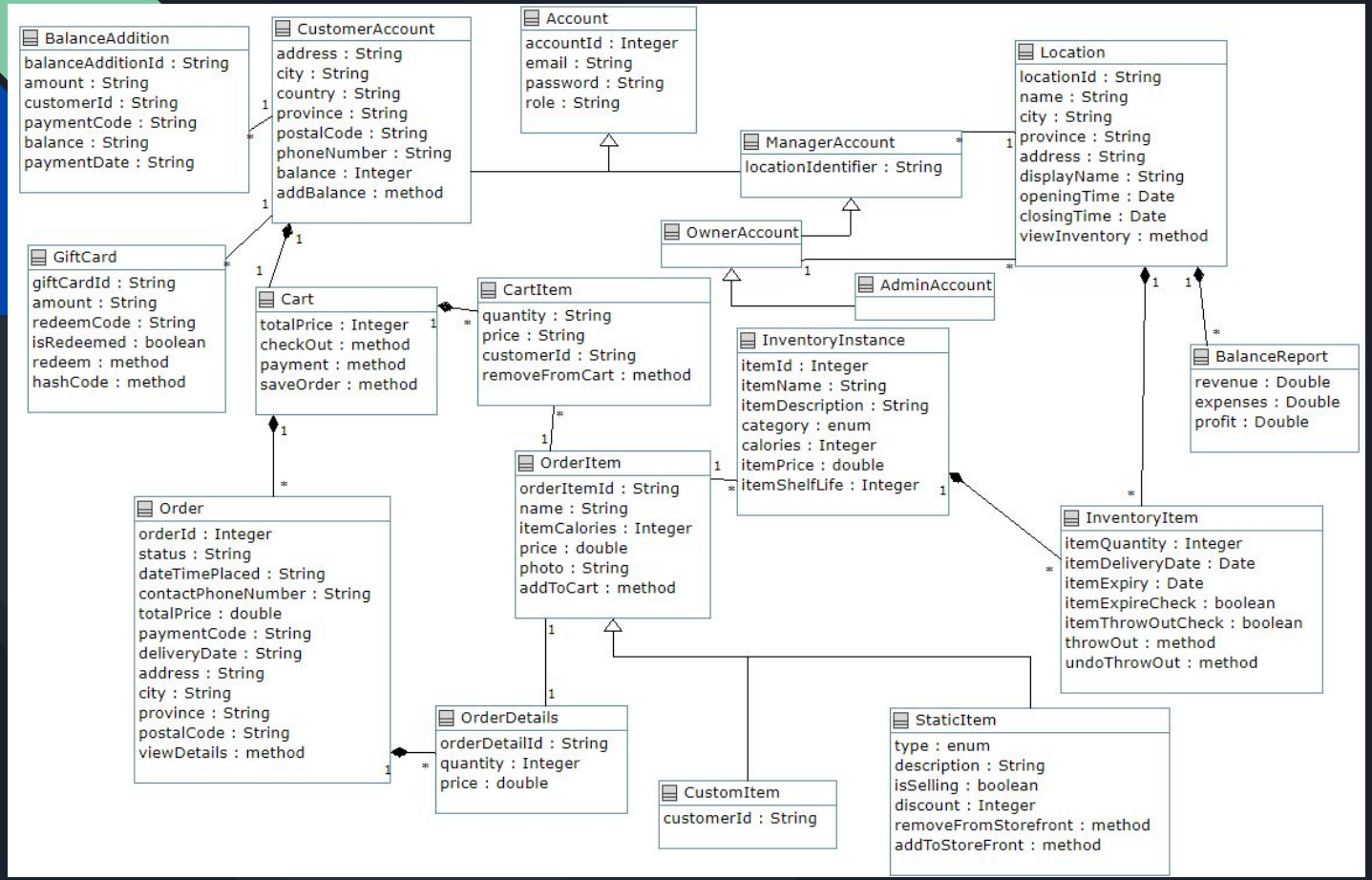
burgerBurger

Jackson Douma, Michael Rosanelli, Alessio Schiavi, Liam Slappendel

burgerBurger

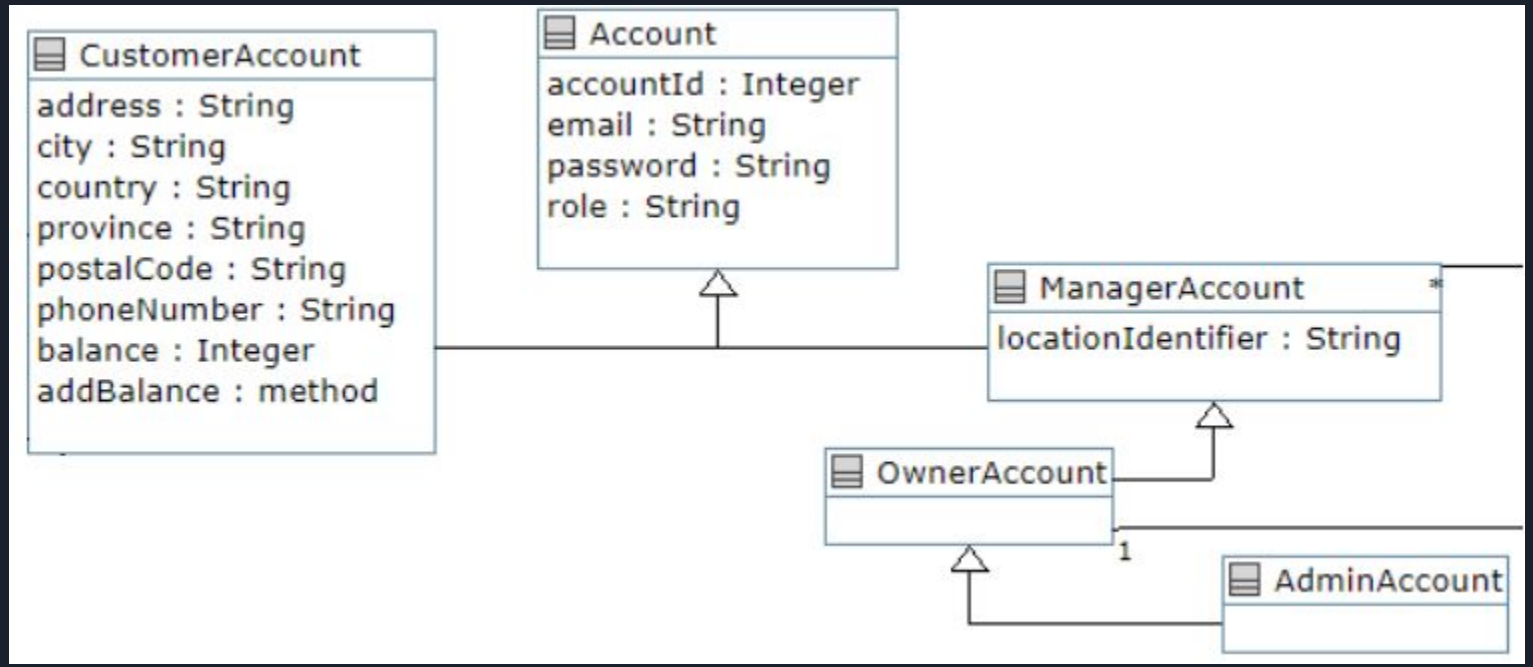
Software Requirements Specification

UML Diagram for burgerBurger

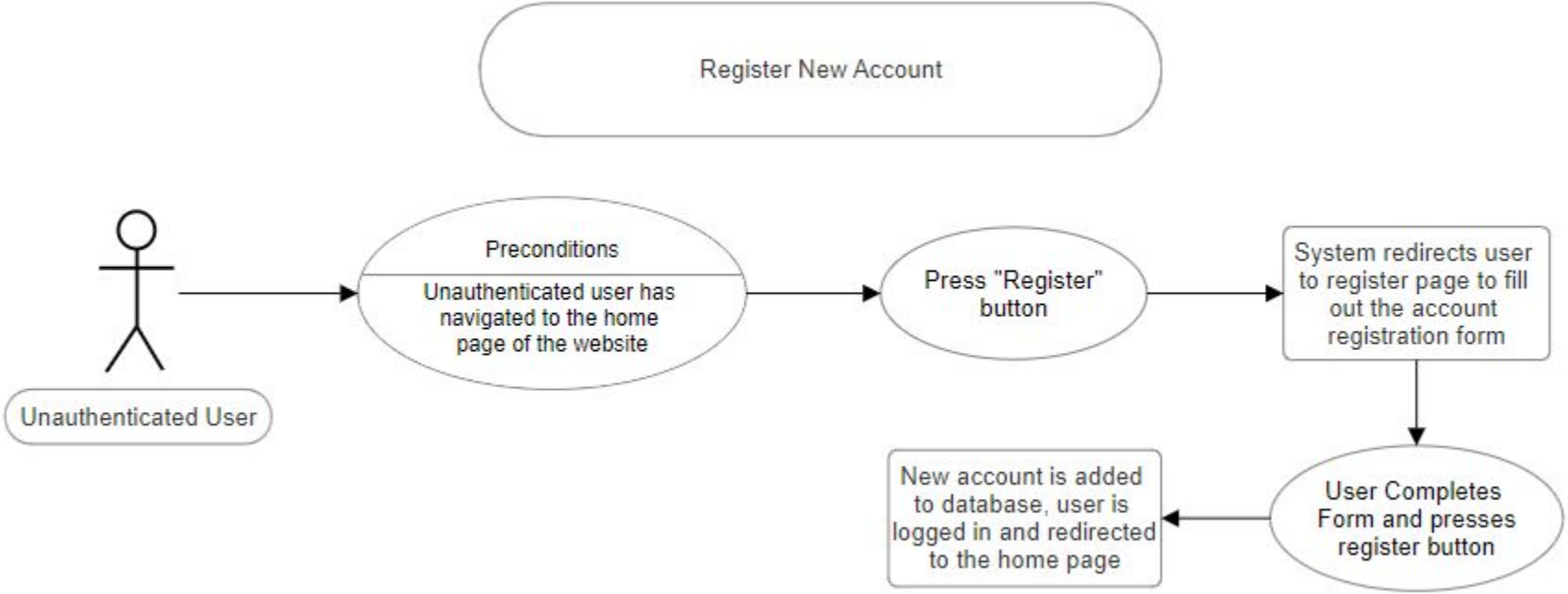


Authentication/Authorization

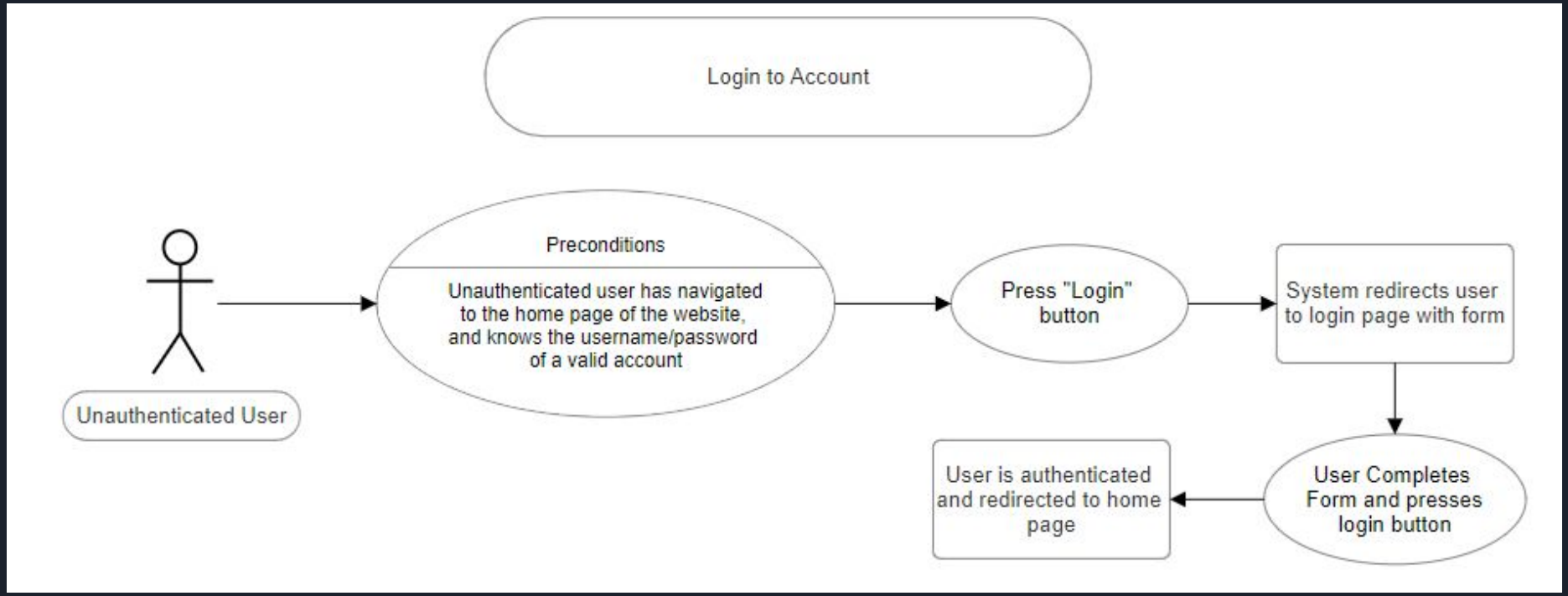
Account Structure



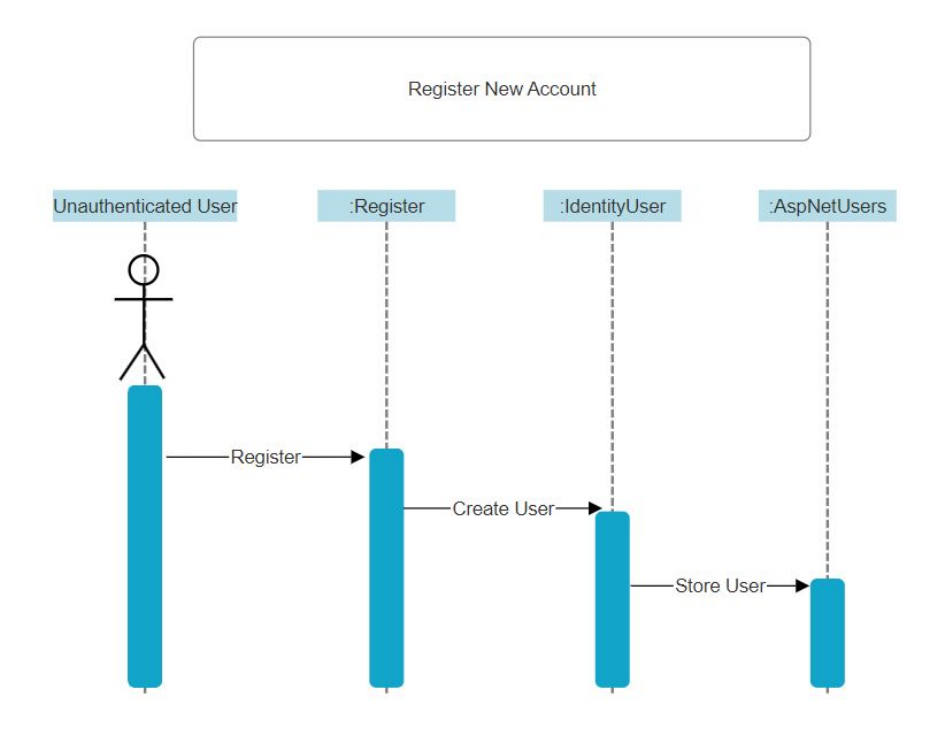
Use Case - Register New Account



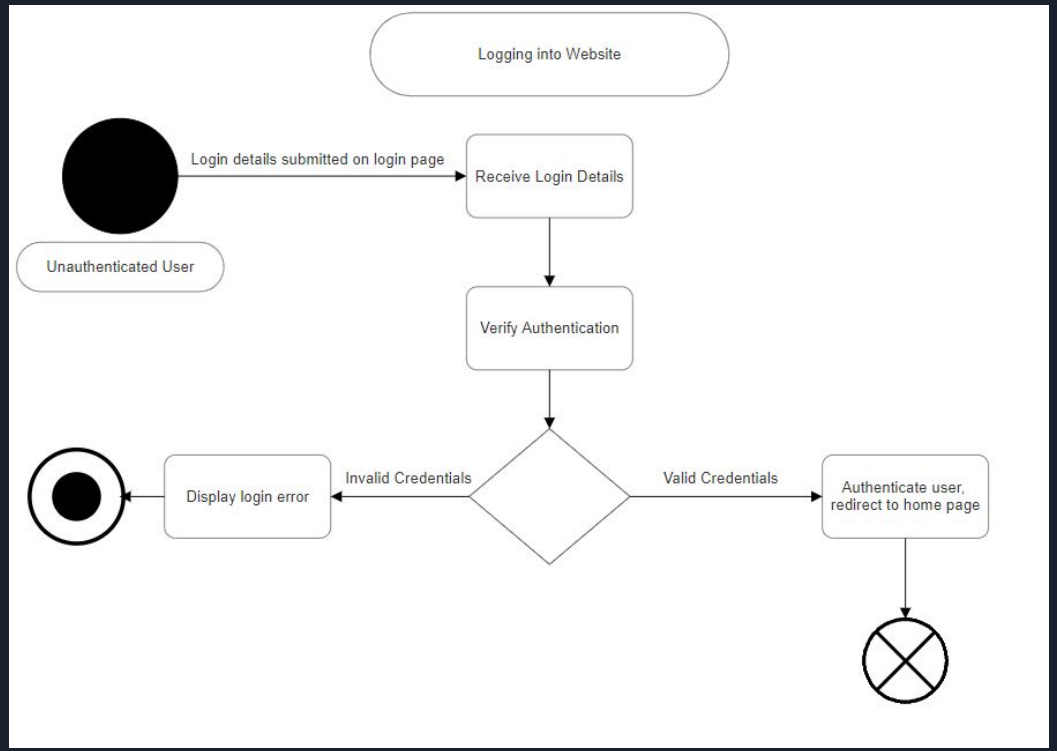
Use Case - Login to Account



Sequence - Register New Account



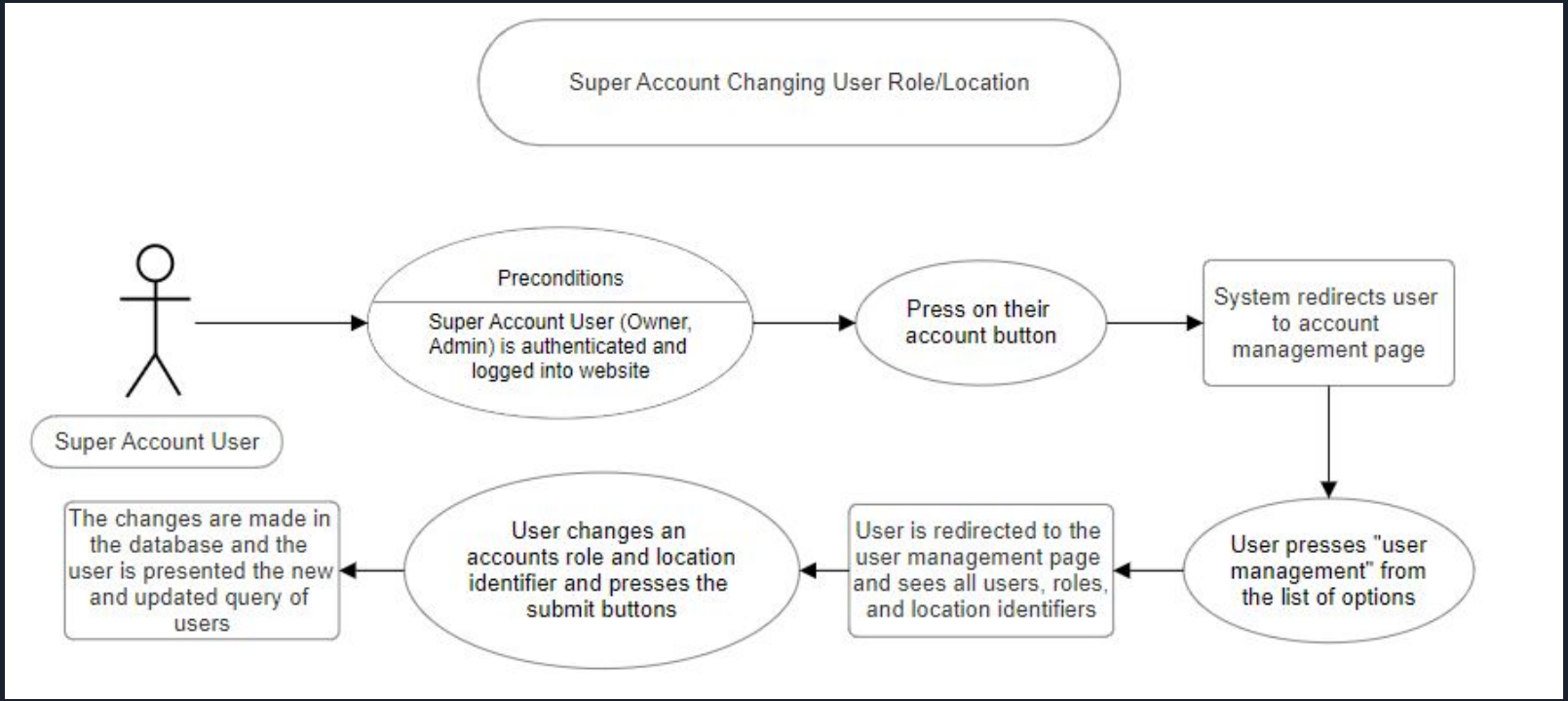
Activity - Login to Account



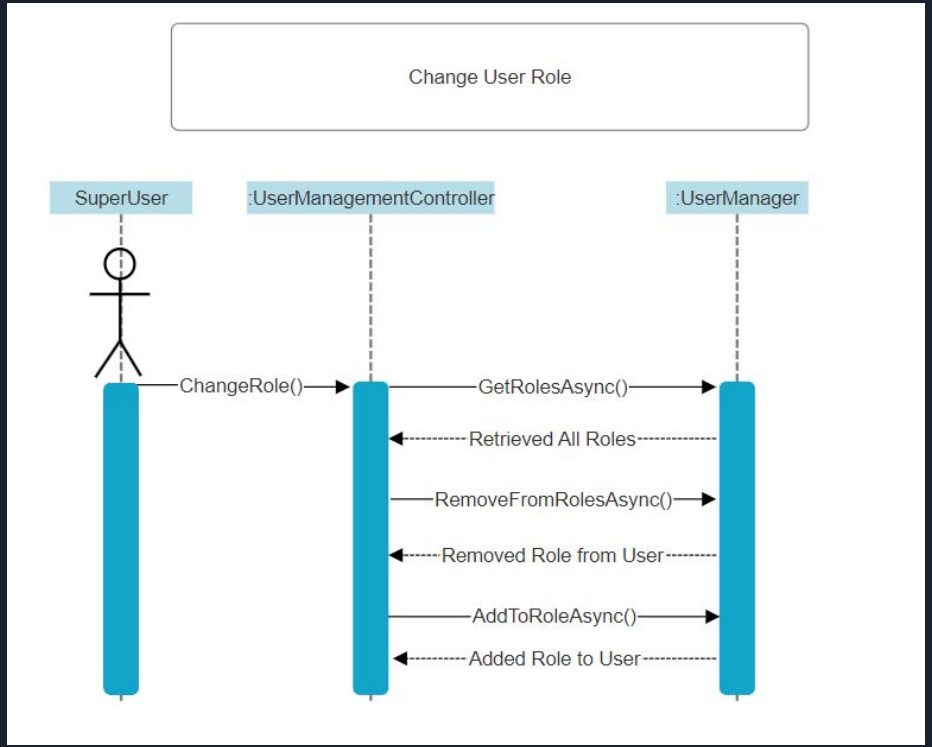
Authentication/Authorization

Demonstration 1 - Register/Login

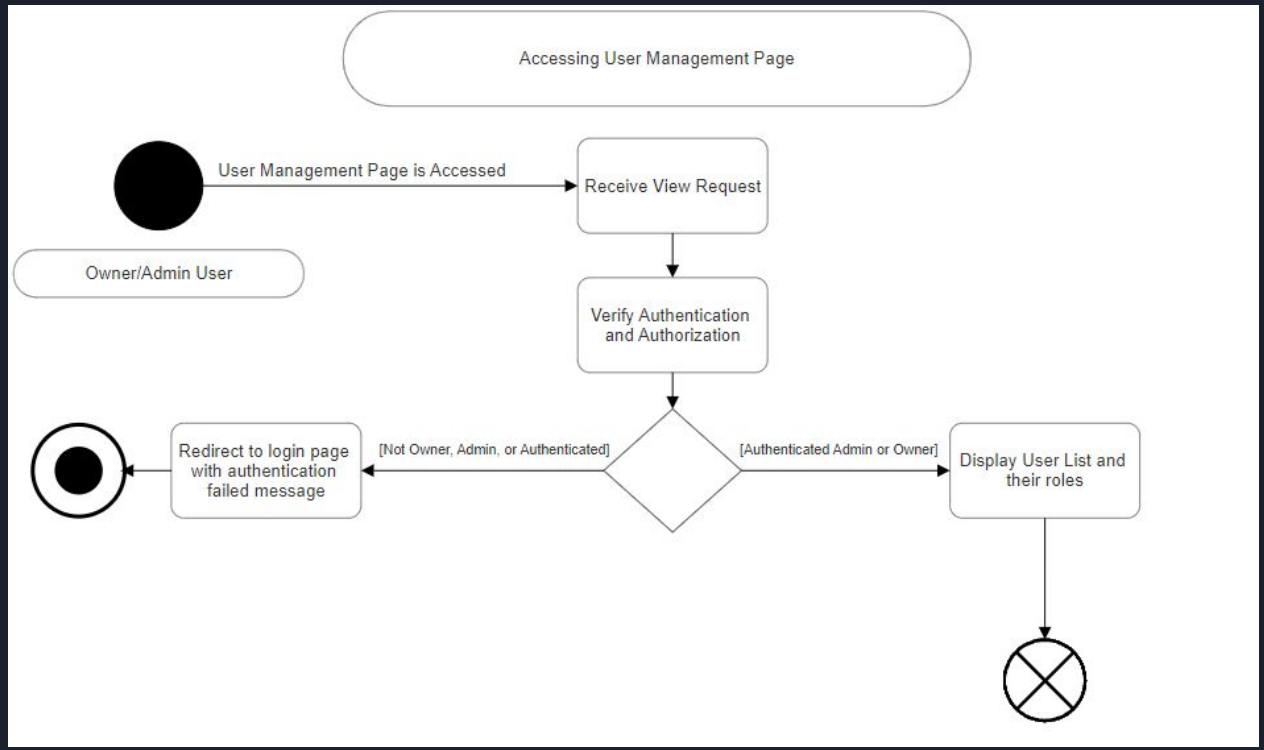
Use Case - Changing User Role/Location



Sequence - Changing User Role



Activity - User Management Page



Authentication/Authorization

Demonstration 2 - Change User Role/Location Identifier

Location Identifiers

address	balance	city	country	locationIdentifier	province	postalCode
NULL	0.00	NULL	NULL	2	NULL	NULL
143 Browning Trail	120.00	Barrie	Canada	3	Ontario	NULL
1 Man Street	0.00	Barrie	Canada	1	QC	L5F5F3

Users

	InventoryId	quantity	itemDeliveryDate	LocationId	itemExpirey
1	23	100	2023-11-20 14:28:00.0000000	1	2024-01-04 14:28:00.0000000

Inventory Items

	LocationId	locationCity	locationProvince	locationAddress	LocationName	DisplayName
1	1	Barrie	ON	29 McAvoy Dr.	Mikey's Place	Mikey's Place - Barrie ON 29 McAvoy Dr.
2	3	Hawkestone	Ontario	5 Booth Street	Burger Pit	Burger Pit - Hawkestone Ontario 5 Booth Street
3	7	Barrie	Ontario	80 Barrie View Dr.	McDonalds	McDonalds - Barrie Ontario 80 Barrie View Dr.
