GroupLayout product3Layout = new javax.swing.GroupLayout(product3);
product3.setLayout(product3Layout);
product3Layout.setHorizontalGroup(
    product3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(product3Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(cost3)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(view3, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap()
        );
product3Layout.setVerticalGroup(
    product3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(product3Layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(cost3)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(view3, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap()
        );
);

product3Layout.setVerticalGroup(
    product3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(product3Layout.createSequentialGroup()
        .addContainerGap()

```

```

.addGroup(product3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(view3, javax.swing.GroupLayout.DEFAULT_SIZE, 48, Short.MAX_VALUE)
    .addComponent(product_name3)
    .addComponent(cost3))
    .addContainerGap())
);

product4.setBackground(new java.awt.Color(255, 255, 255));
product4.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

view4.setBackground(new java.awt.Color(102, 102, 102));
view4.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
view4.setText("View");
view4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        view4ActionPerformed(evt);
    }
});

product_name4.setText("Product Name");

cost4.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
cost4.setText("Cost: XXX.XX");

javax.swing.GroupLayout product4Layout = new javax.swing.GroupLayout(product4);
product4.setLayout(product4Layout);
product4Layout.setHorizontalGroup(
    product4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(product4Layout.createSequentialGroup()
            .addContainerGap()
            .addGroup(product4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(product4Layout.createSequentialGroup()
                    .addComponent(product_name4, javax.swing.GroupLayout.PREFERRED_SIZE, 182, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(18, 18, 18)
                    .addComponent(cost4)
                    .addGap(18, 18, 18)
                    .addComponent(view4, javax.swing.GroupLayout.PREFERRED_SIZE, 80, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(product4Layout.createSequentialGroup()
                    .addGap(18, 18, 18)
                    .addComponent(cost4)
                    .addGap(18, 18, 18)
                    .addComponent(view4, javax.swing.GroupLayout.PREFERRED_SIZE, 80, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addContainerGap())
        .addGroup(product4Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(cost4)
            .addGap(18, 18, 18)
            .addComponent(view4, javax.swing.GroupLayout.PREFERRED_SIZE, 80, javax.swing.GroupLayout.PREFERRED_SIZE))
    .addContainerGap())
);
product4Layout.setVerticalGroup(
    product4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(product4Layout.createSequentialGroup()
            .addContainerGap()
            .addGroup(product4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(product4Layout.createSequentialGroup()
                    .addComponent(product_name4, javax.swing.GroupLayout.PREFERRED_SIZE, 182, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(18, 18, 18)
                    .addComponent(cost4)
                    .addGap(18, 18, 18)
                    .addComponent(view4, javax.swing.GroupLayout.PREFERRED_SIZE, 80, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(product4Layout.createSequentialGroup()
                    .addGap(18, 18, 18)
                    .addComponent(cost4)
                    .addGap(18, 18, 18)
                    .addComponent(view4, javax.swing.GroupLayout.PREFERRED_SIZE, 80, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addContainerGap())
        .addGroup(product4Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(cost4)
            .addGap(18, 18, 18)
            .addComponent(view4, javax.swing.GroupLayout.PREFERRED_SIZE, 80, javax.swing.GroupLayout.PREFERRED_SIZE))
    .addContainerGap())
);

product5.setBackground(new java.awt.Color(255, 255, 255));
product5.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

```

```

view5.setBackground(new java.awt.Color(102, 102, 102));
view5.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
view5.setText("View");
view5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        view5ActionPerformed(evt);
    }
});

product_name5.setText("Product Name");

cost5.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
cost5.setText("Cost: XXX.XX");

javax.swing.GroupLayout product5Layout = new javax.swing.GroupLayout(product5);
product5.setLayout(product5Layout);
product5Layout.setHorizontalGroup(
    product5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
product5Layout.createSequentialGroup()
    .addContainerGap()
    .addComponent(product_name5, javax.swing.GroupLayout.PREFERRED_SIZE, 182,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addGap(18, 18, 18)
    .addComponent(cost5)
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(view5, javax.swing.GroupLayout.PREFERRED_SIZE, 79,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addContainerGap())
);
product5Layout.setVerticalGroup(
    product5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(product5Layout.createSequentialGroup()
        .addContainerGap()

.addGroup(product5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(view5, javax.swing.GroupLayout.DEFAULT_SIZE, 48, Short.MAX_VALUE)
        .addComponent(product_name5)
        .addComponent(cost5))
        .addContainerGap())
);

product6.setBackground(new java.awt.Color(255, 255, 255));
product6.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

view6.setBackground(new java.awt.Color(102, 102, 102));
view6.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
view6.setText("View");
view6.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        view6ActionPerformed(evt);
    }
});

```

```

product_name6.setText("Product Name");

cost6.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
cost6.setText("Cost: XXX.XX");

javax.swing.GroupLayout product6Layout = new javax.swing.GroupLayout(product6);
product6.setLayout(product6Layout);
product6Layout.setHorizontalGroup(
    product6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
            product6Layout.createSequentialGroup()
                .addComponent(product_name6, javax.swing.GroupLayout.PREFERRED_SIZE, 182,
                    javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addComponent(cost6)
                .addGap(PreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
                    javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(view6, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
                    javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(ContainerGap())
            );
        product6Layout.setVerticalGroup(
            product6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(product6Layout.createSequentialGroup()
                    .addComponent(product6Layout.createSequentialGroup()
                        .addComponent(view6, javax.swing.GroupLayout.PREFERRED_SIZE, 49, Short.MAX_VALUE)
                        .addComponent(product_name6)
                        .addComponent(cost6)
                        .addGap(ContainerGap())
                    );
                .addGroup(product6Layout.createSequentialGroup()
                    .addComponent(product6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(view6, javax.swing.GroupLayout.DEFAULT_SIZE, 49, Short.MAX_VALUE)
                        .addComponent(product_name6)
                        .addComponent(cost6)
                        .addGap(ContainerGap())
                    );
                );
            product7.setBackground(new java.awt.Color(255, 255, 255));
            product7.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

            view7.setBackground(new java.awt.Color(102, 102, 102));
            view7.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
            view7.setText("View");
            view7.addActionListener(new java.awt.event.ActionListener() {
                public void actionPerformed(java.awt.event.ActionEvent evt) {
                    view7ActionPerformed(evt);
                }
            });

            product_name7.setText("Product Name");

            cost7.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
            cost7.setText("Cost: XXX.XX");

            javax.swing.GroupLayout product7Layout = new javax.swing.GroupLayout(product7);
            product7.setLayout(product7Layout);
            product7Layout.setHorizontalGroup(
                product7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(product7Layout.createSequentialGroup()
                        .addComponent(product7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                            .addComponent(product7Layout.createSequentialGroup()
                                .addComponent(view7, javax.swing.GroupLayout.PREFERRED_SIZE, 49, Short.MAX_VALUE)
                                .addComponent(product_name7)
                                .addComponent(cost7)
                                .addGap(ContainerGap())
                            );
                        );
                    );
            );
        );
    );
}

```

```

product7Layout.createSequentialGroup()
    .addContainerGap()
    .addComponent(product_name7, javax.swing.GroupLayout.PREFERRED_SIZE, 182,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addGap(18, 18, 18)
    .addComponent(cost7)
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(view7, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addContainerGap()
);
product7Layout.setVerticalGroup(
    product7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(product7Layout.createSequentialGroup()
        .addContainerGap()

.addGroup(product7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(view7, javax.swing.GroupLayout.DEFAULT_SIZE, 49, Short.MAX_VALUE)
        .addComponent(product_name7)
        .addComponent(cost7))
    .addContainerGap()
);
product8.setBackground(new java.awt.Color(255, 255, 255));
product8.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

view8.setBackground(new java.awt.Color(102, 102, 102));
view8.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
view8.setText("View");
view8.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        view8ActionPerformed(evt);
    }
});

product_name8.setText("Product Name");

cost8.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
cost8.setText("Cost: XXX.XX");

javax.swing.GroupLayout product8Layout = new javax.swing.GroupLayout(product8);
product8.setLayout(product8Layout);
product8Layout.setHorizontalGroup(
    product8Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(product8Layout.createSequentialGroup()
            .addGroup(product8Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING,
                javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(product_name8, javax.swing.GroupLayout.PREFERRED_SIZE, 182,
                javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGroup(product8Layout.createSequentialGroup()
                    .addGap(18, 18, 18)
                    .addComponent(cost8)
                    .addGap(18, 18, 18)
                    .addComponent(view8, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
                    javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addContainerGap())
);

```



```

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(product3, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(product4, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(product5, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(product6, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(product7, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(product8, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(contentPane, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
    );
    pack();
}// </editor-fold>//GEN-END:initComponents

private void back_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_back_buttonActionPerformed
    this.setVisible(false);
}//GEN-LAST:event_back_buttonActionPerformed

private void view1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_view1ActionPerformed
    ProductUI obj = new ProductUI(new Product());
    obj.setVisible(true);
}//GEN-LAST:event_view1ActionPerformed

private void view2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_view2ActionPerformed
    ProductUI obj = new ProductUI(new Product());
    obj.setVisible(true);
}//GEN-LAST:event_view2ActionPerformed

private void view3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_view3ActionPerformed

```

```

ProductUI obj = new ProductUI(new Product());
obj.setVisible(true);
}//GEN-LAST:event_view3ActionPerformed

private void view4ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_view4ActionPerformed
ProductUI obj = new ProductUI(new Product());
obj.setVisible(true);
}//GEN-LAST:event_view4ActionPerformed

private void view5ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_view5ActionPerformed
ProductUI obj = new ProductUI(new Product());
obj.setVisible(true);
}//GEN-LAST:event_view5ActionPerformed

private void view6ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_view6ActionPerformed
ProductUI obj = new ProductUI(new Product());
obj.setVisible(true);
}//GEN-LAST:event_view6ActionPerformed

private void view7ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_view7ActionPerformed
ProductUI obj = new ProductUI(new Product());
obj.setVisible(true);
}//GEN-LAST:event_view7ActionPerformed

private void view8ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_view8ActionPerformed
ProductUI obj = new ProductUI(new Product());
obj.setVisible(true);
}//GEN-LAST:event_view8ActionPerformed

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
/* Set the Nimbus look and feel */
//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
/* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
 * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
 */
try {
    for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
        if ("Nimbus".equals(info.getName())) {
            javax.swing.UIManager.setLookAndFeel(info.getClassName());
            break;
        }
    }
} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(CatalogUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
} catch (InstantiationException ex) {
}
}

```

```
java.util.logging.Logger.getLogger(CatalogUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(CatalogUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(CatalogUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
}
//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new CatalogUI().setVisible(true);
    }
});
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton back_button;
private javax.swing.JPanel contentPane;
private javax.swing.JLabel cost1;
private javax.swing.JLabel cost2;
private javax.swing.JLabel cost3;
private javax.swing.JLabel cost4;
private javax.swing.JLabel cost5;
private javax.swing.JLabel cost6;
private javax.swing.JLabel cost7;
private javax.swing.JLabel cost8;
private javax.swing.JPanel product1;
private javax.swing.JPanel product2;
private javax.swing.JPanel product3;
private javax.swing.JPanel product4;
private javax.swing.JPanel product5;
private javax.swing.JPanel product6;
private javax.swing.JPanel product7;
private javax.swing.JPanel product8;
private javax.swing.JLabel product_name1;
private javax.swing.JLabel product_name2;
private javax.swing.JLabel product_name3;
private javax.swing.JLabel product_name4;
private javax.swing.JLabel product_name5;
private javax.swing.JLabel product_name6;
private javax.swing.JLabel product_name7;
private javax.swing.JLabel product_name8;
private javax.swing.JButton view1;
private javax.swing.JButton view2;
private javax.swing.JButton view3;
private javax.swing.JButton view4;
private javax.swing.JButton view5;
private javax.swing.JButton view6;
private javax.swing.JButton view7;
```

```
    private javax.swing.JButton view8;
    // End of variables declaration//GEN-END:variables
}
```

## DiscountCodeUI.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package pages_Jeff_Seller;

/**
 *
 * @author jeffplate1
 */

import javax.swing.*;
import database_jon.Product;
import java.awt.Color;

public class DiscountCodeUI extends javax.swing.JFrame {

    /**
     * Creates new form DiscountCode
     */
    public DiscountCodeUI() {
        setTitle("Create Product Discount");
        setBackground(new Color(240, 240, 240));
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    // @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        contentPane = new javax.swing.JPanel();
        discount_code = new javax.swing.JLabel();
        percent_off = new javax.swing.JLabel();
        create_button = new javax.swing.JButton();
        create_button.setForeground(new Color(255, 255, 255));
        code_TextField = new javax.swing.JTextField();
        percent_TextField = new javax.swing.JTextField();
        back_button = new javax.swing.JButton();
        back_button.setForeground(new Color(255, 255, 255));
    }
}
```

```

contentPane.setBackground(new Color(240, 240, 240));

discount_code.setText("Discount Code:");

percent_off.setText("Percent % Off:");

create_button.setBackground(new java.awt.Color(102, 102, 102));
create_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
create_button.setText("Create");

create_button.setBorder(javax.swing.BorderFactory.createBevelBorder(javax.swing.border.BevelBorder.RAISED));
create_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        create_buttonActionPerformed(evt);
    }
});

back_button.setBackground(new java.awt.Color(102, 102, 102));
back_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
back_button.setText("Back");
back_button.setBorderStyle(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
back_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        back_buttonActionPerformed(evt);
    }
});

javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);
contentPane.setLayout(contentPaneLayout);
contentPaneLayout.setHorizontalGroup(
    contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(contentPaneLayout.createSequentialGroup()
                    .addComponent(percent_off, javax.swing.GroupLayout.DEFAULT_SIZE, 140, Short.MAX_VALUE)
                    .addComponent(discount_code, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(back_button, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                .addGroup(contentPaneLayout.createSequentialGroup()
                    .addComponent(create_button, javax.swing.GroupLayout.PREFERRED_SIZE, 394, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(42, 42, 42)))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(contentPaneLayout.createSequentialGroup()
                    .addComponent(code_TextField, javax.swing.GroupLayout.DEFAULT_SIZE, 394, Short.MAX_VALUE)
                    .addComponent(percent_TextField)))
                .addGroup(contentPaneLayout.createSequentialGroup()
                    .addGap(42, 42, 42)
                    .addContainerGap())))
);

