

Project Title:

Snackies

Group Number 12

Group Members: Chase Moffat, Charles Pyfrom, Miles Choquette, Sebastian Zapata

Shopping Cart Project

Platform: This application will be a Java application using the Swing library.

Application Glossary:

1. **Seller:** An individual who offers products for sale on the marketplace.
2. **Buyer:** An individual who seeks to purchase products on the marketplace.
3. **Transaction:** An agreement between the buyer and seller in an exchange of goods for currency.
4. **Product:** An item that has been listed by a seller in the marketplace.
5. **Shopping Cart:** A virtual container where buyers can add products they wish to purchase.
6. **Checkout:** The process where a buyer enters their payment and shipping information to purchase a product.
7. **Receipt:** Documentation for the buyer that displays the products they purchased, their price, and the total price.
8. **Inventory:** The list of products that a buyer has posted for sale on the marketplace.
9. **Revenue:** The total amount of income generated by the buyer's sales.
10. **Sales:** The total number of products sold by a buyer.
11. **Profit:** The financial gain for the buyer.
12. **Sale Price:** The price that a buyer lists a product for on the marketplace.
13. **Invoice Price:** The price the buyer gets the product for from a supplier.
14. **Quantity:** The number units a buyer has for a specific product.

Contributor: Chase

Application Functional Specification:

Platform:

This application will be a Java application using the Swing library.

When the Snackies application opens up the first thing the user sees is a login screen. At this screen the user will be able to sign in as a seller or a customer. Each option will open a different view. The user will also be able to register a new account if they do not already have one.

When a customer navigates to the login button they are prompted to enter their username and password. Once logged in a new window opens which displays the online store. The customer can filter different products by category. The products are displayed with their name, price. If a customer clicks on the product it will also show the name and price but it will also show quantity and a description of the product. If the product is available for purchase (if quantity is > 0) the customer can add the product to their shopping cart. The shopping cart will display the price of the individual products selected and the total price. Next to each product in the cart there will also be an option for quantity that the customer can update. The customer will also have an option to remove items from their cart.

A customer can checkout at any time. If their shopping cart is empty a message will appear notifying the customer that their cart is empty. If their shopping cart is not empty a window will pop up showing their current shopping cart and at the bottom will be the total price.

If the customer chooses to proceed they will next be prompted to enter their payment information. If the customer enters incorrect information (example: not entering enough digits for credit card number) a message will display to alert the customer. The customer will also have to enter their shipping information. If the customer enters incorrect information (example: does not include a zip code) a message will display to alert the customer. The customer will also have the option to exit back to the store page anytime before hitting **confirm order**. After payment the customer will then be prompted to enter their shipping information. The system will then show an overview window that the customer can review. Once the customer selects the confirmed order the system will display a receipt.

When a seller logs in they are prompted to enter their username and password. Once logged a window pops up where the seller can see their inventory. The inventory shows the products they have already added to their inventory list. Next to each product there is an option to remove a product from their inventory. There is also an option to update a product(name, invoice price, sale price, quantity, description, and category). At the top of the inventory there is a button that opens a window where the seller can add a new product. The window has a form that allows the seller to enter the product name, invoice price, sale price, quantity, description, and category. The seller has the option to commit the changes or exit back to the inventory list.

The seller also has the option to view their money management. When this button is pressed a window would pop up showing the seller their overall profit(revenues - cost) , revenue(sum of sell price for all sold items), and costs(sum of invoice price for all items bought

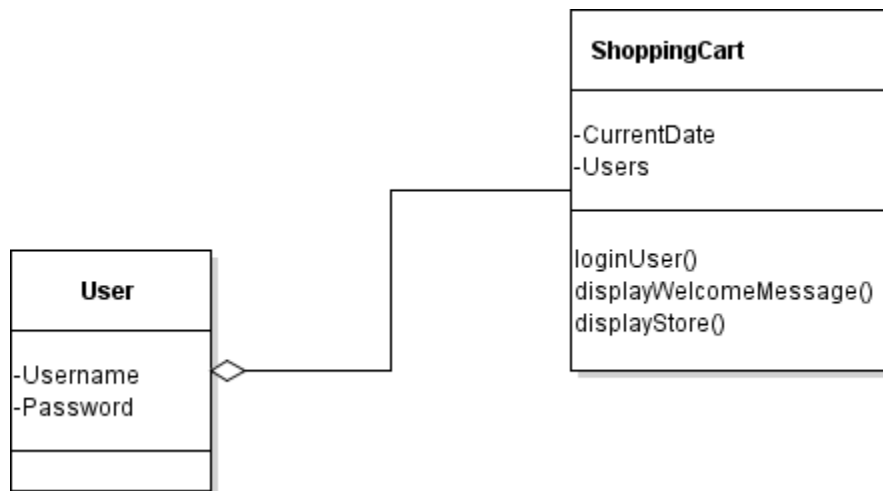
in the seller's inventory). The seller would also have an option to close this window and navigate back to their inventory.

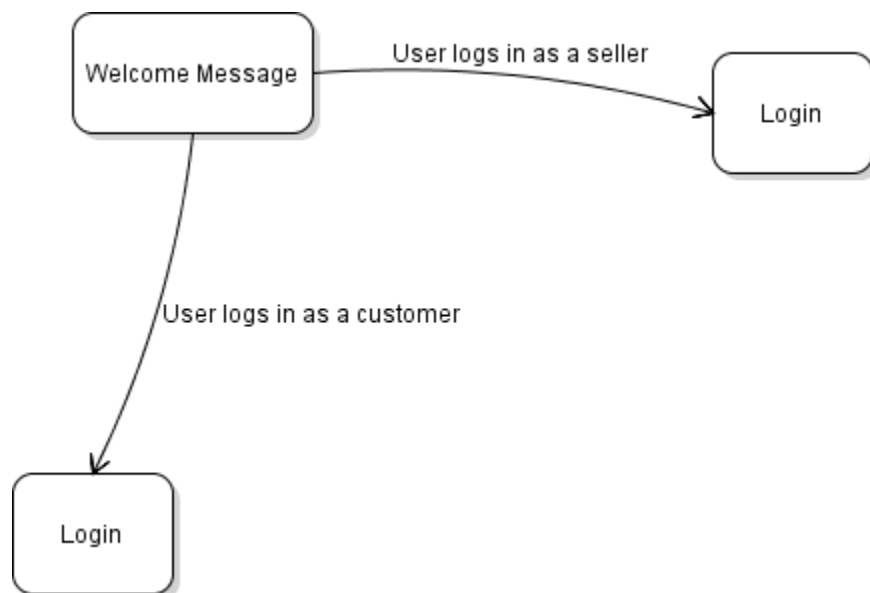
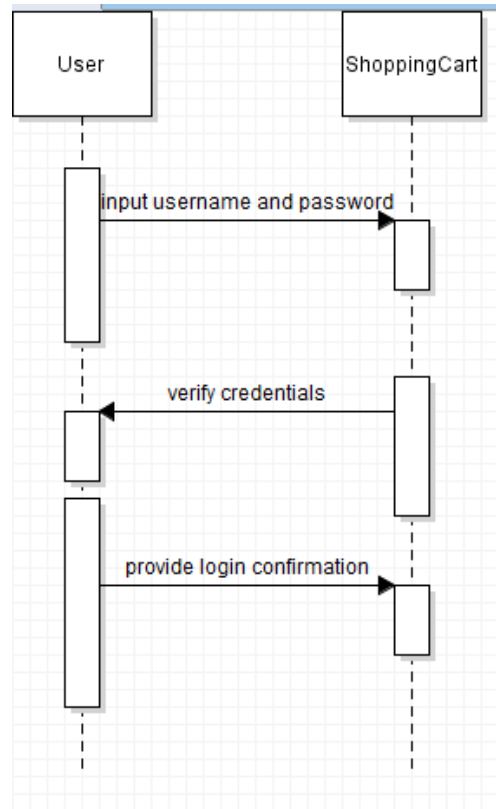
Essential Use Cases/Diagrams:

Contributors: Chase, Charles, Miles

Use Case: User Logs In

1. Customer navigates to log in button
2. Customer enters their unique username & password
3. System confirms log in (Message: “Login Successful”)
4. Customer can now view their shopping cart

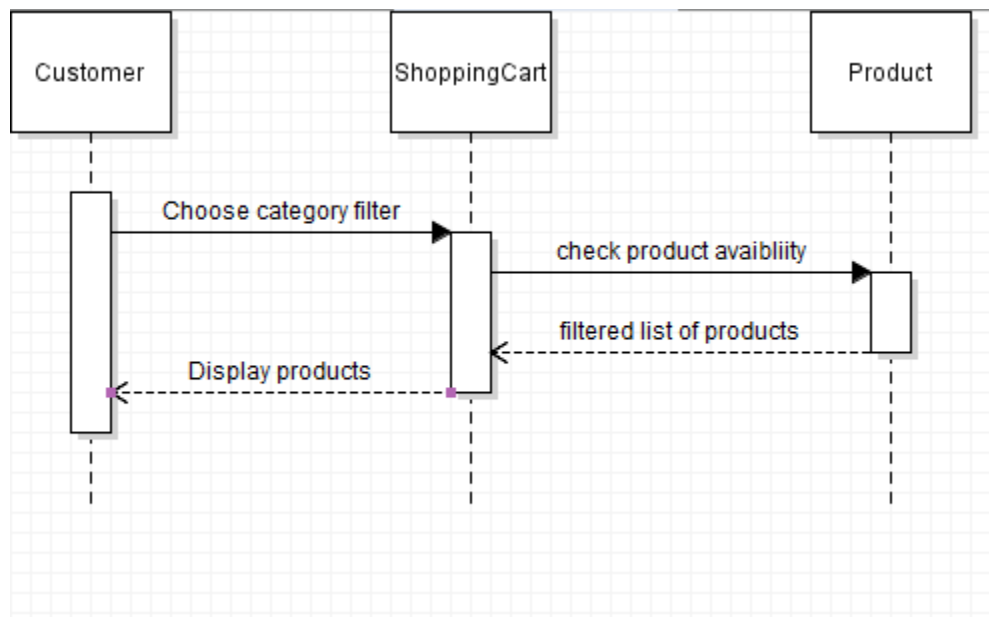
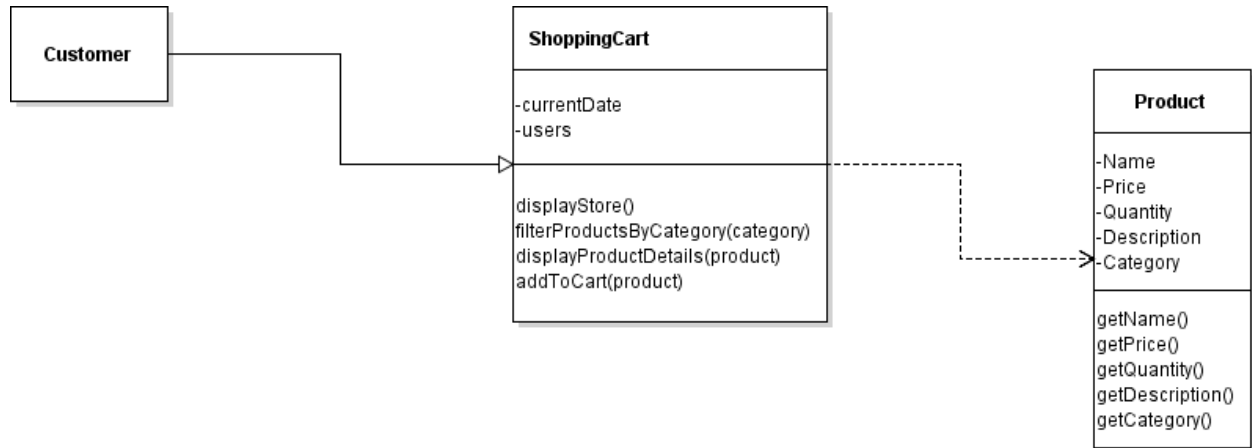


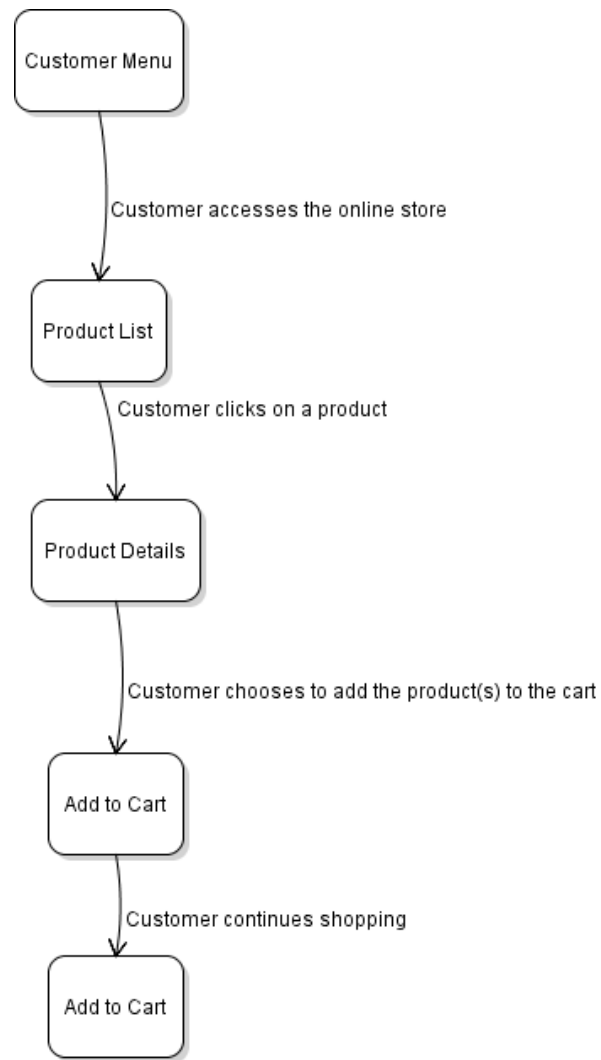


Use Case: Customer Adds Items to Shopping Cart

1. Customer logs into the system

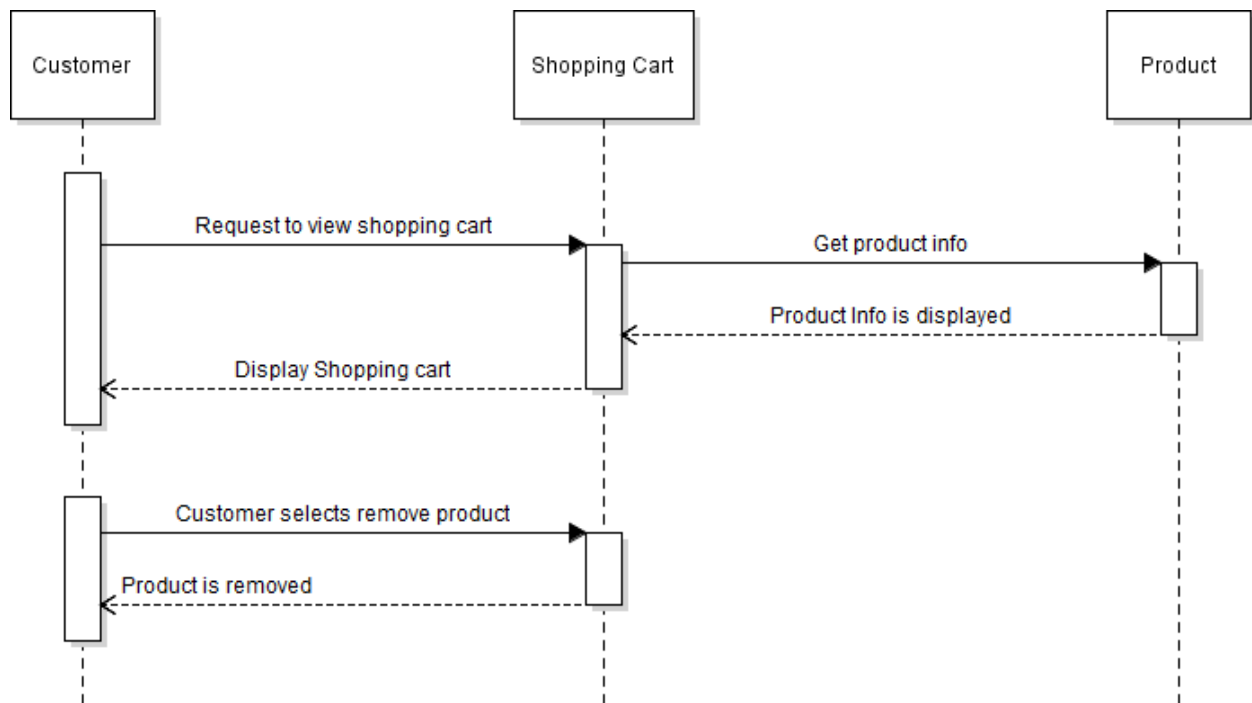
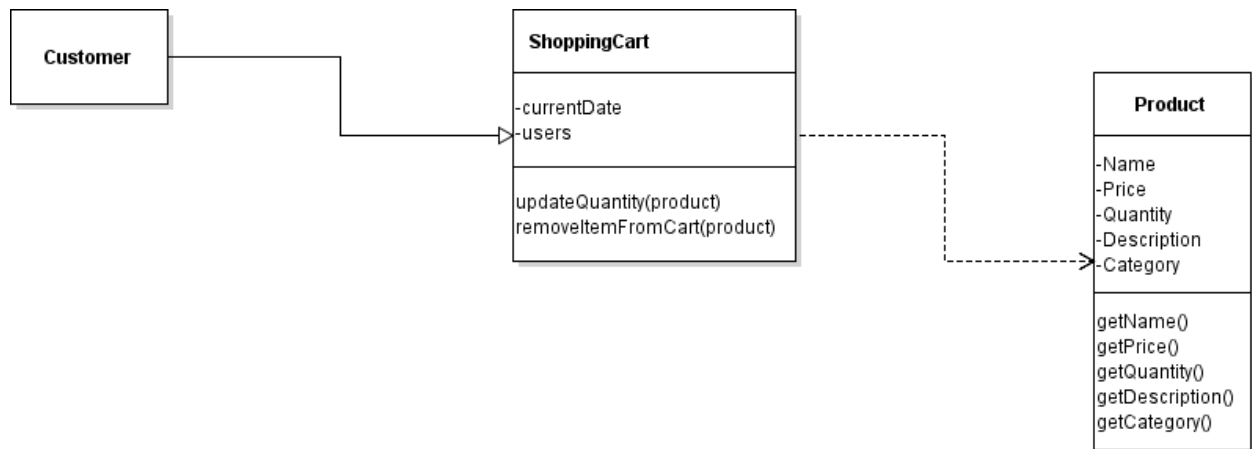
2. Customer navigates to product page
3. Customer clicks “add product to cart”
4. System confirms add (Message: “Product Added to Cart”)
5. Customer can now see the product in their cart