4	9	Bikini Bottom	Ocean	4 Water Drive	Krusty Krab	Krusty Krab - Bikini Bottom Ocean 4 Water Drive
5	10	Orillia	Ontario	500 University Ave	24 Hour Burgers @Lakehead	24 Hour Burgers @Lakehead - Orillia Ontario 500 ...

Locations

Example of Location Identifiers in Inventory

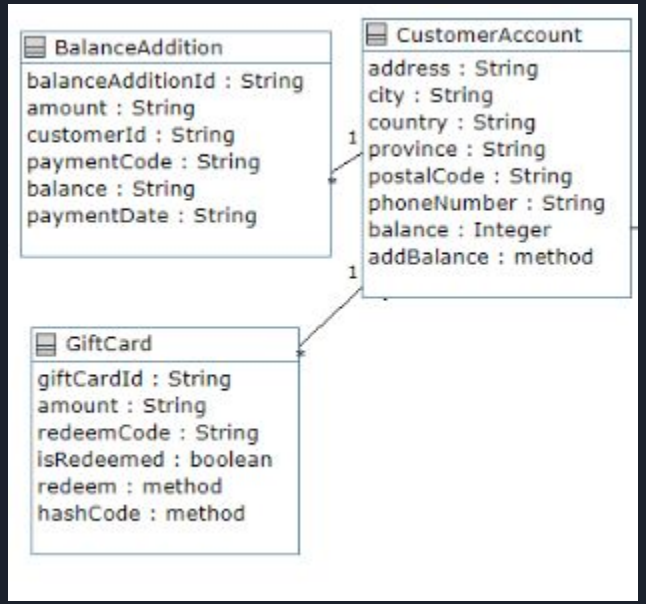
```
private void CheckAndSendTwilioMessages(Inventory inventory)
{
    if (!inventory.itemExpireCheck && inventory.itemExpirey.Date <= DateTime.Now.AddDays(3).Date)
    {
        if (!inventory.MessageSent)
        {
            var accountSid = "AC2e8546a4562326dc5114a3220c8fb7e3";
            var authToken = "63a35084de721329ed5e65a0ae743d6c";

            TwilioClient.Init(accountSid, authToken);


            var locationId = inventory.LocationId;
            var location = _context.Location.FirstOrDefault(l => l.LocationId == locationId);



            var managerUserRole = _context.UserRoles
                .FirstOrDefault(ur => ur.UserId == _context.Users
                                            .Where(u => u.locationIdentifier == location.LocationId)
                                            .Select(u => u.Id)
                                            .FirstOrDefault() &&
                                    ur.RoleId == "2f3c1a4b-e860-4f72-9f35-026fdaff2dc8");

            if (managerUserRole != null)
            {
                var managerUser = _context.Users.FirstOrDefault(u => u.Id == managerUserRole.UserId);

                if (managerUser != null && !string.IsNullOrEmpty(managerUser.PhoneNumber))
                {
                    var to = new PhoneNumber(managerUser.PhoneNumber);
```

What is the location of the item?

