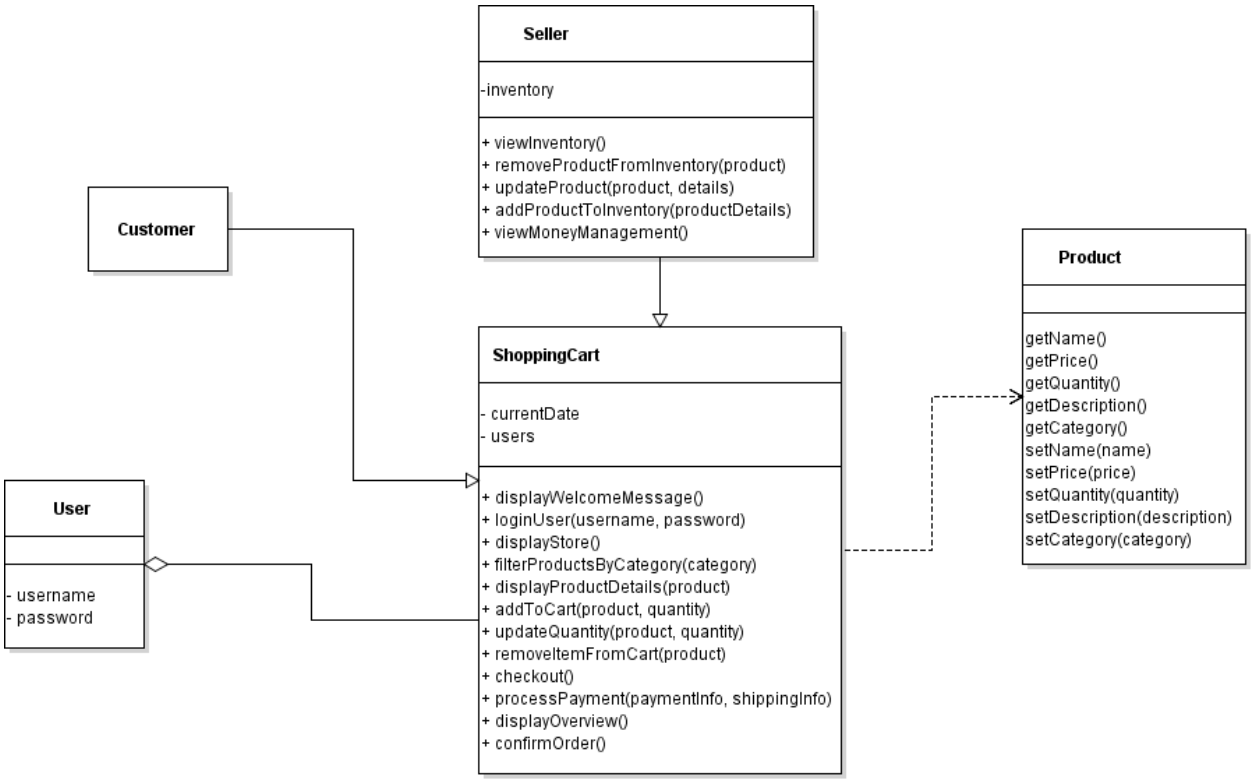
Group Number 12

Group Members: Chase Moffat, Charles Pyfrom, Miles Choquette

Shopping Cart Project



CRC Cards

Class: Shopping Cart

Responsibilities:

- Display welcome message
- Manage users' login
- Display store and products
- Filter products by category

- Manage shopping cart operations
- Process checkout and payment
- Manage order confirmation and display receipt

Collaborators:

- User
- Customer
- Seller
- Product

Class: User

Responsibilities:

- Store username and password

Collaborators:

- Shopping Cart

Class: Customer

Responsibilities:

Collaborators:

- Shopping Cart

Class: Seller

Responsibilities:

- Manage inventory
- Manage money management

Collaborators:

- Shopping Cart
- Product

Class: Product

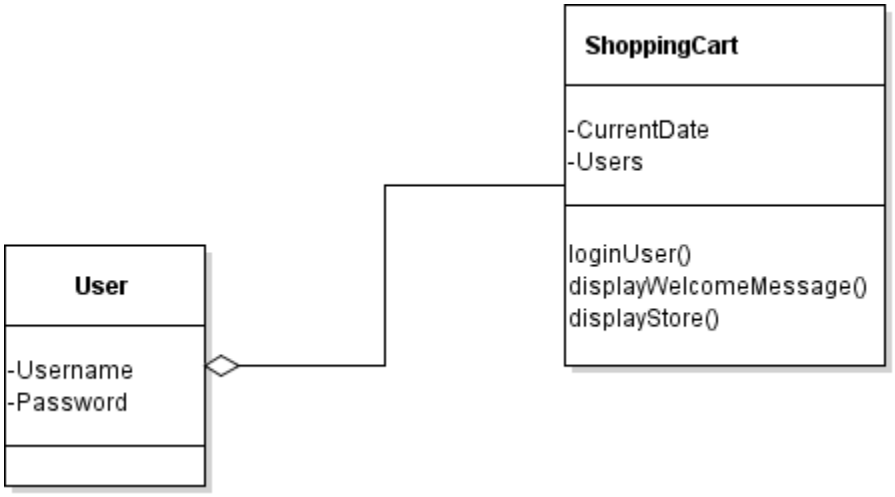
Responsibilities:

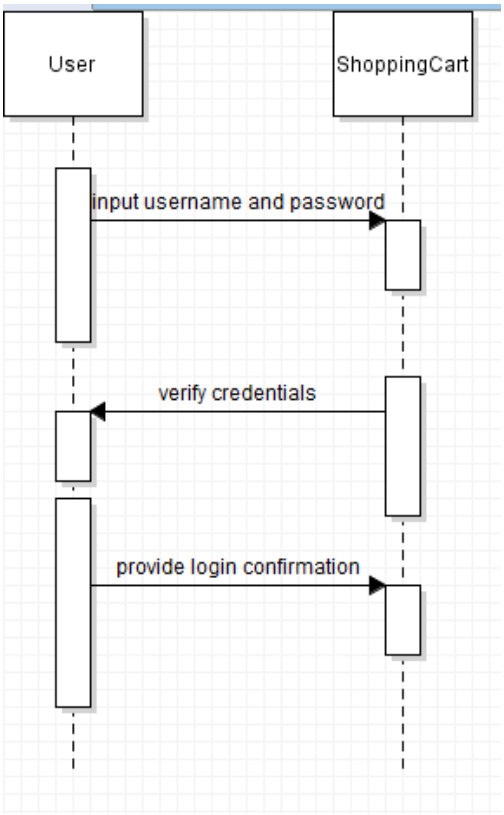
- Store product details such as name, price, quantity, description, and category