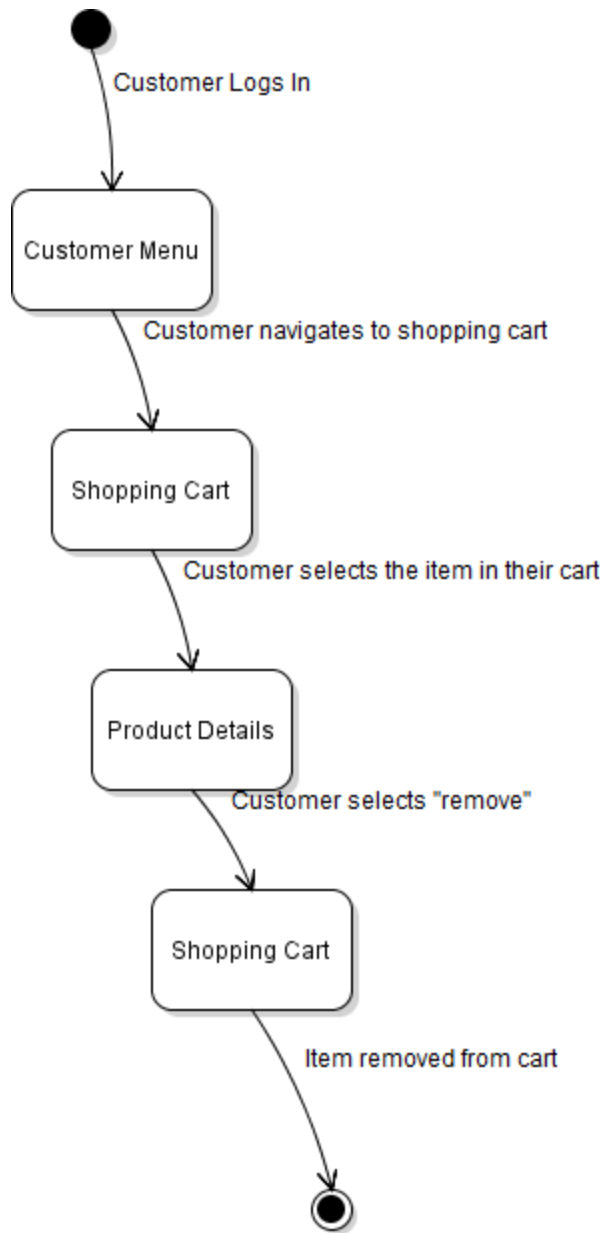




Use Case: Customer Reviews/Updates Shopping Cart

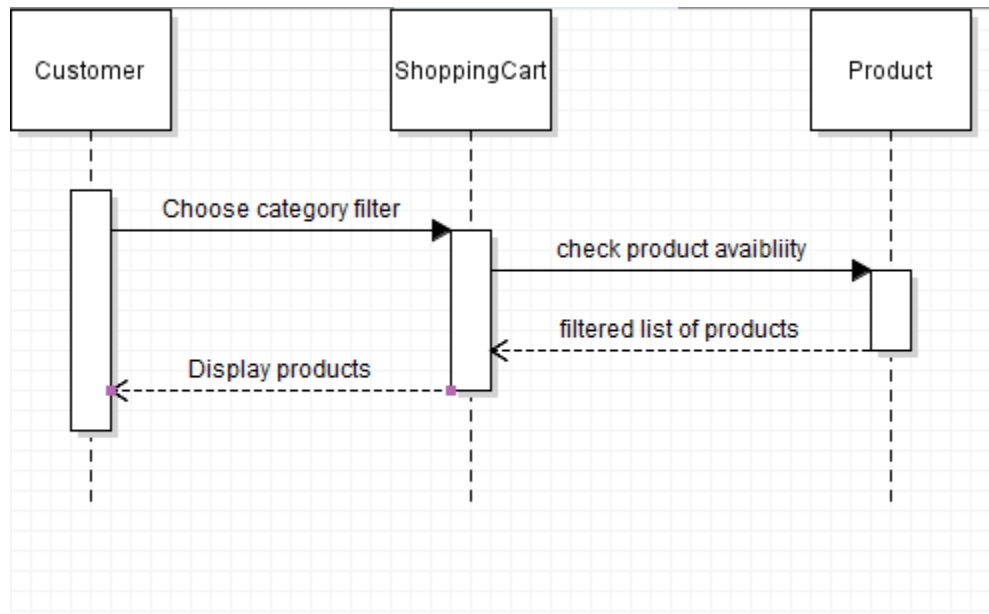
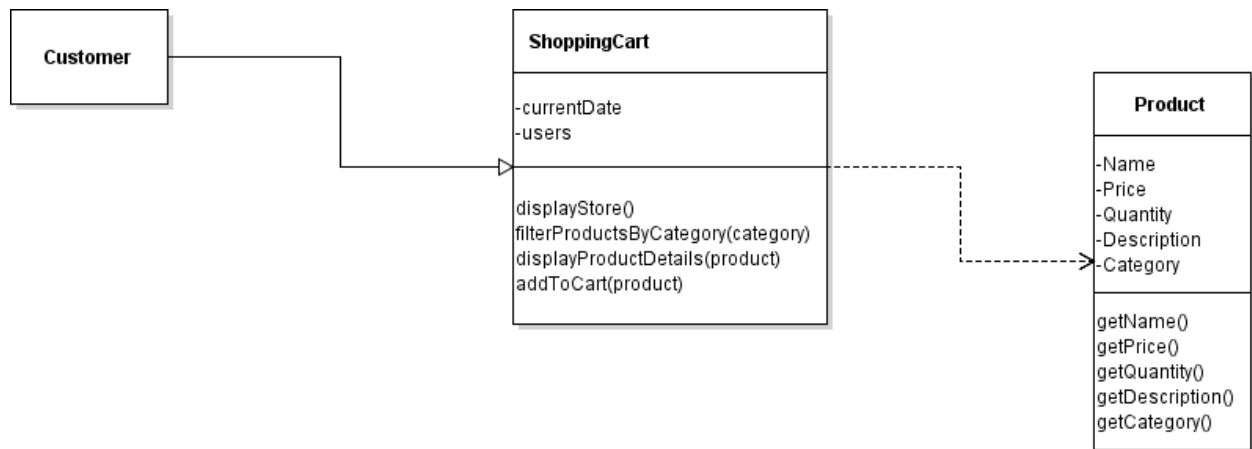
1. Customer clicks on the “Shopping Cart” link.
2. System displays contents of the customer’s shopping cart
3. Customer can review items in the cart
4. Customer can update the shopping cart
5. System updates shopping cart

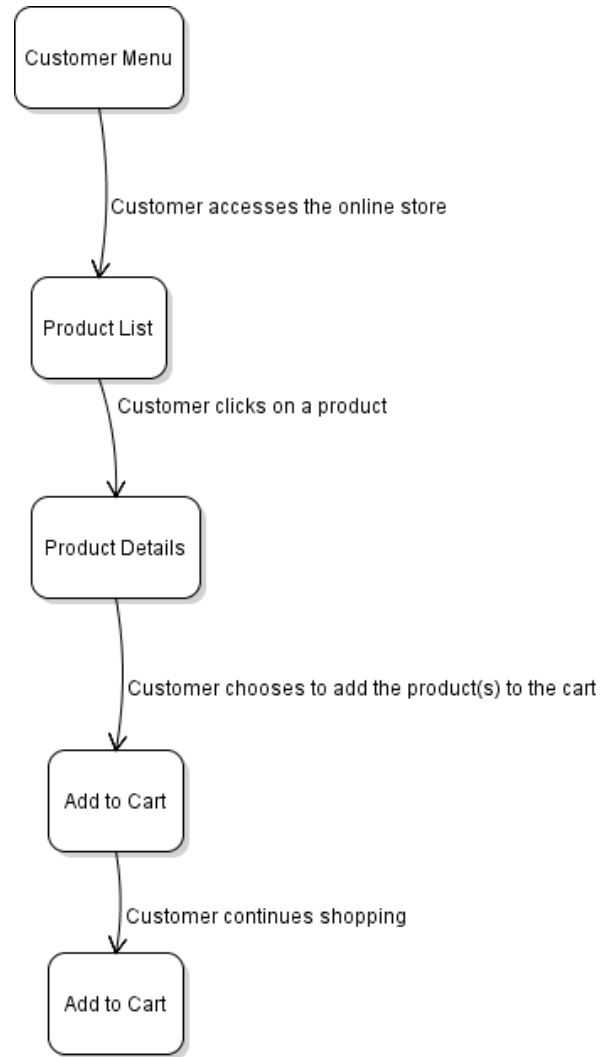




Use Case: Customer Reviews Product Details

1. Customer successfully **Logs In**
2. Customer navigates to product page
3. Customer clicks on “Product Details”
4. System Displays the details about the specific Product

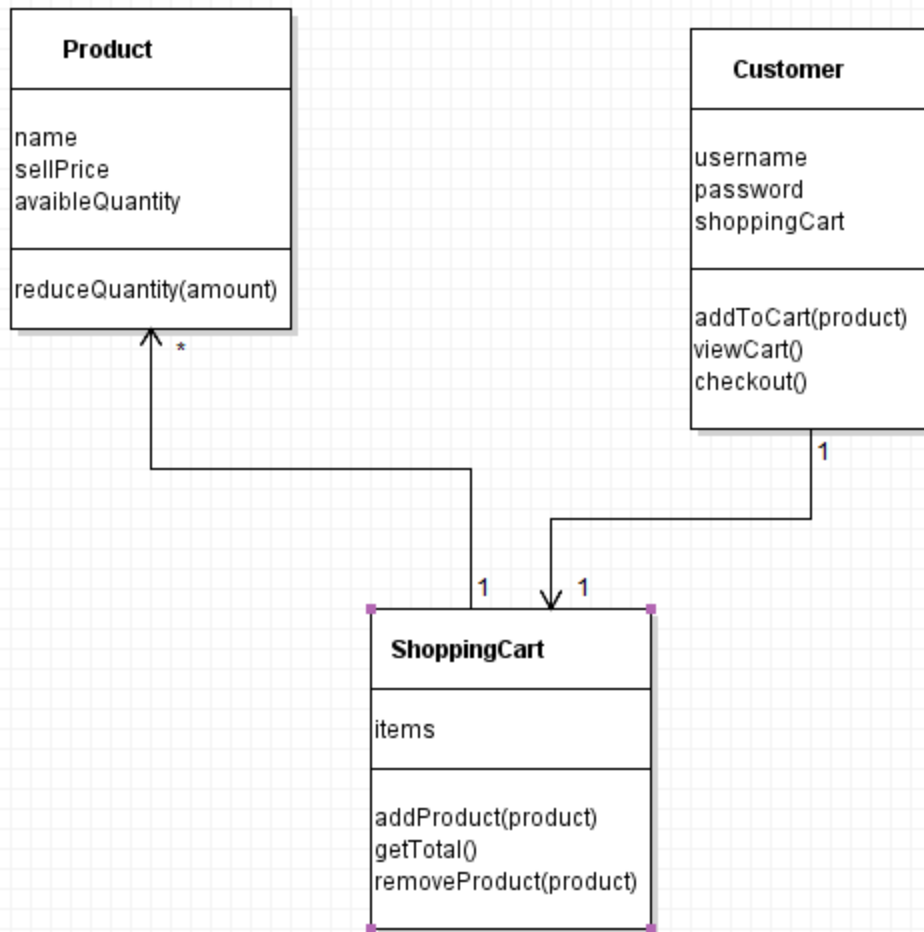


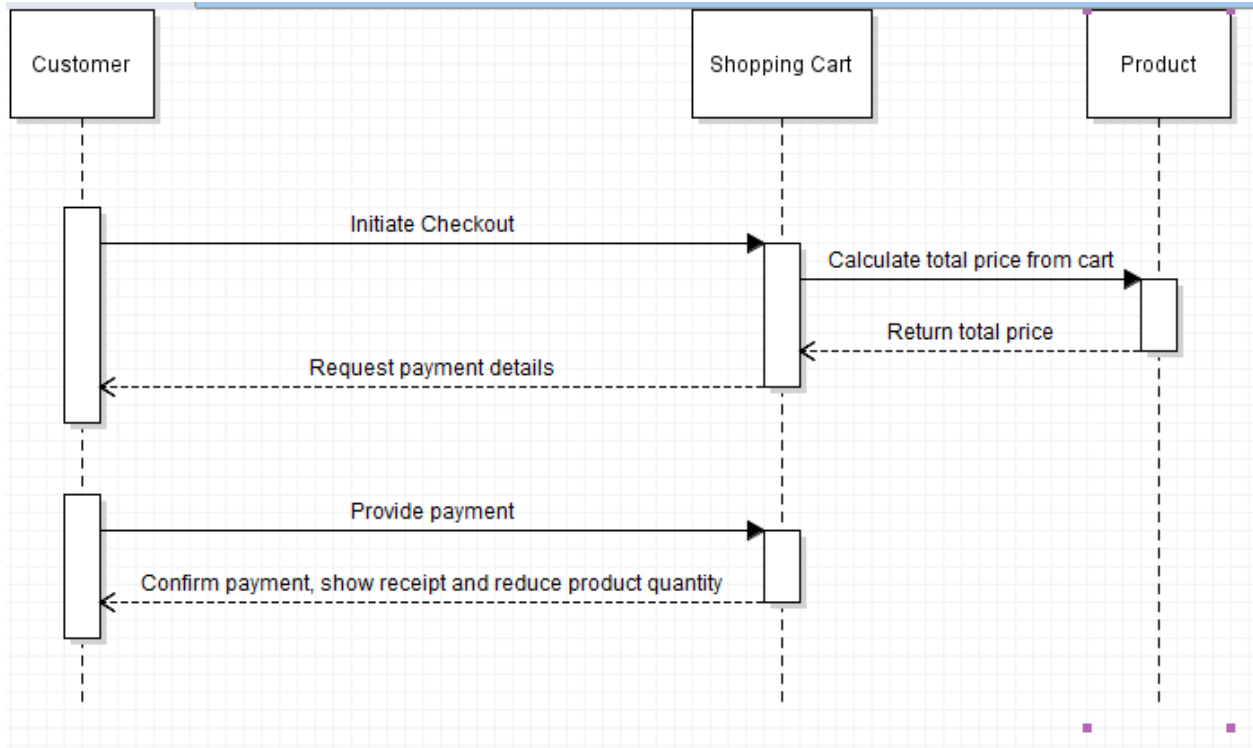


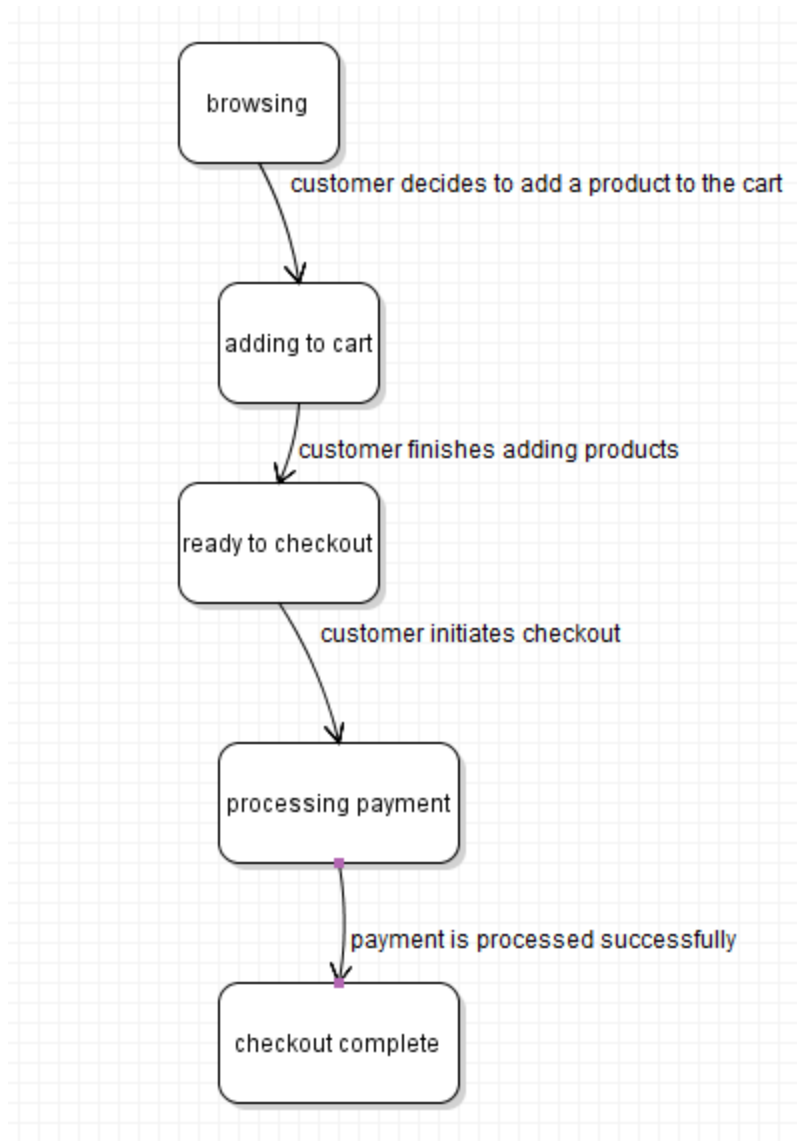
Use Case: Customer Checks Out

1. Customer successfully **Logs In**
2. Customer **Adds Items to Shopping Cart**
3. Customer **Reviews Shopping Cart**
4. Customer clicks on "Check out"
5. System displays the total
6. System asks for credit card information
7. Customer enters payment information

8. System confirms payment info
9. System asks for shipping address
10. Customer enters shipping address
11. System confirms shipping address
12. System displays product and total
13. Customer clicks on “Complete Payment”
14. System confirms checkout
15. System displays receipt



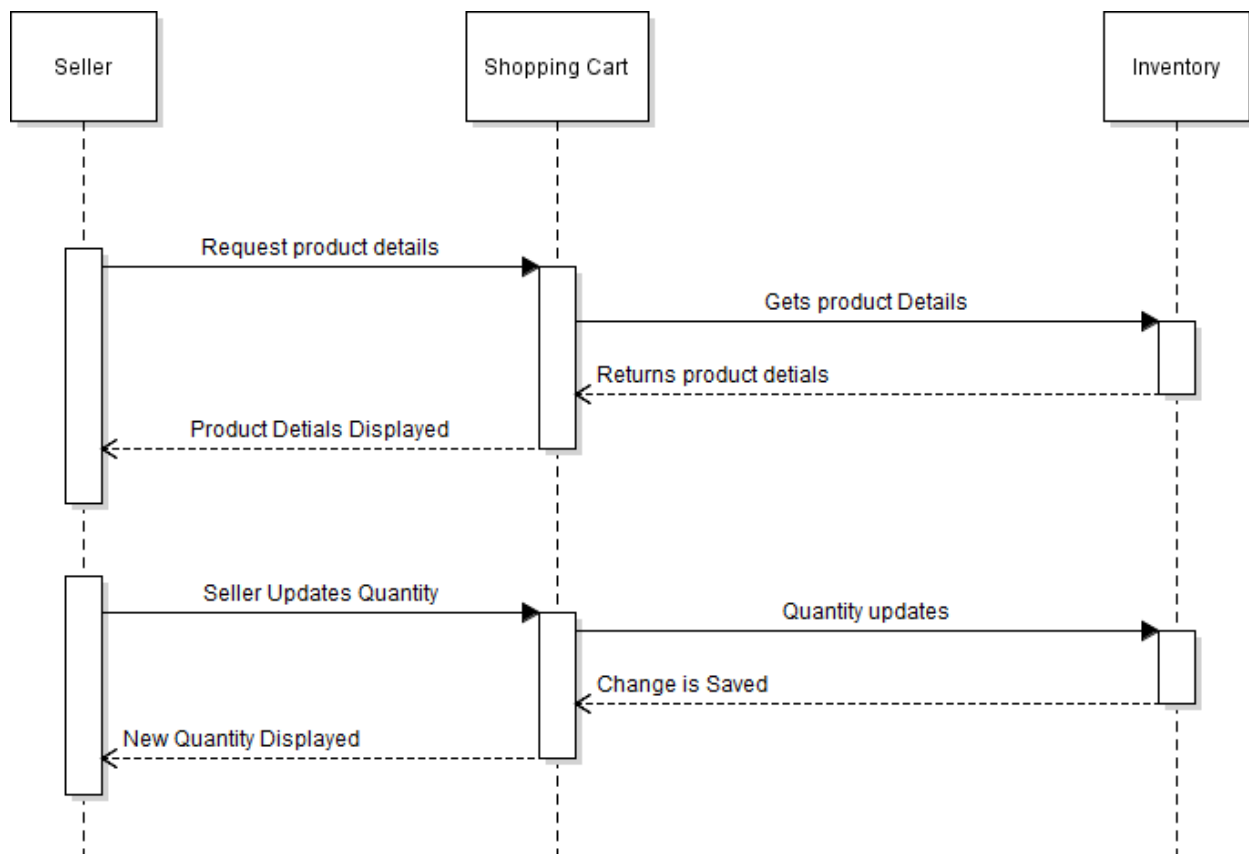
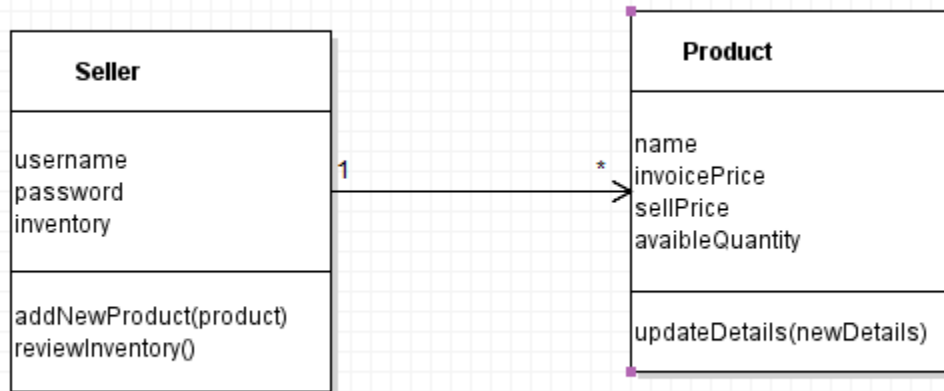


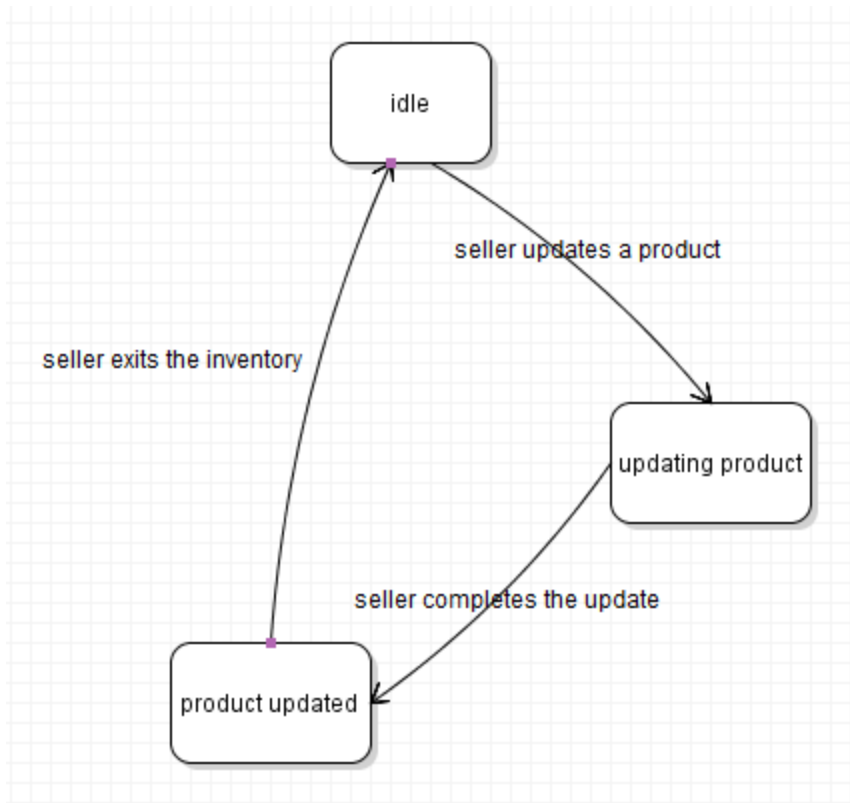


Use Case: Seller Reviews/Updates Inventory

1. The seller accesses the "Inventory Management" section of the application.
2. The application displays the current state of the seller's inventory.
3. For each product that needs an update, the seller selects the product from the list.
4. After making the necessary updates, the seller saves the changes.