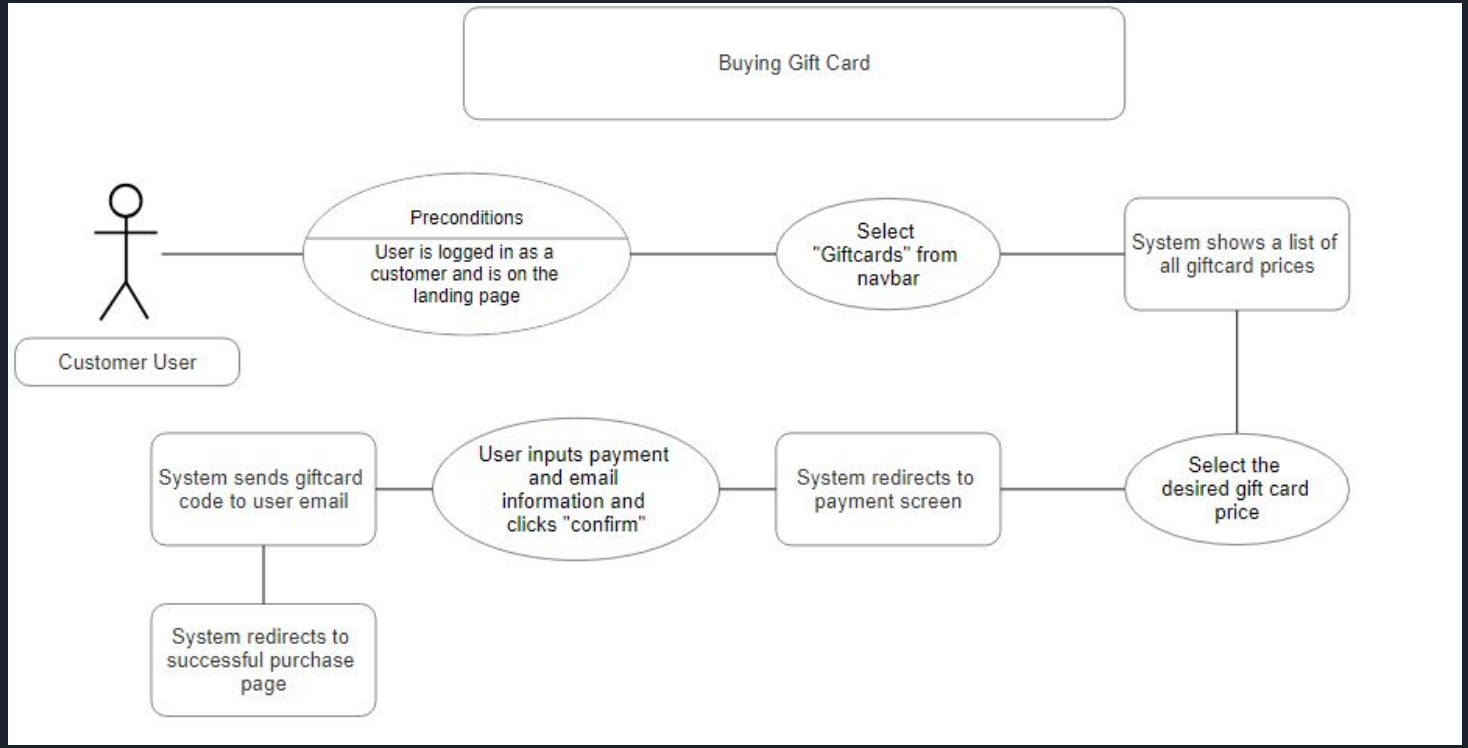
What manager account shares this location?

Accounts - Giftcards/Balance

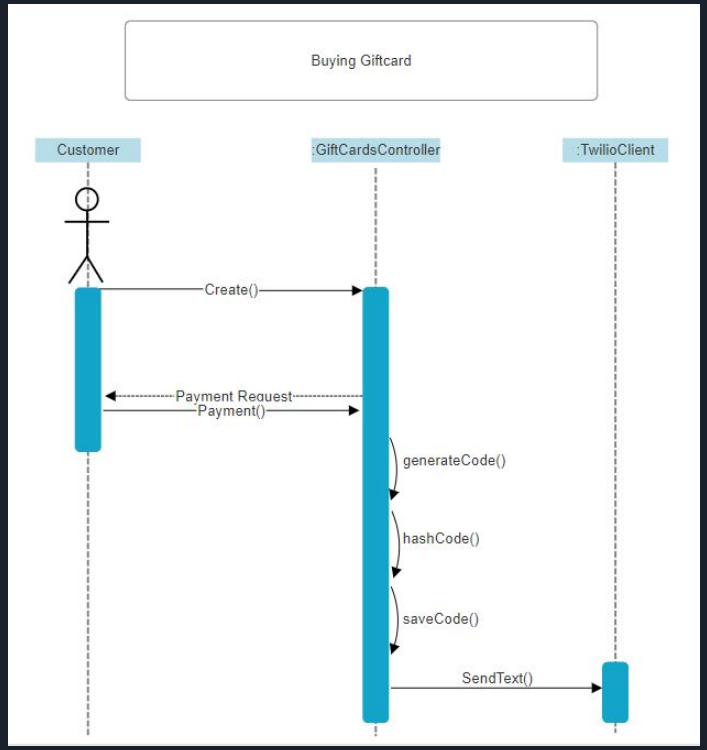
Gift Card/Balance Structure



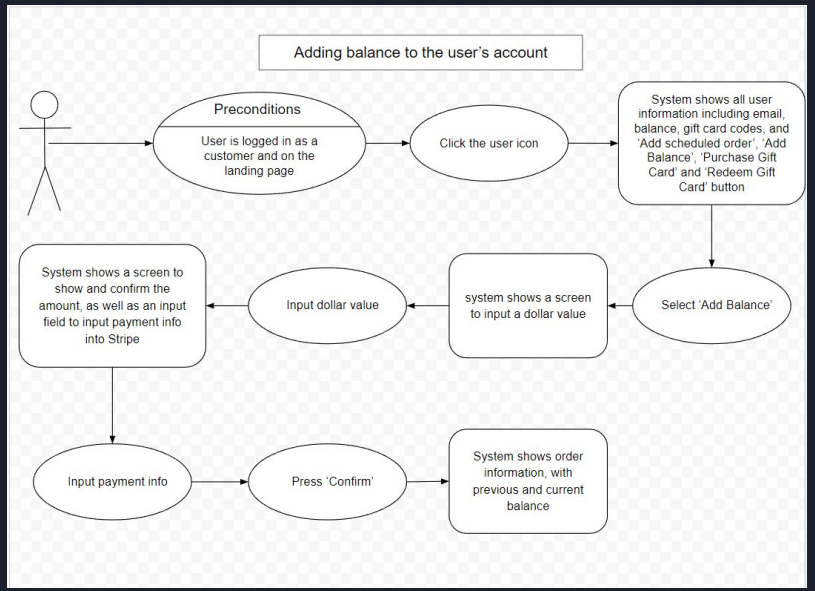
Use Case - Buying Gift Card

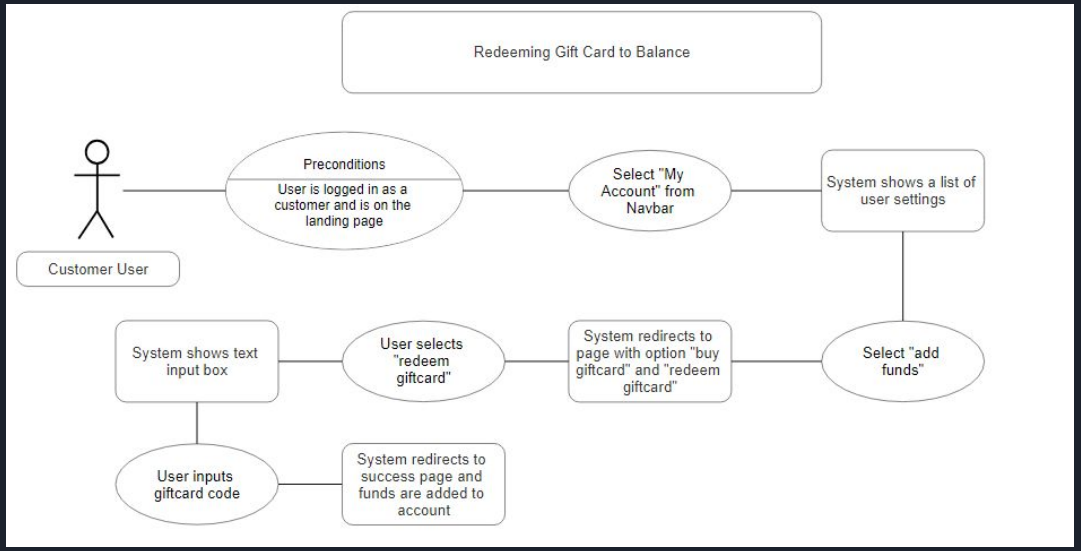


Sequence - Buying Gift Card



Adding Balance to User's Account



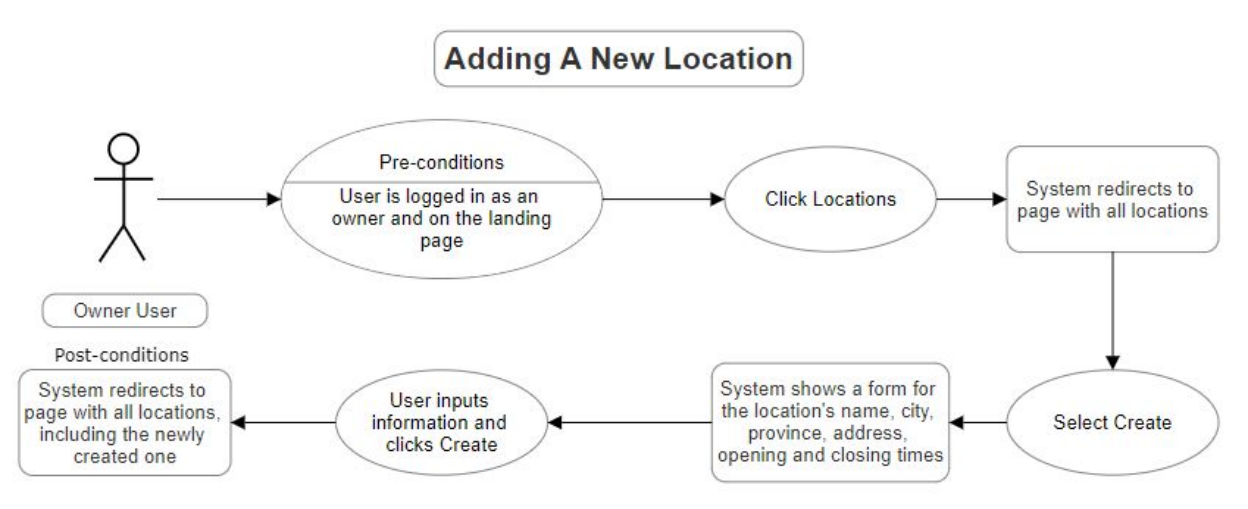


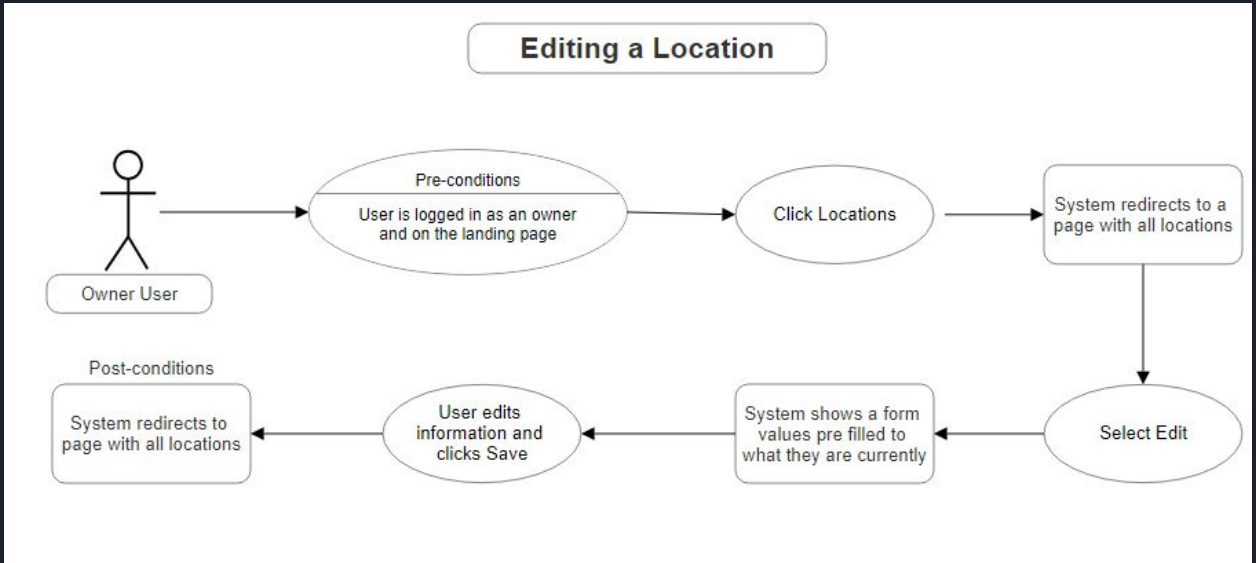
Authentication/Authorization

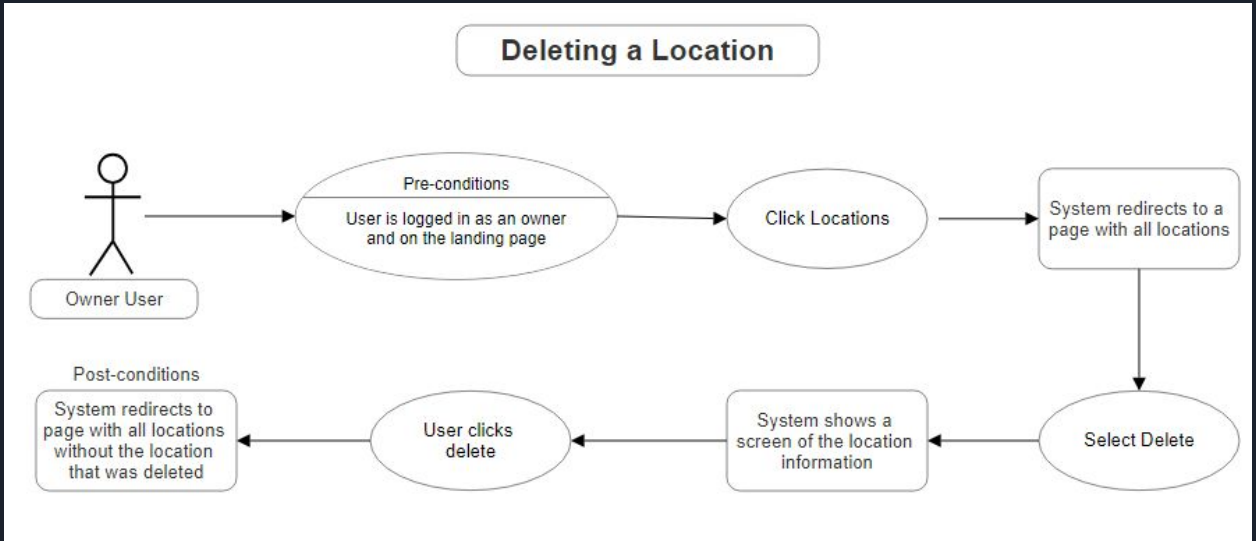
Demonstration 3 - Buying and Redeeming Gift Cards