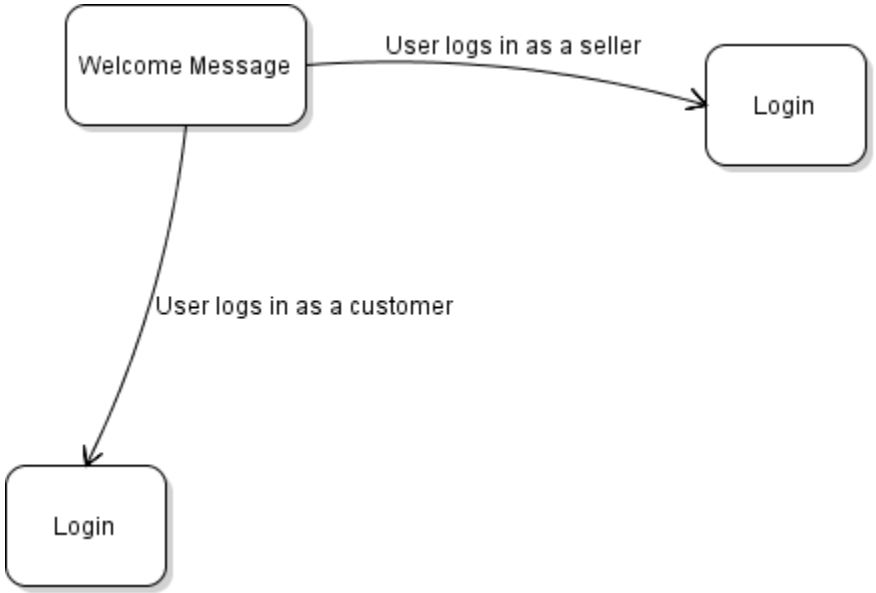
Collaborators:

- Shopping Cart
- Seller

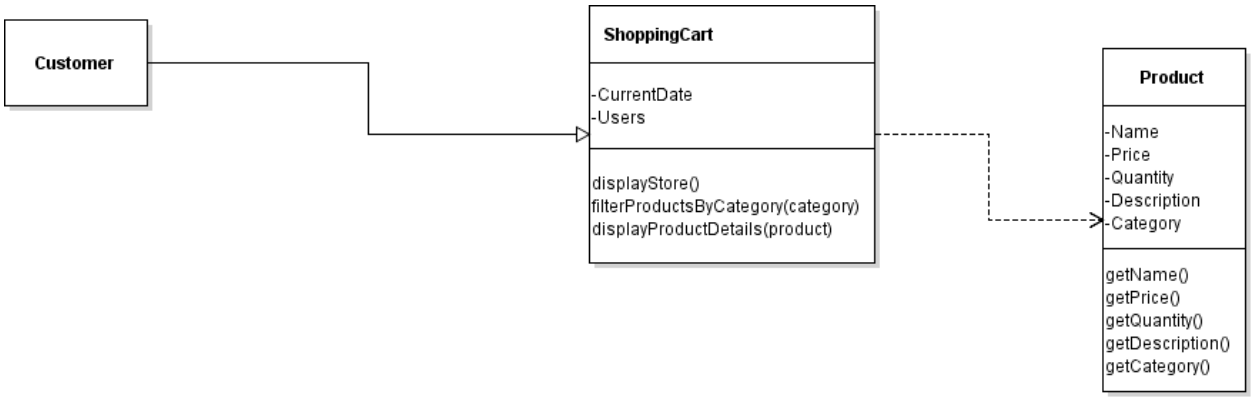
Login UML Diagrams:

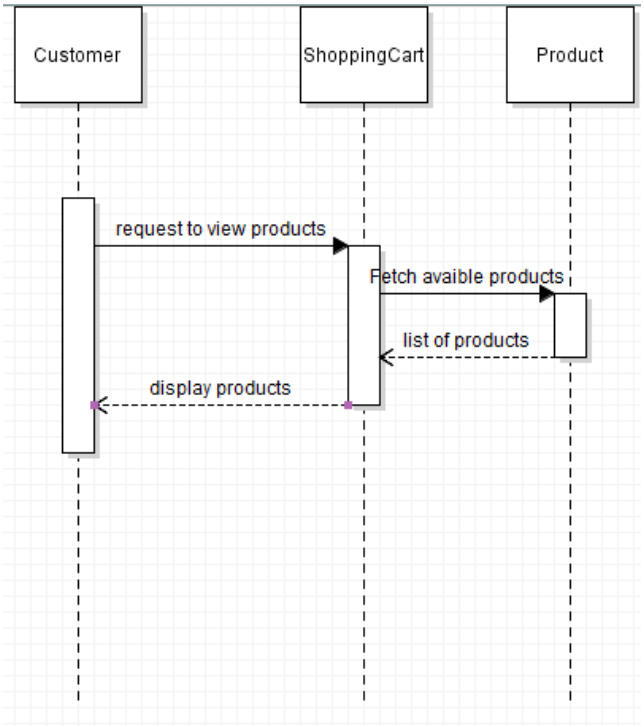


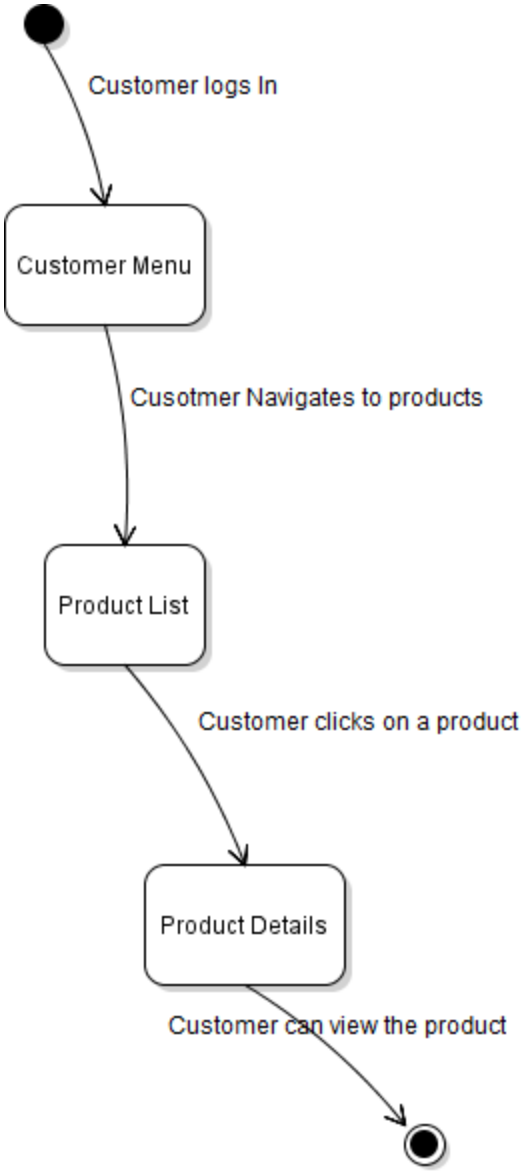

User
ShoppingCart
input username and password
verify credentials
provide login confirmation