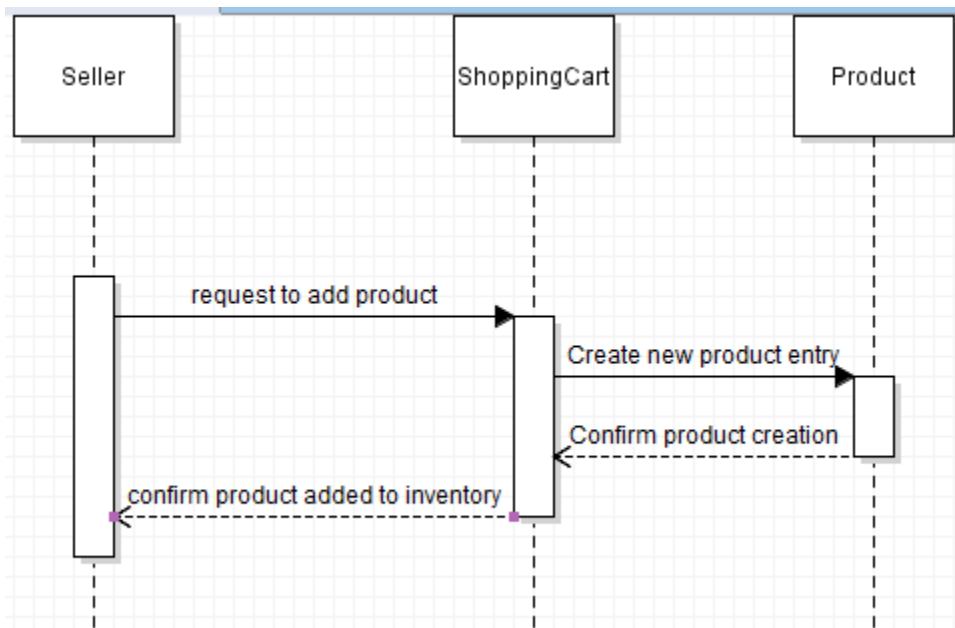
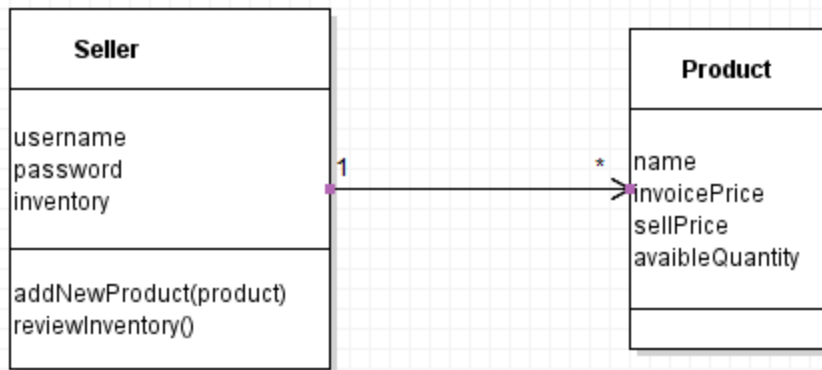
5. The seller can continue to review and update other products or exit the inventory management section.

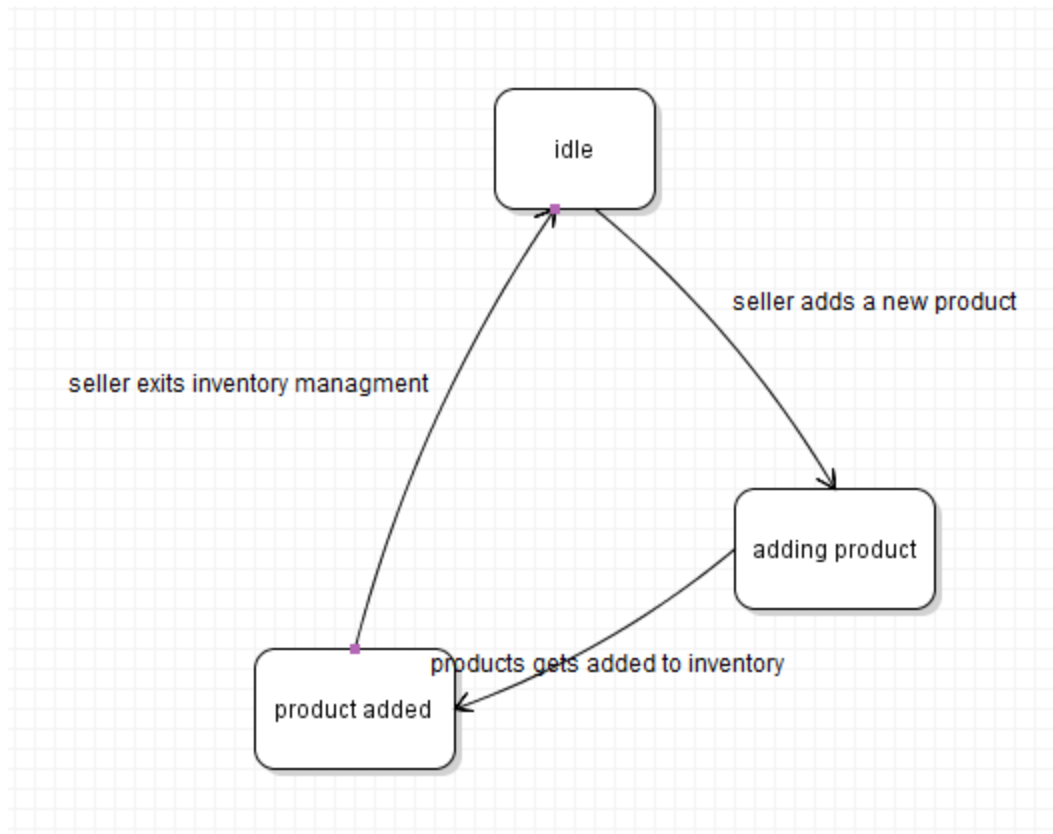




Use Case: Seller Adds New Product

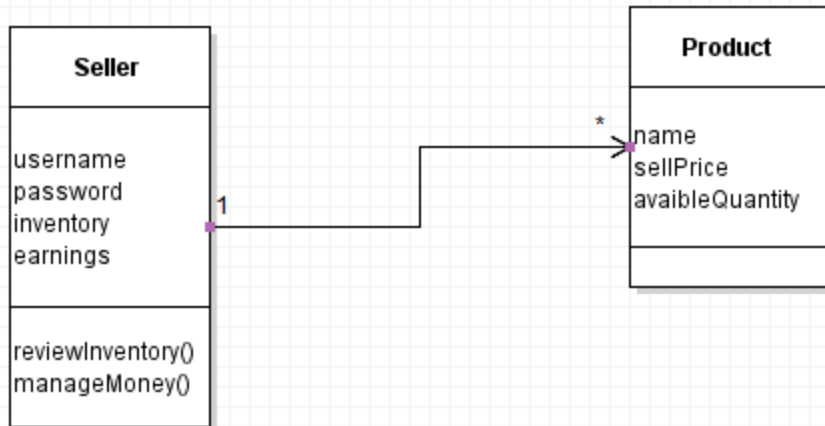
1. The seller accesses the "Inventory Management" section of the application.
2. The seller selects an option to "Add New Product."
3. The application prompts the seller to provide the following details for the new product.
 - Product name
 - Invoice price
 - Sell price
 - Available quantity
4. After entering the details, the seller saves the new product.
5. The seller can continue to review and update other products in the inventory or exit the inventory management section.

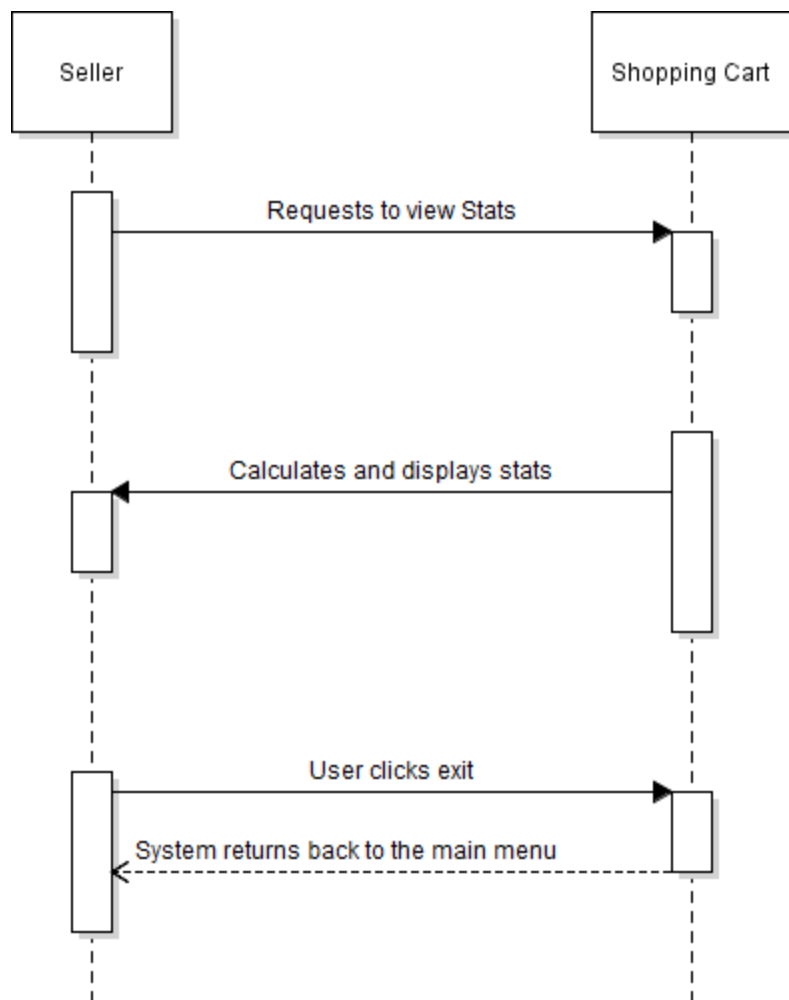


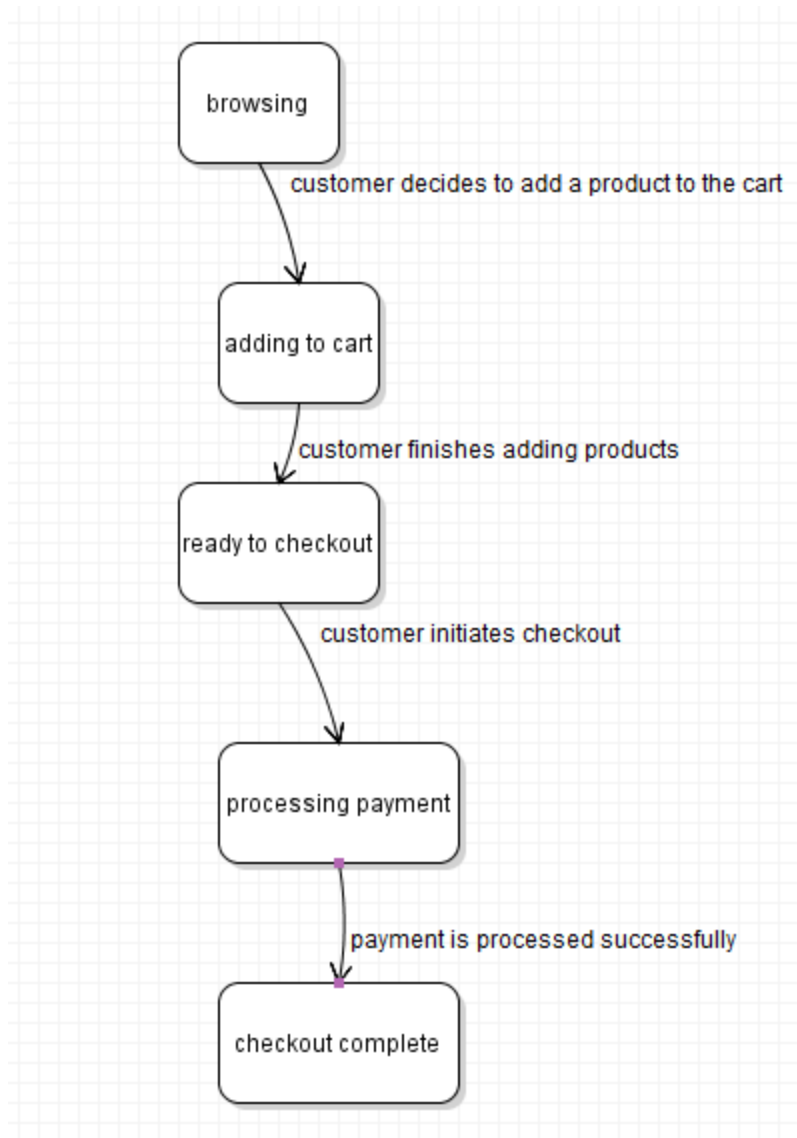


Use Case: Seller checks their stats (Revenue, Sales, Profit)

1. The seller accesses the “stats” section of the application.
2. System opens a new window
3. The seller can now view their stats(Revenue, Sales, profit)
4. The seller finishes viewing the stats and clicks exit
5. The system closes the stats window







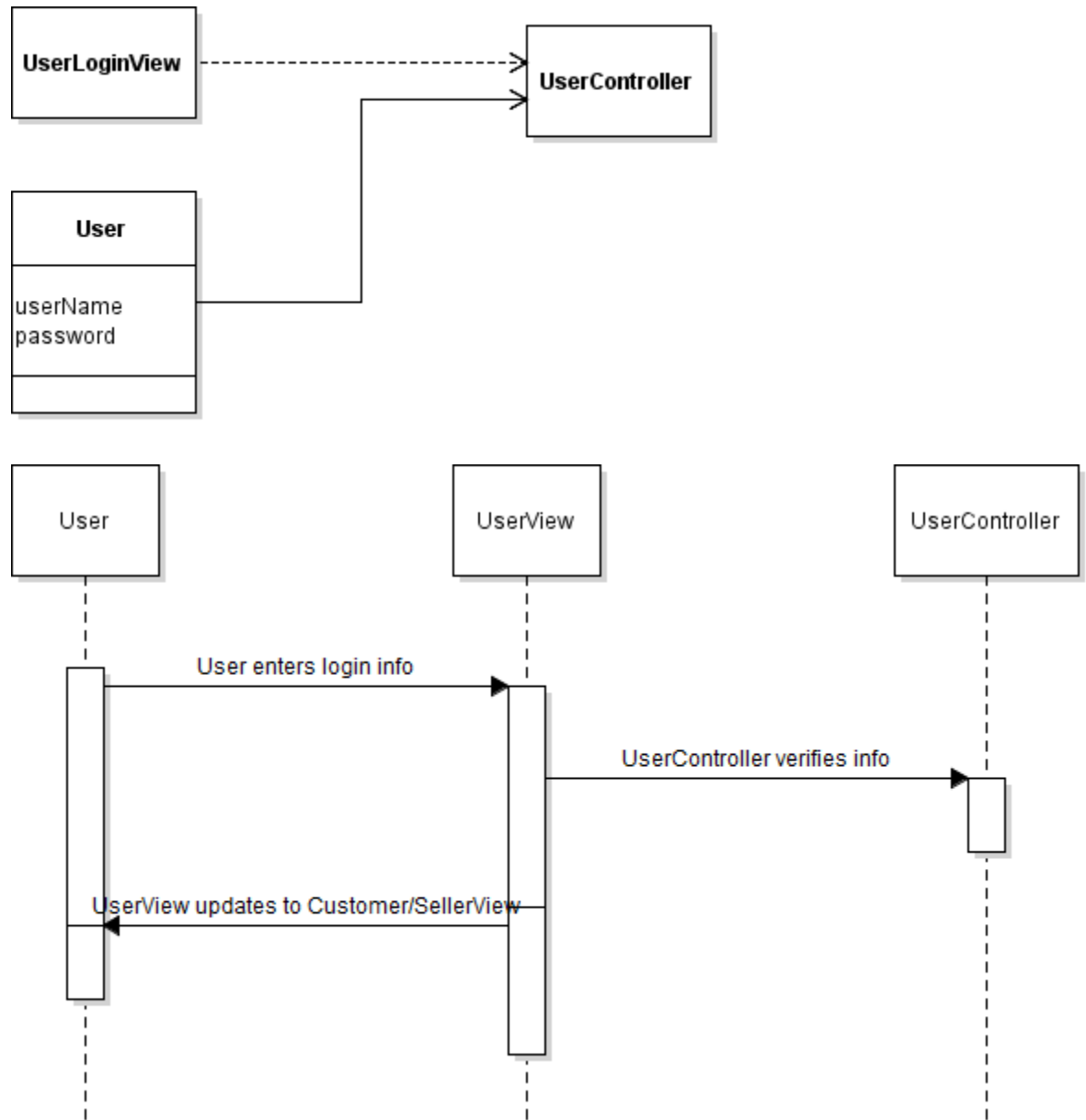
WalkThrough Use Cases/Diagrams:

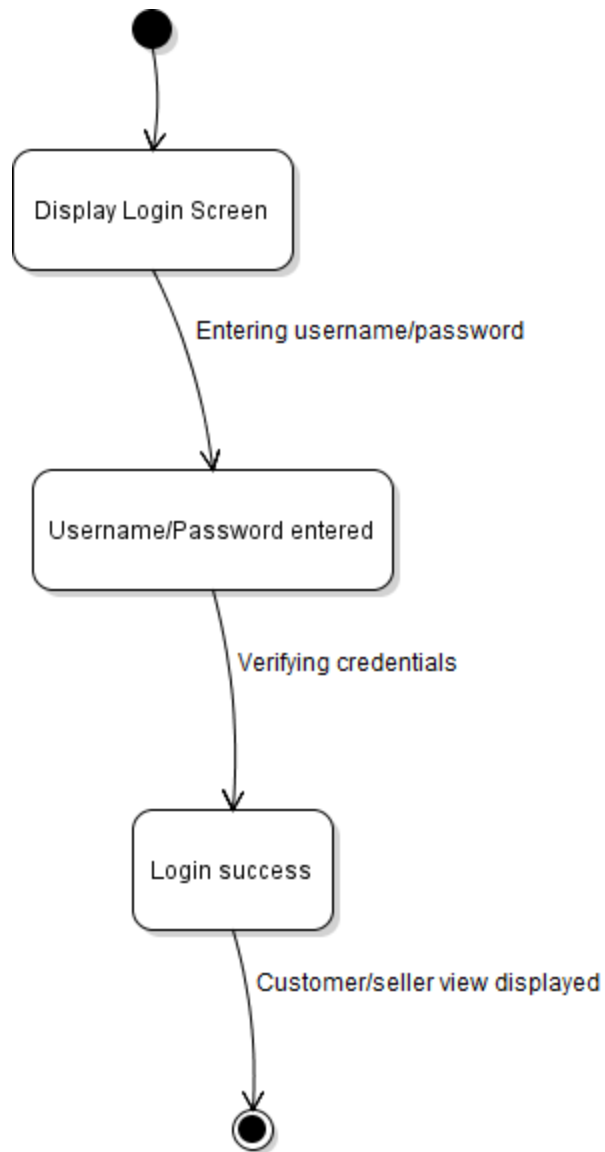
Contributor: Chase

Use Case: User Logs In

1. The user interacts with UserLoginView, entering credentials into JTextField
2. User clicks JButton to submit username and password