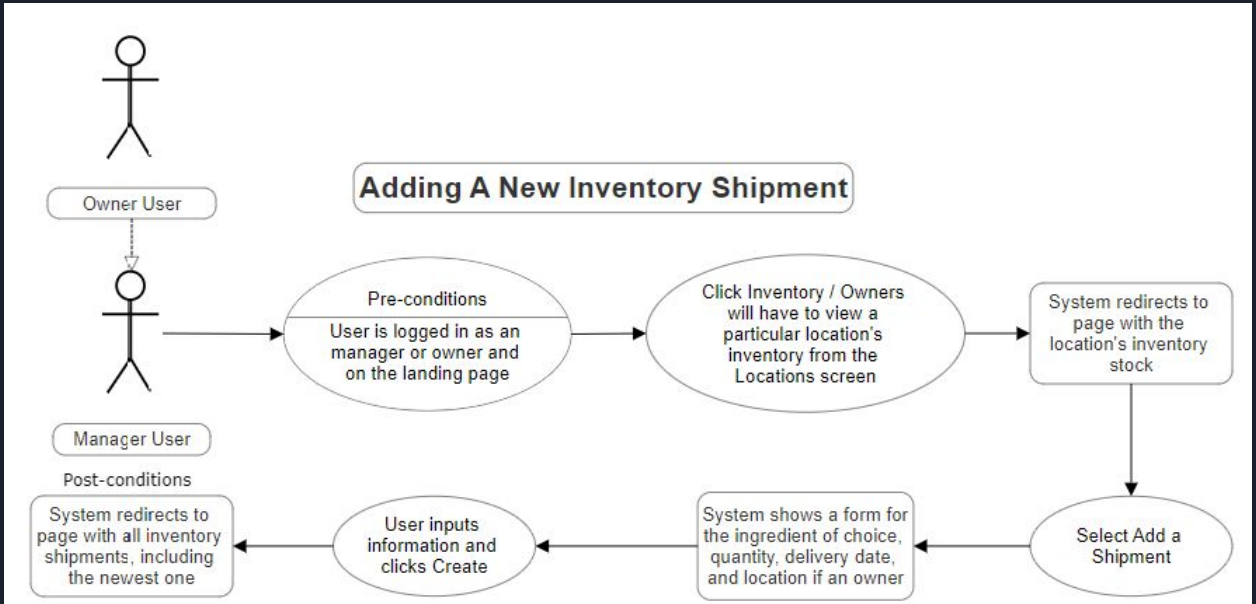
Location and Inventory

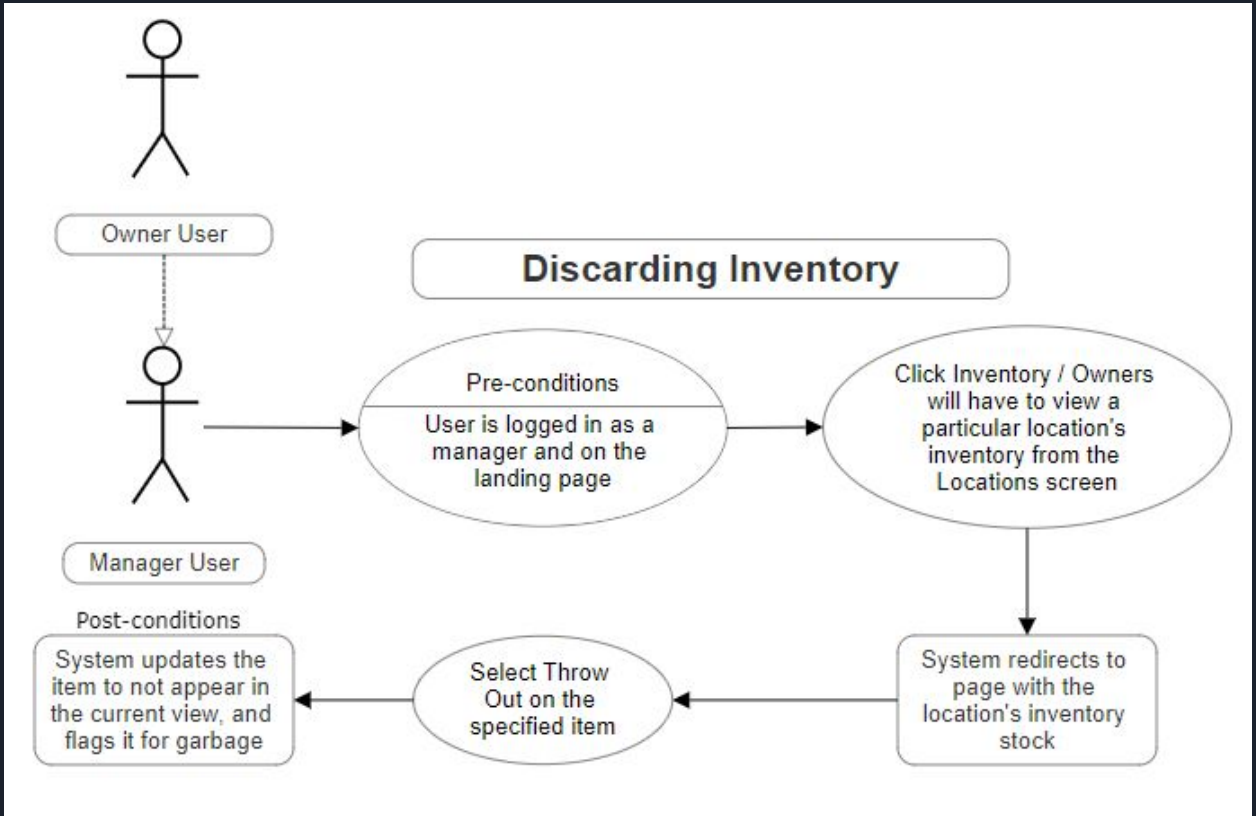
Use Case Diagrams

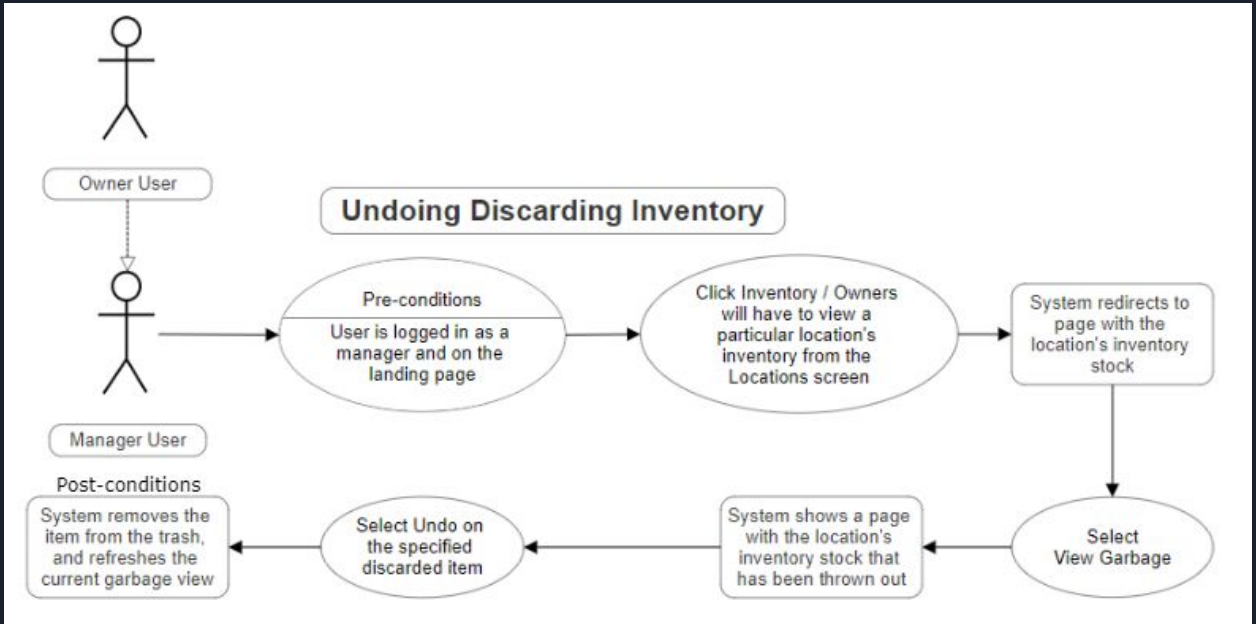

Adding A New Location
Pre-conditions
User is logged in as an owner and on the landing page
Click Locations
System redirects to page with all locations
Owner User
Post-conditions
System redirects to page with all locations, including the newly created one
User inputs information and clicks Create
System shows a form for the location's name, city, province, address, opening and closing times
Select Create

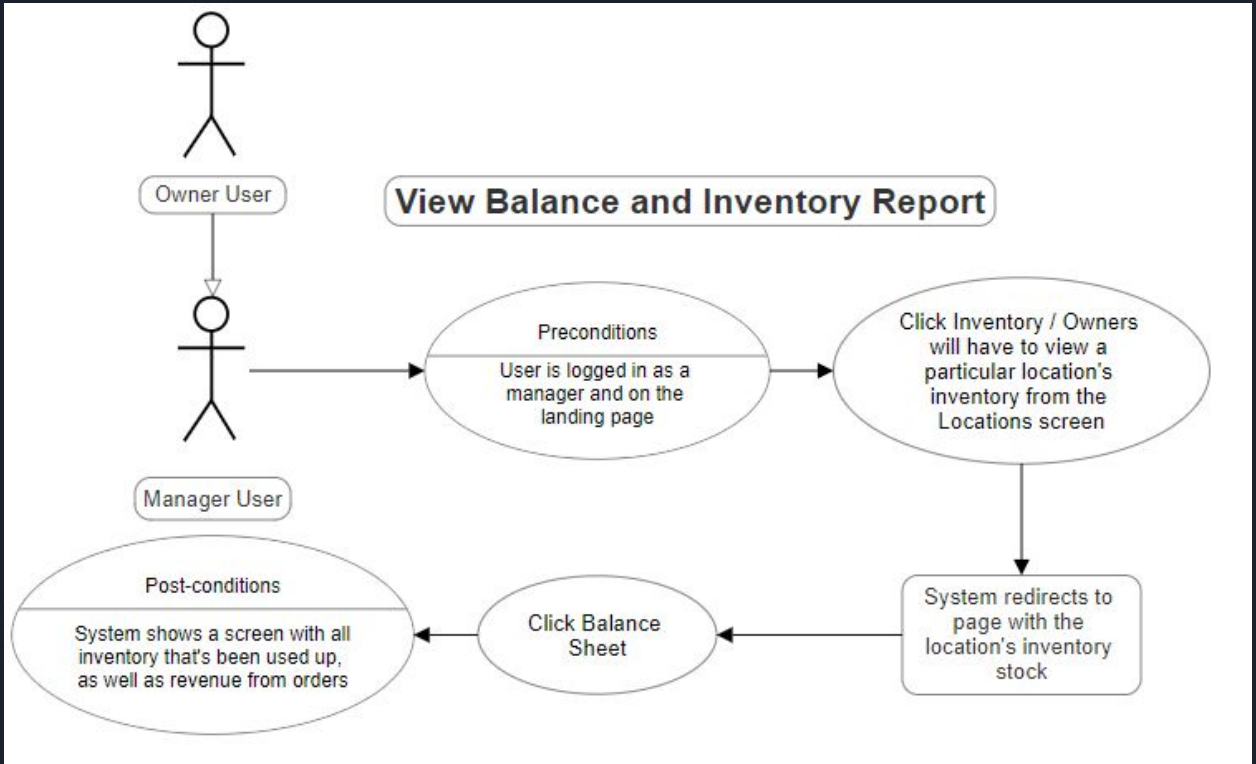

Editing a Location
Owner User
Pre-conditions
User is logged in as an owner and on the landing page
Click Locations
System redirects to a page with all locations
Select Edit
System shows a form values pre filled to what they are currently
User edits information and clicks Save
Post-conditions
System redirects to page with all locations


Deleting a Location
Owner User
Pre-conditions
User is logged in as an owner and on the landing page
Click Locations
System redirects to a page with all locations
Select Delete
System shows a screen of the location information
User clicks delete
Post-conditions
System redirects to page with all locations without the location that was deleted

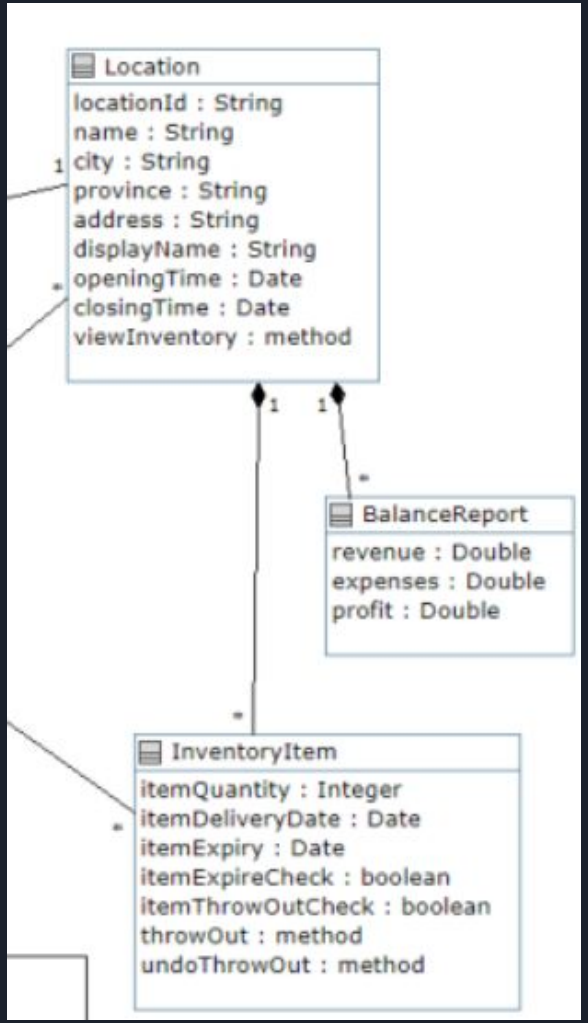

Adding A New Inventory Shipment
Owner User
Manager User
Pre-conditions
User is logged in as an manager or owner and on the landing page
Click Inventory / Owners will have to view a particular location's inventory from the Locations screen
System redirects to page with the location's inventory stock
Select Add a Shipment
System shows a form for the ingredient of choice, quantity, delivery date, and location if an owner
User inputs information and clicks Create
Post-conditions
System redirects to page with all inventory shipments, including the newest one


Owner User
Discarding Inventory
Pre-conditions
User is logged in as a manager and on the landing page
Click Inventory / Owners will have to view a particular location's inventory from the Locations screen
Manager User
Post-conditions
System updates the item to not appear in the current view, and flags it for garbage
Select Throw Out on the specified item
System redirects to page with the location's inventory stock


Owner User
Undoing Discarding Inventory
Pre-conditions
User is logged in as a manager and on the landing page
Click Inventory / Owners will have to view a particular location's inventory from the Locations screen
System redirects to page with the location's inventory stock
Manager User
Post-conditions
System removes the item from the trash, and refreshes the current garbage view
Select Undo on the specified discarded item
System shows a page with the location's inventory stock that has been thrown out
Select View Garbage

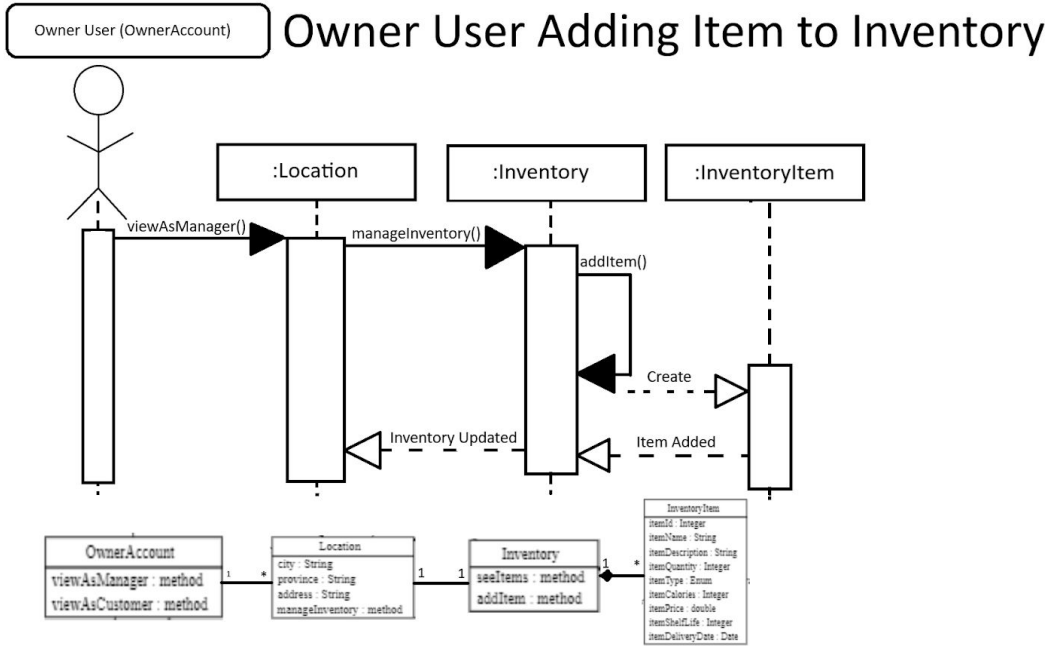

Owner User
View Balance and Inventory Report
Preconditions
User is logged in as a manager and on the landing page
Click Inventory / Owners will have to view a particular location's inventory from the Locations screen
Manager User
Post-conditions
System shows a screen with all inventory that's been used up, as well as revenue from orders
Click Balance Sheet
System redirects to page with the location's inventory stock

Classes


Location
locationId : String
name : String
city : String
province : String
address : String
displayName : String
openingTime : Date
closingTime : Date
viewInventory : method
1
*
1
1
*
BalanceReport
revenue : Double
expenses : Double
profit : Double
*
*
InventoryItem
itemQuantity : Integer
itemDeliveryDate : Date
itemExpiry : Date
itemExpireCheck : boolean
itemThrowOutCheck : boolean
throwOut : method
undoThrowOut : method