Welcome Message
User logs in as a seller
Login
User logs in as a customer
Login

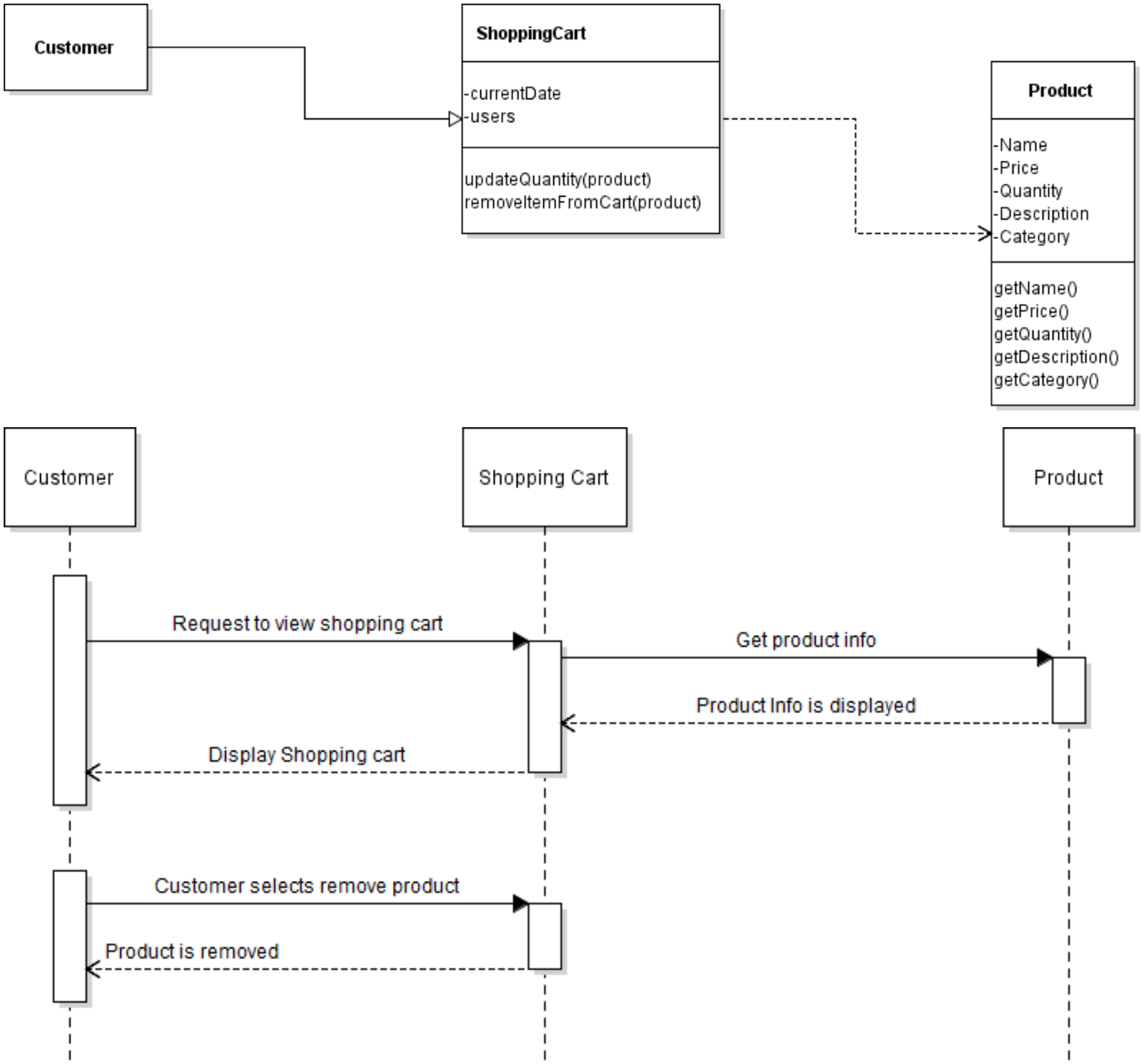
Browsing products UML Diagrams:

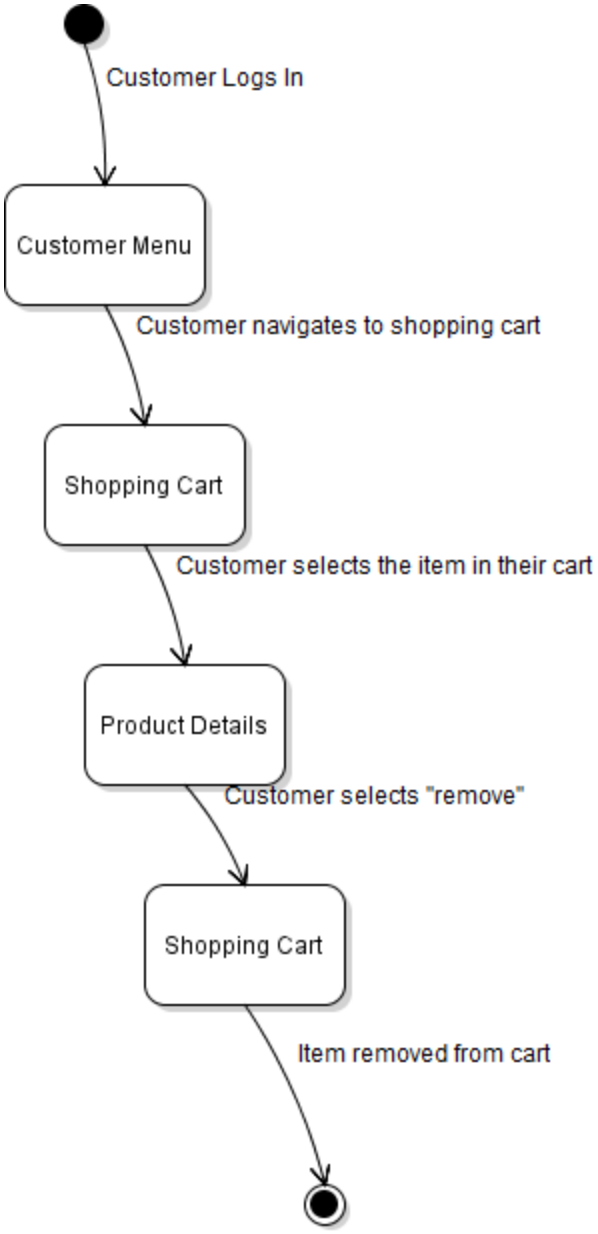



Customer
ShoppingCart
Product
request to view products
Fetch avaible products
list of products
display products