3. UserController retrieves credentials from UserLoginView
4. UserController either opens CustomerView or SellerView

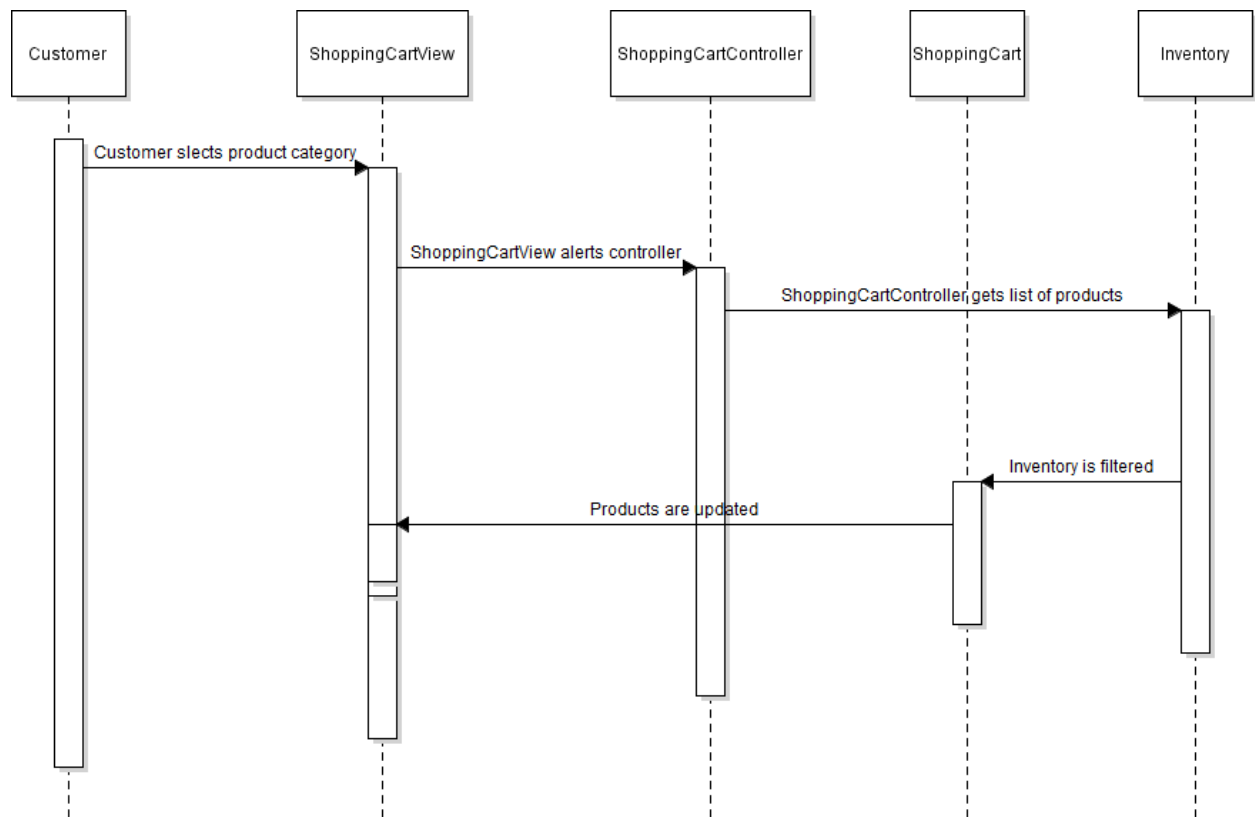
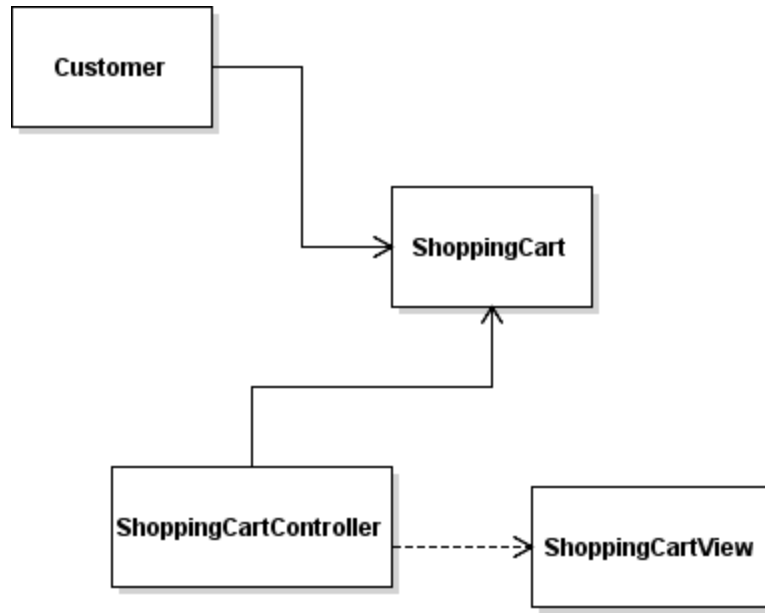


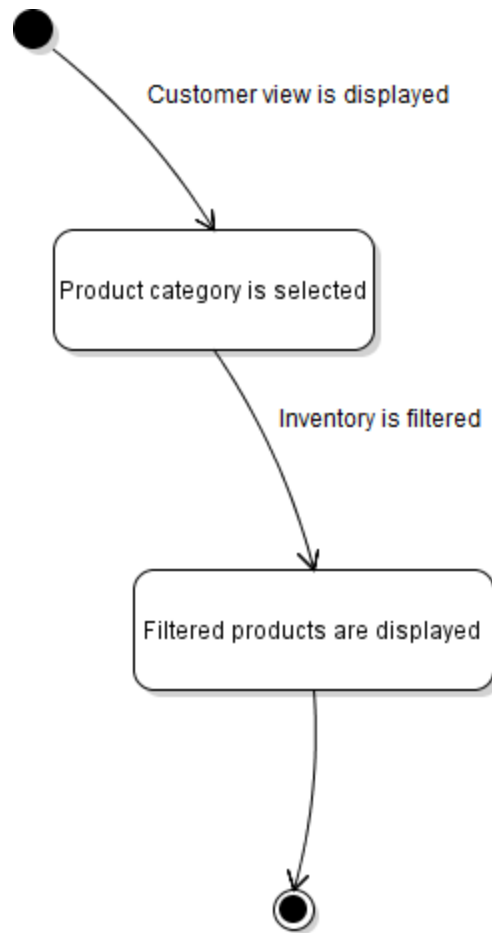


Contributor: Chase

Use Case: Customer Browses Products

1. Using CustomerView, Customer selects a product category from JComboBox
2. CustomerController requests a filtered product list from Inventory
3. CustomerView displays the filtered products on JTable

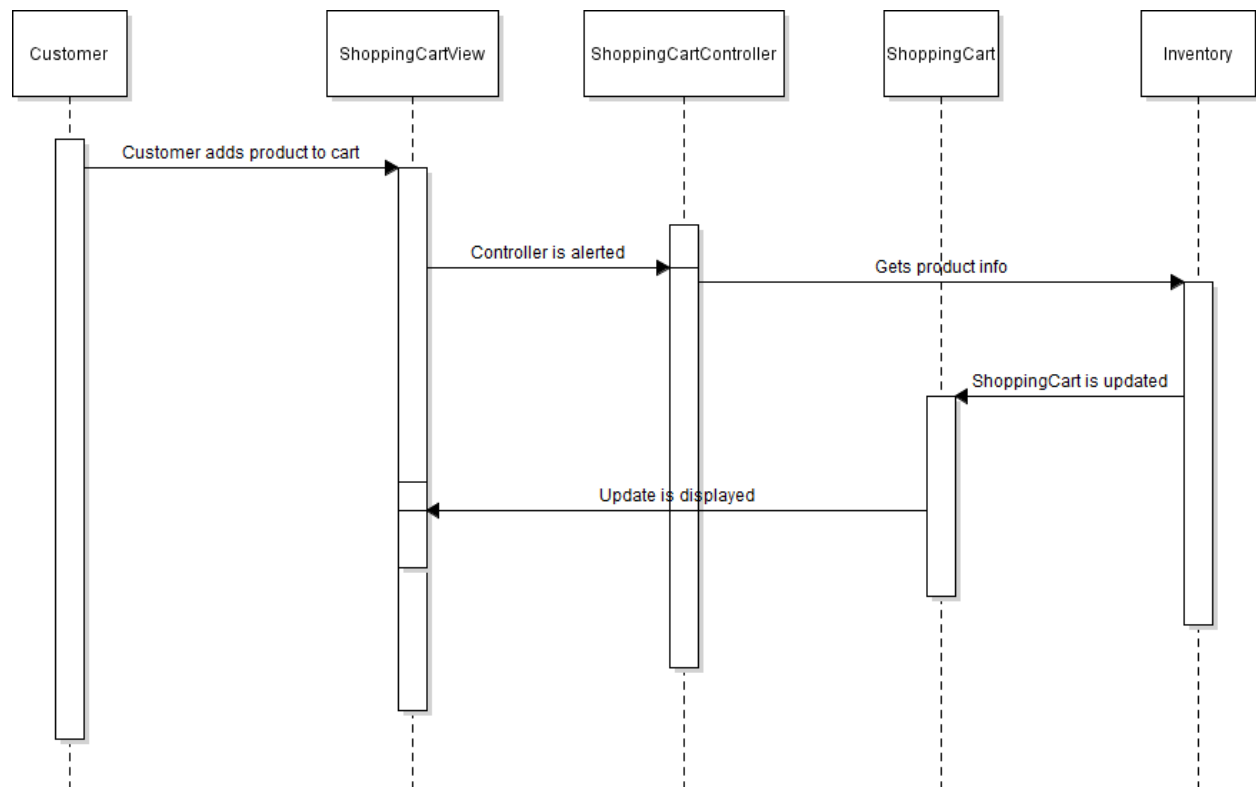
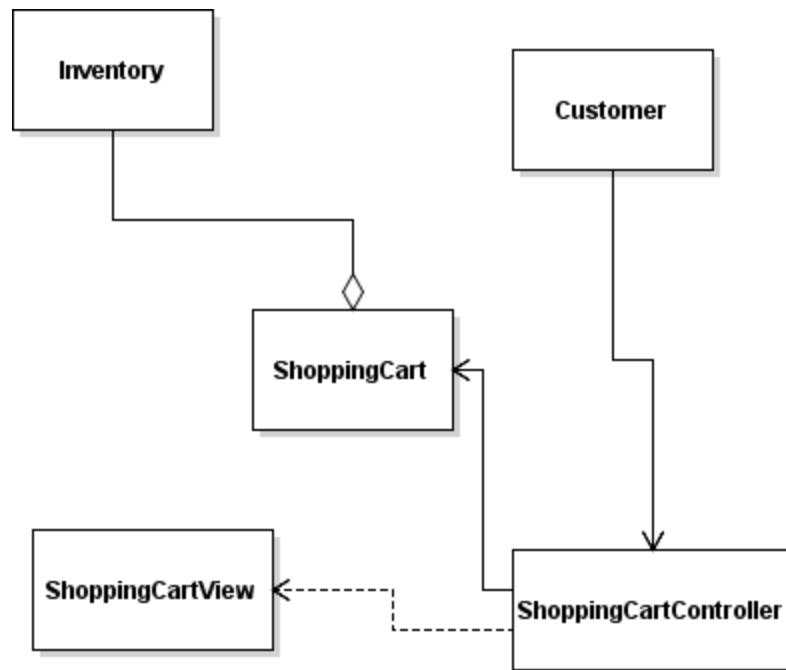


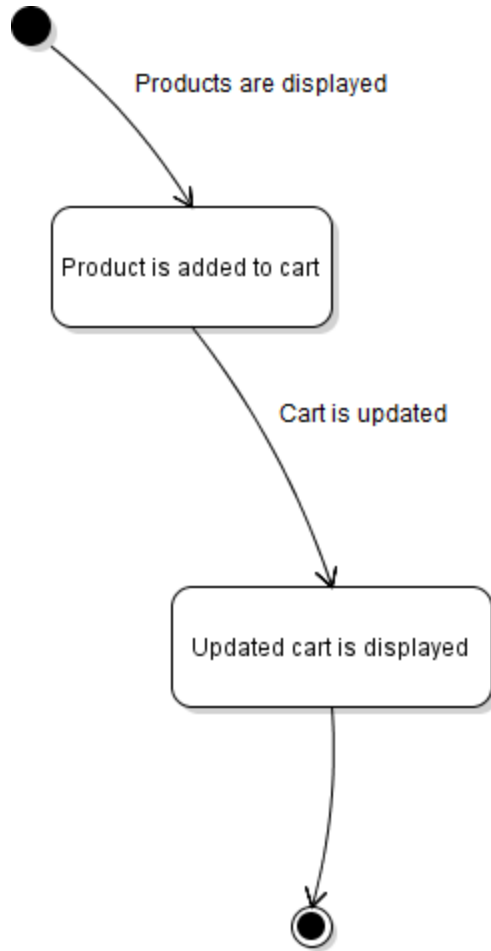


Contributor: Chase

Use Case: Customer Adds Product to Cart

1. Customer clicks "Add to cart" JButton in CustomerView
2. CustomerController updates ShoppingCart
3. ShoppingCartView displays the new item in a JList

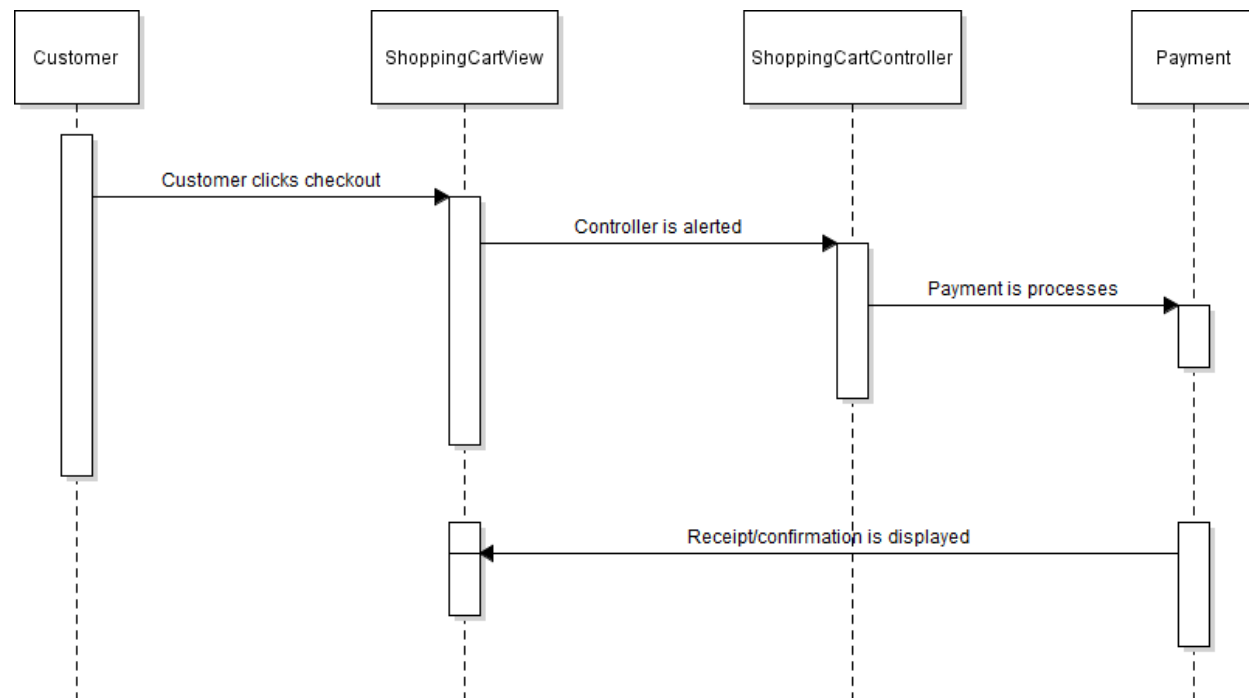
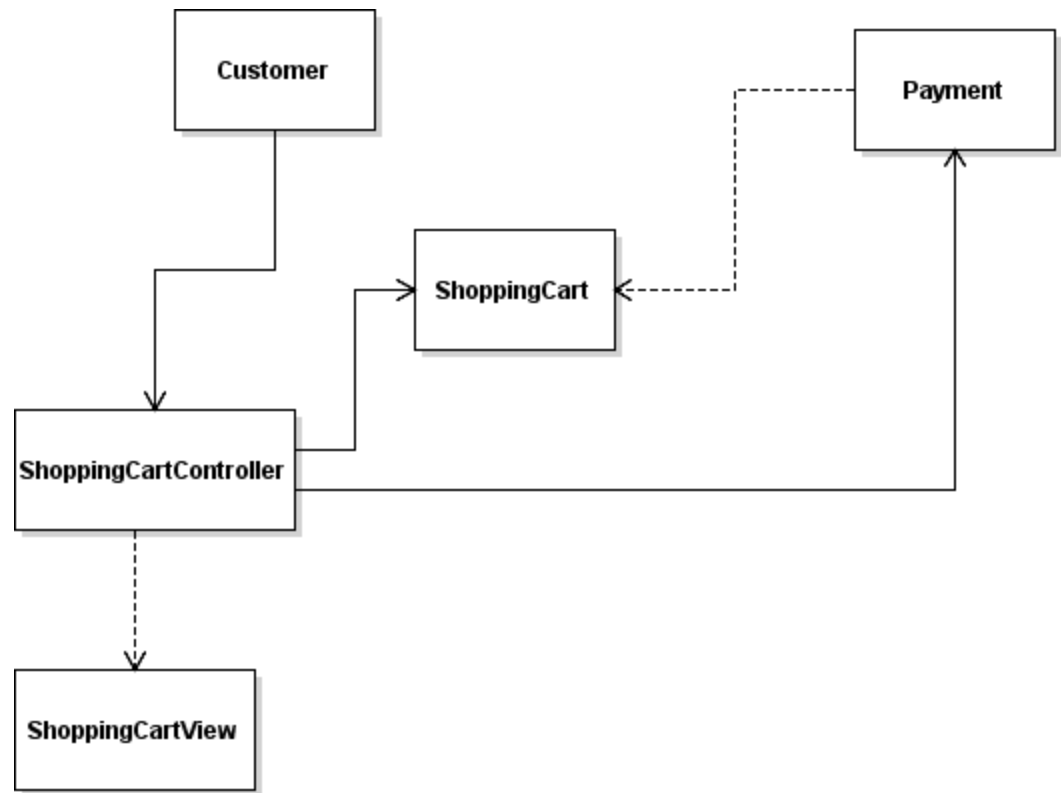


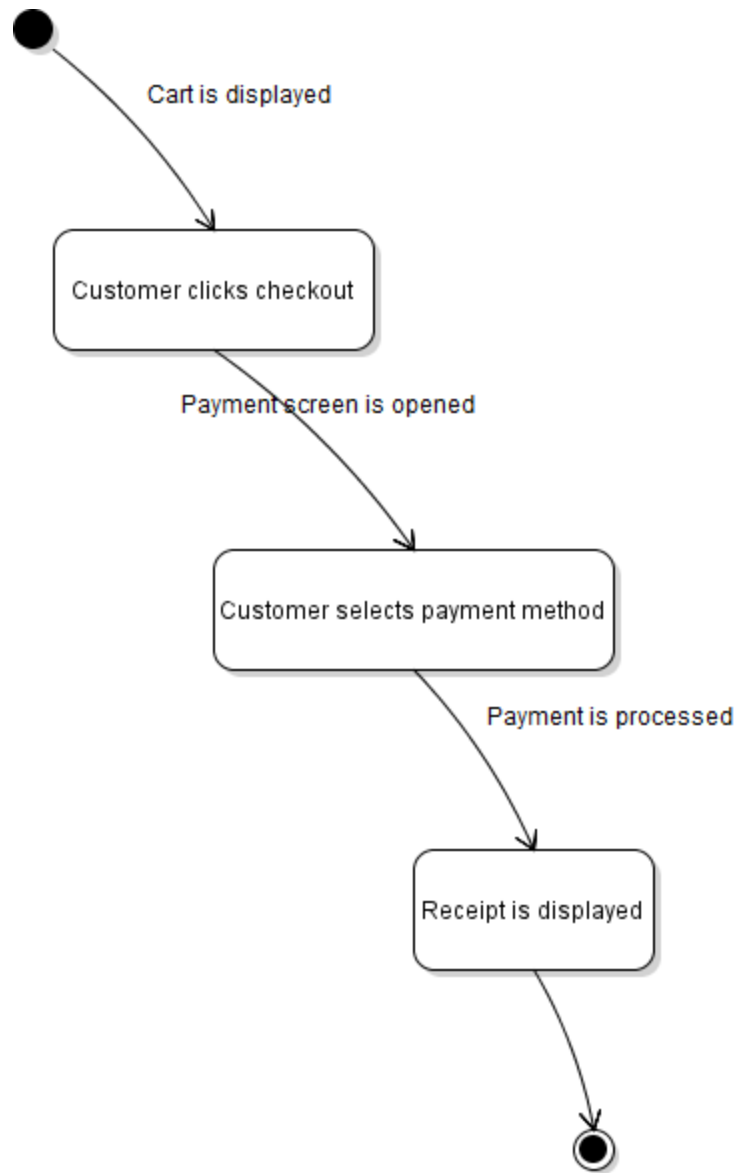


Contributor: Chase

Use Case: Customer Checks Out

1. Customer clicks "Checkout" JButton in ShoppingCartView
2. ShoppingCartController calls Payment to process the checkout
3. ShoppingCartView shows confirmation/Receipt with JOptionPane