```

```

contentPaneLayout.setVerticalGroup(
    contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addGap(33, 33, 33)

        .addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
            .addComponent(code_TextField, javax.swing.GroupLayout.DEFAULT_SIZE, 33,
Short.MAX_VALUE)
                .addComponent(discount_code, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addGap(18, 18, 18)

        .addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
            .addComponent(percent_off, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(percent_TextField, javax.swing.GroupLayout.DEFAULT_SIZE, 35,
Short.MAX_VALUE))
            .addGap(18, 18, 18)

        .addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
            .addComponent(create_button, javax.swing.GroupLayout.DEFAULT_SIZE, 34,
Short.MAX_VALUE)
                .addComponent(back_button, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addContainerGap(17, Short.MAX_VALUE))
    );

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
);
pack();
}// </editor-fold>//GEN-END:initComponents

//Edit later
private void create_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_create_buttonActionPerformed
if(String.valueOf(code_TextField.getText()).isEmpty()){
    if(String.valueOf(percent_TextField.getText()).isEmpty()){
        JFrame frame = new JFrame();
        JOptionPane.showMessageDialog(frame, "You did not add a code or percent off.");
    }
    else if(String.valueOf(code_TextField.getText()) != null &&
String.valueOf(percent_TextField.getText()) != null){

```

```

        ProductUI obj = new ProductUI(new Product());
        obj.setVisible(true);
        JFrame frame = new JFrame();
        JOptionPane.showMessageDialog(frame, "Discount code added.");
    }
}
}//GEN-LAST:event_create_buttonActionPerformed

private void back_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_back_buttonActionPerformed
    this.setVisible(false);
}//GEN-LAST:event_back_buttonActionPerformed

/** 
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html 
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(DiscountCodeUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(DiscountCodeUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(DiscountCodeUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(DiscountCodeUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }
    //</editor-fold>
    //</editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new DiscountCodeUI().setVisible(true);
        }
    });
}

```

```

}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton back_button;
private javax.swing.JTextField code_TextField;
private javax.swing.JPanel contentPane;
private javax.swing.JButton create_button;
private javax.swing.JLabel discount_code;
private javax.swing.JTextField percent_TextField;
private javax.swing.JLabel percent_off;
// End of variables declaration//GEN-END:variables
}

```

## EditDetailsUI.java

```

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package pages_Jeff_Seller;

/**
 *
 * @author jeffplatel
 */
import javax.swing.*;

import database_jon.Product;
import database_jon.ShopletSystemManager;

import java.awt.Color;
public class EditDetailsUI extends javax.swing.JFrame {

    Product product = new Product();
    ProductUI productUI;

    /**
     * Edit Details of a product class
     * @param product The product to edit
     * @param productUI The parent UI element
     */
    public EditDetailsUI(Product product, ProductUI productUI) {
        setTitle("Update Product - " + product.name);
        this.product = product;
        this.productUI = productUI;
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */

```

```

//@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    contentPane = new javax.swing.JPanel();
    product_name = new javax.swing.JLabel();
    price = new javax.swing.JLabel();
    quantity = new javax.swing.JLabel();
    description = new javax.swing.JLabel();
    product_name_text = new javax.swing.JTextField();
    price_text = new javax.swing.JTextField();
    quantity_text = new javax.swing.JTextField();
    description_text = new javax.swing.JTextField();
    description_text.setHorizontalAlignment(SwingConstants.LEFT);
    update_button = new javax.swing.JButton();
    update_button.setForeground(new Color(255, 255, 255));
    back_button = new javax.swing.JButton();
    back_button.setForeground(new Color(255, 255, 255));

    contentPane.setBackground(new Color(240, 240, 240));
    product_name.setText("Product Name:");
    price.setText("Price:");
    quantity.setText("Quantity:");
    description.setText("Description:");
    product_name_text.setText(product.name);
    price_text.setText(product.price.toString());
    quantity_text.setText("3");
    description_text.setText(product.description);

    update_button.setBackground(new java.awt.Color(102, 102, 102));
    update_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
    update_button.setText("Update");
    update_button.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            update_buttonActionPerformed(evt);
        }
    });

    back_button.setBackground(new java.awt.Color(102, 102, 102));
    back_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
    back_button.setText("Back");
    back_button.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            back_buttonActionPerformed(evt);
        }
    });

    javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);

```

```

contentPane.setLayout(contentPaneLayout);
contentPaneLayout.setHorizontalGroup(
    contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(contentPaneLayout.createSequentialGroup()
        .addGap(62, 62, 62)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
    .addComponent(description, javax.swing.GroupLayout.DEFAULT_SIZE, 161,
Short.MAX_VALUE)
        .addComponent(quantity, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(price, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(product_name, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING,
false)
    .addGroup(contentPaneLayout.createSequentialGroup()
        .addComponent(back_button, javax.swing.GroupLayout.PREFERRED_SIZE, 120,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(update_button, javax.swing.GroupLayout.PREFERRED_SIZE, 120,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addComponent(product_name_text, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, 346, Short.MAX_VALUE)
        .addComponent(price_text, javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(quantity_text, javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(description_text, javax.swing.GroupLayout.Alignment.LEADING))
    .addContainerGap(44, Short.MAX_VALUE))
);

contentPaneLayout.setVerticalGroup(
    contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(contentPaneLayout.createSequentialGroup()
        .addGap(45, 45, 45)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
    .addComponent(product_name_text, javax.swing.GroupLayout.DEFAULT_SIZE, 36,
Short.MAX_VALUE)
        .addComponent(product_name, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    .addGap(18, 18, 18)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
    .addComponent(price_text, javax.swing.GroupLayout.DEFAULT_SIZE, 36,
Short.MAX_VALUE)
        .addComponent(price, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    .addGap(18, 18, 18)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,

```

```

    false)
        .addComponent(quantity_text, javax.swing.GroupLayout.DEFAULT_SIZE, 36,
Short.MAX_VALUE)
        .addComponent(quantity, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        .addGap(18, 18, 18)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(description, javax.swing.GroupLayout.PREFERRED_SIZE, 36,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(description_text, javax.swing.GroupLayout.PREFERRED_SIZE, 100,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
        .addComponent(update_button, javax.swing.GroupLayout.DEFAULT_SIZE, 38,
Short.MAX_VALUE)
        .addComponent(back_button, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        .addContainerGap(17, Short.MAX_VALUE))
);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        );
);

pack();
}// </editor-fold>//GEN-END:initComponents

private void update_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_update_buttonActionPerformed
    ShopletSystemManager.getInstance().edit_product(product.product_id,
product_name_text.getText(), description_text.getText(), Integer.parseInt(price_text.getText()),
product.amount_sold);
    productUI.refreshUI(product_name_text.getText(), price_text.getText(), description_text.getText());
    this.setVisible(false);
    JFrame frame = new JFrame();
    JOptionPane.showMessageDialog(frame, "Product details updated.");
}//GEN-LAST:event_update_buttonActionPerformed

private void back_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_back_buttonActionPerformed
    ProductUI obj = new ProductUI(new Product());
    obj.setVisible(true);
}//GEN-LAST:event_back_buttonActionPerformed

```

```

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(EditDetailsUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(EditDetailsUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(EditDetailsUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(EditDetailsUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }
    //</editor-fold>
    //</editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new EditDetailsUI(new Product(), new ProductUI(new Product())).setVisible(true);
        }
    });
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton back_button;
private javax.swing.JPanel contentPane;
private javax.swing.JLabel description;
private javax.swing.JTextField description_text;
private javax.swing.JLabel price;
private javax.swing.JTextField price_text;
private javax.swing.JLabel product_name;
private javax.swing.JTextField product_name_text;
private javax.swing.JLabel quantity;
private javax.swing.JTextField quantity_text;

```

```
    private javax.swing.JButton update_button;
}
```

## ErrorMessage.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package pages_Jeff_Seller;

/**
 *
 * @author jeffplate
 */

import javax.swing.*;
import javax.swing.JOptionPane;

/**
 * Error message prompt class
 * @author Kelvin Doman
 *
 */
public class ErrorMessage {
    ErrorMessage(){
        JFrame frame = new JFrame();
        String message = "Item already exists. Try again.";
        JOptionPane.showMessageDialog(frame, message);

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

## Logout.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package pages_Jeff_Seller;

/**
 *
 * @author jeffplate
 */
```

```

import javax.swing.*;

/**
 * Logout class
 * @author Kelvin Dhomam
 *
 */
public class Logout {
    Logout(){
        JFrame frame = new JFrame();
        JOptionPane.showMessageDialog(frame, "You've successfully logged out!");
    }

    /**
     * Logs out
     * @param args
     */
    public static void main(String[] args) {
        new Logout();
    }
}

```

## ProductUI.java

```

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package pages_Jeff_Seller;

import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import javax.swing.JPanel;

import database_jon.Product;
import database_jon.Review;
import database_jon.ShopletSystemManager;
import net.miginfocom.swing.MigLayout;

import java.awt.Color;
import java.awt.Dimension;
import java.awt.Font;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.util.List;

import javax.swing.GroupLayout.Alignment;
import javax.swing.BorderFactory;
import javax.swing.GroupLayout;
import javax.swing.JButton;
import javax.swing.LayoutStyle.ComponentPlacement;
import javax.swing.border.Border;

```

```

import javax.swing.BoxLayout;

/**
 *
 * @author jeffplate
 */
public class ProductUI extends javax.swing.JFrame {

    Product product;

    /**
     * Creates new form ProductUI
     */
    public ProductUI(Product product) {
        setTitle("Seller Product - " + product.name);
        this.product = product;
        initComponents();
    }

    public void refreshUI(String newName, String newPrice, String newDescription)
    {
        setTitle("Seller Product - " + newName);
        product_name.setText(newName);
        price.setText("Price: " + newPrice);
        description.setText(newDescription);
        System.out.println("UI Elements updated");
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    // @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        contentPane = new javax.swing.JPanel();
        product_name = new javax.swing.JLabel();
        price = new javax.swing.JLabel();
        edit_details = new javax.swing.JButton();
        edit_details.setForeground(new Color(255, 255, 255));
        delete = new javax.swing.JButton();
        delete.setForeground(new Color(255, 255, 255));
        discount_code = new javax.swing.JButton();
        discount_code.setForeground(new Color(255, 255, 255));
        reviews = new javax.swing.JLabel();
        jScrollPane1 = new javax.swing.JScrollPane();
        description = new javax.swing.JTextArea();
        back_button = new javax.swing.JButton();
        back_button.setForeground(new Color(255, 255, 255));

        contentPane.setBackground(new Color(240, 240, 240));

        product_name.setFont(new java.awt.Font("Helvetica Neue", 1, 18)); // NOI18N
        product_name.setText(product.name);

```

```

price.setText("Price: " + product.price);

edit_details.setBackground(new java.awt.Color(102, 102, 102));
edit_details.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
edit_details.setText("Edit Details");
edit_details.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        edit_detailsActionPerformed(evt);
    }
});

delete.setBackground(new java.awt.Color(102, 102, 102));
delete.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
delete.setText("Delete");
delete.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        deleteActionPerformed(evt);
    }
});

discount_code.setBackground(new java.awt.Color(102, 102, 102));
discount_code.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
discount_code.setText("Discount Code");
discount_code.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        discount_codeActionPerformed(evt);
    }
});

reviews.setFont(new java.awt.Font("Helvetica Neue", 1, 14)); // NOI18N
reviews.setText("Reviews");

description.setColumns(20);
description.setRows(5);
description.setText(product.description);
jScrollPane1.setViewportView(description);

back_button.setBackground(new java.awt.Color(102, 102, 102));
back_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
back_button.setText("Back");
back_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        back_buttonActionPerformed(evt);
    }
});

JPanel reviewPanel = new JPanel();

javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);
contentPaneLayout.setHorizontalGroup(
    contentPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(Alignment.TRAILING, contentPaneLayout.createSequentialGroup()
            .addGap()
            .addGroup(contentPaneLayout.createParallelGroup(Alignment.TRAILING)
                .addComponent(reviewPanel, Alignment.LEADING, GroupLayout.DEFAULT_SIZE, 801,

```