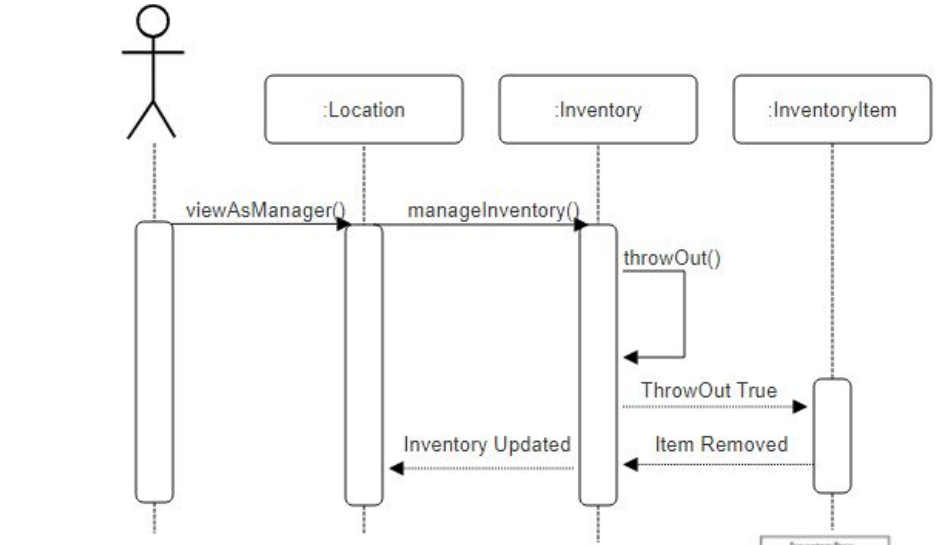
Sequence Diagrams

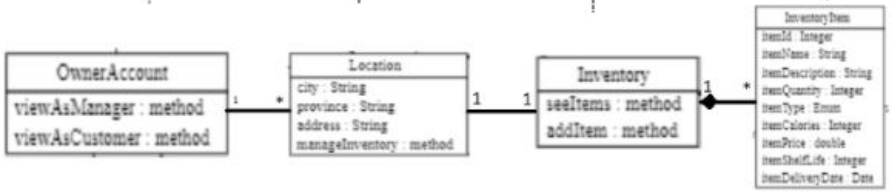
Owner User Adding Item to Inventory



Owner Account

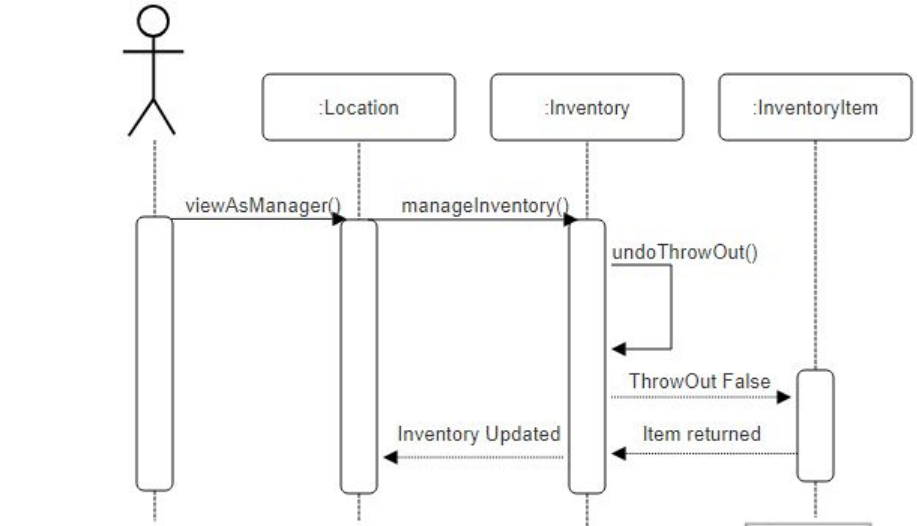
Owner User Discarding an Inventory item

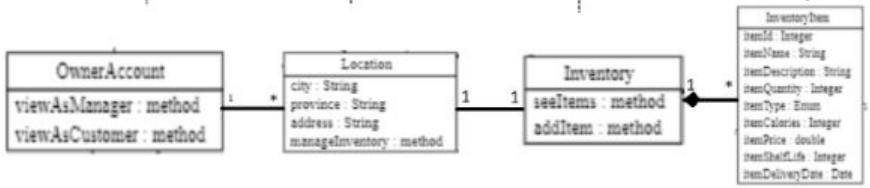




Owner Account

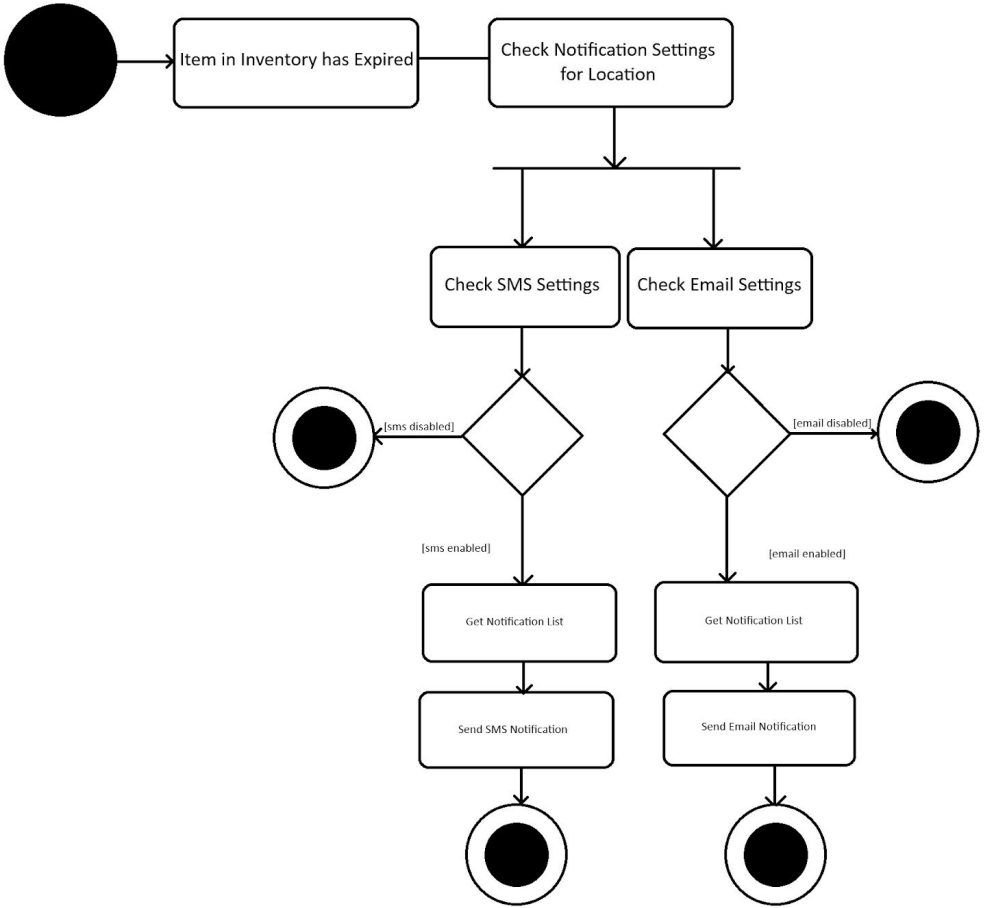
Owner User Returning a Discarded Inventory item



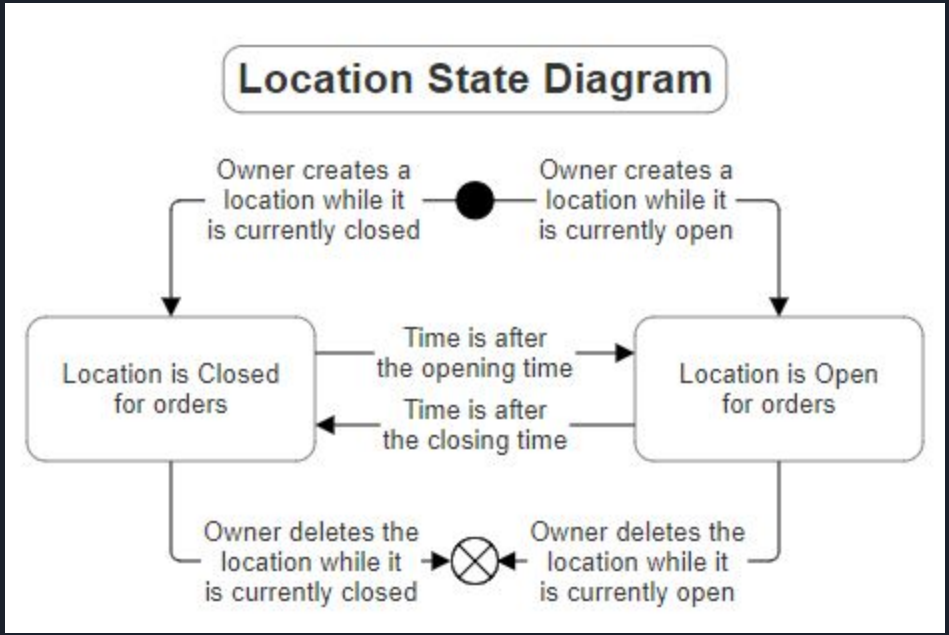


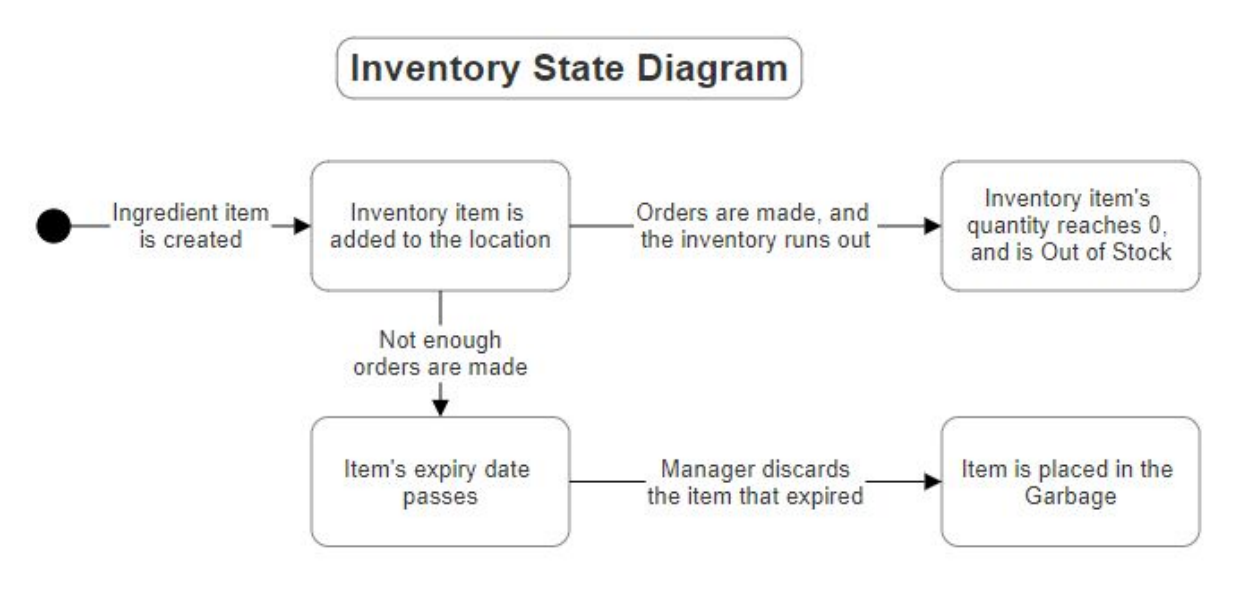
Activity Diagrams

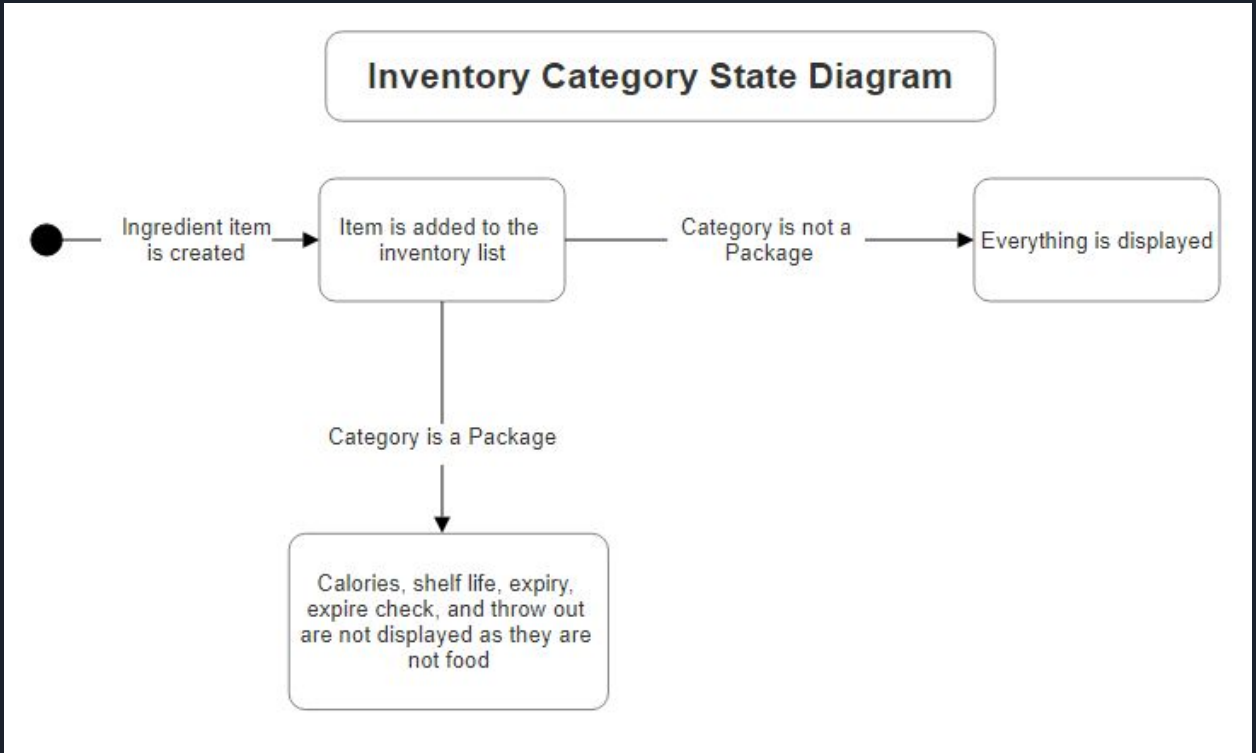
Item Expiration Notification



State Diagrams


Location State Diagram
Owner creates a location while it is currently closed
Owner creates a location while it is currently open
Location is Closed for orders
Time is after the opening time
Time is after the closing time
Location is Open for orders
Owner deletes the location while it is currently closed
Owner deletes the location while it is currently open


Inventory State Diagram
Ingredient item is created
Inventory item is added to the location
Orders are made, and the inventory runs out
Inventory item's quantity reaches 0, and is Out of Stock
Not enough orders are made
Item's expiry date passes
Manager discards the item that expired
Item is placed in the Garbage


Inventory Category State Diagram
Ingredient item is created
Item is added to the inventory list
Category is not a Package
Everything is displayed
Category is a Package
Calories, shelf life, expiry, expire check, and throw out are not displayed as they are not food

Implementation

Database

Models → Location.cs

Models → Inventory.cs

Data → ApplicationDbContext.cs

	LocationId	locationCity	locationProvince	locationAddress	LocationName	DisplayName	ClosingTime	OpeningTime
1	1	Barrie	ON	29 McAvoy Dr.	Mikey's Place	Mikey's Place - Barrie ON 29 McAvoy Dr.	23:00:00.0000000	09:00:00.0000000
2	3	Hawkestone	Ontario	5 Booth Street	Burger Pit	Burger Pit - Hawkestone Ontario 5 Booth Street	17:00:00.0000000	06:00:00.0000000
3	7	Barrie	Ontario	80 Barrie View Dr.	McDonalds	McDonalds - Barrie Ontario 80 Barrie View Dr.	16:07:00.0000000	06:00:00.0000000
4	9	Bikini Bottom	Ocean	4 Water Drive	Krusty Krab	Krusty Krab - Bikini Bottom Ocean 4 Water Drive	17:00:00.0000000	09:00:00.0000000