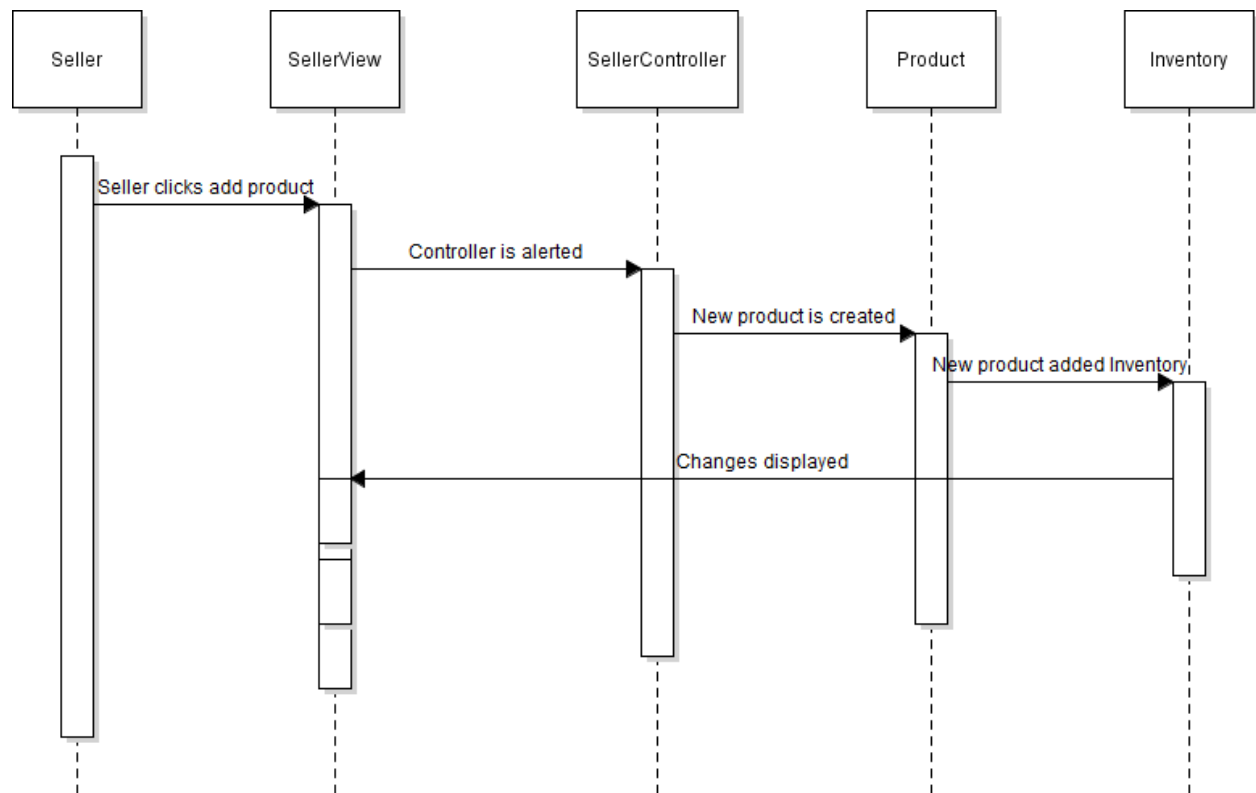
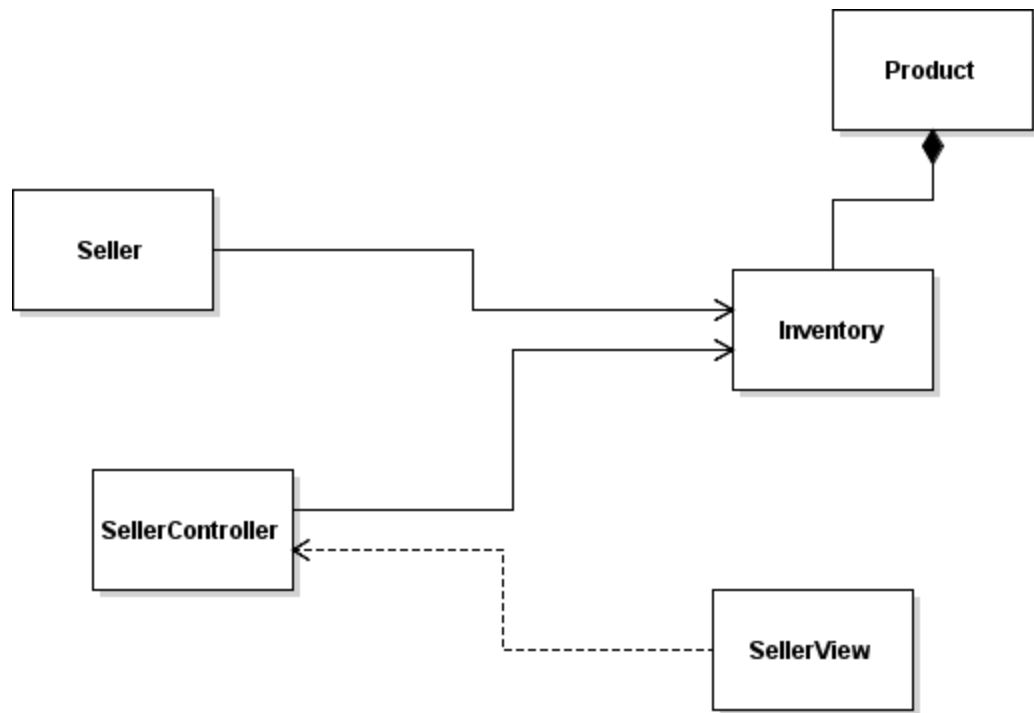


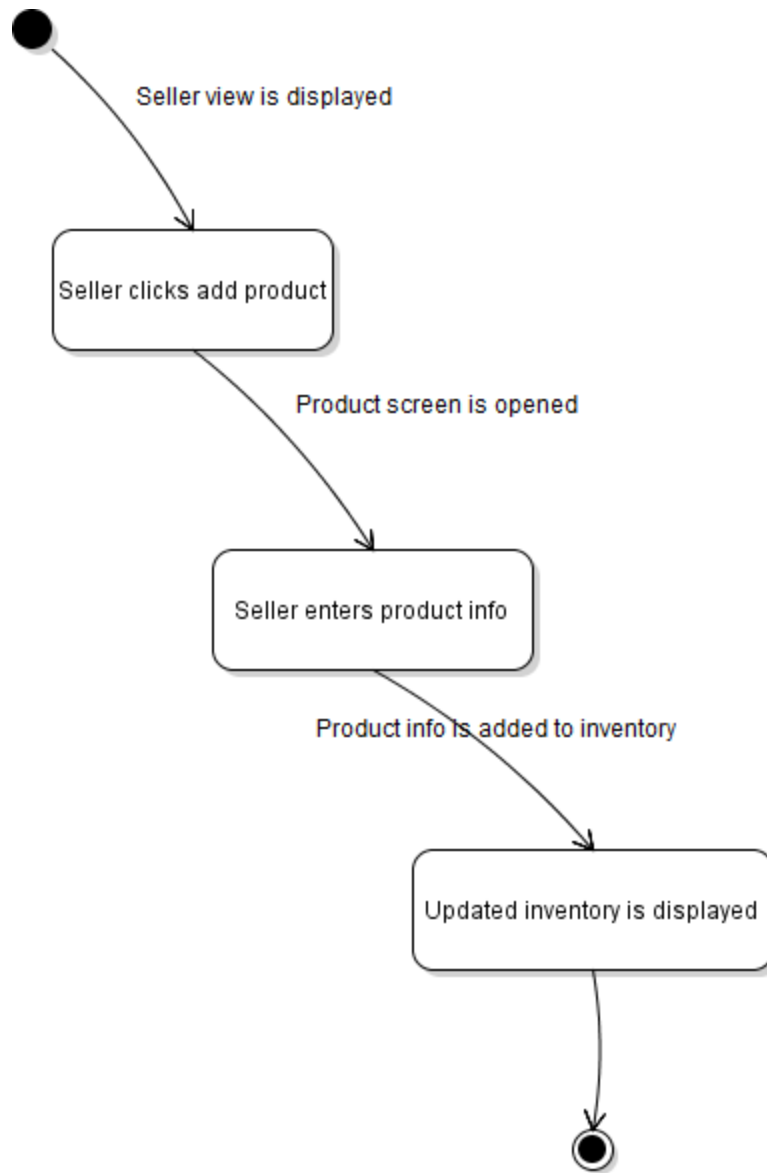


Contributor: Chase

Use Case: Seller Manages Inventory

1. Seller uses SellerView to open an add product form using a JButton
2. Seller enters the product details into JTextField
3. Seller adds the product using "Submit" JButton
4. SellerController updates Inventory to process the changes
5. SellerView updates JTable to display the changes

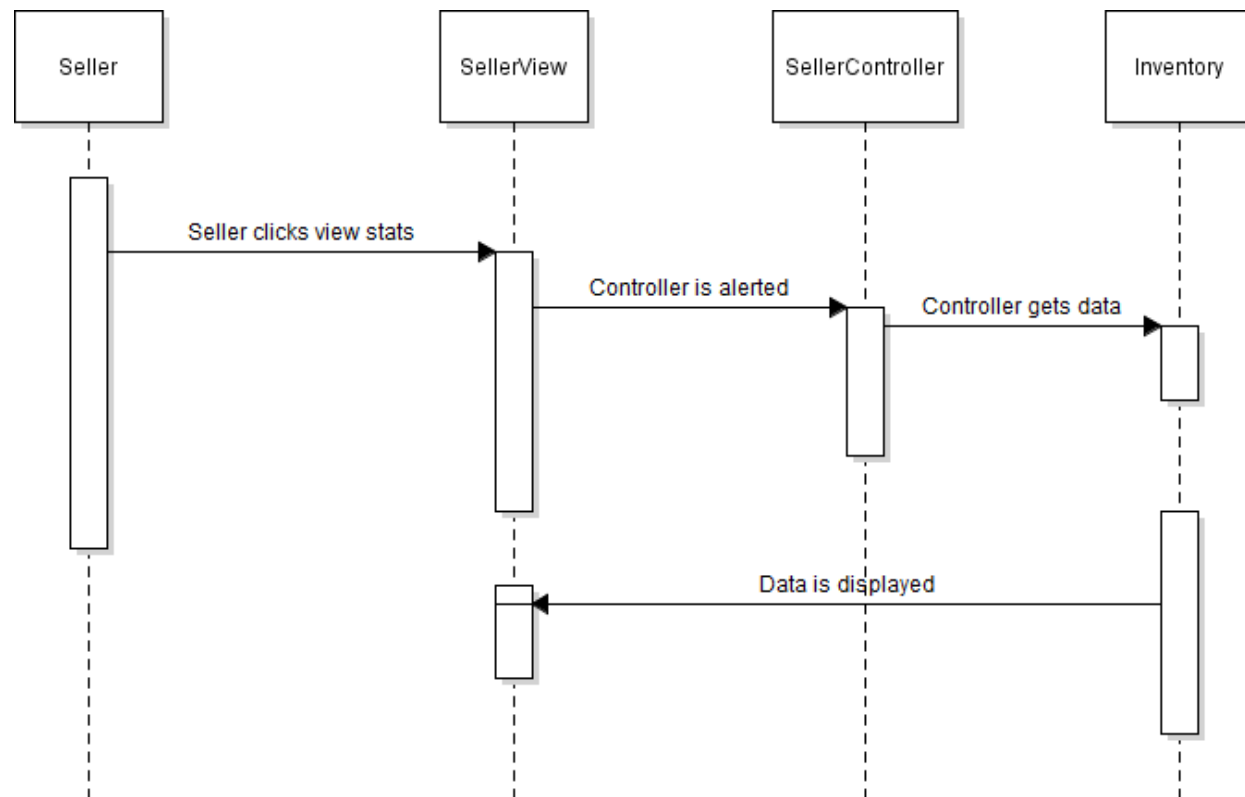
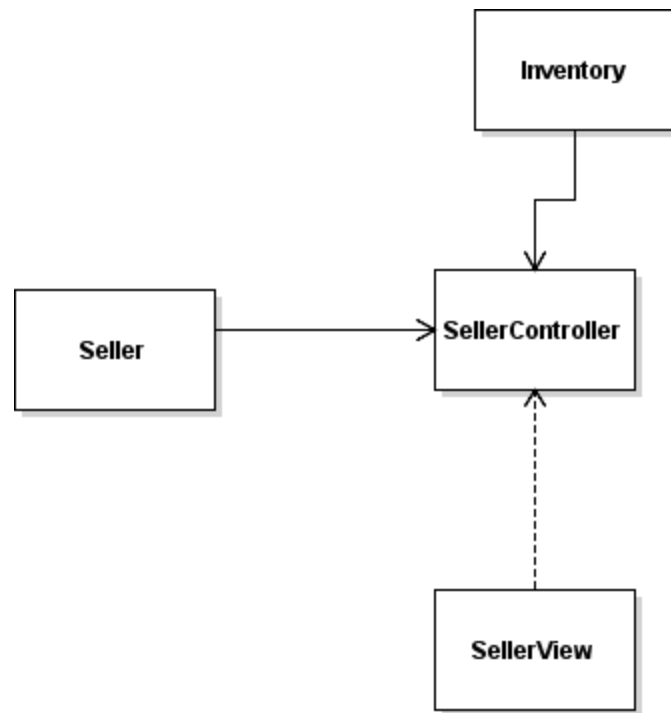


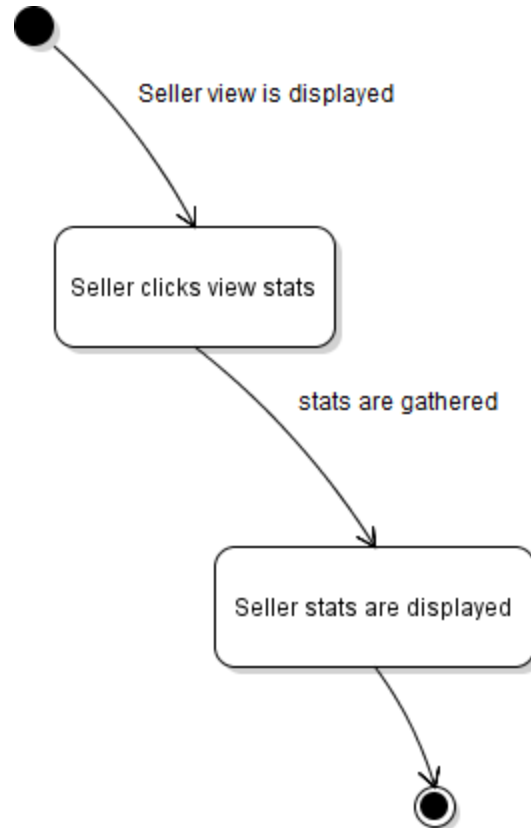


Contributor: Chase

Use Case: Seller Views Sales Data

1. Seller clicks "View Stats" JButton in SellerView
2. SellerController retrieves the data from DataManager
3. SellerView displays the stats in a JTextArea

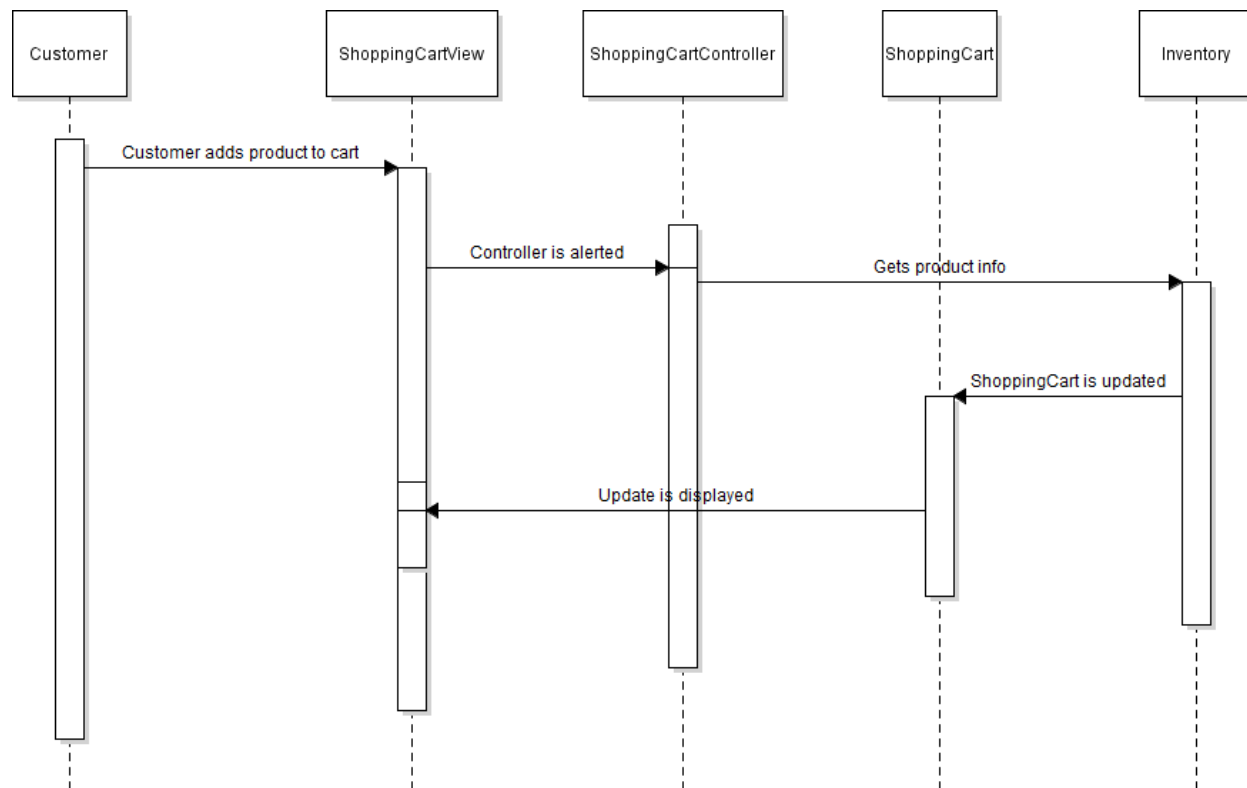
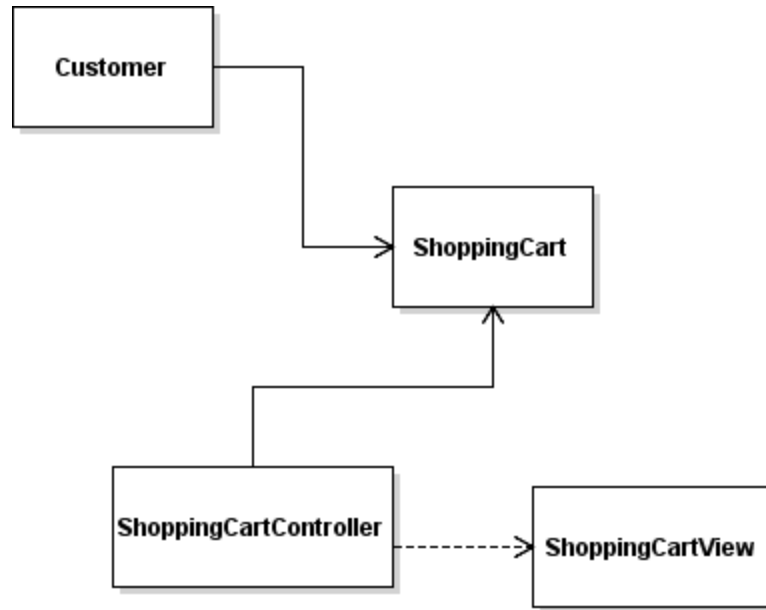


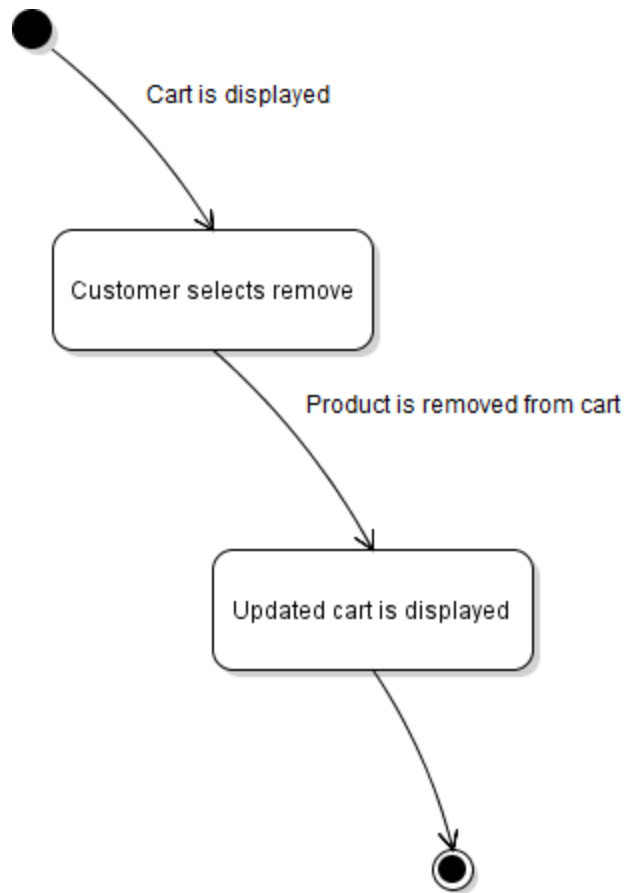


Contributor: Chase

Use Case: Customer Updates Cart

1. Customer navigates to their cart in CustomerView
2. Customer can now see their cart in ShoppingCartView
3. Customer adjusts the quantity of product using JSpinner
4. Customer also removes product by clicking "Remove" JButton
5. ShoppingCartController handles the change and updates ShoppingCart
6. ShoppingCartView now displays the updated cart