```

Short.MAX_VALUE)
    .addGroup(contentPaneLayout.createSequentialGroup()
        .addGroup(contentPaneLayout.createParallelGroup(Alignment.LEADING)
            .addGroup(contentPaneLayout.createParallelGroup(Alignment.LEADING, false)
                .addComponent(price, GroupLayout.DEFAULT_SIZE, GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                    .addComponent(product_name, GroupLayout.DEFAULT_SIZE, 234,
Short.MAX_VALUE))
                .addComponent(jScrollPane1, GroupLayout.PREFERRED_SIZE, 564,
GroupLayout.PREFERRED_SIZE)
                    .addComponent(reviews, GroupLayout.PREFERRED_SIZE, 135,
GroupLayout.PREFERRED_SIZE))
            .addPreferredGap(ComponentPlacement.RELATED, 110, Short.MAX_VALUE)
            .addGroup(contentPaneLayout.createParallelGroup(Alignment.LEADING, false)
                .addComponent(delete, GroupLayout.DEFAULT_SIZE, GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                    .addComponent(edit_details, GroupLayout.DEFAULT_SIZE,
GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(discount_code, Alignment.TRAILING, GroupLayout.DEFAULT_SIZE,
GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(back_button, GroupLayout.DEFAULT_SIZE,
GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))
            .addGap(16)))
    );
contentPaneLayout.setVerticalGroup(
    contentPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addContainerGap()
            .addGroup(contentPaneLayout.createParallelGroup(Alignment.TRAILING, false)
                .addGroup(contentPaneLayout.createSequentialGroup()
                    .addComponent(product_name, GroupLayout.PREFERRED_SIZE, 52,
GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(ComponentPlacement.RELATED)
                    .addComponent(price, GroupLayout.PREFERRED_SIZE, 37,
GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(ComponentPlacement.RELATED)
                    .addComponent(jScrollPane1, GroupLayout.PREFERRED_SIZE, 207,
GroupLayout.PREFERRED_SIZE)
                    .addGap(37)
                    .addComponent(reviews, GroupLayout.PREFERRED_SIZE, 31,
GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(ComponentPlacement.RELATED))
                .addGroup(contentPaneLayout.createSequentialGroup()
                    .addComponent(back_button, GroupLayout.DEFAULT_SIZE,
GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addGap(18)
                    .addComponent(edit_details, GroupLayout.PREFERRED_SIZE, 85,
GroupLayout.PREFERRED_SIZE)
                    .addGap(18)
                    .addComponent(delete, GroupLayout.PREFERRED_SIZE, 85,
GroupLayout.PREFERRED_SIZE)
                    .addGap(18)
                    .addComponent(discount_code, GroupLayout.PREFERRED_SIZE, 84,
GroupLayout.PREFERRED_SIZE)
                    .addGap(35)))
            .addPreferredGap(ComponentPlacement.RELATED)

```

```

        .addComponent(reviewPanel, GroupLayout.DEFAULT_SIZE, 228, Short.MAX_VALUE)
        .addContainerGap()
    );
    reviewPanel.setLayout(new BoxLayout(reviewPanel, BoxLayout.X_AXIS));
    contentPane.setLayout(contentPaneLayout);

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );

    reviewPanel.setLayout(new BoxLayout(reviewPanel, BoxLayout.Y_AXIS));

    //Reviews
    List<Review> productReviews =
ShopletSystemManager.getInstance().grab_reviews(product.product_id);

    for (int i = 0; i < productReviews.size(); i++)
    {
        reviewPanel.add(addReviewItem(productReviews.get(i).review_id, productReviews.get(i).user_id
            ,productReviews.get(i).product_id, productReviews.get(i).reviewer_name,
productReviews.get(i).review_rating
            , productReviews.get(i).review_content), "span, growx");
    }

    pack();
}// </editor-fold>//GEN-END:initComponents

private void discount_codeActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_discount_codeActionPerformed
    DiscountCodeUI obj = new DiscountCodeUI();
    obj.setVisible(true);
}//GEN-LAST:event_discount_codeActionPerformed
private void edit_detailsActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_edit_detailsActionPerformed
    EditDetailsUI obj = new EditDetailsUI(product, this);
    obj.setVisible(true);
}//GEN-LAST:event_edit_detailsActionPerformed
private void deleteActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_deleteActionPerformed
    if(delete.getMouseListeners() != null){
        ShopletSystemManager.getInstance().delete_product(product.product_id);
        contentPane.setVisible(false);
        JFrame frame = new JFrame();
        JOptionPane.showMessageDialog(frame, "Product successfully deleted.");
        dispose();
    }
}//GEN-LAST:event_deleteActionPerformed

```

```

/**
 * The JPanel object that represents a product item entry in the product catalog.
 * @param productName The name of the product to show
 * @param productPrice The price of the product to show
 * @return
 */
public JPanel addReviewItem(Integer review_id, Integer user_id, Integer product_id, String
review_name, String review_rating, String review_content)
{
    Review review = new Review(review_id, user_id, product_id, review_name, review_rating,
review_content);

    // Convert price to 2 decimal places
    Border border = BorderFactory.createLineBorder(Color.black);

    // Build product entry
    JPanel reviewPanel = new JPanel(new MigLayout("", "[]push[]15", "[]"));
    reviewPanel.setPreferredSize(new Dimension(1000, 60));
    reviewPanel.setMaximumSize(new Dimension(1000, 60));
    reviewPanel.setBackground(Color.white);

    JLabel reviewerLabel = new JLabel(review.reviewer_name);
    reviewerLabel.setFont(new Font("Arial", Font.PLAIN, 28));
    reviewerLabel.setMaximumSize(new Dimension(200, 100));
    reviewPanel.add(reviewerLabel);

    reviewPanel.add(new JLabel(" Rating: " + review_rating)).setFont(new Font("Arial", Font.PLAIN,
16));
    reviewPanel.add(new JLabel(review_content)).setFont(new Font("Arial", Font.PLAIN, 16));

    reviewPanel.setBorder(border);

    // Return the product panel
    return reviewPanel;
}

private void back_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_back_buttonActionPerformed
    this.setVisible(false);
}//GEN-LAST:event_back_buttonActionPerformed

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {

```

```

        javax.swing.UIManager.setLookAndFeel(info.getClassName());
        break;
    }
}
} catch (ClassNotFoundException ex) {
    java.util.logging.Logger.getLogger(ProductUI.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
} catch (InstantiationException ex) {
    java.util.logging.Logger.getLogger(ProductUI.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
} catch (IllegalAccessException ex) {
    java.util.logging.Logger.getLogger(ProductUI.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
} catch (javax.swing.UnsupportedLookAndFeelException ex) {
    java.util.logging.Logger.getLogger(ProductUI.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
}
//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new ProductUI(new Product()).setVisible(true);
    }
});
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton back_button;
private javax.swing.JPanel contentPane;
private javax.swing.JButton delete;
private javax.swing.JTextArea description;
private javax.swing.JButton discount_code;
private javax.swing.JButton edit_details;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JLabel price;
private javax.swing.JLabel product_name;
private javax.swing.JLabel reviews;
}

```

## ProfileUI.java

```

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package pages_Jeff_Seller;

```

```

/*
 *
 * @author jeffplate
 */

import javax.swing.*;
import java.awt.Color;
public class ProfileUI extends javax.swing.JFrame {

    /**
     * Creates new form Profile
     */
    public ProfileUI() {
        setTitle("Seller Panel - Edit Profile");
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    // @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        contentPane = new javax.swing.JPanel();
        username = new javax.swing.JLabel();
        password = new javax.swing.JLabel();
        email = new javax.swing.JLabel();
        first_name = new javax.swing.JLabel();
        last_name = new javax.swing.JLabel();
        street_address = new javax.swing.JLabel();
        city = new javax.swing.JLabel();
        states = new javax.swing.JLabel();
        zip_code = new javax.swing.JLabel();
        phone_number = new javax.swing.JLabel();
        username_text = new javax.swing.JTextField();
        password_text = new javax.swing.JTextField();
        email_text = new javax.swing.JTextField();
        first_name_text = new javax.swing.JTextField();
        last_name_text = new javax.swing.JTextField();
        street_address_text = new javax.swing.JTextField();
        city_text = new javax.swing.JTextField();
        states_select = new javax.swing.JComboBox();
        zip_code_text = new javax.swing.JTextField();
        phone_number_text = new javax.swing.JTextField();
        update_button = new javax.swing.JButton();
        update_button.setForeground(new Color(255, 255, 255));
        cancel_button = new javax.swing.JButton();
        cancel_button.setForeground(new Color(255, 255, 255));

        contentPane.setBackground(new Color(240, 240, 240));

        username.setText("Username");

```

```

password.setText("Password");

email.setText("Email");

first_name.setText("First Name");

last_name.setText("Last Name");

street_address.setText("Street Address");

city.setText("City");

states.setText("States");

zip_code.setText("Zip Code");

phone_number.setText("Phone Number");

first_name_text.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        first_nameActionPerformed(evt);
    }
});

states_select.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "AK - Alaska", "AL - Alabama", "AR - Arkansas", "AZ - Arizona", "CA - California", "CO -Colorado", "CT - Connectictut", "DC - District of Columbia", "DE - Delaware", "FL - Florida", "GA - Georgia", "HI - Hawaii", "IA - Iowa", "ID - Idaho", "IL - Illinois", "IN - Indiana", "KY - Kentucky", "LA - Louisiana", "MA - Massachusetts", "MD - Maryland", "ME - Maine", "MI - Michigan", "MN - Minnesota", "MI - Missouri", "MS - Mississippi", "MT - Montana", "NC - North Carolina", "ND - North Dakota", "NE - Nebraska", "NH - New Hampshire", "NJ - New Jersey", "NM - New Mexico", "NV - Nevada", "NY - New York", "OH - Ohio", "OK - Oklahoma", "OR - Oregon", "PA - Pennsylvania", "PR - Puerto Rico", "RI - Rhode Island", "SC - South Carolina", "SD - South Dakota", "TN - Tennessee", "TX - Texas", "UT - Utah", "VA - Virginia", "VT - Vermont", "WA - Washington", "WI - Wisconsin", "WV - West Virginia", "WY - Wyoming" }));
states_select.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        states_selectActionPerformed(evt);
    }
});

update_button.setBackground(new java.awt.Color(102, 102, 102));
update_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
update_button.setText("Update Account");
update_button.setBorder(null);
update_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        update_buttonActionPerformed(evt);
    }
});

cancel_button.setBackground(new java.awt.Color(102, 102, 102));
cancel_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
cancel_button.setText("Cancel");
cancel_button.setBorder(null);
cancel_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {

```

```

        cancel_buttonActionPerformed(evt);
    }
});

javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);
contentPane.setLayout(contentPaneLayout);
contentPaneLayout.setHorizontalGroup(
    contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(contentPaneLayout.createSequentialGroup()
        .addGap(24, 24, 24)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
    .addComponent(phone_number, javax.swing.GroupLayout.DEFAULT_SIZE, 99,
Short.MAX_VALUE)
    .addComponent(zip_code, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(states, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(city, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(street_address, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(last_name, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(first_name, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(username, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(email, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addComponent(password, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    .addGap(18, 18, 18)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
    .addComponent(zip_code_text, javax.swing.GroupLayout.DEFAULT_SIZE, 339,
Short.MAX_VALUE)
    .addComponent(username_text)
    .addComponent(password_text)
    .addComponent(email_text)
    .addComponent(first_name_text)
    .addComponent(last_name_text)
    .addComponent(street_address_text)
    .addComponent(city_text)
    .addComponent(states_select, 0, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    .addComponent(phone_number_text)
    .addGroup(contentPaneLayout.createSequentialGroup()
        .addComponent(update_button, javax.swing.GroupLayout.PREFERRED_SIZE, 150,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(cancel_button, javax.swing.GroupLayout.PREFERRED_SIZE, 150,
javax.swing.GroupLayout.PREFERRED_SIZE)))

```

```

    .addContainerGap(34, Short.MAX_VALUE))
);
contentPaneLayout.setVerticalGroup(
    contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(contentPaneLayout.createSequentialGroup()
        .addGap(25, 25, 25)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
    .addComponent(username, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(username_text, javax.swing.GroupLayout.DEFAULT_SIZE, 27,
Short.MAX_VALUE))
    .addGap(18, 18, 18)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
    .addComponent(password_text, javax.swing.GroupLayout.DEFAULT_SIZE, 28,
Short.MAX_VALUE)
        .addComponent(password, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
    .addComponent(email, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(email_text, javax.swing.GroupLayout.DEFAULT_SIZE, 27,
Short.MAX_VALUE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(first_name_text, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(first_name, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(last_name_text, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(last_name, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(street_address_text, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(street_address, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(city_text, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(city, javax.swing.GroupLayout.PREFERRED_SIZE, 27,

```

```

javax.swing.GroupLayout.PREFERRED_SIZE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(states_select, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(states, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(zip_code_text)
    .addComponent(zip_code, javax.swing.GroupLayout.PREFERRED_SIZE, 25,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addGap(18, 18, 18)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(phone_number, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(phone_number_text, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
    .addGap(18, 18, 18)

.addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
    .addComponent(update_button, javax.swing.GroupLayout.DEFAULT_SIZE, 40,
Short.MAX_VALUE)
    .addComponent(cancel_button, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    .addGap(18, 18, 18))
);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(contentPane, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(contentPane, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
);
pack();
}// </editor-fold>//GEN-END:initComponents

private void first_nameActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_first_nameActionPerformed
    // TODO add your handling code here:
}//GEN-LAST:event_first_nameActionPerformed

private void states_selectActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_states_selectActionPerformed
    // TODO add your handling code here:
}

```

```

}//GEN-LAST:event_states_selectActionPerformed

private void update_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_update_buttonActionPerformed
    JFrame frame = new JFrame();
    JOptionPane.showMessageDialog(frame, "Account details updated.");
    this.setVisible(false);
}//GEN-LAST:event_update_buttonActionPerformed

private void cancel_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_cancel_buttonActionPerformed
    JFrame frame = new JFrame();
    JOptionPane.showMessageDialog(frame, "No changes were made.");
    this.setVisible(false);
}//GEN-LAST:event_cancel_buttonActionPerformed

/**
 * The main argument
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(ProfileUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(ProfileUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(ProfileUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(ProfileUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }
    //</editor-fold>
    //</editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new ProfileUI().setVisible(true);
        }
    });
}

```

```

}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton cancel_button;
private javax.swing.JLabel city;
private javax.swing.JTextField city_text;
private javax.swing.JPanel contentPane;
private javax.swing.JLabel email;
private javax.swing.JTextField email_text;
private javax.swing.JLabel first_name;
private javax.swing.JTextField first_name_text;
private javax.swing.JLabel last_name;
private javax.swing.JTextField last_name_text;
private javax.swing.JLabel password;
private javax.swing.JTextField password_text;
private javax.swing.JLabel phone_number;
private javax.swing.JTextField phone_number_text;
private javax.swing.JLabel states;
private javax.swing.JComboBox<String> states_select;
private javax.swing.JLabel street_address;
private javax.swing.JTextField street_address_text;
private javax.swing.JButton update_button;
private javax.swing.JLabel username;
private javax.swing.JTextField username_text;
private javax.swing.JLabel zip_code;
private javax.swing.JTextField zip_code_text;
// End of variables declaration//GEN-END:variables
}

```

## ProfitReportUI.java

```

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package pages_Jeff_Seller;
import java.awt.Color;
import java.util.ArrayList;
import java.util.Arrays;
import java.util.List;

import javax.swing.GroupLayout.Alignment;
import javax.swing.GroupLayout;
import javax.swing.LayoutStyle.ComponentPlacement;
import database_jon.ShopletSystemManager;
import database_jon.Order;
import database_jon.Product;
import javax.swing.JLabel;
import java.awt.Font;

/**
 *
 * @author jeffplate1

```

```
/*
public class ProfitReportUI extends javax.swing.JFrame {

    /**
     * Creates new form ProfitReportUI
     */
    public ProfitReportUI() {
        setTitle("Seller Revenue Report");
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    //@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    contentPane = new javax.swing.JPanel();
    total_profit = new javax.swing.JLabel();
    profit = new javax.swing.JLabel();
    close_button = new javax.swing.JButton();
    close_button.setForeground(new Color(255, 255, 255));

    contentPane.setBackground(new Color(240, 240, 240));
    total_profit.setText("Gross Profit:");

    close_button.setBackground(new java.awt.Color(102, 102, 102));
    close_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
    close_button.setText("Close");
    close_button.setBorder(new javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
    close_button.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            close_buttonActionPerformed(evt);
        }
    });
    });

    JLabel lblProfitHeader = new JLabel("Profit Report");
    lblProfitHeader.setFont(new Font("Tahoma", Font.PLAIN, 25));

    javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);
    contentPaneLayout.setHorizontalGroup(
        contentPaneLayout.createParallelGroup(Alignment.TRAILING)
            .addGroup(contentPaneLayout.createSequentialGroup()
                .addGroup(contentPaneLayout.createParallelGroup(Alignment.LEADING)
                    .addGroup(contentPaneLayout.createSequentialGroup()
                        .addGap(102)
                        .addComponent(lblProfitHeader))
                    .addGroup(contentPaneLayout.createSequentialGroup()
                        .addGap(102)
                        .addGroup(contentPaneLayout.createParallelGroup(Alignment.LEADING)
                            .addGroup(contentPaneLayout.createSequentialGroup()
                                .addGap(102)
                                .addComponent(total_profit, GroupLayout.PREFERRED_SIZE, 130, GroupLayout.PREFERRED_SIZE))
                            .addGroup(contentPaneLayout.createSequentialGroup()
                                .addGap(102)
                                .addComponent(profit, GroupLayout.PREFERRED_SIZE, 130, GroupLayout.PREFERRED_SIZE)))
                            .addGroup(contentPaneLayout.createSequentialGroup()
                                .addGap(102)
                                .addComponent(close_button, GroupLayout.PREFERRED_SIZE, 130, GroupLayout.PREFERRED_SIZE))))))
                .addGap(102)
            )
    );
    contentPaneLayout.setVerticalGroup(
        contentPaneLayout.createParallelGroup(Alignment.LEADING)
            .addGroup(contentPaneLayout.createSequentialGroup()
                .addGap(102)
                .addComponent(lblProfitHeader, GroupLayout.PREFERRED_SIZE, 130, GroupLayout.PREFERRED_SIZE)
                .addGap(102)
                .addGroup(contentPaneLayout.createParallelGroup(Alignment.BASELINE)
                    .addComponent(total_profit, GroupLayout.PREFERRED_SIZE, 130, GroupLayout.PREFERRED_SIZE)
                    .addComponent(profit, GroupLayout.PREFERRED_SIZE, 130, GroupLayout.PREFERRED_SIZE))
                .addGap(102)
                .addComponent(close_button, GroupLayout.PREFERRED_SIZE, 130, GroupLayout.PREFERRED_SIZE)
                .addGap(102)
            )
    );
}
}
```

```
.addComponent(total_profit)
.addComponent(related)
.addComponent(profit)))
.addContainerGap(71, Short.MAX_VALUE))
.addGroup(contentPaneLayout.createSequentialGroup()
.addContainerGap(91, Short.MAX_VALUE)
.addComponent(close_button, GroupLayout.PREFERRED_SIZE, 114,
GroupLayout.PREFERRED_SIZE)
.addGap(85))
);
contentPaneLayout.setVerticalGroup(
contentPaneLayout.createParallelGroup(Alignment.TRAILING)
.addGroup(Alignment.LEADING, contentPaneLayout.createSequentialGroup()
.addGap(26)
.addComponent(lblProfitHeader)
.addGap(39)
.addGroup(contentPaneLayout.createParallelGroup(Alignment.BASELINE)
.addComponent(total_profit, GroupLayout.PREFERRED_SIZE, 37,
GroupLayout.PREFERRED_SIZE)
.addComponent(profit))
.addPreferredGap(ComponentPlacement.RELATED, 45, Short.MAX_VALUE)
.addComponent(close_button, GroupLayout.PREFERRED_SIZE, 38,
GroupLayout.PREFERRED_SIZE)
.addGap(54))
);
contentPane.setLayout(contentPaneLayout);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
.addComponent(contentPane, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
);
layout.setVerticalGroup(
layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
.addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
);
//Get the total profit.

List<Order> orders = ShopletSystemManager.getInstance().get_all_orders();
List<Product> sellerProductIds =
ShopletSystemManager.getInstance().get_list_of_own_products(ShopletSystemManager.getInstance().current_user_id);

Integer totalProfit = 0;
List<String> orderProductIds = new ArrayList<String>();

for (int i = 0; i < orders.size(); i++)
{
    orderProductIds.addAll(Arrays.asList(orders.get(i).product_ids.replaceAll("[^0-9]", "").split(",")));
}

System.out.println("Product IDs that were bought:");

```

```

System.out.println(orderProductIds.toString());

System.out.println("First Product Id that was found for this seller: " +
sellerProductIds.get(0).product_id);

for (int i = 0; i < orderProductIds.size(); i++)
{
    for (int j = 0; j < sellerProductIds.size(); j++)
    {
        if (Integer.parseInt(orderProductIds.get(i)) == sellerProductIds.get(j).product_id)
            totalProfit += sellerProductIds.get(j).getProductPrice();
    }
}

profit.setText("$" + totalProfit.toString());

pack();
}// </editor-fold>//GEN-END:initComponents

private void close_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_close_buttonActionPerformed
    this.setVisible(false);
}//GEN-LAST:event_close_buttonActionPerformed

/** 
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html 
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(ProfitReportUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(ProfitReportUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(ProfitReportUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (UnsupportedLookAndFeelException ex) {
}
}

```

```

java.util.logging.Logger.getLogger(ProfitReportUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
}
//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new ProfitReportUI().setVisible(true);
    }
});
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton close_button;
private javax.swing.JPanel contentPane;
private javax.swing.JLabel profit;
private javax.swing.JLabel total_profit;
}

```

## RespondUI.java

```

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package pages_Jeff_Seller;

/**
 *
 * @author jeffplate
 */

import javax.swing.*;
import javax.swing.GroupLayout.Alignment;
import javax.swing.LayoutStyle.ComponentPlacement;
import java.awt.Color;

public class RespondUI extends javax.swing.JFrame {

    /**
     * Creates new form Respond
     */
    public RespondUI() {
        setBackground(new Color(240, 240, 240));
        getContentPane().setBackground(new Color(240, 240, 240));
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */

```

```

/*
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    contentPane = new javax.swing.JPanel();
    reply = new javax.swing.JLabel();
    reply_text = new javax.swing.JTextField();
    post_button = new javax.swing.JButton();

    contentPane.setBackground(new Color(240, 240, 240));

    reply.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
    reply.setText("Review Response");

    post_button.setBackground(new Color(255, 255, 255));
    post_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
    post_button.setText("Post");
    post_button.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            post_buttonActionPerformed(evt);
        }
    });

    javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);
    contentPaneLayout.setHorizontalGroup(
        contentPaneLayout.createParallelGroup(Alignment.LEADING)
            .addGroup(contentPaneLayout.createSequentialGroup()
                .addGroup(contentPaneLayout.createParallelGroup(Alignment.LEADING)
                    .addGroup(contentPaneLayout.createSequentialGroup()
                        .addGroup(contentPaneLayout.createParallelGroup(Alignment.LEADING)
                            .addGroup(contentPaneLayout.createSequentialGroup()
                                .addGap(429, Short.MAX_VALUE)
                                .addComponent(post_button, GroupLayout.PREFERRED_SIZE, 74, GroupLayout.PREFERRED_SIZE))
                            .addGroup(contentPaneLayout.createSequentialGroup()
                                .addGap(129, GroupLayout.PREFERRED_SIZE)
                                .addComponent(reply, GroupLayout.PREFERRED_SIZE, 129, GroupLayout.PREFERRED_SIZE)))
                        .addGap(493, GroupLayout.PREFERRED_SIZE)
                        .addComponent(reply_text, GroupLayout.PREFERRED_SIZE, 493, GroupLayout.PREFERRED_SIZE))
                    .addGroup(contentPaneLayout.createSequentialGroup()
                        .addGap(33, GroupLayout.PREFERRED_SIZE)
                        .addComponent(reply, GroupLayout.PREFERRED_SIZE, 33, GroupLayout.PREFERRED_SIZE))
                )
                .addGap(110, GroupLayout.PREFERRED_SIZE)
                .addComponent(post_button, GroupLayout.DEFAULT_SIZE, 33, Short.MAX_VALUE))
            .addGroup(contentPaneLayout.createSequentialGroup()
                .addGap(33, GroupLayout.PREFERRED_SIZE)
                .addComponent(reply_text, GroupLayout.PREFERRED_SIZE, 493, GroupLayout.PREFERRED_SIZE))
        )
    );
    contentPaneLayout.setVerticalGroup(
        contentPaneLayout.createParallelGroup(Alignment.LEADING)
            .addGroup(contentPaneLayout.createSequentialGroup()
                .addGroup(contentPaneLayout.createParallelGroup(Alignment.LEADING)
                    .addGroup(contentPaneLayout.createSequentialGroup()
                        .addGap(429, Short.MAX_VALUE)
                        .addComponent(post_button, GroupLayout.PREFERRED_SIZE, 74, GroupLayout.PREFERRED_SIZE))
                    .addGroup(contentPaneLayout.createSequentialGroup()
                        .addGap(129, GroupLayout.PREFERRED_SIZE)
                        .addComponent(reply, GroupLayout.PREFERRED_SIZE, 129, GroupLayout.PREFERRED_SIZE)))
                )
                .addGap(493, GroupLayout.PREFERRED_SIZE)
                .addComponent(reply_text, GroupLayout.PREFERRED_SIZE, 493, GroupLayout.PREFERRED_SIZE))
            .addGroup(contentPaneLayout.createSequentialGroup()
                .addGap(33, GroupLayout.PREFERRED_SIZE)
                .addComponent(reply, GroupLayout.PREFERRED_SIZE, 33, GroupLayout.PREFERRED_SIZE))
        )
    );
}

```