	InventoryId	quantity	itemDeliveryDate	LocationId	itemExpirey	itemExpireCheck	itemThrowOutCheck	Category	calories	itemCost	itemDescription	itemName	itemShelfLife	Outline	MessageSent
1	23	100	2023-11-20 14:28:00.0000000	1	2024-01-04 14:28:00.0000000	1	0	1	45	0.75	red and juicy	Tomato	14	1	0
2	24	0	2023-11-20 16:30:15.5838918	1	0001-01-01 00:00:00.0000000	0	0	2	10	0.50	Heinz ketchup	Ketchup	7	7	0
3	25	0	2023-11-20 16:30:15.6075940	3	0001-01-01 00:00:00.0000000	0	0	2	10	0.50	Heinz ketchup	Ketchup	7	7	0
4	26	0	2023-11-21 11:54:21.9073042	1	0001-01-01 00:00:00.0000000	0	0	6	0	0.05	Wraps the burger	Burger Wrap	0	8	0
5	27	0	2023-11-21 11:54:21.9111571	3	0001-01-01 00:00:00.0000000	0	0	6	0	0.05	Wraps the burger	Burger Wrap	0	8	0
6	28	1000	2023-11-21 11:54:00.0000000	1	0001-01-01 00:00:00.0000000	0	0	6	0	0.05	Wraps the burger	Burger Wrap	0	8	0

Location List

Views → Locations → index.cshtml

Locations

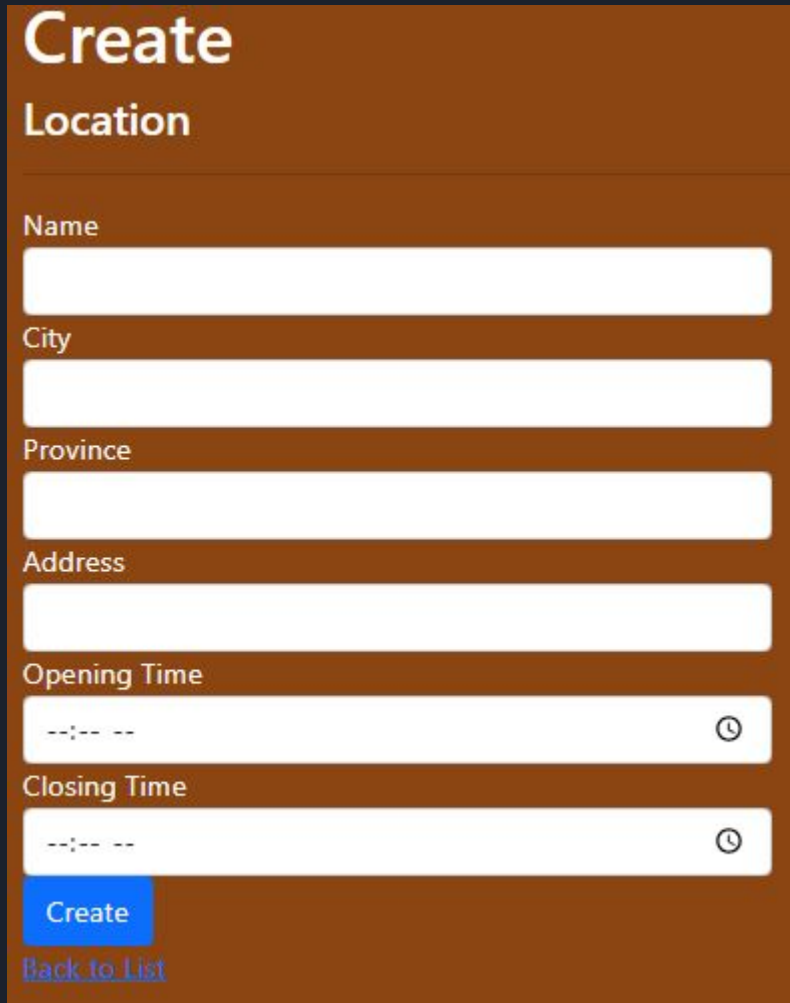
Create New

Name	Store Location	Inventory	
Mikey's Place	Barrie ON 29 McAvoy Dr.	View	Edit | Details | Delete
Burger Pit	Hawkestone Ontario 5 Booth Street	View	Edit | Details | Delete
McDonalds	Barrie Ontario 80 Barrie View Dr.	View	Edit | Details | Delete
Krusty Krab	Bikini Bottom Ocean 4 Water Drive	View	Edit | Details | Delete
24 Hour Burgers @Lakehead	Orillia Ontario 500 University Ave	View	Edit | Details | Delete

Create New Location

Views → Locations → Create.cshtml

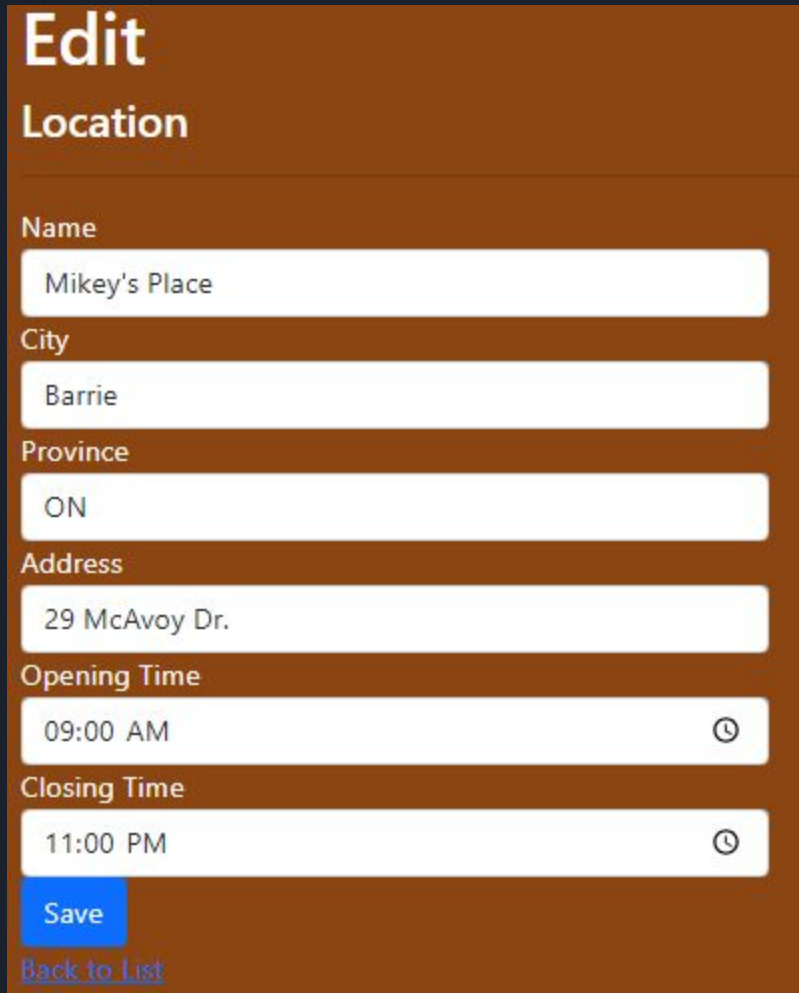
Controllers → LocationsController.cs



Edit Location

Views → Locations → Edit.cshtml

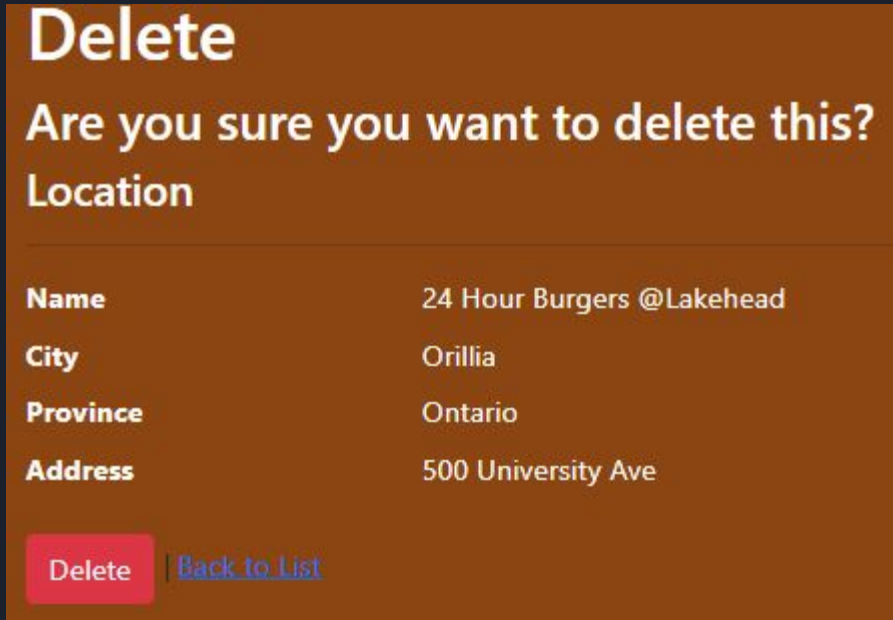
Controllers → LocationsController.cs



Delete Inventory

Views → Locations → Delete.cshtml

Controllers → LocationsController.cs



Inventory List

Views → Inventories→ index.cshtml

Inventory

Add a Shipment

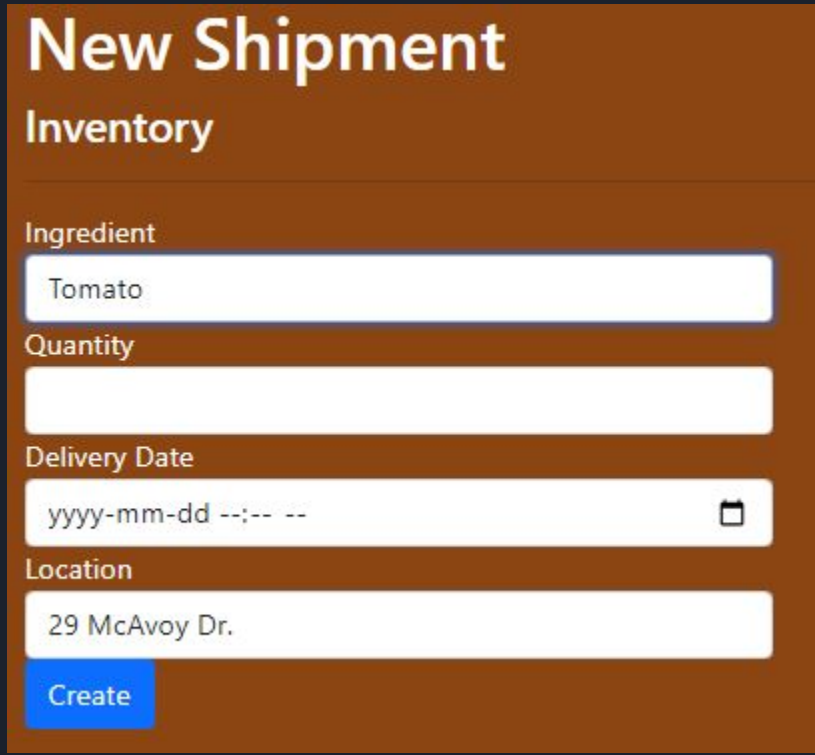
Category	Name	Quantity	Calories	Shelf Life(days)	Delivery Date	Expiry	Expire Check	
Condiment	Ketchup	0	10	7	2023-11-20	0001-01-01	☐	Details | Throw Out
Package	Burger Wrap	0			2023-11-21			Details
Package	Burger Wrap	1000			2023-11-21			Details
Package	Burger Wrap	5000			2023-11-21			Details
Topping	Tomato	1	45	14	2023-10-18	2023-11-01	☐	Details | Throw Out
Topping	Tomato	1	45	14	2023-11-17	2023-12-01	☐	Details | Throw Out
Bread	Bread	100	5	5	2023-11-30	2023-12-05	☑	Details | Throw Out
Meat	Meat	1	150	7	2023-11-29	2023-12-06	☑	Details | Throw Out
Topping	Tomato	3	45	14	2023-12-04	2023-12-18	☑	Details | Throw Out
Topping	Tomato	100	45	14	2023-11-20	2024-01-04	☑	Details | Throw Out

Balance Sheet View Garbage

Add a Shipment

Views → Inventories → Create.cshtml

Controllers → InventoriesController.cs



Garbage

Views → Inventories → ThrownOutItems.cshtml

Controllers → InventoriesController.cs

Balance Sheet

Views → Inventories → BalanceSheet.cshtml

Controllers → InventoriesController.cs

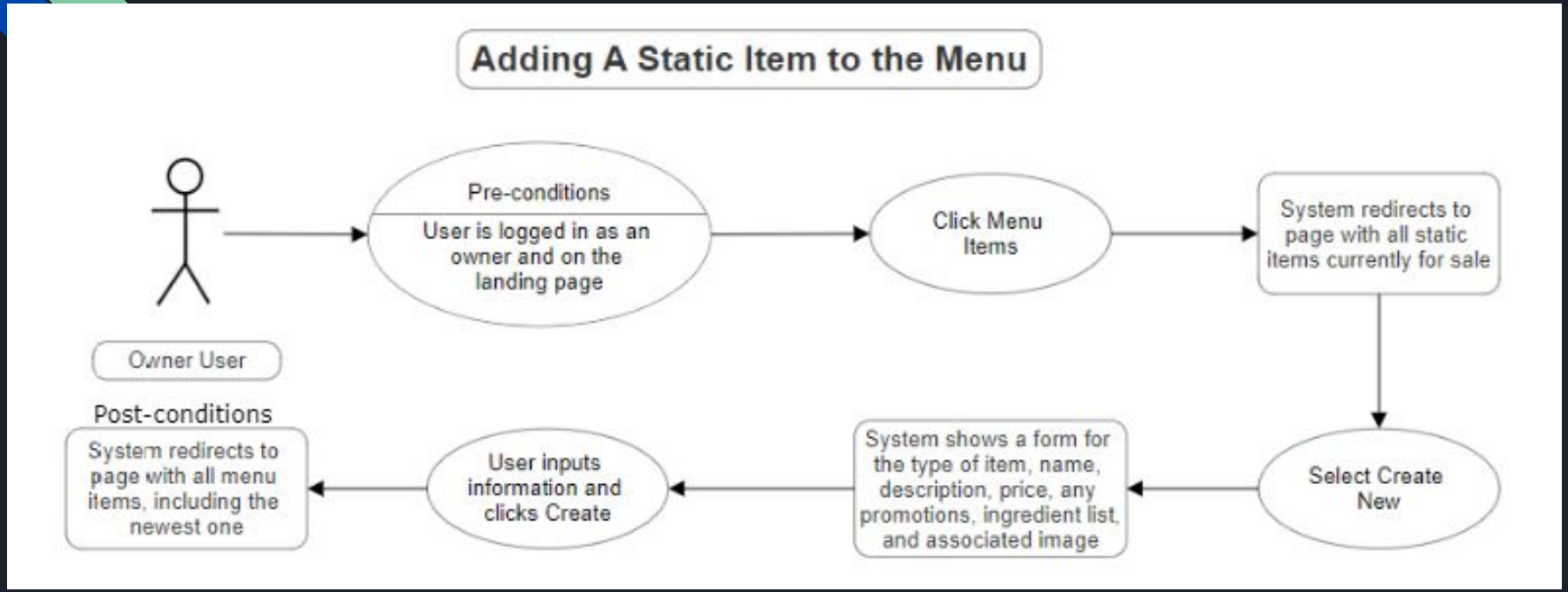
Balance Sheet

Equities

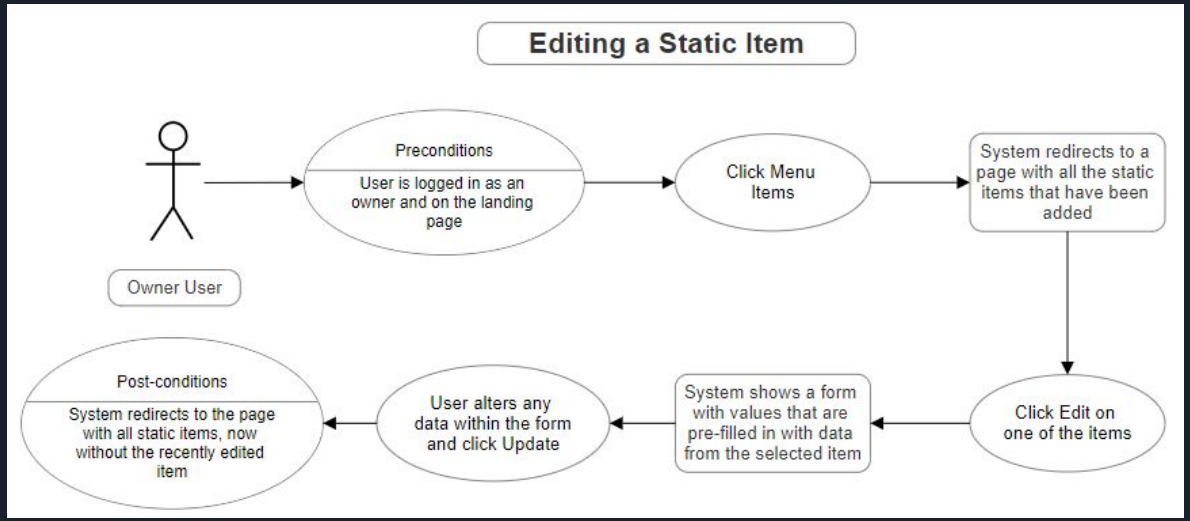
Order Date	Order Total
2023-11-20 2:35:33 PM	1.99
2023-11-22 3:29:06 PM	7.98
2023-11-24 9:29:46 PM	7.98
2023-11-28 2:27:36 PM	6.99
2023-11-28 4:35:15 PM	6.99
2023-11-28 4:41:03 PM	1.99
2023-11-28 4:47:28 PM	6.99
Total Item Equities: $40.91	