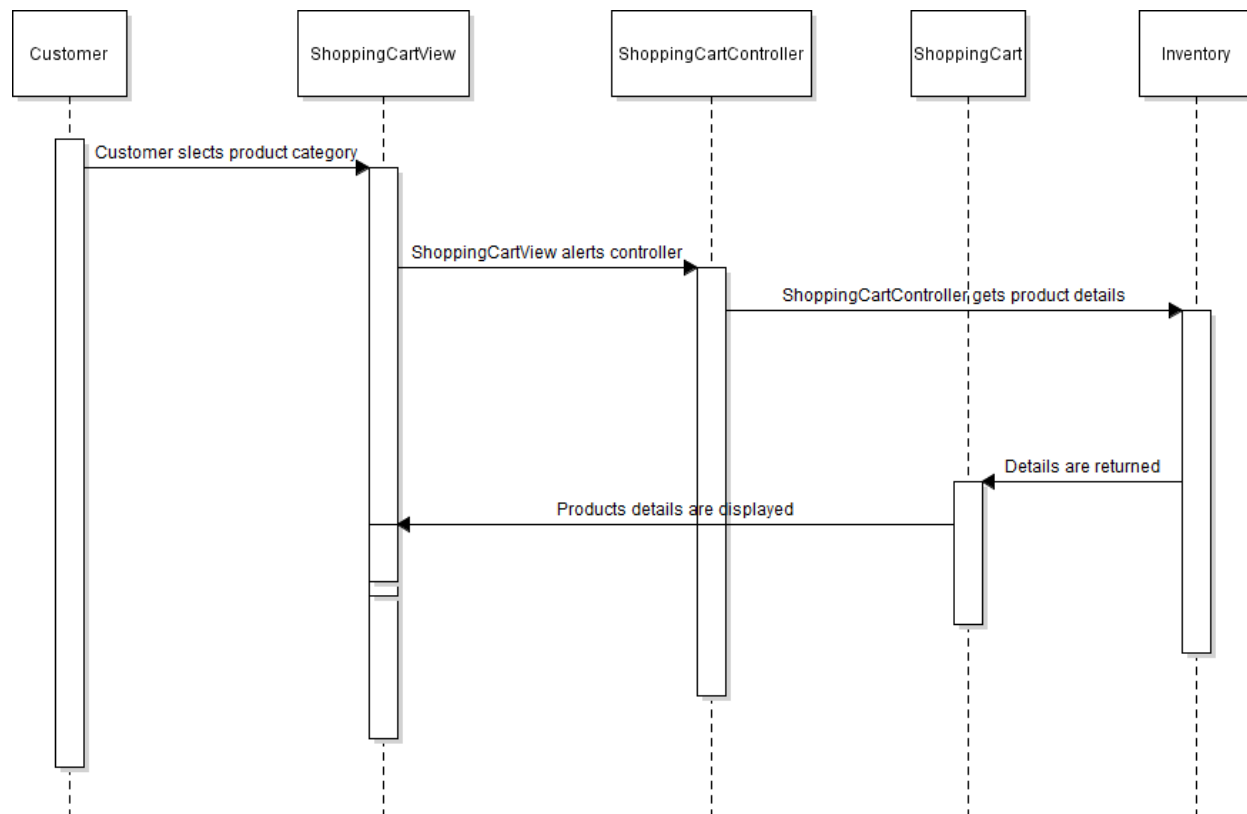
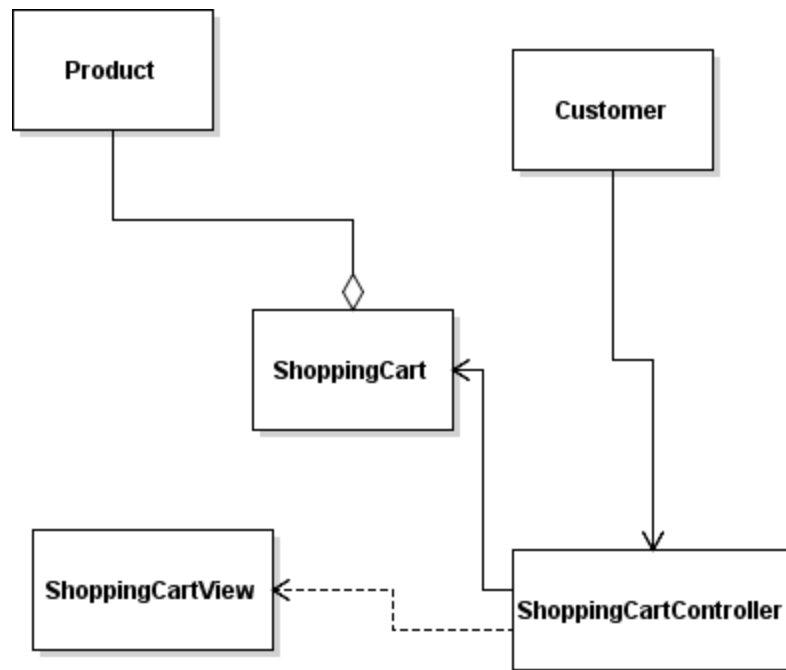


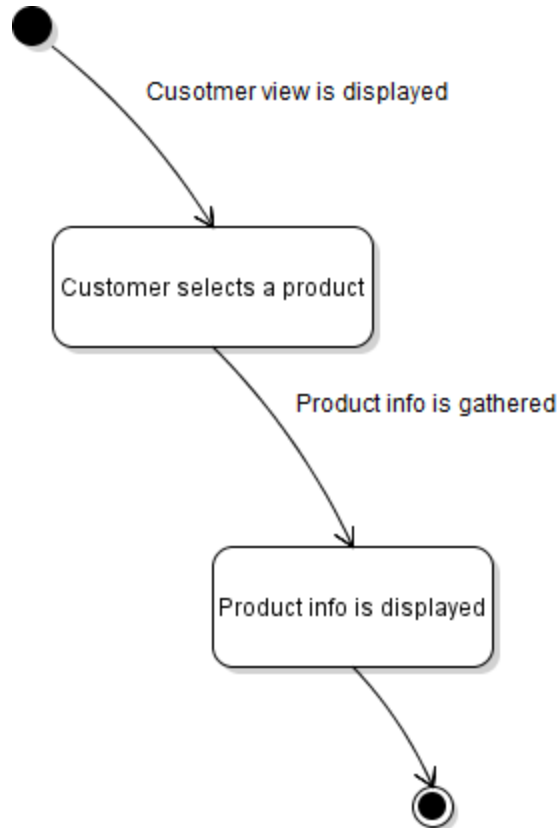


Contributor: Chase

Use Case: Customer Views Product Details

1. Customer clicks on a product name represented in a JTable on CustomerView
2. CustomerController gets the product info from Inventory
3. A JDialog popup displays the product information in CustomerView





CRC Cards

Contributor: Chase

Class: Shopping Cart

Responsibilities:

- Filter products by category
- Manage shopping cart operations
- Process checkout and payment

Collaborators:

- ShoppingCartController
- Customer
- Product
- Payment

Class: User

Responsibilities:

- Store username and password

Collaborators:

- UserController

Class: Customer

Responsibilities:

- Handles customer specific behaviors

Collaborators:

- ShoppingCart, CustomerController

Class: Seller

Responsibilities:

- Manage inventory
- Manage money management

Collaborators:

- SellerController
- Inventory

Class: Inventory

Responsibilities:

- Stores the list of products

Collaborators:

- Product
- SellerController
- DataManager

Class: Product

Responsibilities:

- Store product details(Name, Price, Quantity, Description, and Category)

Collaborators:

- Inventory

Class: Payment

Responsibilities:

- Process payments
- All payments are successful

Collaborators:

- ShoppingCartController

Class: DataManager

Responsibilities:

- Serialize and deserialize data for the application.

Collaborators:

- Product
- User
- Inventory

CRC Cards(View Elements)

Contributor: Chase**Class: ShoppingCartView**

Responsibilities:

- Display the shopping cart interface
- Show product listings and cart contents
- Provide options for checkout and payment

Collaborators:

- ShoppingCartController

Class: UserLoginView

Responsibilities:

- Facilitate user login/logout
- Collect username and password

Collaborators:

- UserController

Class: CustomerView

Responsibilities:

- Display the customer store interface

Collaborators:

- CustomerController

Class: SellerView

Responsibilities:

- Display the seller store interface
- Allow sellers to manage inventory
- Display sales stats

Collaborators:

- SellerController

Class: Inventory View

Responsibilities:

- Display the product information
- Allow sellers to add/update products

Collaborators:

- ProductController

CRC Cards(Controller Elements)

Contributor: Chase

Class: ShoppingCartController

Responsibilities:

- Handle interactions in ShoppingCartView
- Manage adding/removing products
- Process checkout

Collaborators:

- ShoppingCart
- ShoppingCartView
- Payment

Class: UserController

Responsibilities:

- Manage login process

Collaborators:

- User
- UserLoginView

Class: CustomerController

Responsibilities:

- Manage customer operations

Collaborators:

- Customer
- CustomerView

Class: SellerController

Responsibilities:

- Handle inventory management for sellers
- Provide functionality for view sales data

Collaborators:

- Seller
- SellerView
- Inventory

Class: InventoryController

Responsibilities:

- Manage operations for product details
- Handle adding/updating products for seller

Collaborators:

- Product
- InventoryView

Design Patterns

Contributor: Miles

1. Model-View-Controller (MVC)

MVC Component	Role in MVC	Example in 'Snackies'
Model	Represents the application's data and business logic	Product, Inventory, ShoppingCart, Customer, User, Seller

View	Displays the data to the user and handles user interactions	ProductView, ShoppingCartView, UserLoginView, CustomerView, SellerView, InventoryView
Controller	Acts as an intermediary between Model and View, updating the View in response to Model changes and updating the Model in response to user actions	InventoryController, ShoppingCartController, UserController, CustomerController, Seller Controller

2. Observer

Pattern Element	Role in Observer	Example in 'Snackies'
Subject	Maintains a list of observers, notifies them of state changes	Inventory
Observer	Receives updates from the subject	InventoryDisplay, CartUpdateListener
Concrete Observer	Implements the Observer interface, updating its state in response to notifications	StockViewer, CartSummaryView

3. Strategy

Pattern Element	Role in Strategy	Example in 'Snackies'
Strategy Interface	Declares an interface common to all supported algorithms	Payment
Concrete Strategy	Implements a specific algorithm using the Strategy interface	CreditCardPayment

Context	Configured with a Concrete Strategy object, maintains a reference to a Strategy object	PricingContext
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4. Factory

Pattern Element	Role in Factory	Example in 'Snackies'
Factory	Declares an interface for creating an object, but lets subclasses decide which class to instantiate	ProductFactory
Concrete Factory	Implements the Factory interface to return an instance of a Concrete Product	SnackFactory, DrinkFactory
Product	Defines the interface of objects the factory method creates	Snack, Drink

5. Singleton

Pattern Element	Role in Singleton	Example in 'Snackies'
Singleton	Ensures a class has only one instance and provides a global point of access to it	DataManager

6. Command

Pattern Element	Role in Command	Example in 'Snackies'
Command	Declares an interface for executing an operation	Command, AddProductCommand, RemoveProductCommand
Concrete Command	Defines a binding between a Receiver object and an action	AddProductToCart, RemoveProductFromCart
Invoker	Asks the command to carry out the request	ShoppingCartView
Receiver	Knows how to perform the operations	ShoppingCart

Project Code

Dashboard.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 com.mycompany.snackies;

import java.awt.Image;
import javax.swing.ImageIcon;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import java.time.LocalTime;

```

```
import java.time.LocalDate;
import java.time.format.DateTimeFormatter;
```

```
/**
 *
 * @author pyfro
 */
public class Dashboard extends javax.swing.JFrame {
```

```
    /**
     * Creates new form Dashboard
     */
    private double total = 0.0;
    private int x = 0;
    public Dashboard() {
        initComponents();
        /*init();*/
    }

    public void init(){
        /*setImage(); */
    }

    /*public void setImage(){

        ImageIcon icon = new ImageIcon(getClass().getResource("/images/donuts.jpg"));
        Image img = icon.getImage().getScaledInstance(jLabelimage.getWidth(),
jLabelimage.getHeight(),Image.SCALE_SMOOTH);
        jLabelimage.setIcon(new ImageIcon(img));
    }*/

    public boolean qtyIsZero(int qty){
        if(qty==0){
            JOptionPane.showMessageDialog(null, "Please increase item quantity");
            return false;
        }
    }
}
```



```

        return true;
    }

    public void reset(){
        jSpinner1.setValue(0);
        jSpinner2.setValue(0);
        jSpinner3.setValue(0);
        jSpinner4.setValue(0);
        jSpinner5.setValue(0);
        jSpinner6.setValue(0);
        jSpinner7.setValue(0);
        jSpinner8.setValue(0);

        jCheckBox1.setSelected(false);
        jCheckBox2.setSelected(false);
        jCheckBox3.setSelected(false);
        jCheckBox4.setSelected(false);
        jCheckBox5.setSelected(false);
        jCheckBox6.setSelected(false);
        jCheckBox7.setSelected(false);
        jCheckBox8.setSelected(false);

        jTextFieldTax.setText("0.00");
        jTextFieldTotal.setText("0.00");
        total = 0.0;

        jTextArea.setText("");
    }

    /**
     * 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">
    private void initComponents() {

```

```
jPanel1 = new javax.swing.JPanel();
jPanel2 = new javax.swing.JPanel();
jLabel1 = new javax.swing.JLabel();
jPanel3 = new javax.swing.JPanel();
jLabelimage = new javax.swing.JPanel();
jLabel4 = new javax.swing.JLabel();
jLabel5 = new javax.swing.JLabel();
jLabel6 = new javax.swing.JLabel();
jLabel8 = new javax.swing.JLabel();
jSpinner1 = new javax.swing.JSpinner();
jCheckBox1 = new javax.swing.JCheckBox();
jLabel7 = new javax.swing.JLabel();
jLabel52 = new javax.swing.JLabel();
jLabel2 = new javax.swing.JLabel();
jLabelimage1 = new javax.swing.JPanel();
jLabel10 = new javax.swing.JLabel();
jLabel11 = new javax.swing.JLabel();
jLabel12 = new javax.swing.JLabel();
jLabel13 = new javax.swing.JLabel();
jLabel14 = new javax.swing.JLabel();
jSpinner2 = new javax.swing.JSpinner();
jCheckBox2 = new javax.swing.JCheckBox();
jLabel27 = new javax.swing.JLabel();
jLabelimage2 = new javax.swing.JPanel();
jLabel16 = new javax.swing.JLabel();
jLabel17 = new javax.swing.JLabel();
jLabel18 = new javax.swing.JLabel();
jLabel19 = new javax.swing.JLabel();
jLabel20 = new javax.swing.JLabel();
jSpinner3 = new javax.swing.JSpinner();
jCheckBox3 = new javax.swing.JCheckBox();
jLabel15 = new javax.swing.JLabel();
jLabelimage3 = new javax.swing.JPanel();
jLabel22 = new javax.swing.JLabel();
jLabel23 = new javax.swing.JLabel();
jLabel24 = new javax.swing.JLabel();
jLabel25 = new javax.swing.JLabel();
jLabel26 = new javax.swing.JLabel();
jSpinner4 = new javax.swing.JSpinner();
jCheckBox4 = new javax.swing.JCheckBox();
```

```
jLabel21 = new javax.swing.JLabel();
jLabelimage4 = new javax.swing.JPanel();
jLabel28 = new javax.swing.JLabel();
jLabel29 = new javax.swing.JLabel();
jLabel30 = new javax.swing.JLabel();
jLabel31 = new javax.swing.JLabel();
jLabel32 = new javax.swing.JLabel();
jSpinner5 = new javax.swing.JSpinner();
jCheckBox5 = new javax.swing.JCheckBox();
jLabel33 = new javax.swing.JLabel();
jLabelimage5 = new javax.swing.JPanel();
jLabel34 = new javax.swing.JLabel();
jLabel35 = new javax.swing.JLabel();
jLabel36 = new javax.swing.JLabel();
jLabel37 = new javax.swing.JLabel();
jLabel38 = new javax.swing.JLabel();
jSpinner6 = new javax.swing.JSpinner();
jCheckBox6 = new javax.swing.JCheckBox();
jLabel39 = new javax.swing.JLabel();
jLabelimage6 = new javax.swing.JPanel();
jLabel40 = new javax.swing.JLabel();
jLabel41 = new javax.swing.JLabel();
jLabel42 = new javax.swing.JLabel();
jLabel43 = new javax.swing.JLabel();
jLabel44 = new javax.swing.JLabel();
jSpinner7 = new javax.swing.JSpinner();
jCheckBox7 = new javax.swing.JCheckBox();
jLabel45 = new javax.swing.JLabel();
jLabelimage7 = new javax.swing.JPanel();
jLabel46 = new javax.swing.JLabel();
jLabel47 = new javax.swing.JLabel();
jLabel48 = new javax.swing.JLabel();
jLabel49 = new javax.swing.JLabel();
jLabel50 = new javax.swing.JLabel();
jSpinner8 = new javax.swing.JSpinner();
jCheckBox8 = new javax.swing.JCheckBox();
jLabel51 = new javax.swing.JLabel();
jPanel4 = new javax.swing.JPanel();
jButton1 = new javax.swing.JButton();
jButton2 = new javax.swing.JButton();
```

```

btnExit = new javax.swing.JButton();
btnReset = new javax.swing.JButton();
jPanel5 = new javax.swing.JPanel();
jLabel3 = new javax.swing.JLabel();
jTextFieldTax = new javax.swing.JTextField();
jLabel9 = new javax.swing.JLabel();
jTextFieldTotal = new javax.swing.JTextField();
jScrollPane1 = new javax.swing.JScrollPane();
jTextArea = new javax.swing.JTextArea();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
setUndecorated(true);
setPreferredSize(new java.awt.Dimension(1200, 790));

jPanel1.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
jPanel1.addContainerListener(new java.awt.event.ContainerAdapter() {
    public void componentAdded(java.awt.event.ContainerEvent evt) {
        jPanel1ComponentAdded(evt);
    }
});

jPanel2.setBackground(new java.awt.Color(255, 204, 51));

jLabel1.setFont(new java.awt.Font("Stencil", 0, 24)); // NOI18N
jLabel1.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel1.setText("Snackies!");

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel2Layout.createSequentialGroup()
        .addGap(330, 330, 330)
        .addComponent(jLabel1)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );
jPanel2Layout.setVerticalGroup(

```

```
jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel2Layout.createSequentialGroup()
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addComponent(jLabel1)
        .addContainerGap())
    );
```

```
jPanel3.setBackground(new java.awt.Color(255, 255, 255));
jPanel3.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));
```

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

```
jLabel4.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel4.setText("Price:");
```

```
jLabel5.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel5.setText("Quantity:");
```

```
jLabel6.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel6.setText("Purchase:");
```

```
jLabel8.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel8.setText("$2");
```

```
jSpinner1.setFont(new java.awt.Font("Times New Roman", 1, 12)); // NOI18N
jSpinner1.setModel(new javax.swing.SpinnerNumberModel(0, 0, 25, 1));
```

```
jCheckBox1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jCheckBox1ActionPerformed(evt);
    }
});
```

```
jLabel7.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel7.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel7.setText("BBQ Chips");
```

```

        jLabel52.setIcon(new
javax.swing.ImageIcon("/Users/mileschoquette/Documents/cop4331/Snackies
3/src/main/java/BBQ chips.jpeg")); // NOI18N
        jLabel52.setText("jLabel52");

        javax.swing.GroupLayout jLabelimageLayout = new
javax.swing.GroupLayout(jLabelimage);
        jLabelimage.setLayout(jLabelimageLayout);
        jLabelimageLayout.setHorizontalGroup(

jLabelimageLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jLabelimageLayout.createSequentialGroup()
                .addComponent(jLabel52, javax.swing.GroupLayout.PREFERRED_SIZE,
207, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE,
166, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGroup(jLabelimageLayout.createSequentialGroup()
                    .addComponent(jLabel4)
                    .addGap(24, 24, 24)
                    .addComponent(jLabel8))
                .addGroup(jLabelimageLayout.createSequentialGroup()
                    .addComponent(jLabel5)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                    .addComponent(jSpinner1,
javax.swing.GroupLayout.PREFERRED_SIZE, 47,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jLabelimageLayout.createSequentialGroup()
                    .addComponent(jLabel6)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(jCheckBox1)))
            .addGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );

```

```

jLabelimageLayout.setVerticalGroup(

jLabelimageLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jLabelimageLayout.createSequentialGroup()
        .addContainerGap(12, Short.MAX_VALUE)
        .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 17,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

    .addGroup(jLabelimageLayout.createParallelGroup(javax.swing.GroupLayout.Alignment
.BASLINE)
        .addComponent(jLabel4)
        .addComponent(jLabel8))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

    .addGroup(jLabelimageLayout.createParallelGroup(javax.swing.GroupLayout.Alignment
.BASLINE)
        .addComponent(jLabel5)
        .addComponent(jSpinner1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

    .addGroup(jLabelimageLayout.createParallelGroup(javax.swing.GroupLayout.Alignment
.LEADING)
        .addComponent(jLabel6)
        .addComponent(jCheckBox1))
        .addGap(18, 18, 18)
        .addComponent(jLabel52, javax.swing.GroupLayout.PREFERRED_SIZE,
185, javax.swing.GroupLayout.PREFERRED_SIZE))
    );

jLabel2.setFont(new java.awt.Font("Segoe UI Black", 0, 14)); // NOI18N
jLabel2.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel2.setText("Menu");

jLabelimage1.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));

jLabel10.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N

```

```

jLabel10.setText("Price:");

jLabel11.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel11.setText("Quantity:");

jLabel12.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel12.setText("Purchase:");

jLabel13.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel13.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel13.setText("Fruit Punch");

jLabel14.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel14.setText("$3");

jSpinner2.setFont(new java.awt.Font("Times New Roman", 1, 12)); // NOI18N
jSpinner2.setModel(new javax.swing.SpinnerNumberModel(0, 0, 25, 1));

jCheckBox2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jCheckBox2ActionPerformed(evt);
    }
});

jLabel27.setIcon(new
javax.swing.ImageIcon("/Users/mileschoquette/Documents/cop4331/Snackies
3/src/main/java/fruit_punch.jpeg")); // NOI18N
jLabel27.setText("jLabel27");

javax.swing.GroupLayout jLabelimage1Layout = new
javax.swing.GroupLayout(jLabelimage1);
jLabelimage1.setLayout(jLabelimage1Layout);
jLabelimage1Layout.setHorizontalGroup(

jLabelimage1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jLabelimage1Layout.createSequentialGroup()

.addGroup(jLabelimage1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jLabelimage1Layout.createSequentialGroup()

```



```

        .addGroup(jLabelimage1Layout.createSequentialGroup())
        .addGap(19, 19, 19)
        .addComponent(jLabel13,
javax.swing.GroupLayout.PREFERRED_SIZE, 153,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jLabelimage1Layout.createSequentialGroup())
        .addGap(36, 36, 36)
        .addComponent(jLabel10)
        .addGap(18, 18, 18)
        .addComponent(jLabel14))
        .addGroup(jLabelimage1Layout.createSequentialGroup())
        .addGap(30, 30, 30)