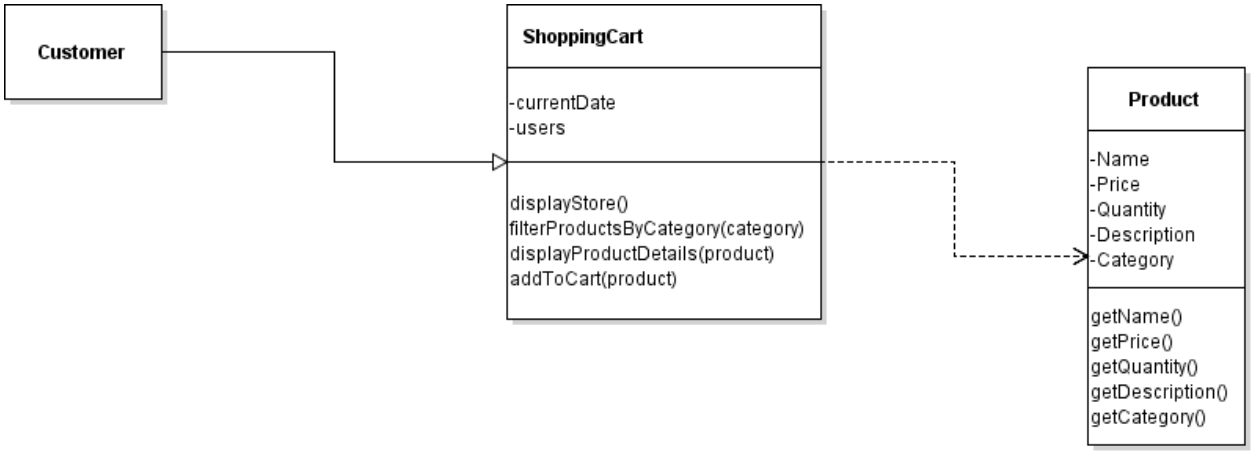


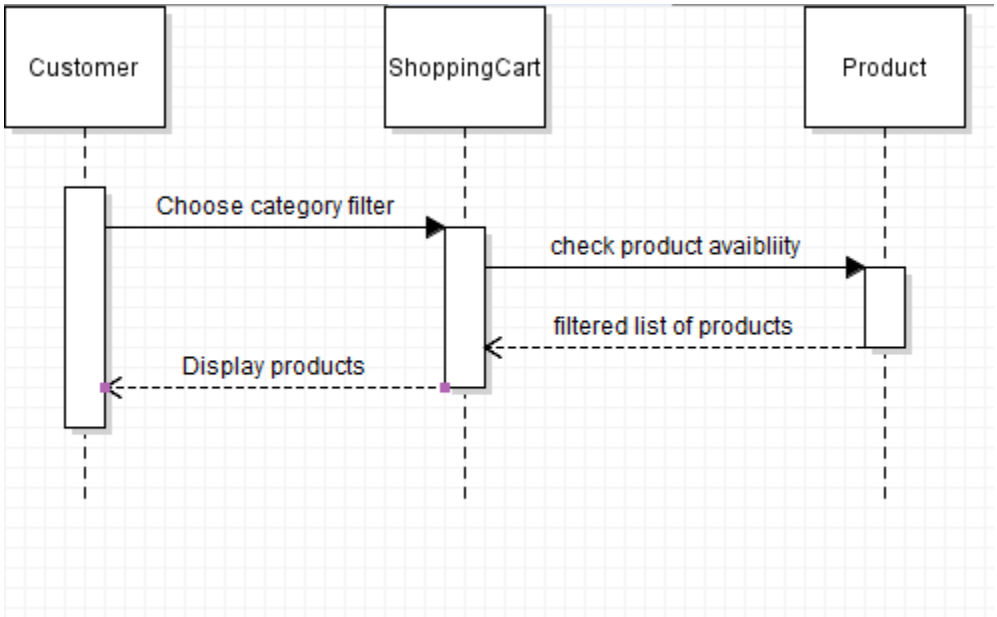
Update Cart UML Diagrams:

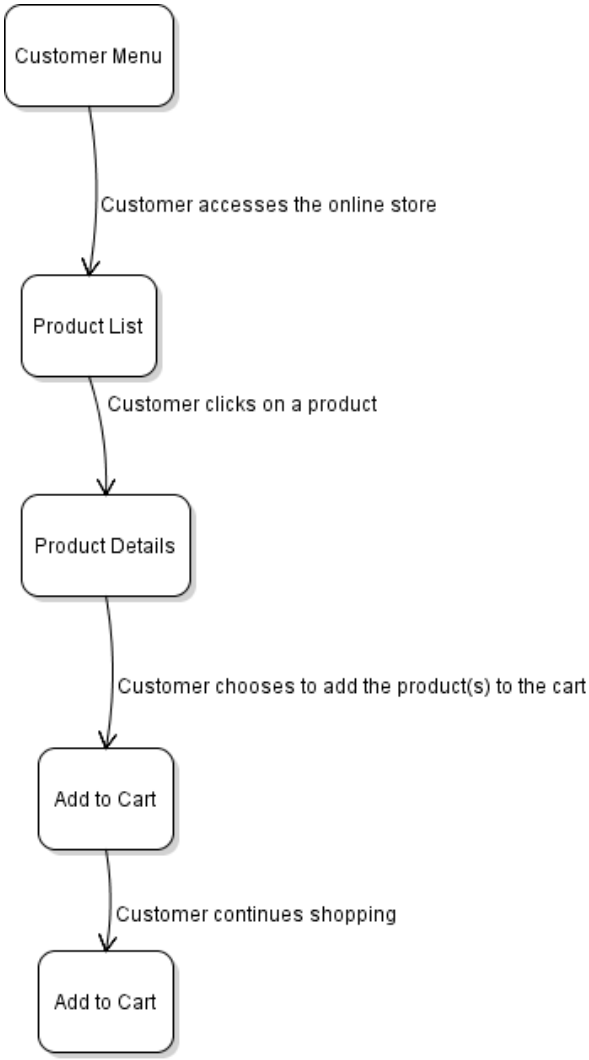

Customer
ShoppingCart
-currentDate
-users
updateQuantity(product)
removeItemFromCart(product)
Product
-Name
-Price
-Quantity
-Description
-Category
getName()
getPrice()
getQuantity()
getDescription()
getCategory()
Customer
Shopping Cart
Product
Request to view shopping cart
Get product info
Product Info is displayed
Display Shopping cart
Customer selects remove product
Product is removed



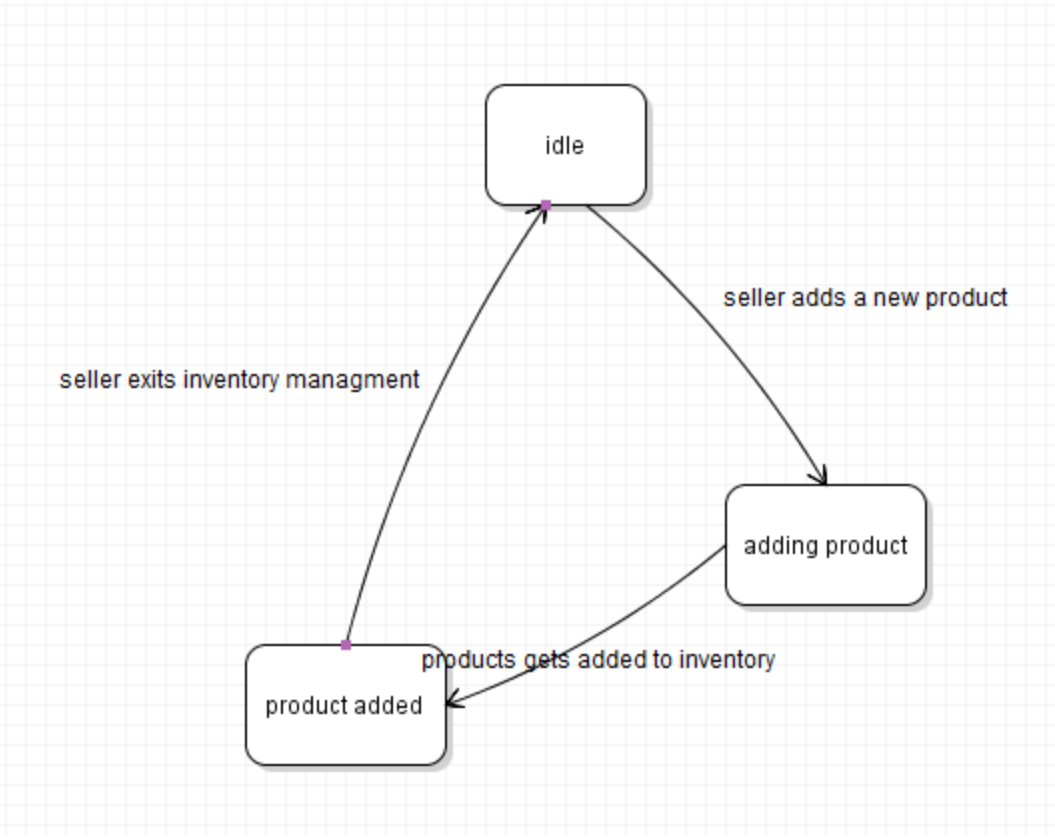
Add products to cart UML Diagrams:

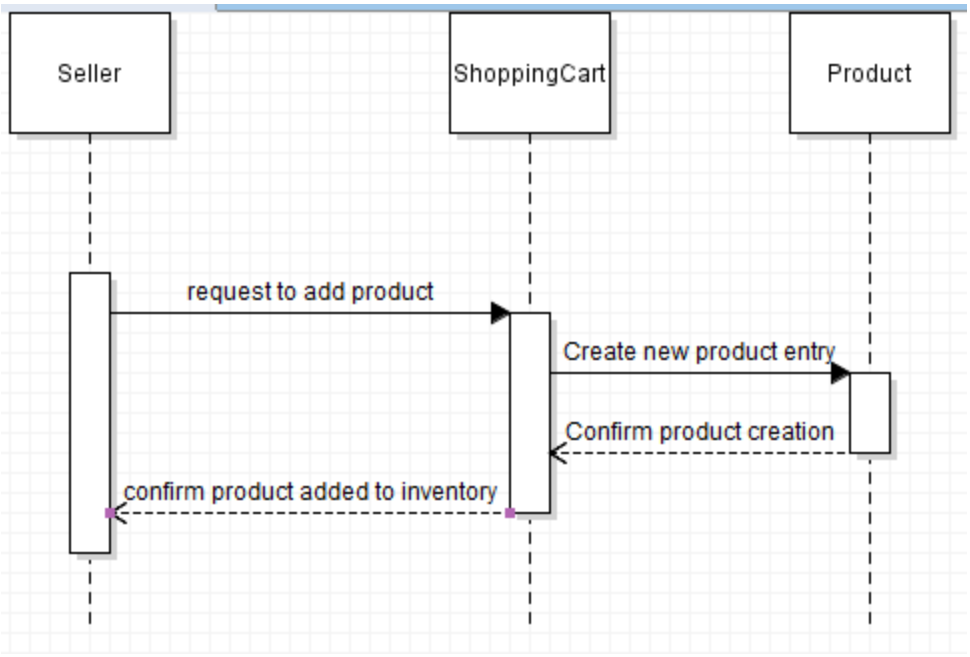

Customer
ShoppingCart
-currentDate
-users
displayStore()
filterProductsByCategory(category)
displayProductDetails(product)
addToCart(product)
Product
-Name
-Price
-Quantity
-Description
-Category
getName()
getPrice()
getQuantity()
getDescription()
getCategory()

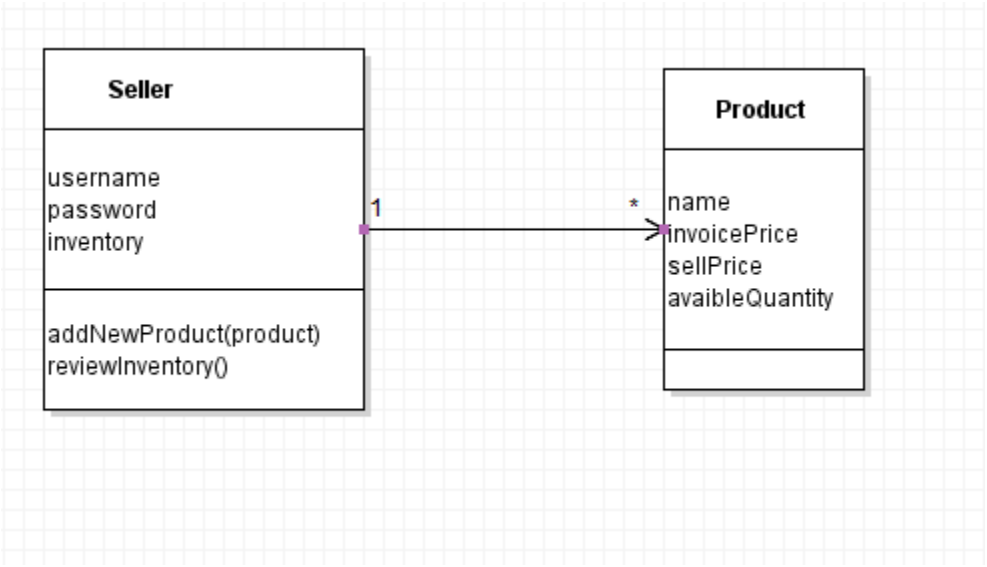

Customer
ShoppingCart
Product
Choose category filter
check product avaibliity
filtered list of products
Display products



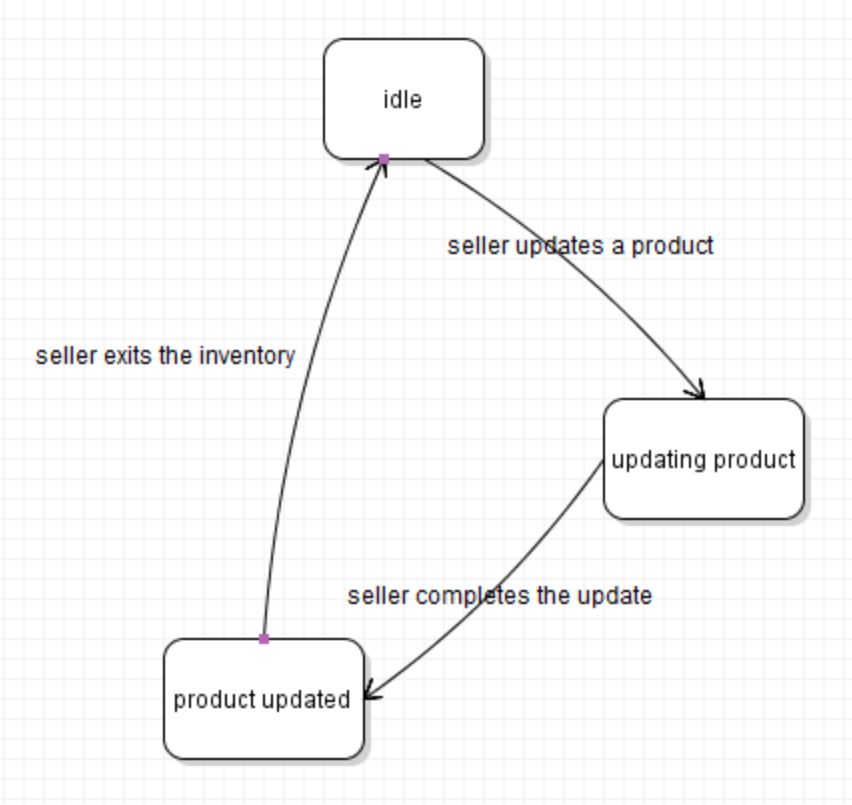
Seller adds product to inventory UML Diagrams:

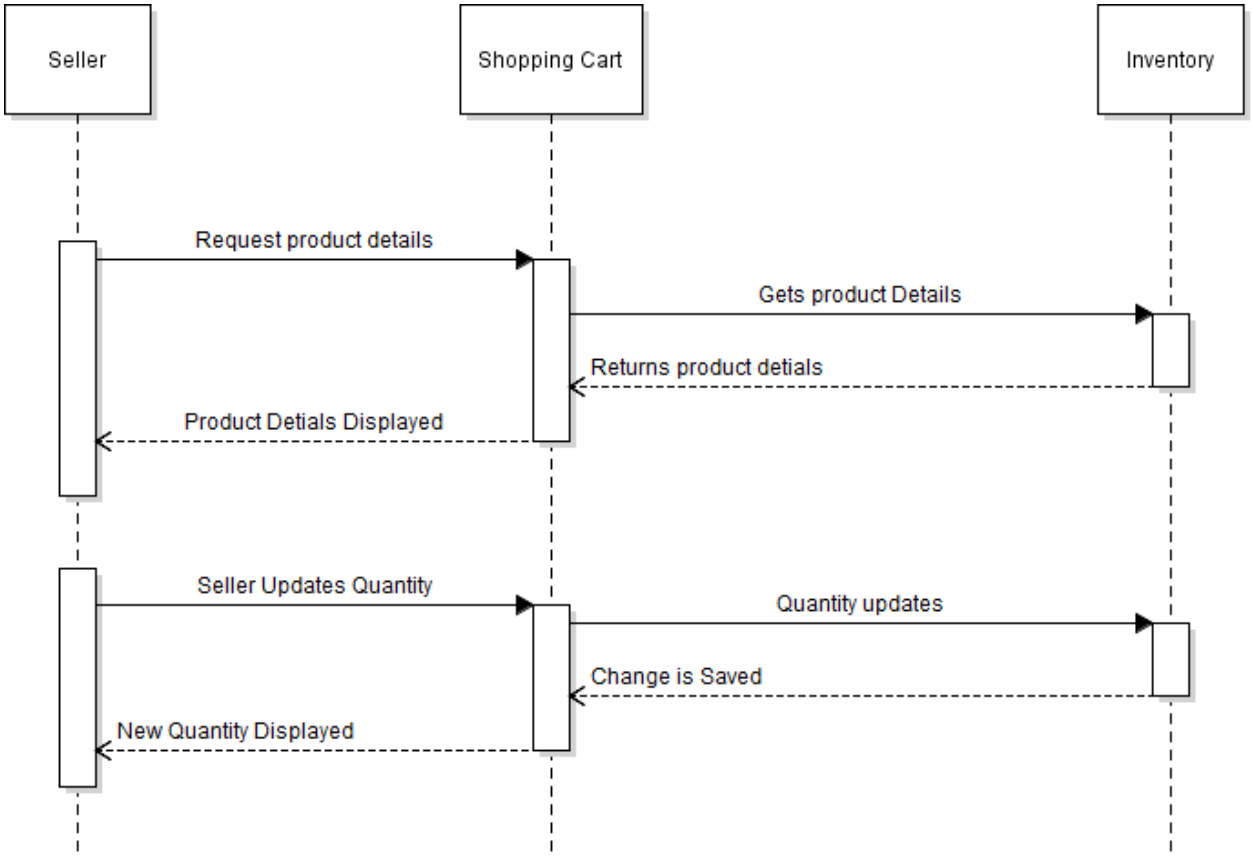

idle
seller adds a new product
seller exits inventory managment
adding product
products gets added to inventory
product added

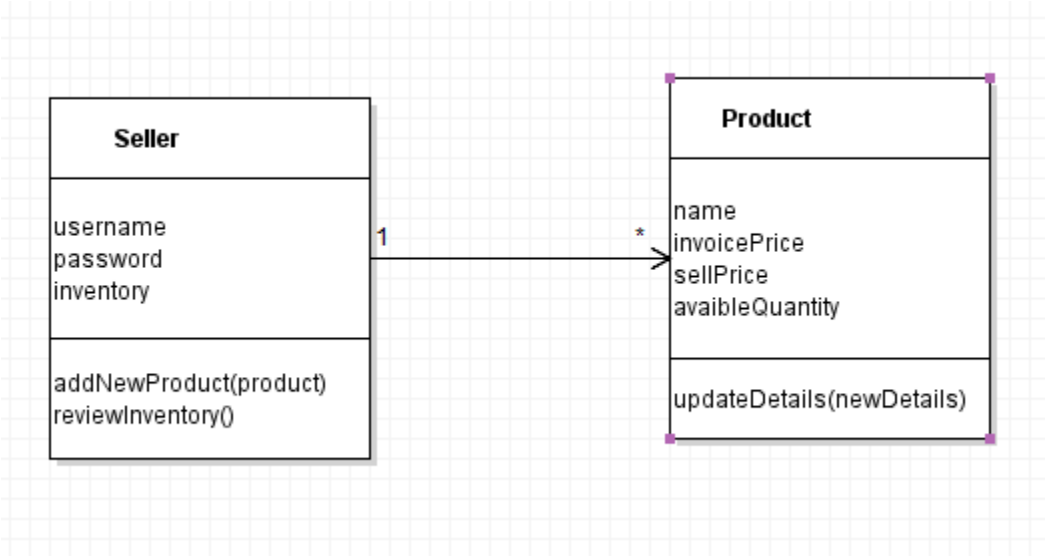




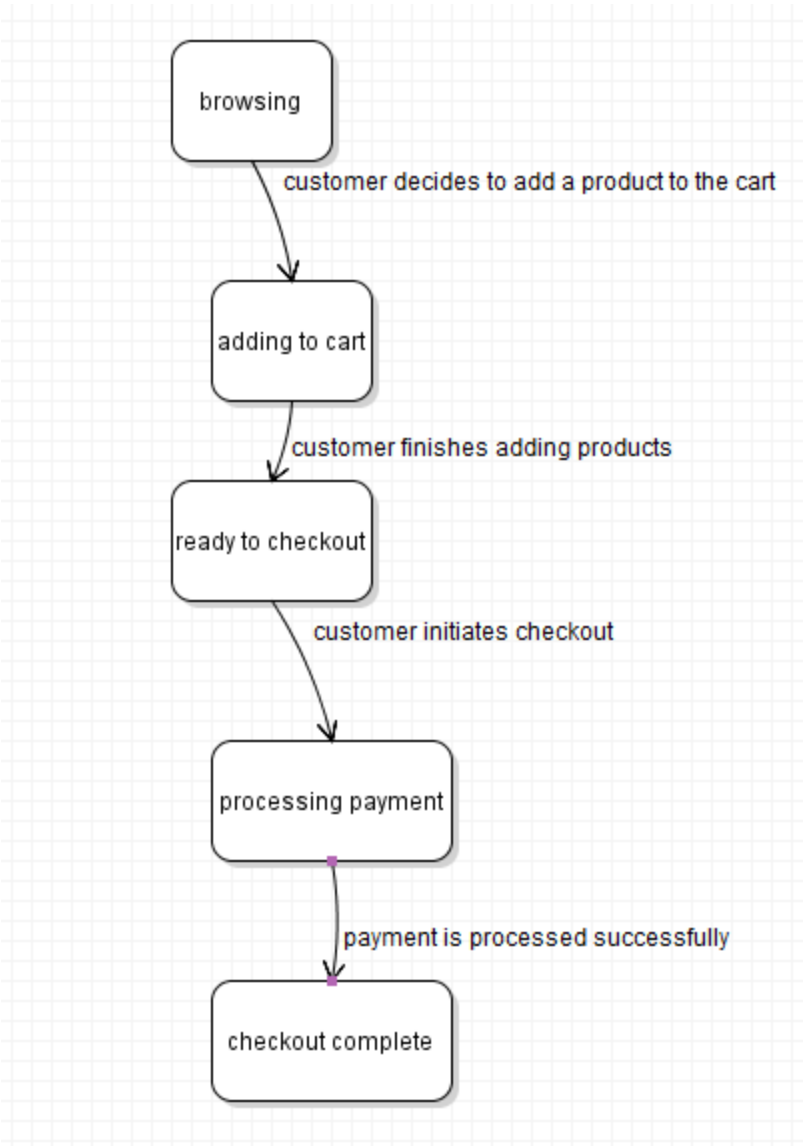
Seller updates Inventory UML Diagrams:

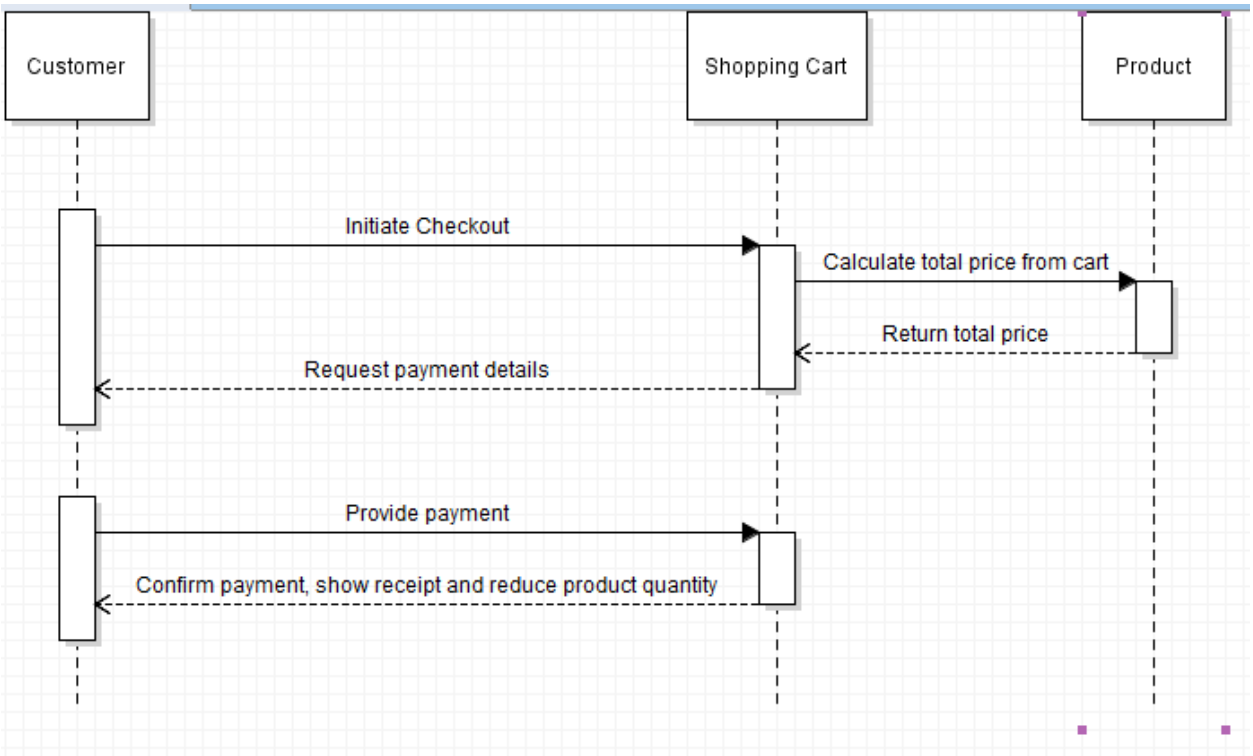

idle
seller updates a product
seller exits the inventory
updating product
seller completes the update
product updated