```

contentPane.setLayout(contentPaneLayout);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
    javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
    javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
);

pack();
}// </editor-fold>//GEN-END:initComponents

private void post_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_post_buttonActionPerformed
JFrame frame = new JFrame();
 JOptionPane.showMessageDialog(frame, "Response was posted.");
 dispose();
 this.setVisible(false);
}//GEN-LAST:event_post_buttonActionPerformed

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
/* Set the Nimbus look and feel */
//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
/* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
 * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
 */
try {
    for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
        if ("Nimbus".equals(info.getName())) {
            javax.swing.UIManager.setLookAndFeel(info.getClassName());
            break;
        }
    }
} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(RespondUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(RespondUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(RespondUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
} catch (javax.swing.UnsupportedLookAndFeelException ex) {
}
}

```

```

java.util.logging.Logger.getLogger(RespondUI.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    }
//</editor-fold>
//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new RespondUI().setVisible(true);
    }
});
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JPanel contentPane;
private javax.swing.JButton post_button;
private javax.swing.JLabel reply;
private javax.swing.JTextField reply_text;
// End of variables declaration//GEN-END:variables
}

```

## SellersPanelUI.java

```

/*
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 */
package pages_Jeff_Seller;

/**
 *
 * @author jeffplatel
 */

import java.awt.event.*;
import java.util.List;

import javax.swing.ImageIcon;
import javax.swing.JButton;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import javax.swing.JPanel;

import java.awt.Color;
import java.awt.Dimension;
import java.awt.FlowLayout;
import java.awt.Font;

import javax.swing.GroupLayout.Alignment;
import javax.swing.GroupLayout.ParallelGroup;
import javax.swing.LayoutStyle.ComponentPlacement;

```

```

import javax.swing.border.Border;

import database_jon.Product;
import database_jon.ShopletSystemManager;
import database_jon.User;
import net.miginfocom.swing.MigLayout;
import pages_jarold.Login;
import pages_kelvin.Cart;

import javax.swing.BorderFactory;
import javax.swing.GroupLayout;
import javax.swing.BoxLayout;

public class SellersPanelUI extends javax.swing.JFrame {

    /**
     * Creates new form ProductCatalog
     */
    public SellersPanelUI() {
        setTitle("Sellers Portal");
        addWindowListener(new WindowAdapter() {
            @Override
            public void windowActivated(WindowEvent e) {
                // Update cart text button when user focuses on window.
                System.out.println("Product list refreshed");
                refreshProductList();
            }
        });
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    // @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        contentPane = new javax.swing.JPanel();
        headerPane = new javax.swing.JPanel();
        icon = new javax.swing.JLabel();
        seller_header = new javax.swing.JLabel();
        logout_button = new javax.swing.JButton();
        logout_button.setForeground(new Color(255, 255, 255));
        displayPane = new javax.swing.JPanel();
        menuPane = new javax.swing.JPanel();
        profile_button = new javax.swing.JButton();
        profile_button.setForeground(new Color(255, 255, 255));
        add_product_button = new javax.swing.JButton();
        add_product_button.setForeground(new Color(255, 255, 255));
        profit_report_button = new javax.swing.JButton();
        profit_report_button.setForeground(new Color(255, 255, 255));
        product1 = new javax.swing.JPanel();
        product_name1 = new javax.swing.JLabel();
    }
}

```

```

cost1 = new javax.swing.JLabel();
view_button1 = new javax.swing.JButton();
view_button1.setForeground(new Color(255, 255, 255));
product2 = new javax.swing.JPanel();
product_name2 = new javax.swing.JLabel();
cost2 = new javax.swing.JLabel();
view_button2 = new javax.swing.JButton();
view_button2.setForeground(new Color(255, 255, 255));

contentPane.setBackground(new Color(240, 240, 240));

headerPane.setBackground(new Color(240, 240, 240));

icon.setIcon(new
ImageIcon(SellersPanelUI.class.getResource("/pages_Jeff_Seller/icon/logo1.png"))); // NOI18N

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

seller_header.setFont(new java.awt.Font("Helvetica Neue", 1, 24)); // NOI18N
seller_header.setForeground(new java.awt.Color(204, 0, 51));
seller_header.setText("Seller");

logout_button.setBackground(new java.awt.Color(102, 102, 102));
logout_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
logout_button.setText("Logout");
logout_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        logout_buttonActionPerformed(evt);
    }
});
});

javax.swing.GroupLayout headerPaneLayout = new javax.swing.GroupLayout(headerPane);
headerPaneLayout.setHorizontalGroup(
    headerPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(headerPaneLayout.createSequentialGroup()
            .addComponent(icon)
            .addGap(18, 18, 18)
            .addComponent(seller_header)
            .addGap(18, 18, 18)
            .addComponent(logout_button, GroupLayout.PREFERRED_SIZE, 100,
GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
        )
        .addGroup(headerPaneLayout.createSequentialGroup()
            .addComponent(icon)
            .addGap(18, 18, 18)
            .addGroup(headerPaneLayout.createParallelGroup(Alignment.LEADING)
                .addGroup(headerPaneLayout.createSequentialGroup()
                    .addComponent(seller_header, GroupLayout.PREFERRED_SIZE, 30,
GroupLayout.PREFERRED_SIZE)
                    .addGap(18, 18, 18)
                    .addComponent(logout_button, GroupLayout.PREFERRED_SIZE, 37,
GroupLayout.PREFERRED_SIZE)))
                .addGroup(headerPaneLayout.createSequentialGroup()
                    .addGap(23)
                    .addComponent(seller_header, GroupLayout.PREFERRED_SIZE, 30,
GroupLayout.PREFERRED_SIZE))
            )
        )
    );
headerPaneLayout.setVerticalGroup(
    headerPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(headerPaneLayout.createSequentialGroup()
            .addGroup(headerPaneLayout.createParallelGroup(Alignment.LEADING)
                .addComponent(icon)
                .addGroup(headerPaneLayout.createParallelGroup(Alignment.LEADING)
                    .addComponent(seller_header)
                    .addComponent(logout_button, GroupLayout.PREFERRED_SIZE, 100,
GroupLayout.PREFERRED_SIZE)))
            .addGap(18, 18, 18)
        )
        .addGroup(headerPaneLayout.createSequentialGroup()
            .addComponent(icon)
            .addGap(18, 18, 18)
            .addGroup(headerPaneLayout.createParallelGroup(Alignment.LEADING)
                .addGroup(headerPaneLayout.createSequentialGroup()
                    .addComponent(seller_header, GroupLayout.PREFERRED_SIZE, 30,
GroupLayout.PREFERRED_SIZE)
                    .addGap(18, 18, 18)
                    .addComponent(logout_button, GroupLayout.PREFERRED_SIZE, 37,
GroupLayout.PREFERRED_SIZE)))
                .addGroup(headerPaneLayout.createSequentialGroup()
                    .addGap(23)
                    .addComponent(seller_header, GroupLayout.PREFERRED_SIZE, 30,
GroupLayout.PREFERRED_SIZE)))
            .addGap(18, 18, 18)
        )
    );

```

```

    .addContainerGap(GridLayout.DEFAULT_SIZE, Short.MAX_VALUE))
);
headerPane.setLayout(headerPaneLayout);

displayPane.setBackground(new Color(240, 240, 240));

menuPane.setBackground(new Color(240, 240, 240));

profile_button.setBackground(new java.awt.Color(102, 102, 102));
profile_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
profile_button.setText("Profile");
profile_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        profile_buttonActionPerformed(evt);
    }
});
add_product_button.setBackground(new java.awt.Color(102, 102, 102));
add_product_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
add_product_button.setText("Add Product");
add_product_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        add_product_buttonActionPerformed(evt);
    }
});
profit_report_button.setBackground(new java.awt.Color(102, 102, 102));
profit_report_button.setFont(new java.awt.Font("Helvetica Neue", 1, 13)); // NOI18N
profit_report_button.setText("Profit Report");
profit_report_button.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        profit_report_buttonActionPerformed(evt);
    }
});

productList = new JPanel();
productList.setBackground(new Color(240, 240, 240));

javax.swing.GroupLayout menuPaneLayout = new javax.swing.GroupLayout(menuPane);
menuPaneLayout.setHorizontalGroup(
    menuPaneLayout.createParallelGroup(Alignment.TRAILING)
        .addGroup(menuPaneLayout.createSequentialGroup()
            .addContainerGap()
            .addGroup(menuPaneLayout.createParallelGroup(Alignment.TRAILING, false)
                .addComponent(productList, GroupLayout.PREFERRED_SIZE, 960,
GroupLayout.PREFERRED_SIZE)
                .addGroup(menuPaneLayout.createSequentialGroup()
                    .addComponent(profile_button, GroupLayout.PREFERRED_SIZE, 172,
GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(ComponentPlacement.RELATED)
                    .addComponent(add_product_button, GroupLayout.PREFERRED_SIZE, 171,
GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(ComponentPlacement.RELATED, GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                    .addComponent(profit_report_button, GroupLayout.PREFERRED_SIZE, 173,
GroupLayout.PREFERRED_SIZE)))
            .addContainerGap())
        .addGap(100)
    .addContainerGap())
);

```

```

        .addContainerGap())
    );
menuPaneLayout.setVerticalGroup(
    menuPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(menuPaneLayout.createSequentialGroup()
            .addContainerGap()
            .addGroup(menuPaneLayout.createParallelGroup(Alignment.LEADING, false)
                .addGroup(menuPaneLayout.createParallelGroup(Alignment.BASELINE)
                    .addComponent(profile_button, GroupLayout.PREFERRED_SIZE, 49,
GroupLayout.PREFERRED_SIZE)
                    .addComponent(add_product_button, GroupLayout.PREFERRED_SIZE, 48,
GroupLayout.PREFERRED_SIZE))
                .addComponent(profit_report_button, GroupLayout.DEFAULT_SIZE,
GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addPreferredGap(ComponentPlacement.RELATED)
            .addComponent(productList, GroupLayout.DEFAULT_SIZE, 541, Short.MAX_VALUE)
            .addContainerGap())
    );
productList.setLayout(new BoxLayout(productList, BoxLayout.Y_AXIS));
menuPane.setLayout(menuPaneLayout);

javax.swing.GroupLayout displayPaneLayout = new javax.swing.GroupLayout(displayPane);

displayPaneLayout.setHorizontalGroup(
    displayPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(displayPaneLayout.createSequentialGroup()
            .addGap(0)
            .addGroup(displayPaneLayout.createParallelGroup(Alignment.LEADING, false)
                .addComponent(menuPane, Alignment.TRAILING, GroupLayout.DEFAULT_SIZE,
GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addGap(15, 15, Short.MAX_VALUE)))
    );
displayPaneLayout.setVerticalGroup(
    displayPaneLayout.createParallelGroup(Alignment.LEADING)
        .addGroup(displayPaneLayout.createSequentialGroup()
            .addComponent(menuPane, GroupLayout.PREFERRED_SIZE, GroupLayout.DEFAULT_SIZE,
GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(ComponentPlacement.UNRELATED)
            .addPreferredGap(ComponentPlacement.RELATED)))
    );

displayPane.setLayout(displayPaneLayout);

javax.swing.GroupLayout contentPaneLayout = new javax.swing.GroupLayout(contentPane);
contentPane.setLayout(contentPaneLayout);
contentPaneLayout.setHorizontalGroup(
    contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addComponent(headerPane, javax.swing.GroupLayout.DEFAULT_SIZE,
GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addContainerGap())
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addComponent(contentPanel, javax.swing.GroupLayout.PREFERRED_SIZE,
GroupLayout.PREFERRED_SIZE, Short.MAX_VALUE)
            .addContainerGap())
    );
contentPaneLayout.setVerticalGroup(
    contentPaneLayout.createSequentialGroup()
        .addGroup(contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(contentPanel, javax.swing.GroupLayout.DEFAULT_SIZE,
GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addContainerGap())
        .addGroup(contentPaneLayout.createSequentialGroup()
            .addComponent(contentPanel, javax.swing.GroupLayout.PREFERRED_SIZE,
GroupLayout.PREFERRED_SIZE, Short.MAX_VALUE)
            .addContainerGap())
    );

```

```

        .addComponent(displayPane, javax.swing.GroupLayout.PREFERRED_SIZE, 972,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );
contentPaneLayout.setVerticalGroup(
    contentPaneLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(contentPaneLayout.createSequentialGroup()
        .addContainerGap()
        .addComponent(headerPane, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(displayPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
);
javaswing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(contentPane, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
);

//Products
List<Product> products =
ShopletSystemManager.getInstance().get_list_of_own_products(ShopletSystemManager.getInstance().c
urrent_user_id);

for (int i = 0; i < products.size(); i++)
{
    productList.add(ProductItem(products.get(i).product_id ,products.get(i).name, products.get(i).price,
products.get(i).description), "span, growx");
}

pack();
}// </editor-fold>//GEN-END:initComponents

private void add_product_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_add_product_buttonActionPerformed
AddProductUI obj = new AddProductUI(this);
obj.setVisible(true);
}//GEN-LAST:event_add_product_buttonActionPerformed
private void profit_report_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_profit_report_buttonActionPerformed
ProfitReportUI obj = new ProfitReportUI();
obj.setVisible(true);
}//GEN-LAST:event_profit_report_buttonActionPerformed
private void logout_buttonActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_logout_buttonActionPerformed
Logout obj = new Logout();

```