        .addGroup(jLabelimage1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                .addGroup(jLabelimage1Layout.createSequentialGroup())
                .addComponent(jLabel12)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jCheckBox2))
        .addGroup(jLabelimage1Layout.createSequentialGroup())
        .addComponent(jLabel11)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jSpinner2,
javax.swing.GroupLayout.PREFERRED_SIZE, 47,
javax.swing.GroupLayout.PREFERRED_SIZE))))))
        .addGap(0, 0, Short.MAX_VALUE))
        .addComponent(jLabel27, javax.swing.GroupLayout.PREFERRED_SIZE, 0,
Short.MAX_VALUE)
    );
    jLabelimage1Layout.setVerticalGroup(

jLabelimage1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
G)
        .addGroup(jLabelimage1Layout.createSequentialGroup())
        .addContainerGap()
        .addComponent(jLabel13)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

```

```

.addGroup(jLabelimage1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(jLabel10)
    .addComponent(jLabel14))
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jLabelimage1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(jSpinner2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(jLabel11))
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jLabelimage1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(jLabel12)
    .addComponent(jCheckBox2))
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
.addComponent(jLabel27, javax.swing.GroupLayout.PREFERRED_SIZE,
169, javax.swing.GroupLayout.PREFERRED_SIZE)
.addContainerGap(8, Short.MAX_VALUE)
);

jLabelimage2.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));

jLabel16.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel16.setText("Price:");

jLabel17.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel17.setText("Quantity:");

jLabel18.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel18.setText("Purchase:");

jLabel19.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel19.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel19.setText("Cookie");

```

```

jLabel20.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel20.setText("$1");

jSpinner3.setFont(new java.awt.Font("Times New Roman", 1, 12)); // NOI18N
jSpinner3.setModel(new javax.swing.SpinnerNumberModel(0, 0, 25, 1));

jCheckBox3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jCheckBox3ActionPerformed(evt);
    }
});

jLabel15.setIcon(new
javax.swing.ImageIcon("/Users/mileschoquette/Documents/cop4331/Snackies
3/src/main/java/cookie.jpeg")); // NOI18N
jLabel15.setText("jLabel15");

javax.swing.GroupLayout jLabelimage2Layout = new
javax.swing.GroupLayout(jLabelimage2);
jLabelimage2.setLayout(jLabelimage2Layout);
jLabelimage2Layout.setHorizontalGroup(

jLabelimage2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jLabelimage2Layout.createSequentialGroup()
        .addGap(18, 18, 18)
        .addComponent(jLabel17)
        .addGap(18, 18, 18)
        .addComponent(jSpinner3,
javax.swing.GroupLayout.PREFERRED_SIZE, 47,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addGroup(jLabelimage2Layout.createSequentialGroup()
        .addGap(18, 18, 18)
        .addComponent(jLabel18)
        .addGap(18, 18, 18)
        .addComponent(jCheckBox3))

```

```

        .addComponent(jLabel19, javax.swing.GroupLayout.PREFERRED_SIZE,
153, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGroup(jLabelimage2Layout.createSequentialGroup())
        .addComponent(jLabel16)
        .addGap(18, 18, 18)
        .addComponent(jLabel20)))
        .addContainerGap(69, Short.MAX_VALUE))
        .addGroup(jLabelimage2Layout.createSequentialGroup())
        .addComponent(jLabel15, javax.swing.GroupLayout.PREFERRED_SIZE, 0,
Short.MAX_VALUE)
        .addContainerGap())
    );
    jLabelimage2Layout.setVerticalGroup(

jLabelimage2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jLabelimage2Layout.createSequentialGroup())
        .addContainerGap()
        .addComponent(jLabel19)
        .addGap(18, 18, 18)

        .addGroup(jLabelimage2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel20)
        .addComponent(jLabel16))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addGroup(jLabelimage2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel17)
        .addComponent(jSpinner3, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addGroup(jLabelimage2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jLabel18)
        .addComponent(jCheckBox3))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

```

```
        .addComponent(jLabel15, javax.swing.GroupLayout.PREFERRED_SIZE,
204, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );
```

```
jLabelimage3.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));
```

```
jLabel22.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel22.setText("Price:");
```

```
jLabel23.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel23.setText("Quantity:");
```

```
jLabel24.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel24.setText("Purchase:");
```

```
jLabel25.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel25.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel25.setText("Coke");
```

```
jLabel26.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel26.setText("$3");
```

```
jSpinner4.setFont(new java.awt.Font("Times New Roman", 1, 12)); // NOI18N
jSpinner4.setModel(new javax.swing.SpinnerNumberModel(0, 0, 25, 1));
```

```
jCheckBox4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jCheckBox4ActionPerformed(evt);
    }
});
```

```
jLabel21.setIcon(new
javax.swing.ImageIcon("/Users/mileschoquette/Documents/cop4331/Snackies
3/src/main/java/Unknown.jpeg")); // NOI18N
jLabel21.setText("jLabel21");
```

```

        javax.swing.GroupLayout jLabelimage3Layout = new
javax.swing.GroupLayout(jLabelimage3);
        jLabelimage3.setLayout(jLabelimage3Layout);
        jLabelimage3Layout.setHorizontalGroup(

jLabelimage3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jLabelimage3Layout.createSequentialGroup())
        .addContainerGap()

.addGroup(jLabelimage3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jLabelimage3Layout.createSequentialGroup())

.addGroup(jLabelimage3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jLabelimage3Layout.createSequentialGroup())
        .addComponent(jLabel23)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jSpinner4,
javax.swing.GroupLayout.PREFERRED_SIZE, 47,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jLabelimage3Layout.createSequentialGroup())
        .addGap(29, 29, 29)
        .addComponent(jLabel25,
javax.swing.GroupLayout.PREFERRED_SIZE, 155,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addContainerGap(29, Short.MAX_VALUE))
        .addGroup(jLabelimage3Layout.createSequentialGroup())

.addGroup(jLabelimage3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jLabelimage3Layout.createSequentialGroup())
        .addComponent(jLabel22)
        .addGap(18, 18, 18)
        .addComponent(jLabel26))
        .addGroup(jLabelimage3Layout.createSequentialGroup())
        .addComponent(jLabel24)

```

```

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addComponent(jCheckBox4))
    .addComponent(jLabel21,
javax.swing.GroupLayout.PREFERRED_SIZE, 184,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addGap(0, 0, Short.MAX_VALUE))))
);
jLabelimage3Layout.setVerticalGroup(

jLabelimage3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jLabelimage3Layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jLabel25)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jLabelimage3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(jLabel22)
    .addComponent(jLabel26))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jLabelimage3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(jLabel23)
    .addComponent(jSpinner4, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jLabelimage3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(jLabel24)
    .addComponent(jCheckBox4))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addComponent(jLabel21, javax.swing.GroupLayout.PREFERRED_SIZE,
212, javax.swing.GroupLayout.PREFERRED_SIZE)
    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

```

```
);
```

```
jLabelimage4.setBorder(javax.swing.BorderFactory.createLineBorder(new  
java.awt.Color(0, 0, 0)));
```

```
jLabel28.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N  
jLabel28.setText("Price:");
```

```
jLabel29.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N  
jLabel29.setText("Quantity:");
```

```
jLabel30.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N  
jLabel30.setText("Purchase:");
```

```
jLabel31.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N  
jLabel31.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);  
jLabel31.setText("Donut");
```

```
jLabel32.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N  
jLabel32.setText("$1");
```

```
jSpinner5.setFont(new java.awt.Font("Times New Roman", 1, 12)); // NOI18N  
jSpinner5.setModel(new javax.swing.SpinnerNumberModel(0, 0, 25, 1));
```

```
jCheckBox5.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jCheckBox5ActionPerformed(evt);  
    }  
});
```

```
jLabel33.setIcon(new  
javax.swing.ImageIcon("/Users/mileschoquette/Documents/cop4331/Snackies  
3/src/main/java/donuts.png")); // NOI18N  
jLabel33.setText("jLabel33");
```

```
javax.swing.GroupLayout jLabelimage4Layout = new  
javax.swing.GroupLayout(jLabelimage4);  
jLabelimage4.setLayout(jLabelimage4Layout);  
jLabelimage4Layout.setHorizontalGroup(
```



```
jLabelimage4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jLabelimage4Layout.createSequentialGroup()  
        .addGap(12, 12, 12)
```

```
    .addGroup(jLabelimage4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
```

```
        .addGroup(jLabelimage4Layout.createSequentialGroup()
```

```
    .addGroup(jLabelimage4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addComponent(jLabel29)  
        .addComponent(jLabel28))  
        .addGap(18, 18, 18)
```

```
    .addGroup(jLabelimage4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addComponent(jLabel32)  
        .addComponent(jSpinner5,  
javax.swing.GroupLayout.PREFERRED_SIZE, 47,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
        .addGap(96, 96, 96))  
        .addGroup(jLabelimage4Layout.createSequentialGroup()  
            .addComponent(jLabel30)  
            .addGap(18, 18, 18)  
            .addComponent(jCheckBox5)  
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,  
Short.MAX_VALUE))))  
        .addGroup(jLabelimage4Layout.createSequentialGroup()  
            .addContainerGap()
```

```
    .addGroup(jLabelimage4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addComponent(jLabel33, javax.swing.GroupLayout.PREFERRED_SIZE,  
233, javax.swing.GroupLayout.PREFERRED_SIZE)  
        .addComponent(jLabel31, javax.swing.GroupLayout.PREFERRED_SIZE,  
152, javax.swing.GroupLayout.PREFERRED_SIZE))  
        .addGap(0, 0, Short.MAX_VALUE))
```

```
);
```

```

jLabelimage4Layout.setVerticalGroup(

jLabelimage4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

    .addGroup(jLabelimage4Layout.createSequentialGroup())
        .addContainerGap()
        .addComponent(jLabel31)
        .addGap(35, 35, 35)

    .addGroup(jLabelimage4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel28)
        .addComponent(jLabel32))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

    .addGroup(jLabelimage4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
        .addComponent(jLabel29)
        .addComponent(jSpinner5, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

    .addGroup(jLabelimage4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jLabel30)
        .addComponent(jCheckBox5))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jLabel33, javax.swing.GroupLayout.PREFERRED_SIZE,
205, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );

jLabelimage5.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));

jLabel34.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel34.setText("Price:");

```

```
jLabel35.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel35.setText("Quantity:");
```

```
jLabel36.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel36.setText("Purchase:");
```

```
jLabel37.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel37.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel37.setText("Gummy Bears");
```

```
jLabel38.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel38.setText("$3");
```

```
jSpinner6.setFont(new java.awt.Font("Times New Roman", 1, 12)); // NOI18N
jSpinner6.setModel(new javax.swing.SpinnerNumberModel(0, 0, 25, 1));
```

```
jCheckBox6.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jCheckBox6ActionPerformed(evt);
    }
});
```

```
jLabel39.setIcon(new
javax.swing.ImageIcon("/Users/mileschoquette/Documents/cop4331/Snackies
3/src/main/java/Gummy Bears.jpeg")); // NOI18N
jLabel39.setText("jLabel39");
```

```
javax.swing.GroupLayout jLabelimage5Layout = new
javax.swing.GroupLayout(jLabelimage5);
jLabelimage5.setLayout(jLabelimage5Layout);
jLabelimage5Layout.setHorizontalGroup(
```

```
jLabelimage5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jLabelimage5Layout.createSequentialGroup())
    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
```

```
.addGroup(jLabelimage5Layout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.LEADING)
```

```

        .addComponent(jLabel37, javax.swing.GroupLayout.PREFERRED_SIZE,
151, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGroup(jLabelimage5Layout.createSequentialGroup())
        .addGap(6, 6, 6)

    .addGroup(jLabelimage5Layout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.LEADING)
        .addGroup(jLabelimage5Layout.createSequentialGroup())
        .addComponent(jLabel35)

    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(jSpinner6,
javax.swing.GroupLayout.PREFERRED_SIZE, 47,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jLabelimage5Layout.createSequentialGroup())
        .addComponent(jLabel34)
        .addGap(18, 18, 18)
        .addComponent(jLabel38))
        .addGroup(jLabelimage5Layout.createSequentialGroup())
        .addComponent(jLabel36)

    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(jCheckBox6))))))
        .addGap(48, 48, 48))
    .addGroup(jLabelimage5Layout.createSequentialGroup())
        .addContainerGap()
        .addComponent(jLabel39, javax.swing.GroupLayout.PREFERRED_SIZE,
199, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );
    jLabelimage5Layout.setVerticalGroup(

jLabelimage5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jLabelimage5Layout.createSequentialGroup())
        .addContainerGap()
        .addComponent(jLabel37)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

```

```

.addGroup(jLabelimage5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(jLabel34)
    .addComponent(jLabel38))
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jLabelimage5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(jLabel35)
    .addComponent(jSpinner6, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(jLabelimage5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(jLabel36)
    .addComponent(jCheckBox6))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
    .addComponent(jLabel39, javax.swing.GroupLayout.PREFERRED_SIZE,
163, javax.swing.GroupLayout.PREFERRED_SIZE)
    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
);

jLabelimage6.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));

jLabel40.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel40.setText("Price:");

jLabel41.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel41.setText("Quantity:");

jLabel42.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel42.setText("Purchase:");

```

```
jLabel43.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel43.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel43.setText("Water");
```

```
jLabel44.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel44.setText("$3");
```

```
jSpinner7.setFont(new java.awt.Font("Times New Roman", 1, 12)); // NOI18N
jSpinner7.setModel(new javax.swing.SpinnerNumberModel(0, 0, 25, 1));
```

```
jCheckBox7.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jCheckBox7ActionPerformed(evt);
    }
});
```

```
jLabel45.setIcon(new
javax.swing.ImageIcon("/Users/mileschoquette/Documents/cop4331/Snackies
3/src/main/java/Water.jpeg")); // NOI18N
jLabel45.setText("jLabel45");
```

```
javax.swing.GroupLayout jLabelimage6Layout = new
javax.swing.GroupLayout(jLabelimage6);
jLabelimage6.setLayout(jLabelimage6Layout);
jLabelimage6Layout.setHorizontalGroup(
```

```
jLabelimage6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jLabelimage6Layout.createSequentialGroup()
        .addGap(16, 16, 16)
```

```
    .addGroup(jLabelimage6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jLabelimage6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
```

```
    .addGroup(jLabelimage6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addGroup(jLabelimage6Layout.createSequentialGroup()
```

```
.addGroup(jLabelimage6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addComponent(jLabel41)
    .addComponent(jLabel40))
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addGroup(jLabelimage6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addComponent(jSpinner7,
javax.swing.GroupLayout.PREFERRED_SIZE, 47,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(jLabel44)))
```

```
    .addComponent(jLabel43,
javax.swing.GroupLayout.PREFERRED_SIZE, 142,
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
    .addGroup(jLabelimage6Layout.createSequentialGroup())
    .addComponent(jLabel42)
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
    .addComponent(jCheckBox7)
    .addGap(51, 51, 51)))
```

```
    .addComponent(jLabel45, javax.swing.GroupLayout.PREFERRED_SIZE,
173, javax.swing.GroupLayout.PREFERRED_SIZE))
    .addGap(0, 39, Short.MAX_VALUE))
```

```
);
```

```
jLabelimage6Layout.setVerticalGroup(
```

```
jLabelimage6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jLabelimage6Layout.createSequentialGroup())
```

```
    .addContainerGap()
```

```
    .addComponent(jLabel43)
```

```
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addGroup(jLabelimage6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
    .addComponent(jLabel40)
```

```
    .addComponent(jLabel44))
```

```

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addGroup(jLabelimage6Layout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.TRAILING)
            .addComponent(jSpinner7, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel41))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addGroup(jLabelimage6Layout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.LEADING)
            .addComponent(jLabel42)
            .addComponent(jCheckBox7))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jLabel45, javax.swing.GroupLayout.PREFERRED_SIZE,
173, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap()
    );

    jLabelimage7.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));

    jLabel46.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    jLabel46.setText("Price:");

    jLabel47.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    jLabel47.setText("Quantity:");

    jLabel48.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    jLabel48.setText("Purchase:");

    jLabel49.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    jLabel49.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
    jLabel49.setText("PB&J Sandwich");

    jLabel50.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    jLabel50.setText("$5");

```



```
jSpinner8.setFont(new java.awt.Font("Times New Roman", 1, 12)); // NOI18N
jSpinner8.setModel(new javax.swing.SpinnerNumberModel(0, 0, 25, 1));

jCheckBox8.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jCheckBox8ActionPerformed(evt);
    }
});

jLabel51.setIcon(new
javax.swing.ImageIcon("/Users/mileschoquette/Documents/cop4331/Snackies
3/src/main/java/PB&J.jpeg")); // NOI18N
jLabel51.setText("jLabel51");

javax.swing.GroupLayout jLabelimage7Layout = new
javax.swing.GroupLayout(jLabelimage7);
jLabelimage7.setLayout(jLabelimage7Layout);
jLabelimage7Layout.setHorizontalGroup(

jLabelimage7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jLabelimage7Layout.createSequentialGroup()
        .addGap(16, 16, 16)
        .addGroup(jLabelimage7Layout.createSequentialGroup()
            .addComponent(jLabel49, javax.swing.GroupLayout.PREFERRED_SIZE,
154, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGroup(jLabelimage7Layout.createSequentialGroup()
                .addComponent(jLabel46)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addComponent(jLabel50))
            .addGroup(jLabelimage7Layout.createSequentialGroup()
                .addComponent(jLabel47)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addComponent(jLabel48)))
        .addContainerGap(16, Short.MAX_VALUE))
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jLabelimage7Layout.createSequentialGroup()
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jSpinner8,
javax.swing.GroupLayout.PREFERRED_SIZE, 47,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(16, Short.MAX_VALUE))
    .addGroup(jLabelimage7Layout.createSequentialGroup()
        .addGap(16, 16, 16)
```

```

        .addComponent(jLabel48)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jCheckBox8))
            .addComponent(jLabel51, javax.swing.GroupLayout.PREFERRED_SIZE,
207, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );
        jLabelimage7Layout.setVerticalGroup(

jLabelimage7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jLabelimage7Layout.createSequentialGroup())
            .addGap(15, 15, 15)
            .addComponent(jLabel49)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addGroup(jLabelimage7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel46)
            .addComponent(jLabel50))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addGroup(jLabelimage7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel47)
            .addComponent(jSpinner8, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addGroup(jLabelimage7Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel48)
            .addComponent(jCheckBox8))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel51, javax.swing.GroupLayout.PREFERRED_SIZE,
202, javax.swing.GroupLayout.PREFERRED_SIZE)

```

```

        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );

    jPanel4.setBackground(new java.awt.Color(255, 255, 255));
    jPanel4.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));

    jButton1.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    jButton1.setText("Total");
    jButton1.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));
    jButton1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton1ActionPerformed(evt);
        }
    });

    jButton2.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    jButton2.setText("Receipt");
    jButton2.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));
    jButton2.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton2ActionPerformed(evt);
        }
    });

    btnExit.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    btnExit.setText("Exit");
    btnExit.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));
    btnExit.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            btnExitActionPerformed(evt);
        }
    });

    btnReset.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    btnReset.setText("Reset");

```

```

        btnReset.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(0, 0, 0)));
        btnReset.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnResetActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout jPanel4Layout = new javax.swing.GroupLayout(jPanel4);
        jPanel4.setLayout(jPanel4Layout);
        jPanel4Layout.setHorizontalGroup(

jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel4Layout.createSequentialGroup()
        .addGap(18, 18, 18)
        .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 96,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 92,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(22, 22, 22)
        .addComponent(btnReset, javax.swing.GroupLayout.PREFERRED_SIZE, 97,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(btnExit, javax.swing.GroupLayout.PREFERRED_SIZE, 97,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(322, Short.MAX_VALUE))
    );
        jPanel4Layout.setVerticalGroup(

jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel4Layout.createSequentialGroup()
        .addGap(18, 18, 18)
        .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 96,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 92,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(22, 22, 22)
        .addComponent(btnReset, javax.swing.GroupLayout.PREFERRED_SIZE, 97,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(btnExit, javax.swing.GroupLayout.PREFERRED_SIZE, 97,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(322, Short.MAX_VALUE))
    );

```

```

        .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
jPanel4Layout.createSequentialGroup())

        .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BA
SELINE)

            .addComponent(btnExit,
javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addComponent(btnReset,
javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE))

            .addGap(0, 0, Short.MAX_VALUE))

            .addComponent(jButton2, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

            .addContainerGap()

        );

        javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
        jPanel3.setLayout(jPanel3Layout);
        jPanel3Layout.setHorizontalGroup(

jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addGroup(jPanel3Layout.createSequentialGroup()

                .addGap(42, 42, 42)

            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LE
ADING)

                .addComponent(jPanel4, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

                .addGroup(jPanel3Layout.createSequentialGroup()

                    .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LE
ADING, false)

                        .addComponent(jLabelimage4,
javax.swing.GroupLayout.PREFERRED_SIZE, 199,
javax.swing.GroupLayout.PREFERRED_SIZE)

```

```
        .addComponent(jLabelimage1,  
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,  
Short.MAX_VALUE))
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
```

```
        .addComponent(jLabelimage,  
javax.swing.GroupLayout.PREFERRED_SIZE, 217,  
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
        .addComponent(jLabelimage5,  
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,  
Short.MAX_VALUE))
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addComponent(jLabelimage2,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
        .addComponent(jLabelimage6,  
javax.swing.GroupLayout.Alignment.TRAILING,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
```

```
.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addComponent(jLabelimage3,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
        .addComponent(jLabelimage7,  
javax.swing.GroupLayout.PREFERRED_SIZE,
```