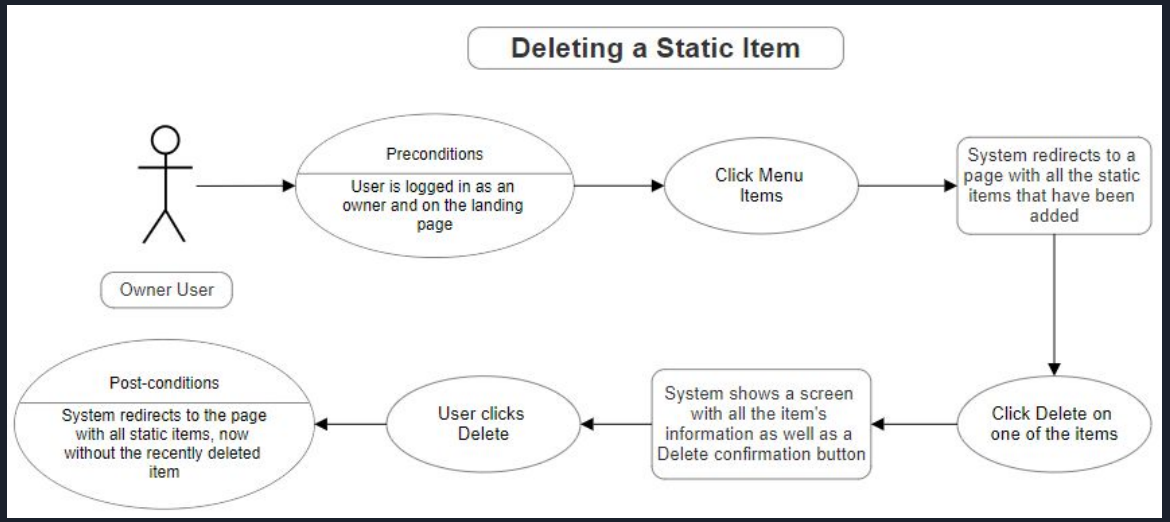
Order Items
Static Items and Custom Items

Use Cases

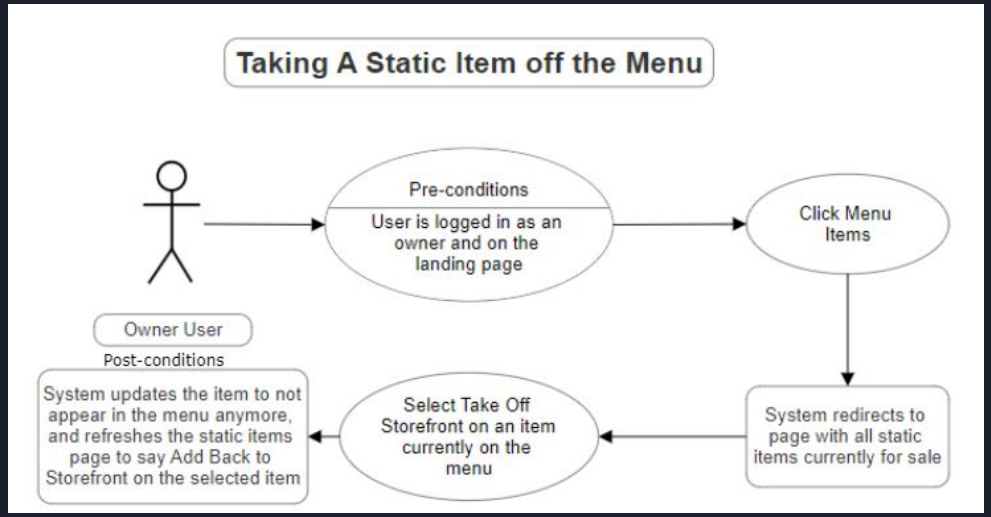

Adding A Static Item to the Menu
Pre-conditions
User is logged in as an owner and on the landing page
Click Menu Items
System redirects to page with all static items currently for sale
Owner User
Post-conditions
System redirects to page with all menu items, including the newest one
User inputs information and clicks Create
System shows a form for the type of item, name, description, price, any promotions, ingredient list, and associated image
Select Create New

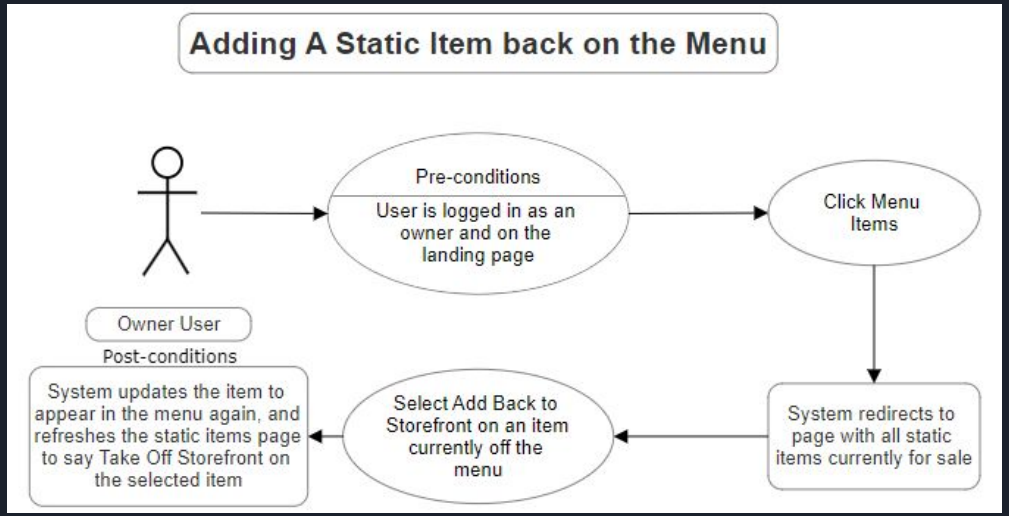
Use Cases


Editing a Static Item
Owner User
Preconditions
User is logged in as an owner and on the landing page
Click Menu Items
System redirects to a page with all the static items that have been added
Click Edit on one of the items
System shows a form with values that are pre-filled in with data from the selected item
User alters any data within the form and click Update
Post-conditions
System redirects to the page with all static items, now without the recently edited item

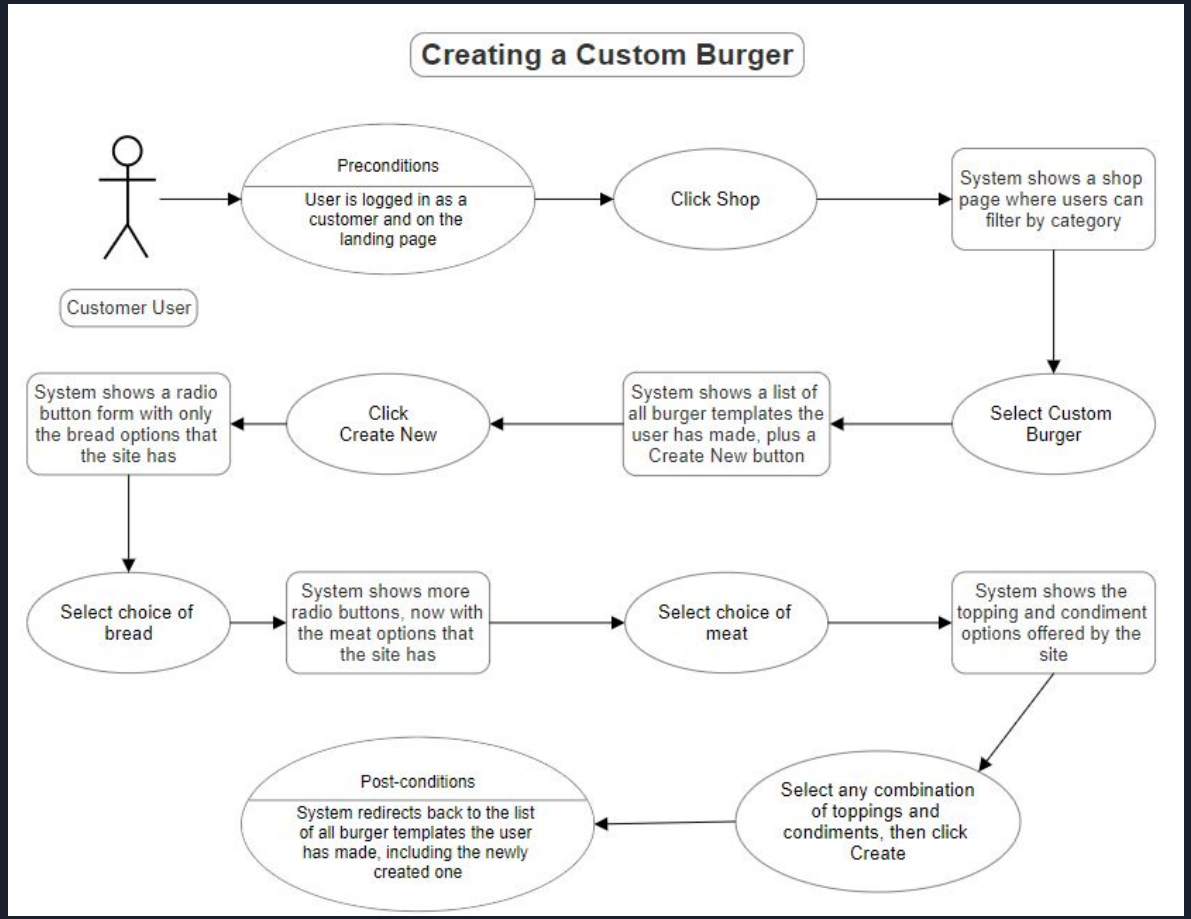

Deleting a Static Item
Owner User
Preconditions
User is logged in as an owner and on the landing page
Click Menu Items
System redirects to a page with all the static items that have been added
Click Delete on one of the items
System shows a screen with all the item's information as well as a Delete confirmation button
User clicks Delete
Post-conditions
System redirects to the page with all static items, now without the recently deleted item

Use Cases

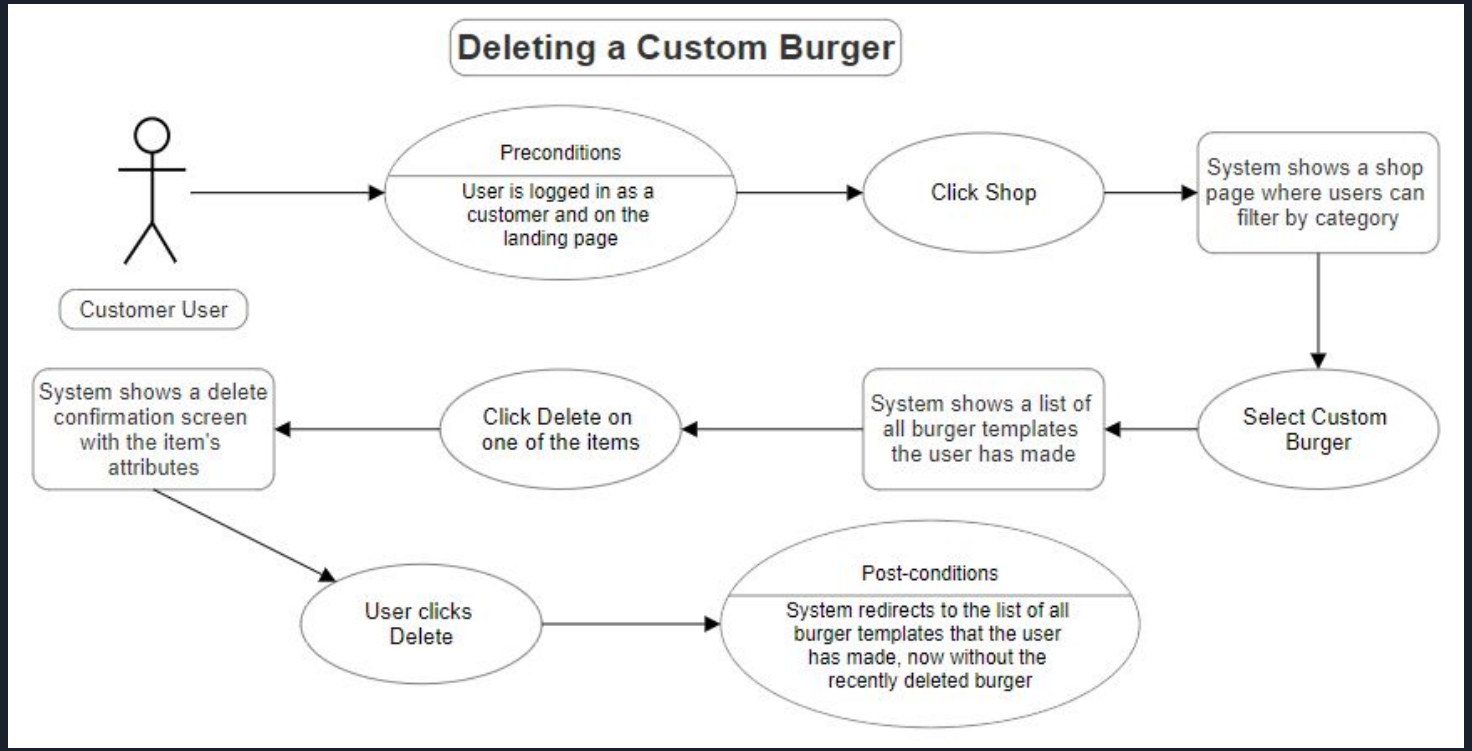

Taking A Static Item off the Menu
Pre-conditions
User is logged in as an owner and on the landing page
Click Menu Items
System redirects to page with all static items currently for sale
Select Take Off Storefront on an item currently on the menu
System updates the item to not appear in the menu anymore, and refreshes the static items page to say Add Back to Storefront on the selected item
Owner User
Post-conditions


Adding A Static Item back on the Menu
Pre-conditions
User is logged in as an owner and on the landing page
Click Menu Items
System redirects to page with all static items currently for sale
Select Add Back to Storefront on an item currently off the menu
System updates the item to appear in the menu again, and refreshes the static items page to say Take Off Storefront on the selected item
Owner User
Post-conditions