```

        if(logout_button.getMouseListeners() != null){
            this.setVisible(false);
            Login login = new Login();
            login.setVisible(true);
            obj.getClass();
        }

    }//GEN-LAST:event_logout_buttonActionPerformed
    private void view_button2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_view_button2ActionPerformed
        ProductUI obj = new ProductUI(new Product());
        obj.setVisible(true);
    }//GEN-LAST:event_view_button2ActionPerformed
    private void profile_buttonActionPerformed(ActionEvent evt){
        ProfileUI obj = new ProfileUI();
        obj.setVisible(true);
    }

    /**
     * The JPanel object that represents a product item entry in the product catalog.
     * @param productName The name of the product to show
     * @param productPrice The price of the product to show
     * @return
     */
    public JPanel ProductItem(Integer productId, String productName, Integer productPrice, String
productDescription)
    {
        Product product = new Product(productId, productName, productPrice, productDescription, true, 1,
false);

        // Convert price to 2 decimal places
        Border border = BorderFactory.createLineBorder(Color.black);

        // Build product entry
        JPanel newProductPanel = new JPanel(new MigLayout("", "[][]push[][]15", "[]"));
        newProductPanel.setPreferredSize(new Dimension(1000, 60));
        newProductPanel.setMaximumSize(new Dimension(1000, 60));
        newProductPanel.setBackground(Color.white);

        JLabel productLabel = new JLabel(productName);
        productLabel.setFont(new Font("Arial", Font.PLAIN, 28));
        productLabel.setMaximumSize(new Dimension(200, 100));

        newProductPanel.add(productLabel);
        newProductPanel.add(new JLabel("Cost: $" + productPrice)).setFont(new Font("Arial", Font.PLAIN,
16));

        JButton viewProduct = new JButton("View Product");
        viewProduct.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e) {
                ProductUI obj = new ProductUI(product);
                obj.setVisible(true);
            }
        });
    }
}

```

```

newProductPanel.add(viewProduct);
newProductPanel.setBorder(border);

    // Return the product panel
    return newProductPanel;
}

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(SellersPanelUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(SellersPanelUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(SellersPanelUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(SellersPanelUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new SellersPanelUI().setVisible(true);
    }
});
}

/**
 */

```

```

        * Refresh the product list if needed.
        */
    public void refreshProductList()
    {
        productList.removeAll();
        productList.revalidate();
        productList.repaint();

        //Products
        List<Product> products =
ShopletSystemManager.getInstance().get_list_of_own_products(ShopletSystemManager.getInstance().c
urrent_user_id);

        for (int i = 0; i < products.size(); i++)
        {
            productList.add(ProductItem(products.get(i).product_id ,products.get(i).name, products.get(i).price,
products.get(i).description), "span, growx");
        }
    }

    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JButton add_product_button;
    private javax.swing.JPanel contentPane;
    private javax.swing.JLabel cost1;
    private javax.swing.JLabel cost2;
    private javax.swing.JPanel displayPane;
    private javax.swing.JPanel headerPane;
    private javax.swing.JLabel icon;
    private javax.swing.JButton logout_button;
    private javax.swing.JPanel menuPane;
    private javax.swing.JPanel product1;
    private javax.swing.JPanel product2;
    private javax.swing.JLabel product_name1;
    private javax.swing.JLabel product_name2;
    private javax.swing.JButton profile_button;
    private javax.swing.JButton profit_report_button;
    private javax.swing.JLabel seller_header;
    private javax.swing.JButton view_button1;
    private javax.swing.JButton view_button2;
    private JPanel productList;
}

```

## BuyerCatalogUI.java

```

package pages_kelvin;
import database_jon.Product;
import database_jon.ShopletSystemManager;
import net.miginfocom.swing.MigLayout;
import java.util.List;

import javax.swing.*;
import javax.swing.border.Border;

```

```

import java.awt.*;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.awt.event.FocusAdapter;
import java.awt.event.FocusEvent;
import java.awt.event.WindowAdapter;
import java.awt.event.WindowEvent;

/**
 * Class for the Buyer Catalog UI to display to the user.
 * @author Kelvin Dhomam
 *
 */
public class BuyerCatalogUI extends JFrame {

    private JButton catalogBtn;
    private JButton profileBtn;
    private JButton viewCartBtn;

    /**
     * Default constructor for the Buyer Catalog UI
     * @param windowTitle The title for the window.
     */
    public BuyerCatalogUI(String windowTitle)
    {
        super(windowTitle);
        addWindowListener(new WindowAdapter() {
            @Override
            public void windowActivated(WindowEvent e) {
                // Update cart text button when user focuses on window.
                updateViewCartUI();
            }
        });

        this.setMinimumSize(new Dimension(1000, 700));
        this.setMaximumSize(new Dimension(1000, 700));
        this.setResizable(false);
        this.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        //Layout and Buttons
        getContentPane().setLayout(new MigLayout("wrap", "[][]push[]","[][]"));
        catalogBtn = new JButton("Catalog");
        profileBtn = new JButton("Profile");
        profileBtn.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e) {
                ProfileUI profileUI = new ProfileUI("Shoplet - Profile");
                profileUI.setVisible(true);
            }
        });
        viewCartBtn = new JButton("[0] View Cart");
        viewCartBtn.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e) {
                CartUI cartUI = new CartUI("Shoplet Cart");
                cartUI.setVisible(true);
            }
        });
    }
}

```

```

});
```

```

// Add to window
getContentPane().add(catalogBtn);
getContentPane().add(profileBtn);
getContentPane().add(viewCartBtn);
```

```

//Products
List<Product> products = ShopletSystemManager.getInstance().get_list_of_products();
for (int i = 0; i < products.size(); i++)
{
    getContentPane().add(ProductItem(products.get(i).product_id, products.get(i).name,
products.get(i).price, products.get(i).description), "span, growx");
}
```

```

/***
 * The JPanel object that represents a product item entry in the product catalog.
 * @param productName The name of the product to show
 * @param productPrice The price of the product to show
 * @return
 */
public JPanel ProductItem(Integer productId, String productName, Integer productPrice, String
productDescription)
{
    Product product = new Product(productId, productName, productPrice, productDescription, true, 1,
false);

    // Convert price to 2 decimal places
    Border border = BorderFactory.createLineBorder(Color.black);

    // Build product entry
    JPanel newProductPanel = new JPanel(new MigLayout("", "[]push[]15", "[]"));
    JLabel productLabel = new JLabel(productName);
    productLabel.setFont(new Font("Arial", Font.PLAIN, 28));
    productLabel.setMaximumSize(new Dimension(200, 100));

    newProductPanel.add(productLabel);
    newProductPanel.add(new JLabel("Cost: $" + productPrice)).setFont(new Font("Arial", Font.PLAIN,
16));

    JButton viewProduct = new JButton("View Product");
    viewProduct.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            ProductUI productPanel = new ProductUI("Shoplet Cart - " + productName, product);
            productPanel.setVisible(true);
        }
    });

    newProductPanel.add(viewProduct);
    JButton button = new JButton("+");

    button.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            Cart.getInstance().addProduct(product);
            updateViewCartUI();
        }
    });
}
```

```

        JOptionPane.showMessageDialog(null, "Item added to cart.", "Shoplet",
JOptionPane.INFORMATION_MESSAGE);
    }
});

newProductPanel.add(button);
newProductPanel.setBorder(border);

// Return the product panel
return newProductPanel;
}

/**
 * Updates the view cart button text to represent the current number of products in the cart.
 */
public void updateViewCartUI()
{
    viewCartBtn.setText("["+Cart.getInstance().getCartSize()+"]" + " View Cart");
}

/**
 * Main constructor
 * @param args Arguments to be supplied.
 */
public static void main(String[] args) {
    JFrame frame = new BuyerCatalogUI("Products - Catalog");
    frame.pack();
    frame.setLocationRelativeTo(null);
    frame.setVisible(true);
}
}

```

## BuyerCheckoutUI.java

```

package pages_kelvin;
import net.miginfocom.swing.MigLayout;
import java.util.*;
import java.util.List;

import javax.swing.*;
import javax.swing.border.Border;

import database_jon.ShopletSystemManager;

import java.awt.*;
import java.awt.event.WindowAdapter;
import java.awt.event.WindowEvent;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;

/**
 * Class to create a the checkout UI
 * @author Kelvin Dhomam

```

```

/*
*/
public class BuyerCheckoutUI extends JFrame {

    // Variables
    private JLabel lblFirstName = new JLabel("First Name:");
    private JLabel lblLastName = new JLabel("Last Name:");
    private JLabel lblStreetAddress = new JLabel("Street Address:");
    private JLabel lblCity = new JLabel("City:");
    private JLabel lblState = new JLabel("State:");
    private JLabel lblZipcode = new JLabel("Zip Code:");
    private JLabel lblPhoneNumber = new JLabel("Phone Number:");
    private JLabel lblCreditCard = new JLabel("Credit Card #:");
    private JLabel lblCVV = new JLabel("CVV:");
    private JLabel lblExpirationDate = new JLabel("Expiration Date:");
    private JLabel lblTotalPrice = new JLabel("Total: $" + Cart.getInstance().calculateGrandTotal());

    private JTextField txtFirstName = new JTextField();
    private JTextField txtLastName = new JTextField();
    private JTextField txtStreetAddress = new JTextField();
    private JTextField txtCity = new JTextField();
    private JTextField txtZipcode = new JTextField();
    private JTextField txtPhoneNumber = new JTextField();
    private JTextField txtCreditCard = new JTextField();
    private JTextField txtCVV = new JTextField();
    private JTextField txtExpirationDate = new JTextField();
    private JComboBox stateComboBox = new JComboBox(StatesList.States);

    public JButton btnCancel = new JButton("Cancel");
    public JButton btnConfirmOrder = new JButton("Confirm Order");

    /**
     * Constructor for the Buyer Checkout UI
     * @param windowTitle The name of the window
     * @param cartWindow The Cart UI reference to be based off of
     */
    public BuyerCheckoutUI(String windowTitle, CartUI cartWindow)
    { // TODO: Add cart parameter to retrieve cart info.
        super(windowTitle);
        addWindowListener(new WindowAdapter() {
            @Override
            public void windowClosing(WindowEvent e) {
                cartWindow.checkout = null;
            }
        });
        this.setMinimumSize(new Dimension(350, 370));
        this.setMaximumSize(new Dimension(350, 370));
        this.setResizable(false);

        getContentPane().setLayout(new MigLayout("", "[][][]"));
        getContentPane().add(lblFirstName, "cell 0 1");
        getContentPane().add(lblLastName, "cell 0 2");
        getContentPane().add(lblStreetAddress, "cell 0 3");
        getContentPane().add(lblCity, "cell 0 4");
    }
}

```

```

getContentPane().add(lblState, "cell 0 5");
getContentPane().add(lblZipcode, "cell 0 6");
getContentPane().add(lblPhoneNumber, "cell 0 7");
getContentPane().add(lblCreditCard, "cell 0 8");
getContentPane().add(lblCVV, "cell 0 9");
getContentPane().add(lblExpirationDate, "cell 0 10");

getContentPane().add(txtFirstName, "cell 1 1");
txtFirstName.setColumns(25);

getContentPane().add(txtLastName, "cell 1 2");
txtLastName.setColumns(25);

getContentPane().add(txtStreetAddress, "cell 1 3");
txtStreetAddress.setColumns(25);

getContentPane().add(txtCity, "cell 1 4");
txtCity.setColumns(25);

getContentPane().add(stateComboBox, "cell 1 5");

getContentPane().add(txtZipcode, "cell 1 6");
txtZipcode.setColumns(25);

getContentPane().add(txtPhoneNumber, "cell 1 7");
txtPhoneNumber.setColumns(25);

getContentPane().add(txtCreditCard, "cell 1 8");
txtCreditCard.setColumns(25);

getContentPane().add(txtCVV, "cell 1 9");
txtCVV.setColumns(25);

getContentPane().add(txtExpirationDate, "cell 1 10");
txtExpirationDate.setColumns(25);

lblTotalPrice.setBorder(BorderFactory.createLineBorder(Color.BLACK));
lblTotalPrice.setFont(new Font("Arial", Font.PLAIN, 26));
lblTotalPrice.setPreferredSize(new Dimension(278, lblTotalPrice.getHeight()));
getContentPane().add(lblTotalPrice, "cell 1 11");
btnCancel.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        cancelCheckoutWindow();
        JOptionPane.showMessageDialog(null, "Payment cancelled.", "Shoplet",
JOptionPane.INFORMATION_MESSAGE);
    }
});

btnCancel.setPreferredSize(new Dimension(125, btnCancel.getHeight()));
getContentPane().add(btnCancel, "cell 1 12");

btnConfirmOrder.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {

        if(String.valueOf(txtFirstName.getText()).isEmpty() || txtLastName.getText().isEmpty() ||


```