```

javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))))
    .addGap(0, 0, Short.MAX_VALUE))
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel3Layout.createSequentialGroup()
    .addContainerGap()
    .addComponent(jLabel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addContainerGap())
    );
jPanel3Layout.setVerticalGroup(

jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel3Layout.createSequentialGroup()
        .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 21,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(jLabelimage4,
javax.swing.GroupLayout.PREFERRED_SIZE, 307,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(jLabelimage,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(jLabelimage2,
javax.swing.GroupLayout.PREFERRED_SIZE, 308,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(jLabelimage3,
javax.swing.GroupLayout.PREFERRED_SIZE, 308,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)

```

```

        .addComponent(jLabelimage5,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.PREFERRED_SIZE, 0, Short.MAX_VALUE)
        .addComponent(jLabelimage6,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addComponent(jLabelimage7,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.PREFERRED_SIZE, 285,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addComponent(jLabelimage1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)
        .addComponent(jPanel4, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(294, Short.MAX_VALUE))
    );

    javax.swing.GroupLayout jPanel5Layout = new javax.swing.GroupLayout(jPanel5);
    jPanel5.setLayout(jPanel5Layout);
    jPanel5Layout.setHorizontalGroup(

jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGap(0, 442, Short.MAX_VALUE)
    );
    jPanel5Layout.setVerticalGroup(

jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGap(0, 886, Short.MAX_VALUE)
    );

    jLabel3.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
    jLabel3.setText("Tax");

    jTextFieldTax.setEditable(false);
    jTextFieldTax.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N

```



```
jTextFieldTax.setHorizontalAlignment(javax.swing.JTextField.CENTER);
jTextFieldTax.setText("0.0");
jTextFieldTax.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jTextFieldTaxActionPerformed(evt);
    }
});
```

```
jLabel9.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jLabel9.setText("Total");
```

```
jTextFieldTotal.setEditable(false);
jTextFieldTotal.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jTextFieldTotal.setHorizontalAlignment(javax.swing.JTextField.CENTER);
jTextFieldTotal.setText("0.0");
jTextFieldTotal.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jTextFieldTotalActionPerformed(evt);
    }
});
```

```
jTextArea.setColumns(20);
jTextArea.setRows(5);
jScrollPane1.setViewportView(jTextArea);
```

```
javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
```

```
jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(12, 12, 12)
            .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(jLabel3,
javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(jLabel9,
javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addComponent(jTextFieldTotal,
javax.swing.GroupLayout.PREFERRED_SIZE, 139,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 603,
Short.MAX_VALUE)
        .addComponent(jPanel5,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addComponent(jTextFieldTax,
javax.swing.GroupLayout.PREFERRED_SIZE, 139,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(0, 0, Short.MAX_VALUE))))
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 403,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(0, 0, Short.MAX_VALUE))))
);

```

```

jPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addGap(612, 612, 612)
        .addComponent(jPanel5, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(9, 9, 9)
            .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 517,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(jTextFieldTax,
javax.swing.GroupLayout.PREFERRED_SIZE, 34,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(jLabel3,
javax.swing.GroupLayout.PREFERRED_SIZE, 16,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addGap(15, 15, 15)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(jLabel9,
javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE)

```

```

        .addComponent(jTextFieldTotal,
javax.swing.GroupLayout.PREFERRED_SIZE, 34,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(0, 0, 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(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );

```

```

    pack();
    setLocationRelativeTo(null);
}

```

```

} // </editor-fold>

```

```

public void snackies(String Name, double Price){
    LocalTime now = LocalTime.now();
    LocalDate today = LocalDate.now();

```

```

    // Define the format for the time

```

```

    DateTimeFormatter timeFormatter = DateTimeFormatter.ofPattern("HH:mm");
    String formattedTime = now.format(timeFormatter);

```

```

    // Define the format for the date if needed

```

```

    DateTimeFormatter dateFormatter = DateTimeFormatter.ofPattern("dd/MM/yyyy");
    String formattedDate = today.format(dateFormatter);

```

```

    String text = "*****Snackies*****\n" +
        "Time: "+ formattedTime + "\nDate: "+ formattedDate +

```

```

        "\n" +
        "*****" + "\nItem Name: " + Name + "\n" +
        "Item Price: $" + Price + "\n\n";
        jTextArea.append(text);
    }

```

```

private void jCheckBox1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    int qty = (Integer) jSpinner1.getValue();
    double price = 2.0;
    double totalPrice = 0.0;
    if (jCheckBox1.isSelected()) {
        updateTotal(price * qty, true);
        totalPrice = qty*price;
        snackies("BBQ Chips", totalPrice);
    }
    else {
        updateTotal(price * qty, false);
    }
}

```

```

private void jCheckBox2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    int qty = (Integer) jSpinner2.getValue();
    double price = 3.0;
    double totalPrice = 0.0;
    if (jCheckBox2.isSelected()) {
        updateTotal(price * qty, true);
        totalPrice = qty*price;
        snackies("Fruit Punch", totalPrice);
    }
    else {
        updateTotal(price * qty, false);
    }
}

```

```

private void jCheckBox3ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    int qty = (Integer) jSpinner3.getValue();
    double price = 1.0; // Assuming $2 for BBQ Chips

```

```

double totalPrice = 0.0;
if (jCheckBox3.isSelected()) {
    updateTotal(price * qty, true);
    totalPrice = qty*price;
    snackies("Cookie", totalPrice);
}
else {
    updateTotal(price * qty, false);
}
}

```

```

private void jCheckBox4ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    int qty = (Integer) jSpinner4.getValue();
    double price = 3.0;
    double totalPrice = 0.0;
    if (jCheckBox4.isSelected()) {
        updateTotal(price * qty, true);
        totalPrice = qty*price;
        snackies("Coke", totalPrice);
    }
    else {
        updateTotal(price * qty, false);
    }
}

```

```

private void jCheckBox5ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    int qty = (Integer) jSpinner5.getValue();
    double price = 1.0;
    double totalPrice = 0.0;
    if (jCheckBox5.isSelected()) {
        updateTotal(price * qty, true);
        totalPrice = qty*price;
        snackies("Donut", totalPrice);
    }
    else {
        updateTotal(price * qty, false);
    }
}

```

```
private void jCheckBox6ActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
    int qty = (Integer) jSpinner6.getValue();  
    double price = 3.0;  
    double totalPrice = 0.0;  
    if (jCheckBox6.isSelected()) {  
        updateTotal(price * qty, true);  
        totalPrice = qty*price;  
        snackies("Gummy Bears", totalPrice);  
    }  
    else {  
        updateTotal(price * qty, false);  
    }  
}
```

```
private void jCheckBox7ActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
    int qty = (Integer) jSpinner7.getValue();  
    double price = 3.0;  
    double totalPrice = 0.0;  
    if (jCheckBox7.isSelected()) {  
        updateTotal(price * qty, true);  
        totalPrice = qty*price;  
        snackies("Water", totalPrice);  
    }  
    else {  
        updateTotal(price * qty, false);  
    }  
}
```

```
private void jCheckBox8ActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
    int qty = (Integer) jSpinner8.getValue();  
    double price = 5.0;  
    double totalPrice = 0.0;  
    if (jCheckBox8.isSelected()) {  
        updateTotal(price * qty, true);  
        totalPrice = qty*price;  
        snackies("PB&J Sandwich", totalPrice);  
    }  
}
```

```

    }
    else {
        updateTotal(price * qty, false);
    }
}

```

```

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    double taxRate = 0.07; // 7% tax rate
    double tax = total * taxRate;
    jTextFieldTax.setText(String.format("%.2f", tax));
    jTextFieldTotal.setText(String.format("%.2f", total + tax));
}

```

```

private void btnExitActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    System.exit(0);
}

```

```

private void jTextFieldTaxActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

```

```

private void btnResetActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    reset();
}

```

```

private void jTextFieldTotalActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

```

```

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    // Generate receipt in JTextArea
    String receiptText = "----- Receipt ----- \n" + jTextField.getText() +
        "----- \n" +
        "Total: " + jTextFieldTotal.getText() + " \n" +
        "Tax: " + jTextFieldTax.getText() + " \n" +
        "----- \n";
}

```



```
jTextArea.setText(receiptText);  
}
```

```
private void jPanel1ComponentAdded(java.awt.event.ContainerEvent evt) {  
    // TODO add your handling code here:  
}
```

```
private double updateTotal(double amount, boolean add) {  
    if (add) {  
        total += amount;  
    } else {  
        total -= amount;  
    }  
    jTextFieldTotal.setText(String.format("%.2f", total));  
    return total;  
}  
  
public int getSpinner1Value() {  
    return (Integer) jSpinner1.getValue();  
}  
//Getter fuction for TestClass  
public int getSpinner2Value() {  
    return (Integer) jSpinner2.getValue();  
}  
//Getter fuction for TestClass  
public int getSpinner3Value() {  
    return (Integer) jSpinner3.getValue();  
}  
//Getter fuction for TestClass  
public int getSpinner4Value() {  
    return (Integer) jSpinner4.getValue();  
}  
//Getter fuction for TestClass  
public int getSpinner5Value() {  
    return (Integer) jSpinner5.getValue();  
}  
//Getter fuction for TestClass  
public int getSpinner6Value() {
```

```

        return (Integer) jSpinner6.getValue();
    }
    //Getter fuction for TestClass
    public int getSpinner7Value() {
        return (Integer) jSpinner7.getValue();
    }
    //Getter fuction for TestClass
    public int getSpinner8Value() {
        return (Integer) jSpinner8.getValue();
    }
    //Getter fuction for TestClass
    public String getTextFieldTaxText() {
        return jTextFieldTax.getText();
    }
    //Getter fuction for TestClass
    public String getTextFieldTotalText() {
        return jTextFieldTotal.getText();
    }
}

/**
 * @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(Dashboard.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
```

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

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

```
java.util.logging.Logger.getLogger(Dashboard.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() {
        UserLoginView loginView = new UserLoginView();
        UserController controller = new UserController(null);
        controller.setView(loginView);
        loginView.setVisible(true);
    }
});
}
```

```
// Variables declaration - do not modify
private javax.swing.JButton btnExit;
private javax.swing.JButton btnReset;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JCheckBox jCheckBox1;
private javax.swing.JCheckBox jCheckBox2;
private javax.swing.JCheckBox jCheckBox3;
private javax.swing.JCheckBox jCheckBox4;
private javax.swing.JCheckBox jCheckBox5;
private javax.swing.JCheckBox jCheckBox6;
```

```
private javax.swing.JCheckBox jCheckBox7;  
private javax.swing.JCheckBox jCheckBox8;  
private javax.swing.JLabel jLabel1;  
private javax.swing.JLabel jLabel10;  
private javax.swing.JLabel jLabel11;  
private javax.swing.JLabel jLabel12;  
private javax.swing.JLabel jLabel13;  
private javax.swing.JLabel jLabel14;  
private javax.swing.JLabel jLabel15;  
private javax.swing.JLabel jLabel16;  
private javax.swing.JLabel jLabel17;  
private javax.swing.JLabel jLabel18;  
private javax.swing.JLabel jLabel19;  
private javax.swing.JLabel jLabel2;  
private javax.swing.JLabel jLabel20;  
private javax.swing.JLabel jLabel21;  
private javax.swing.JLabel jLabel22;  
private javax.swing.JLabel jLabel23;  
private javax.swing.JLabel jLabel24;  
private javax.swing.JLabel jLabel25;  
private javax.swing.JLabel jLabel26;  
private javax.swing.JLabel jLabel27;  
private javax.swing.JLabel jLabel28;  
private javax.swing.JLabel jLabel29;  
private javax.swing.JLabel jLabel3;  
private javax.swing.JLabel jLabel30;  
private javax.swing.JLabel jLabel31;  
private javax.swing.JLabel jLabel32;  
private javax.swing.JLabel jLabel33;  
private javax.swing.JLabel jLabel34;  
private javax.swing.JLabel jLabel35;  
private javax.swing.JLabel jLabel36;  
private javax.swing.JLabel jLabel37;  
private javax.swing.JLabel jLabel38;  
private javax.swing.JLabel jLabel39;  
private javax.swing.JLabel jLabel4;  
private javax.swing.JLabel jLabel40;  
private javax.swing.JLabel jLabel41;  
private javax.swing.JLabel jLabel42;  
private javax.swing.JLabel jLabel43;
```

```
private javax.swing.JLabel jLabel44;
private javax.swing.JLabel jLabel45;
private javax.swing.JLabel jLabel46;
private javax.swing.JLabel jLabel47;
private javax.swing.JLabel jLabel48;
private javax.swing.JLabel jLabel49;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel50;
private javax.swing.JLabel jLabel51;
private javax.swing.JLabel jLabel52;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JLabel jLabel8;
private javax.swing.JLabel jLabel9;
private javax.swing.JPanel jLabelimage;
private javax.swing.JPanel jLabelimage1;
private javax.swing.JPanel jLabelimage2;
private javax.swing.JPanel jLabelimage3;
private javax.swing.JPanel jLabelimage4;
private javax.swing.JPanel jLabelimage5;
private javax.swing.JPanel jLabelimage6;
private javax.swing.JPanel jLabelimage7;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel2;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel4;
private javax.swing.JPanel jPanel5;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JSpinner jSpinner1;
private javax.swing.JSpinner jSpinner2;
private javax.swing.JSpinner jSpinner3;
private javax.swing.JSpinner jSpinner4;
private javax.swing.JSpinner jSpinner5;
private javax.swing.JSpinner jSpinner6;
private javax.swing.JSpinner jSpinner7;
private javax.swing.JSpinner jSpinner8;
private javax.swing.JTextArea jTextArea;
private javax.swing.JTextField jTextFieldTax;
private javax.swing.JTextField jTextFieldTotal;
// End of variables declaration
```

```
}
```

DataManager.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 com.mycompany.snackies;
import java.io.*;

/**
 *
 * @author chase
 */
public class DataManager {

    private static DataManager instance;

    /**
     * Private constructor for Singleton pattern
     */

    private DataManager() {}

    /**
     * Returns the single instance of DataManager.
     *
     * @return The singleton instance of DataManager
     */

    public static DataManager getInstance() {
        if (instance == null) {
            instance = new DataManager();
        }
    }
}
```

```

        return instance;
    }

    /**
     * Serializes an object to a file.
     *
     * @param obj The object to serialize.
     * @param path The file path to serialize the object to.
     * @throws IOException If an I/O error occurs during serialization.
     */

    public void serializeObject(Object obj, String path) throws IOException {
        File file = new File(path);

        if (!file.getParentFile().exists()) {
            file.getParentFile().mkdirs();
        }

        try (ObjectOutputStream out = new ObjectOutputStream(new
FileOutputStream(file))) {
            out.writeObject(obj);
        }
    }

    /**
     * Deserializes an object from a file.
     *
     * @param path The file path to deserialize the object from.
     * @return The deserialized object.
     * @throws IOException If an I/O error occurs during deserialization.
     * @throws ClassNotFoundException If the class of the serialized object cannot be
found.
     */

    public Object deserializeObject(String path) throws IOException,
ClassNotFoundException {
        try (ObjectInputStream in = new ObjectInputStream(new FileInputStream(path))) {
            return in.readObject();
        }
    }
}

```

```
}
```

Snackies.java:

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

package com.mycompany.snackies;

/**
 *
 * @author pyfro
 */
public class Snackies {

    public static void main(String[] args) {
        System.out.println("Hello World!");
    }
}
```

User.java

```
package com.mycompany.snackies;
import java.io.Serializable;
import java.io.*;
/*
 * 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
 */

/**
```



```
*  
* @author chase  
*/
```

```
public class User implements Serializable{
```

```
    private String username;  
    private String password;
```

```
    /**  
     * Constructor for a new user instance  
     *  
     * @param username The desired username  
     * @param password The desired password  
     */
```

```
    public User(String username, String password) {  
        this.username = username;  
        this.password = password;  
    }
```

```
    /**  
     * Returns the username for a given user instance  
     *  
     * @return The users username  
     */
```

```
    public String getUsername() {  
        return username;  
    }
```

```
    /**  
     * Returns the password for a given user instance  
     *  
     * @return The users password  
     */
```

```
    public String getPassword() {  
        return password;  
    }
```

```

/**
 * Sets the username for a given user instance
 *
 * @param username The username to be set
 */

public void setUsername(String username) {
    this.username = username;
}

/**
 * Sets the password for a given user instance
 *
 * @param password The password to be set
 */

public void setPassword(String password) {
    this.password = password;
}

/**
 * Registers a new User and serializes it to a file
 *
 * @param username The registered username
 * @param password The registered password
 * @throws IOException If there is an error during serialization
 */

public void registerUser(String username, String password) {

    User newUser = new User(username, password);
    DataManager dataManager = DataManager.getInstance();

    try {
        dataManager.serializeObject(newUser, "users/" + username + ".ser");
    } catch (IOException e) {
        e.printStackTrace();
    }
}

```

```
}
```

UserController.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 com.mycompany.snackies;
import javax.swing.*.*;
import java.io.*;

/**
 *
 * @author chase
 */

public class UserController {

    private User user;
    private UserLoginView view;
    public boolean isLoggedIn = false;

    /**
     * Links a new UserController instance to a User instance
     *
     * @param user The User instance
     */

    public UserController(User user) {
        this.user = user;
    }

    /**
     * Links a UserLoginView to this controller instance
     *
     * @param view The UserLoginView instance
     */
}
```

```

*/

public void setView(UserLoginView view) {
    this.view = view;
    this.view.setController(this);
}

/**
 * Attempts to log in a user with the provided username and password
 *
 * @param username The username of the user attempting to log in
 * @param password The password of the user attempting to log in
 * @throws FileNotFoundException If the user file does not exist
 * @throws IOException If there is an error reading the user file
 */

public void login(String username, String password) {
    DataManager dataManager = DataManager.getInstance();

    try {

        User user = (User) dataManager.deserializeObject("users/" + username +
".ser");

        if (user.getPassword().equals(password)) {
            JOptionPane.showMessageDialog(view, "Login Successful");
            view.dispose();
            isLoggedIn = true;
            new Dashboard().setVisible(true);

        } else {
            JOptionPane.showMessageDialog(view, "Login Failed: Incorrect Login!");
            isLoggedIn = false;
        }
    } catch (FileNotFoundException e) {
        JOptionPane.showMessageDialog(view, "Login Failed: User not found");
    } catch (IOException | ClassNotFoundException e) {
        JOptionPane.showMessageDialog(view, "Login Failed!");
    }
}

```

```

/**
 * Registers a new user with the given username and password, serializes it to a file
 *
 * @param username The username of the new user
 * @param password The password of the new user
 * @throws IOException If there is an error during the file writing process
 */

```

```

public void registerUser(String username, String password) {

    User newUser = new User(username, password);
    DataManager dataManager = DataManager.getInstance();

    try {
        dataManager.serializeObject(newUser, "users/" + username + ".ser");
        JOptionPane.showMessageDialog(view, "Registration Successful");
    } catch (IOException e) {
        JOptionPane.showMessageDialog(view, "Registration Failed");
        e.printStackTrace();
    }
}

```

```

/**
 * Exits the application
 */

```

```

public void exit() {
    System.exit(0);
}

```

```

/**
 * Checks if a User is logged in
 *
 * @return true if a user is logged in, false otherwise
 */

```

```

//getter for testing
public boolean isLoggedIn() {

```

```
        return isLoggedIn;
    }
}
```

UserLoginView.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 com.mycompany.snackies;
import javax.swing.*.*;
import java.awt.*.*;

/**
 *
 * @author chase
 */

public class UserLoginView extends JFrame {

    private JTextField usernameField;
    private JPasswordField passwordField;
    private JButton loginButton;
    private JButton exitButton;
    private JButton registerButton;
    private UserController controller;

    /**
     * Constructs a new UserLoginView instance
     */

    public UserLoginView() {
        initComponents();
    }

    /**
```

```

* Sets the components for UserLoginView
*/

private void initComponents() {
    usernameField = new JTextField();
    passwordField = new JPasswordField();
    loginButton = new JButton("Login");
    exitButton = new JButton("Exit");
    registerButton = new JButton("Register");
    usernameField.setPreferredSize(new Dimension(50, 20));
    passwordField.setPreferredSize(new Dimension(50, 20));
    loginButton.setPreferredSize(new Dimension(100, 50));
    exitButton.setPreferredSize(new Dimension(100, 50));
    registerButton.setPreferredSize(new Dimension(100, 50));

    JPanel centerPanel = new JPanel();
    centerPanel.setLayout(new BoxLayout(centerPanel, BoxLayout.Y_AXIS));
    centerPanel.add(usernameField);
    centerPanel.add(passwordField);
    centerPanel.add(loginButton);
    centerPanel.add(exitButton);
    centerPanel.add(registerButton);

    add(centerPanel, BorderLayout.CENTER);

    setSize(400, 300);
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    setLocationRelativeTo(null);
    loginButton.addActionListener(e -> controller.login(usernameField.getText(), new
String(passwordField.getPassword())));
    registerButton.addActionListener(e -> registerUser());
    exitButton.addActionListener(e -> controller.exit());
}

/**
 * Sets the UserController to link for this UserLoginView instance
 *
 * @param controller The UserController instance
 */

```

```

public void setController(UserController controller) {
    this.controller = controller;
}

/**
 * Takes the username and password input and registers a new user
 */

private void registerUser() {
    String username = usernameField.getText();
    String password = new String(passwordField.getPassword());
    controller.registerUser(username, password);
}

/**
 * Clears the username and password text fields
 */

public void clearFields() {
    usernameField.setText("");
    passwordField.setText("");
}

/**
 * Gets the text from the username text field
 *
 * @return The text from username text field
 */

//Getters for testing
public String getUsernameField() {
    return usernameField.getText();
}

/**
 * Gets the text from the password text field
 *
 * @return The text from password text field
 */

```



```
//Getters for testing
public String getPasswordField() {
    return new String(passwordField.getPassword());
}
}
```