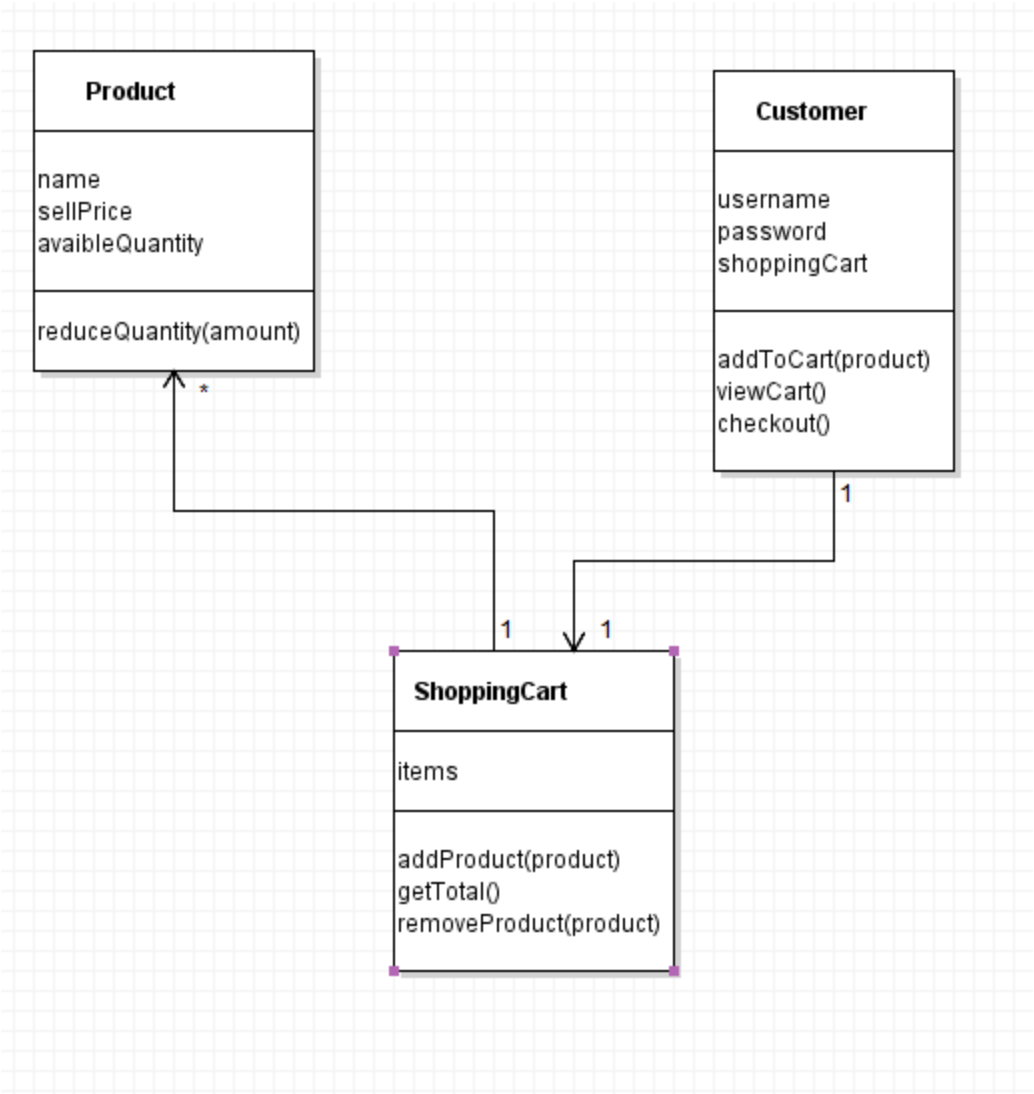




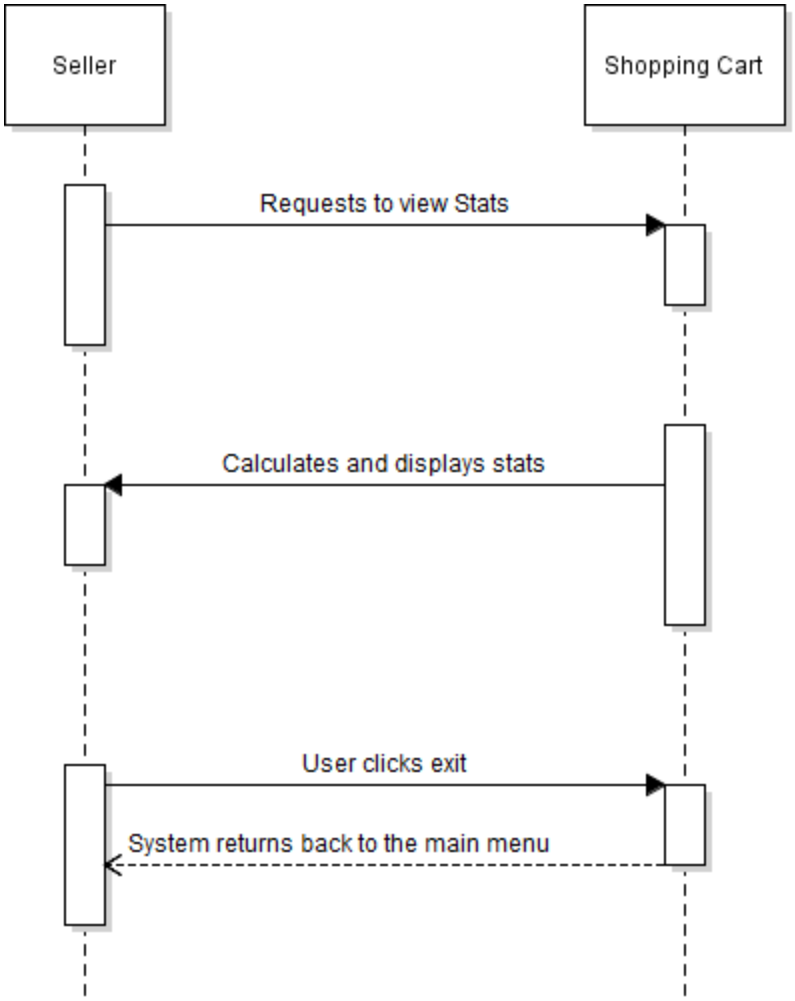
Checkout sequence UML Diagrams:

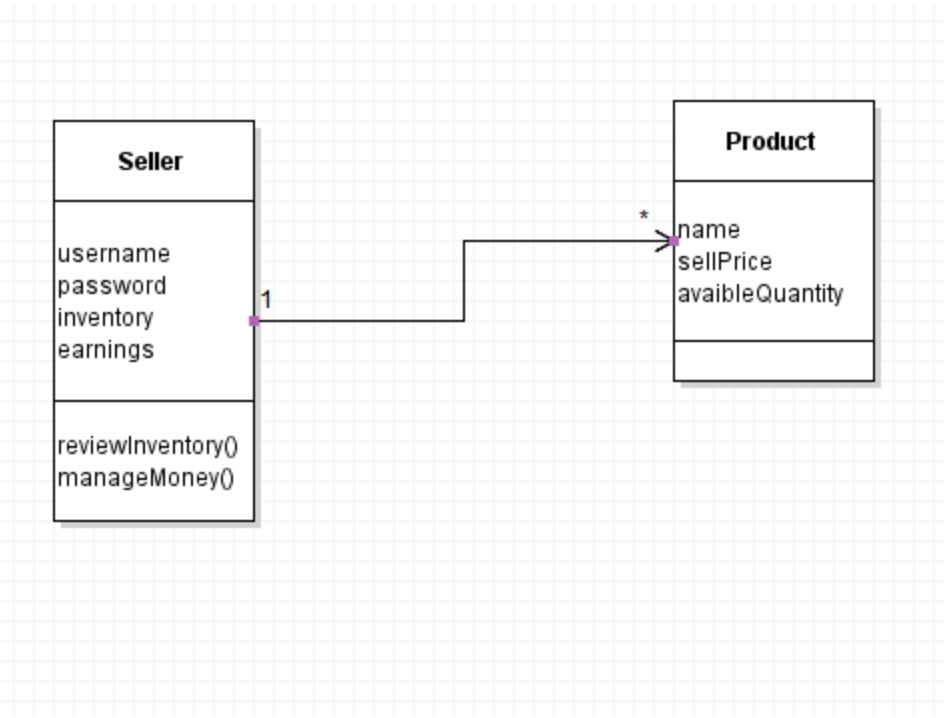

browsing
customer decides to add a product to the cart
adding to cart
customer finishes adding products
ready to checkout
customer initiates checkout
processing payment
payment is processed successfully
checkout complete

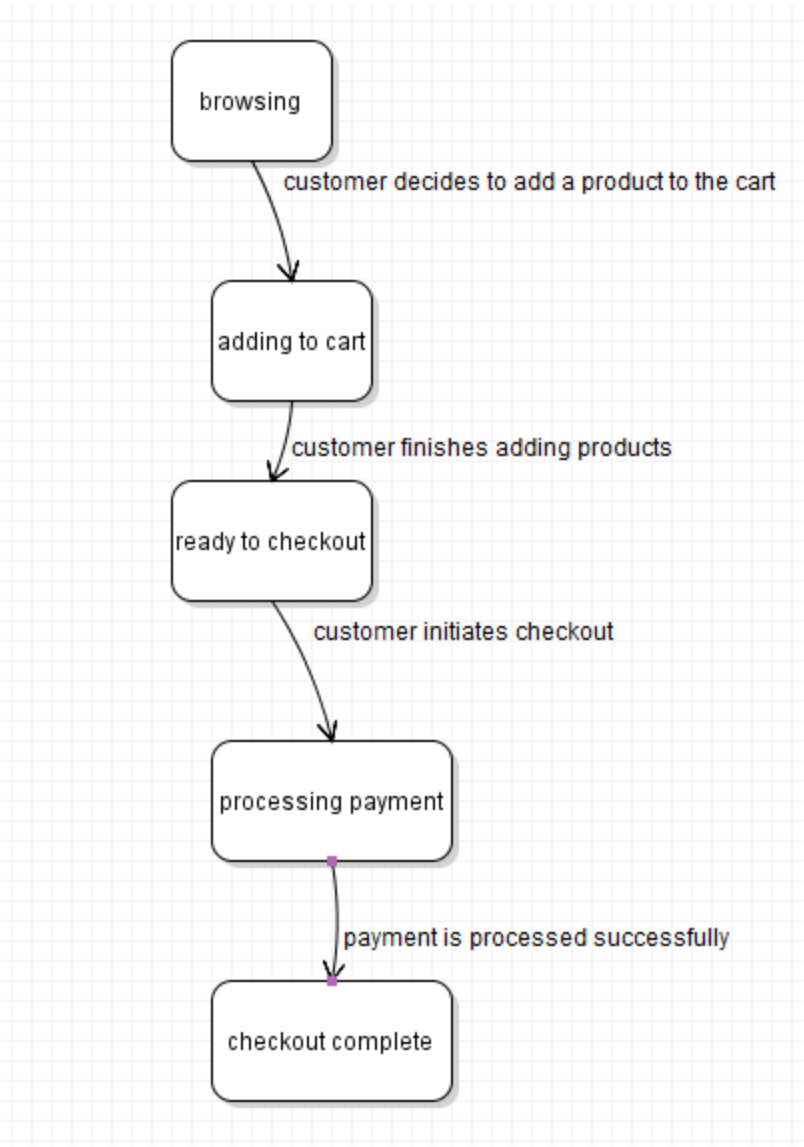

Customer
Shopping Cart
Product
Initiate Checkout
Calculate total price from cart
Return total price
Request payment details
Provide payment
Confirm payment, show receipt and reduce product quantity



Seller Checks Stats UML Diagrams:


Seller
Shopping Cart
Requests to view Stats
Calculates and displays stats
User clicks exit
System returns back to the main menu


Seller
username
password
inventory
earnings
reviewInventory()
manageMoney()
1
*
Product
name
sellPrice
avaibleQuantity


browsing
customer decides to add a product to the cart
adding to cart
customer finishes adding products
ready to checkout
customer initiates checkout
processing payment
payment is processed successfully
checkout complete