```

txtStreetAddress.getText().isEmpty() ||
    txtCity.getText().isEmpty() || txtZipcode.getText().isEmpty() ||
txtPhoneNumber.getText().isEmpty() || txtCreditCard.getText().isEmpty()
    || txtCVV.getText().isEmpty() || txtExpirationDate.getText().isEmpty())
{
    JFrame frame = new JFrame();
    JOptionPane.showMessageDialog(frame, "You left one or more field(s) empty!");
}
else
{
    List<Integer> product_ids = new ArrayList<Integer>();

    for (int i = 0; i < Cart.getInstance().getCartSize(); i++)
    {
        Integer id = Cart.getInstance().itemsInCart.get(i).product_id;
        product_ids.add(id);
    }

    String products_ids_as_string = product_ids.toString();

ShopletSystemManager.getInstance().add_order(ShopletSystemManager.getInstance().current_user_id,
Cart.getInstance().getInstance().calculateGrandTotal().toString(), products_ids_as_string);

    cartWindow.clearCartUI();

    //Input verification
    for (int i = 0; i < Cart.getInstance().getCartSize(); i++)
    {

ShopletSystemManager.getInstance().add_product_sale(Cart.getInstance().itemsInCart.get(i).product_id,
1);
    }

    cancelCheckoutWindow();

    JOptionPane.showMessageDialog(null, "Payment confirmed.", "Shoplet",
JOptionPane.INFORMATION_MESSAGE);

        cartWindow.setVisible(false);
    }
}
});

btnConfirmOrder.setPreferredSize(new Dimension(145, btnConfirmOrder.getHeight()));
getContentPane().add(btnConfirmOrder, "cell 1 12");
}

/**
 * Hides the Checkout Window
 */
public void cancelCheckoutWindow()
{
    this.setVisible(false);
}

```

```

/**
 * Main class for the Buyer Checkout UI
 * @param args Arguments
 */
public static void main(String[] args) {
    JFrame frame = new BuyerCheckoutUI("Shoplet - Checkout", new CartUI("Dummy"));
    frame.pack();
    frame.setLocationRelativeTo(null);
    frame.setVisible(true);
}

```

## Cart.java

```

package pages_kelvin;
import java.util.ArrayList;

import database_jon.Product;

/**
 * Singleton class representing a user's cart.
 * @author Kelvin Doman
 *
 */
public class Cart {

    // Variables
    public ArrayList<Product> itemsInCart;
    public Double subTotal;
    public Double totalPrice;
    public Double totalTax;

    private static Cart _instance = null;

    /**
     * Private constructor for the cart
     */
    private Cart()
    {
        this.itemsInCart = new ArrayList<Product>();
        this.subTotal = 0.0;
        this.totalPrice = 0.0;
        this.totalTax = 0.0;
    }

    /**
     * Retrieves the singleton instance of a Cart object.
     * @return The current user's cart.
     */
    public static Cart getInstance()
    {
        if (_instance == null)

```

```

    _instance = new Cart();

    return _instance;
}

/**
 * Add a product to the user's cart.
 * @param productToAdd The product to add to the cart.
 */
public void addProduct(Product productToAdd)
{
    itemsInCart.add(productToAdd);
    System.out.println("ITEMS NOW IN CART: " + itemsInCart.size());
}

/**
 * Retrieves the user's cart size.
 * @return An int value of the size of the cart.
 */
public int getCartSize()
{
    return itemsInCart.size();
}

void removeProductFromCart(String productName)
{
    Product targetProductToRemove = null;

    for (int i = 0; i < itemsInCart.size(); i++)
    {
        if (itemsInCart.get(i).name == productName)
        {
            targetProductToRemove = itemsInCart.get(i);
            itemsInCart.remove(targetProductToRemove);
        }
    }
}

/**
 * Calculates the total of the user's cart before tax is applied.
 * @return The double value of the user's cart cost before tax.
 */
public Double calculatePreTaxTotal()
{
    double tempTotal = 0.0;

    for (Product product : itemsInCart) {
        tempTotal += product.getProductPrice();
    }

    return tempTotal;
}

/**
 * Calculates the tax amount alone not grand total.
 * @return The tax amount of the cart.
 */

```

```

        */
    public Double calculateTaxTotal()
    {
        return calculatePreTaxTotal() * 0.06;
    }

    /**
     * Calculates the grand total of the whole cart with amount and tax combined.
     * @return The grand total of the cost of the cart.
     */
    public Double calculateGrandTotal()
    {
        return calculatePreTaxTotal() + calculateTaxTotal();
    }

    /**
     * Clear cart of all items.
     */
    public void clearCart()
    {
        itemsInCart.clear();
    }
}

```

## CartUI.java

```

package pages_kelvin;
import net.miginfocom.swing.MigLayout;

import javax.swing.*;
import javax.swing.border.Border;

import database_jon.Product;
import database_jon.ShopletSystemManager;

import java.awt.*;
import java.awt.event.ActionListener;
import java.awt.event.WindowAdapter;
import java.awt.event.WindowEvent;
import java.util.List;
import java.awt.event.ActionEvent;

/**
 * Class for Cart UI that contains all the products the user has in the cart.
 * @author Kelvin Dhomam
 *
 */
public class CartUI extends JFrame {
    private JButton btnCheckout;
    private JPanel productsArea;
    private JPanel pricingArea;
    public BuyerCheckoutUI checkout = null;
    public CartUI cart = null;
}

```

```

JLabel lblTotalCost = null;
JLabel lblTax = null;
JLabel lblTotalPrice = null;
private JLabel lblEmptyCart;

/**
 * Constructor for the Cart UI
 * @param windowTitle The name of the window title.
 */
public CartUI(String windowTitle)
{
    super(windowTitle);

    addWindowListener(new WindowAdapter() {
        @Override
        public void windowActivated(WindowEvent e) {
            // Update cart text button when user focuses on window.
            if (Cart.getInstance().getCartSize() > 0)
            {
                System.out.println("Refreshing UI for any added products");
                refreshCartContents();
            }
        }
    });
}

cart = this;
this.setMinimumSize(new Dimension(930, 570));
this.setMaximumSize(new Dimension(930, 570));
this.setResizable(false);

//Layout and Buttons
getContentPane().setLayout(new MigLayout("wrap", "[push]", "[]"));

productsArea = new JPanel(new MigLayout("wrap", "[push]", "[]"));
pricingArea = new JPanel(new MigLayout("wrap", "[]"));
btnCheckout = new JButton("Checkout");
btnCheckout.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        if (checkout == null)
        {
            checkout = new BuyerCheckoutUI("Shoplet - Checkout", cart);
            checkout.setVisible(true);
        }
    }
});
btnCheckout.setPreferredSize(new Dimension(350, 100));

lblTotalPrice = new JLabel("Price: $" + Cart.getInstance().calculatePreTaxTotal());
lblTotalPrice.setFont(new Font("Arial", Font.PLAIN, 32));
lblTax = new JLabel("Tax: $" + Cart.getInstance().calculateTaxTotal());
lblTax.setFont(new Font("Arial", Font.PLAIN, 32));
lblTotalCost = new JLabel("Total Cost: $" + Cart.getInstance().calculateGrandTotal());
lblTotalCost.setFont(new Font("Arial", Font.PLAIN, 32));

pricingArea.add(lblTotalPrice, "gaptop 1");

```

```

pricingArea.add(lblTax);
pricingArea.add(lblTotalCost, "gaptop 275");

/** PRODUCTS DEMO */
for (int i = 0; i < Cart.getInstance().getCartSize(); i++)
{
    productsArea.add(ProductItem(Cart.getInstance().itemsInCart.get(i).name,
Cart.getInstance().itemsInCart.get(i).price), "span");
}

//Products

//Disable checkout button if cart is empty.
if (Cart.getInstance().getCartSize() == 0)
    btnCheckout.setEnabled(false);

// Reset products panel
productsArea.removeAll();
this.revalidate();
this.repaint();
pack();

// Load all the products from cart
for (int i = 0; i < Cart.getInstance().getCartSize(); i++)
{
    if (Cart.getInstance().getCartSize() == 0)
    {
        return;
    }

    productsArea.add(ProductItem(Cart.getInstance().itemsInCart.get(i).name,
Cart.getInstance().itemsInCart.get(i).getProductPrice()), "growx");
}

getContentPane().add(productsArea, "cell 0 0");
getContentPane().add(pricingArea, "pos 550 0,cell 0 0,width 350");
getContentPane().add(btnCheckout, "pos 550 418.5,cell 0 0");

lblEmptyCart = new JLabel("Cart is currently empty... ");
lblEmptyCart.setFont(new Font("Tahoma", Font.PLAIN, 38));
getContentPane().add(lblEmptyCart, "cell 1 1");

if (Cart.getInstance().getCartSize() == 0)
{
    lblEmptyCart.setVisible(true);
    btnCheckout.setEnabled(false);
}
else
{
    lblEmptyCart.setVisible(false);
    btnCheckout.setEnabled(true);
}
}

/**
 * Creates new Product item entry.

```

```

    * @param productName The name of the product.
    * @param productPrice The price of the product.
    * @return returns a product JPanel to be inserted into another JPanel.
*/
public JPanel ProductItem(String productName, double productPrice)
{
    // Convert price to 2 decimal places
    String priceDecimals = String.format("%.2f", productPrice);
    Border border = BorderFactory.createLineBorder(Color.black);

    // Build product entry
    JPanel newProductPanel = new JPanel(new MigLayout("wrap", "[]10[grow]140[grow]", "[]"));

    // Product Label
    JLabel lblProductName = new JLabel(productName);
    lblProductName.setFont(new Font("Arial", Font.PLAIN, 32));
    lblProductName.setMaximumSize(new Dimension(200, 100));

    // Product Name
    newProductPanel.add(lblProductName, "");
    newProductPanel.add(new JLabel("Cost: $" + priceDecimals)).setFont(new Font("Arial", Font.PLAIN, 16));

    // Product Delete Button
    JButton btnDeleteProductFromCart = new JButton("X");
    btnDeleteProductFromCart.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {

            removeItemFromCart(productName, newProductPanel);
        }
    });
    btnDeleteProductFromCart.setPreferredSize(new Dimension(65, 65));
    newProductPanel.add(btnDeleteProductFromCart, "dock east");

    // Black border
    newProductPanel.setBorder(border);

    // Return the product panel
    return newProductPanel;
}

/**
 * Removes a product from the cart.
 * @param productToDelete The product name to remove from the cart.
 * @param panel The JPanel that the product is associated with.
 */
public void removeItemFromCart(String productToDelete, JPanel panel)
{
    // Remove from Cart
    Cart.getInstance().removeProductFromCart(productToDelete);
    productsArea.remove(panel);

    // Update UI
    lblTotalCost.setText("Total Cost: $" + Cart.getInstance().calculateGrandTotal());
    lblTax.setText("Tax: $" + Cart.getInstance().calculateTaxTotal());
    lblTotalPrice.setText("Price: $" + Cart.getInstance().calculatePreTaxTotal());
}

```

```

JOptionPane.showMessageDialog(null, "Item removed from cart.", "Shoplet",
JOptionPane.ERROR_MESSAGE);

if (Cart.getInstance().getCartSize() == 0)
{
    btnCheckout.setEnabled(false);
    lblEmptyCart.setVisible(true);
}
else
{
    btnCheckout.setEnabled(true);
    lblEmptyCart.setVisible(false);
}

this.revalidate();
this.repaint();
pack();
}

public void refreshCartContents()
{
    productsArea.removeAll();
    lblEmptyCart.setVisible(false);
    productsArea.revalidate();
    productsArea.repaint();

    // Load all the products from cart
    for (int i = 0; i < Cart.getInstance().getCartSize(); i++)
    {
        if (Cart.getInstance().getCartSize() == 0)
        {
            return;
        }

        productsArea.add(ProductItem(Cart.getInstance().itemsInCart.get(i).name,
Cart.getInstance().itemsInCart.get(i).getProductPrice()), "growx");
    }

    lblTotalPrice.setText("Price: $" + Cart.getInstance().calculatePreTaxTotal());
    lblTax.setText("Tax: $" + Cart.getInstance().calculateTaxTotal());
    lblTotalCost.setText("Total Cost: $" + Cart.getInstance().calculateGrandTotal());
}

/**
 * Clears the cart UI elements
 */
public void clearCartUI()
{
    Cart.getInstance().clearCart();
    productsArea.removeAll();
    lblEmptyCart.setVisible(true);
    productsArea.revalidate();
    productsArea.repaint();
}

```

```

/**
 * Main
 * @param args
 */
public static void main(String[] args) {
    JFrame frame = new CartUI("Shoplet - Cart");
    frame.pack();
    frame.setLocationRelativeTo(null);
    frame.setVisible(true);
}
}

```

## ProductUI.java

```

package pages_kelvin;

import database_jon.Review;
import database_jon.ShopletSystemManager;
import net.miginfocom.swing.MigLayout;

import javax.swing.*;
import javax.swing.border.Border;

import database_jon.Product;

import java.awt.*;
import java.awt.event.ActionListener;
import java.awt.event.WindowAdapter;
import java.awt.event.WindowEvent;
import java.util.List;
import java.awt.event.ActionEvent;

/**
 * Product Panel UI Class
 * @author Kelvin Dhomam
 *
 */
public class ProductUI extends JFrame {

    private static final long serialVersionUID = 1L;

    /**
     * Product UI constructor
     * @param windowTitle The title of the product panel
     * @param product The product the panel will be created for
     */
    JPanel reviewsArea = new JPanel();
    Product product;

    public ProductUI(String windowTitle, Product product)
    {

```

```

super(windowTitle);
this.product = product;

addWindowListener(new WindowAdapter() {
    @Override
    public void windowActivated(WindowEvent e) {
        // Update cart text button when user focuses on window.
        refreshUI();
    }
});

this.setMinimumSize(new Dimension(1000, 650));
this.setMaximumSize(new Dimension(1000, 650));
this.setResizable(false);

//Layout and Buttons
getContentPane().setLayout(new MigLayout("wrap", "[793.00,grow][::100px,grow]",
"[73.00][67.00][177.00][27.00][grow,fill][]"));

JLabel lblProductName = new JLabel(product.name);
lblProductName.setFont(new Font("Tahoma", Font.PLAIN, 18));
getContentPane().add(lblProductName, "cell 0 0");

JButton btnAddToCart = new JButton("Add To Cart");
btnAddToCart.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        Cart.getInstance().addProduct(product);
        JOptionPane.showMessageDialog(null, "Item added to cart.", "Shoplet",
JOptionPane.INFORMATION_MESSAGE);
    }
});
btnAddToCart.setPreferredSize(new Dimension(100, 100));
getContentPane().add(btnAddToCart, "cell 1 0,alignx center,aligny center");

JLabel lblProductPrice = new JLabel("Price: " + product.getProductPrice());
getContentPane().add(lblProductPrice, "cell 0 1");

JTextArea txtProductDescription = new JTextArea();
txtProductDescription.setWrapStyleWord(true);
txtProductDescription.setEditable(false);
txtProductDescription.setLineWrap(true);
txtProductDescription.setBackground(null);
txtProductDescription.setText(product.description);
getContentPane().add(txtProductDescription, "cell 0 2,growx,gapright 100,aligny top");

JLabel lblReviewText = new JLabel("Reviews");
getContentPane().add(lblReviewText, "cell 0 3");

JButton btnLeaveAReview = new JButton("Review");
btnLeaveAReview.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        ReviewUI reviewUI = new ReviewUI("Product - " + product.name + " - Review", product);
        reviewUI.setVisible(true);
    }
});
getContentPane().add(btnLeaveAReview, "cell 1 3,alignx right");

```

```

    /**
     * Creates each review element for the product
     * @param review_id The review id
     * @param product_id The product id
     * @param reviewerName the reviewer's name
     * @param review_rating the review's rating
     * @param review_content the review's content
     * @return A review panel UI element
     */
    public JPanel addReview(Integer review_id, Integer user_id, Integer product_id, String review_name,

```

```

String review_rating, String review_content)
{
    Review review = new Review(review_id, user_id, product_id, review_name, review_rating,
review_content);

    // Convert price to 2 decimal places
    Border border = BorderFactory.createLineBorder(Color.black);

    // Build product entry
    JPanel reviewPanel = new JPanel(new MigLayout("", "[]push[]15", "["));
    reviewPanel.setPreferredSize(new Dimension(1000, 60));
    reviewPanel.setMaximumSize(new Dimension(1000, 60));
    reviewPanel.setBackground(Color.white);

    JLabel reviewerLabel = new JLabel(review.reviewer_name);
    reviewerLabel.setFont(new Font("Arial", Font.PLAIN, 28));
    reviewerLabel.setMaximumSize(new Dimension(200, 100));
    reviewPanel.add(reviewerLabel);

    reviewPanel.add(new JLabel(" Rating: " + review_rating).setFont(new Font("Arial", Font.PLAIN,
16)));
    reviewPanel.add(new JLabel(review_content).setFont(new Font("Arial", Font.PLAIN, 16)));

    reviewPanel.setBorder(border);

    // Return the product panel
    return reviewPanel;
}

/**
 * Main
 * @param args
 */
public static void main(String[] args) {
    Product dummy = new Product(1, "Dummy", 0, "Dummy", true, 1, false);
    JFrame frame = new ProductUI("Shoplet - Product", dummy);
    frame.pack();
    frame.setLocationRelativeTo(null);
    frame.setVisible(true);
}
}

```

## ProfileUI.java

```

package pages_kelvin;
import net.miginfocom.swing.MigLayout;

import javax.swing.*;
import javax.swing.border.Border;
import java.awt.*;
import java.awt.event.WindowAdapter;
import java.awt.event.WindowEvent;

```

```

/**
 * Class for the Profile UI edit window
 * @author Kelvin Dhomam
 *
 */
public class ProfileUI extends JFrame {

    private JLabel lblUsername = new JLabel("Username:");
    private JLabel lblPassword = new JLabel("Password:");
    private JLabel lblEmail = new JLabel("Email:");
    private JLabel lblFirstName = new JLabel("First Name:");
    private JLabel lblLastName = new JLabel("Last Name:");
    private JLabel lblStreetAddress = new JLabel("Street Address:");
    private JLabel lblCity = new JLabel("City:");
    private JLabel lblState = new JLabel("State:");
    private JLabel lblZipcode = new JLabel("Zipcode:");
    private JLabel lblPhoneNumber = new JLabel("Phone Number:");

    private JTextField txtUsername = new JTextField();
    private JPasswordField txtPassword = new JPasswordField();
    private JTextField txtEmail = new JTextField();
    private JTextField txtFirstName = new JTextField();
    private JTextField txtLastName = new JTextField();
    private JTextField txtStreetAddress = new JTextField();
    private JTextField txtCity = new JTextField();
    private JTextField txtZipCode = new JTextField();
    private JTextField txtPhoneNumber = new JTextField();
    private JComboBox stateComboBox = new JComboBox(StatesList.States);

    public JButton btnUpdateAccount = new JButton("Update Account");

    /**
     * Profile UI constructor
     * @param windowTitle The window title.
     */
    public ProfileUI(String windowTitle)
    {
        super(windowTitle);
        this.setMinimumSize(new Dimension(350, 340));
        this.setMaximumSize(new Dimension(350, 340));
        this.setResizable(false);

        getContentPane().setLayout(new MigLayout("", "[][][]"));

        getContentPane().add(lblUsername, "cell 0 1");
        getContentPane().add(lblPassword, "cell 0 2");
        getContentPane().add(lblEmail, "cell 0 3");
        getContentPane().add(lblFirstName, "cell 0 4");
        getContentPane().add(lblLastName, "cell 0 5");
        getContentPane().add(lblStreetAddress, "cell 0 6");
        getContentPane().add(lblCity, "cell 0 7");
        getContentPane().add(lblState, "cell 0 8");
        getContentPane().add(lblZipcode, "cell 0 9");
        getContentPane().add(lblPhoneNumber, "cell 0 10");
    }
}

```

```

getContentPane().add(txtUsername, "cell 1 1");
txtUsername.setColumns(25);

getContentPane().add(txtPassword, "cell 1 2");
txtPassword.setColumns(25);

getContentPane().add(txtEmail, "cell 1 3");
txtEmail.setColumns(25);

getContentPane().add(txtFirstName, "cell 1 4");
txtFirstName.setColumns(25);

getContentPane().add(txtLastName, "cell 1 5");
txtLastName.setColumns(25);

getContentPane().add(txtStreetAddress, "cell 1 6");
txtStreetAddress.setColumns(25);

getContentPane().add(txtCity, "cell 1 7");
txtCity.setColumns(25);

getContentPane().add(stateComboBox, "cell 1 8");

getContentPane().add(txtZipCode, "cell 1 9");
txtZipCode.setColumns(25);

getContentPane().add(txtPhoneNumber, "cell 1 10");
txtPhoneNumber.setColumns(25);

btnUpdateAccount.setPreferredSize(new Dimension(278, btnUpdateAccount.getHeight()));
getContentPane().add(btnUpdateAccount, "cell 1 11");
}

/*
 * Main
 * @param args
 */
public static void main(String[] args) {
    JFrame frame = new ProfileUI("Shoplet - Profile");
    frame.pack();
    frame.setLocationRelativeTo(null);
    frame.setVisible(true);
}
}

```

## ReviewUI.java

```

package pages_kelvin;
import net.miginfocom.swing.MigLayout;

import javax.swing.*;
import javax.swing.border.Border;

```

```

import database_jon.Product;
import database_jon.ShopletSystemManager;

import java.awt.*;
import java.awt.event.WindowAdapter;
import java.awt.event.WindowEvent;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;

/**
 * Review UI class
 * @author Kelvin Dhomam
 *
 */
public class ReviewUI extends JFrame {

    private JLabel lblUsername = new JLabel("Review (1-5 Stars):");
    private JLabel lblPassword = new JLabel("Review Text:");

    public JButton btnPost = new JButton("Post");
    private final JTextArea textArea = new JTextArea();
    SpinnerModel sm = new SpinnerNumberModel(1, 1, 5, 1); //default value,lower bound,upper
    bound,increment by
    private final JSpinner txtReviewStars = new JSpinner(sm);

    /**
     * Review UI constructor
     * @param windowTitle The window title for the constructor.
     */
    public ReviewUI(String windowTitle, Product product)
    {
        super(windowTitle);
        this.setMinimumSize(new Dimension(350, 340));
        this.setMaximumSize(new Dimension(350, 340));
        this.setResizable(false);

        getContentPane().setLayout(new MigLayout("", "[grow]", "[grow][grow][grow]"));

        getContentPane().add(lblUsername, "cell 0 1");
        getContentPane().add(lblPassword, "cell 0 2");
        textArea.setLineWrap(true);

        getContentPane().add(textArea, "cell 1 2,grow");
        btnPost.addActionListener(new ActionListener() {

            public void actionPerformed(ActionEvent e) {

                if (textArea.getText().isEmpty())
                {
                    JOptionPane.showMessageDialog(null, "One or more missing fields.", "Shoplet",
                    JOptionPane.ERROR_MESSAGE);
                }
                else
                {
                    ShopletSystemManager.getInstance().add_review
                    ShopletSystemManager.getInstance().current_user_id, product.product_id
                }
            }
        });
    }
}

```

```

        , ShopletSystemManager.getInstance().grab_user_info(ShopletSystemManager.getInstance().current_user
        _id).firstname + " " +
        ShopletSystemManager.getInstance().grab_user_info(ShopletSystemManager.getInstance().current_user
        _id).lastname.charAt(0)
            , txtReviewStars.getValue().toString()
            , textArea.getText());

        setVisible(false);
        JOptionPane.showMessageDialog(null, "Review Successfully Posted", "Shoplet",
JOptionPane.INFORMATION_MESSAGE);
    }
}

});

btnPost.setPreferredSize(new Dimension(278, btnPost.getHeight()));
getContentPane().add(btnPost, "cell 1 1");

getContentPane().add(txtReviewStars, "cell 1 1");
}


/*
 * Main
 * @param args
 */

public static void main(String[] args) {
    JFrame frame = new ReviewUI("Shoplet - Review", new Product());
    frame.pack();
    frame.setLocationRelativeTo(null);
    frame.setVisible(true);
}
}

```

## StatesList.java

```

package pages_kelvin;


/*
 * State list for dropdown uses
 * @author Kelvin Dhomam
 */

public class StatesList {

    // Contains all the states to access.
    public static String[] States =
    {
        "AK - Alaska",
        "AL - Alabama",
        "AR - Arkansas",
        "AZ - Arizona",
        "CA - California",
    }
}

```

```
"CO -Colorado",
"CT - Connecticut",
"DC - District of Columbia",
"DE - Delaware",
"FL - Florida",
"GA - Georgia",
"HI - Hawaii",
"IA - Iowa",
"ID - Idaho",
"IL - Illinois",
"IN - Indiana",
"KY - Kentucky",
"LA - Louisiana",
"MA - Massachusetts",
"MD - Maryland",
"ME - Maine",
"MI - Michigan",
"MN - Minnesota",
"MI - Missouri",
"MS - Mississippi",
"MT - Montana",
"NC - North Carolina",
"ND - North Dakota",
"NE - Nebraska",
"NH - New Hampshire",
"NJ - New Jersey",
"NM - New Mexico",
"NV - Nevada",
"NY - New York",
"OH - Ohio",
"OK - Oklahoma",
"OR - Oregon",
"PA - Pennsylvania",
"PR - Puerto Rico",
"RI - Rhode Island",
"SC - South Carolina",
"SD - South Dakota",
"TN - Tennessee",
"TX - Texas",
"UT - Utah",
"VA - Virginia",
"VT - Vermont",
"WA - Washington",
"WI - Wisconsin",
"WV - West Virginia",
"WY - Wyoming"
};

}
```

## userProfileUI.java

```
package pages_kelvin;
import java.awt.EventQueue;
```

```
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;

/**
 * User Profile Class
 * @author Kelvin Dhomam
 *
 */
public class userProfileUI extends JFrame {

    private JPanel contentPane;

    /**
     * Launch the application.
     */
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    userProfileUI frame = new userProfileUI();
                    frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }

    /**
     * Create the frame.
     */
    public userProfileUI() {
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 1001, 650);
        contentPane = new JPanel();
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

        setContentPane(contentPane);
    }
}
```