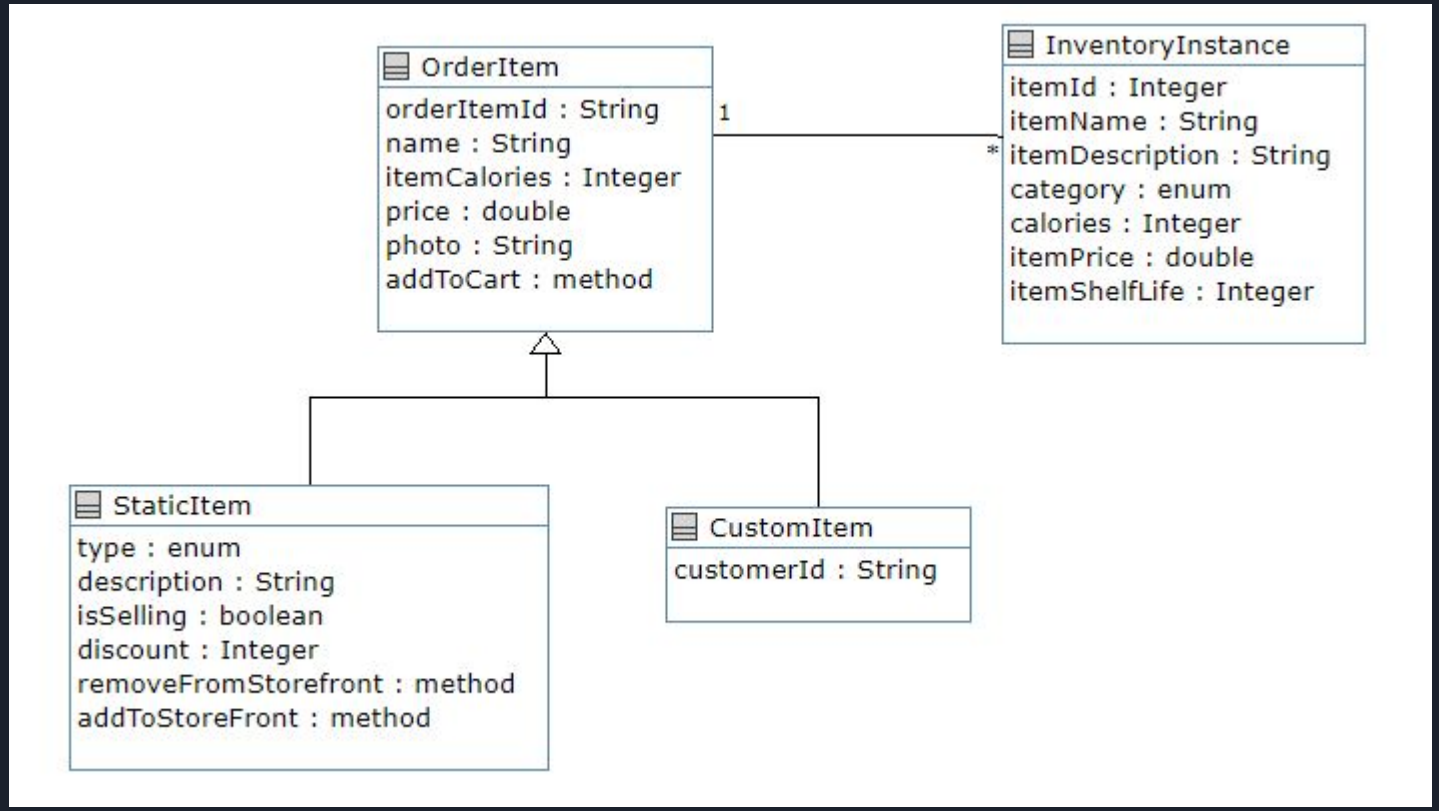
Use Cases


Creating a Custom Burger
Customer User
Preconditions
User is logged in as a customer and on the landing page
Click Shop
System shows a shop page where users can filter by category
Select Custom Burger
System shows a list of all burger templates the user has made, plus a Create New button
Click Create New
System shows a radio button form with only the bread options that the site has
Select choice of bread
System shows more radio buttons, now with the meat options that the site has
Select choice of meat
System shows the topping and condiment options offered by the site
Select any combination of toppings and condiments, then click Create
Post-conditions
System redirects back to the list of all burger templates the user has made, including the newly created one

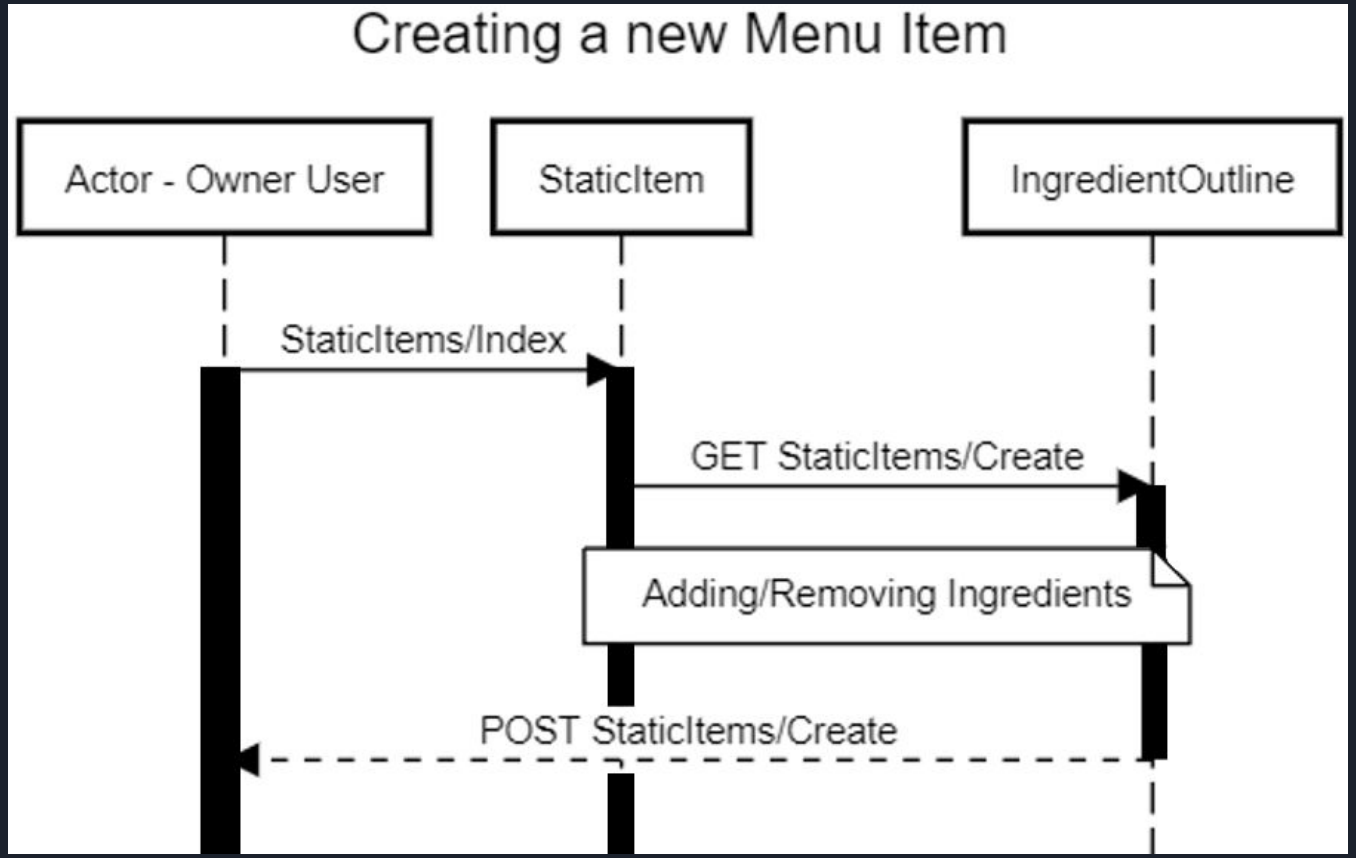
Use Cases


Deleting a Custom Burger
Customer User
Preconditions
User is logged in as a customer and on the landing page
Click Shop
System shows a shop page where users can filter by category
Select Custom Burger
System shows a list of all burger templates the user has made
Click Delete on one of the items
System shows a delete confirmation screen with the item's attributes
User clicks Delete
Post-conditions
System redirects to the list of all burger templates that the user has made, now without the recently deleted burger

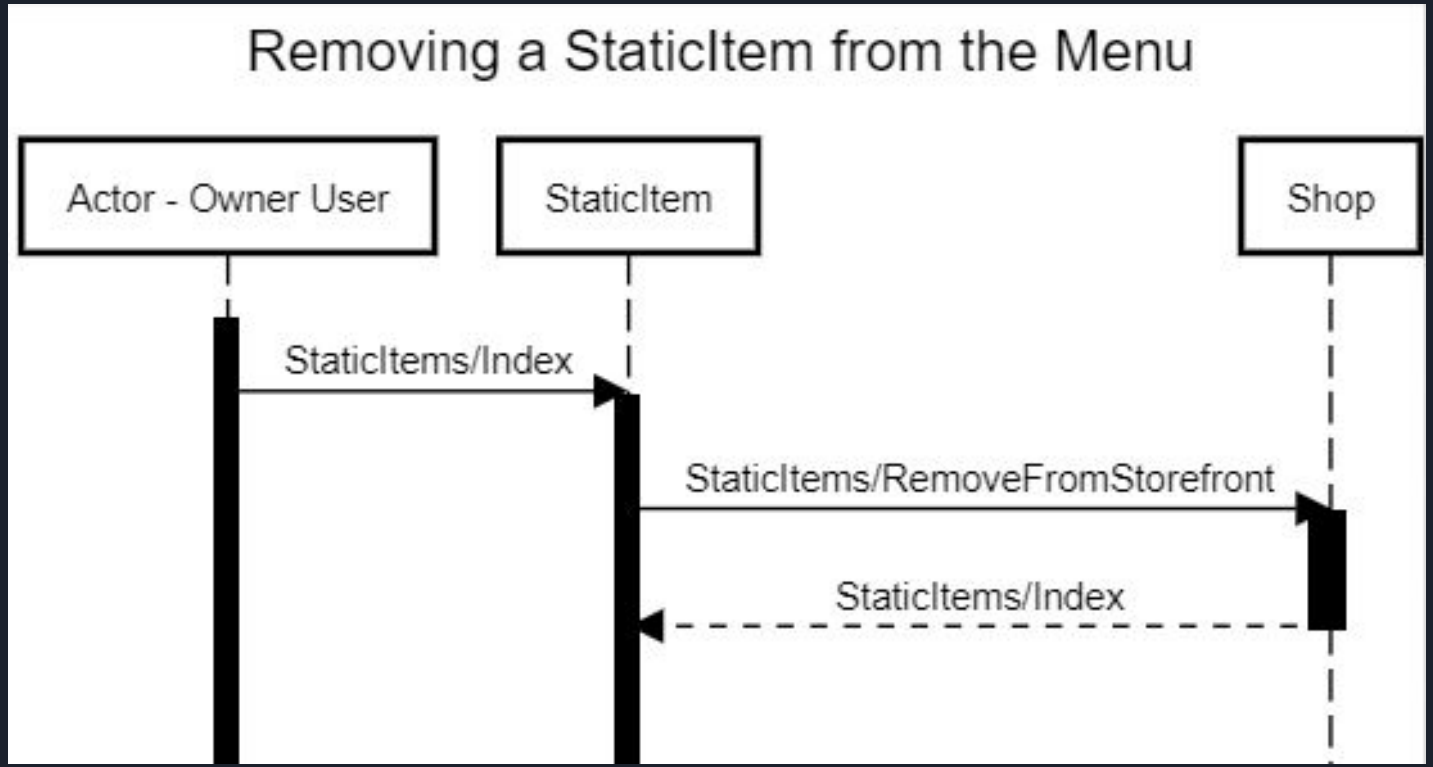
UML Classes


OrderItem
orderItemId : String
name : String
itemCalories : Integer
price : double
photo : String
addToCart : method
1
*
InventoryInstance
itemId : Integer
itemName : String
itemDescription : String
category : enum
calories : Integer
itemPrice : double
itemShelfLife : Integer
StaticItem
type : enum
description : String
isSelling : boolean
discount : Integer
removeFromStorefront : method
addToStoreFront : method
CustomItem
customerId : String

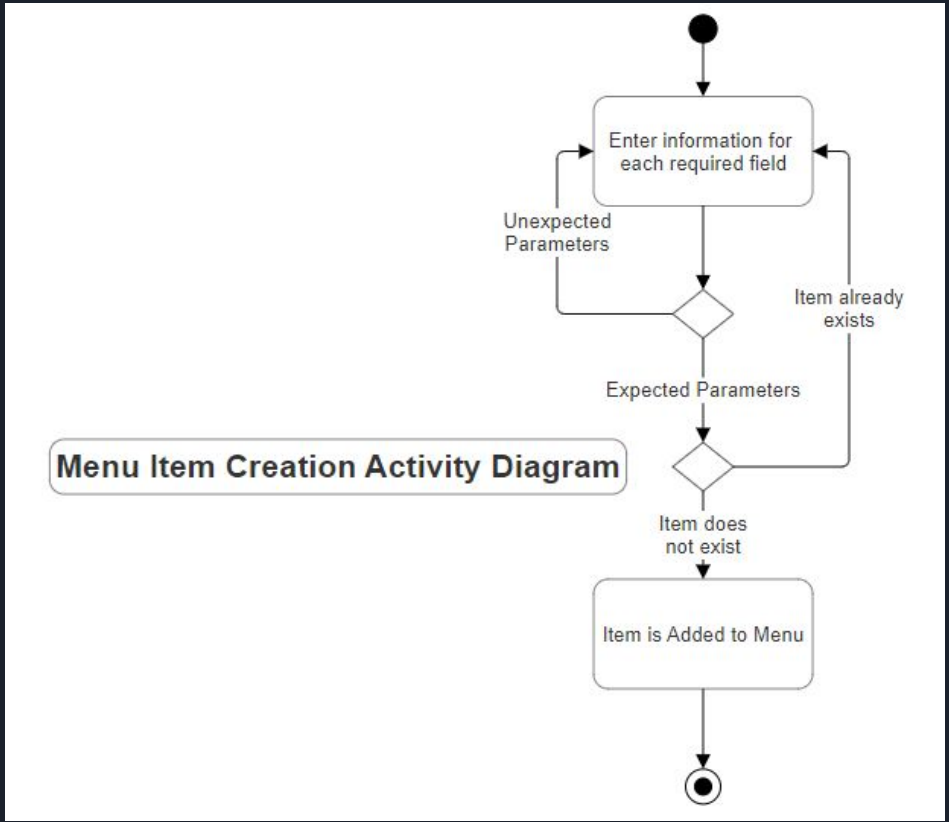
Sequence Diagrams



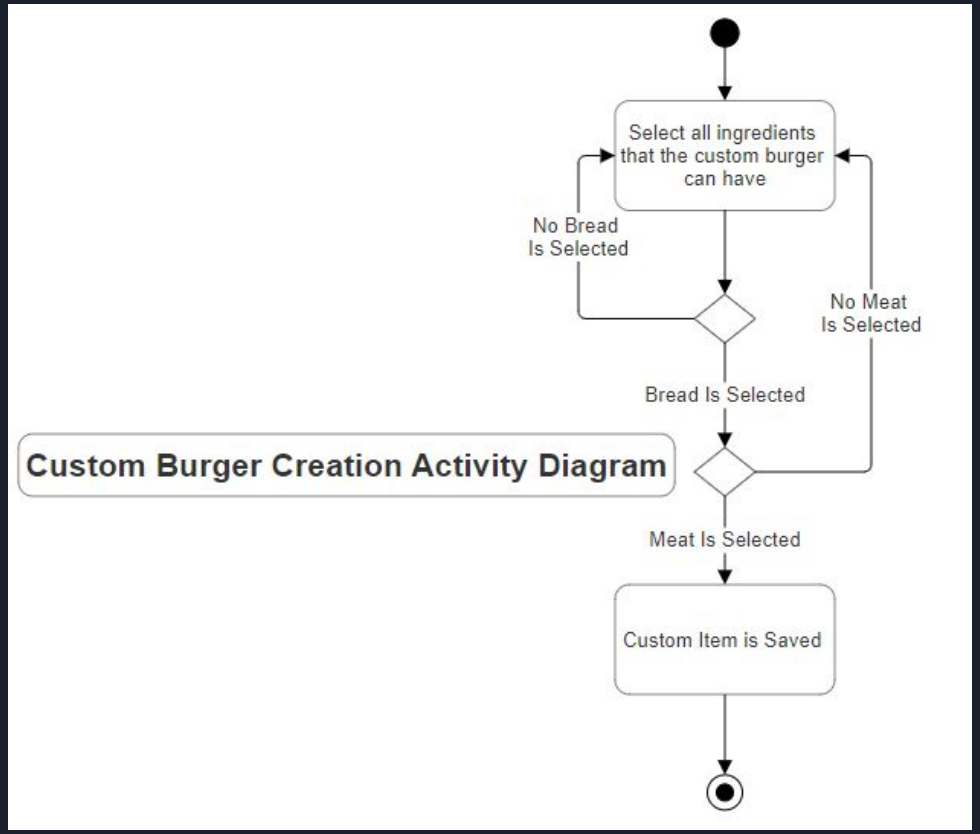
Sequence Diagrams



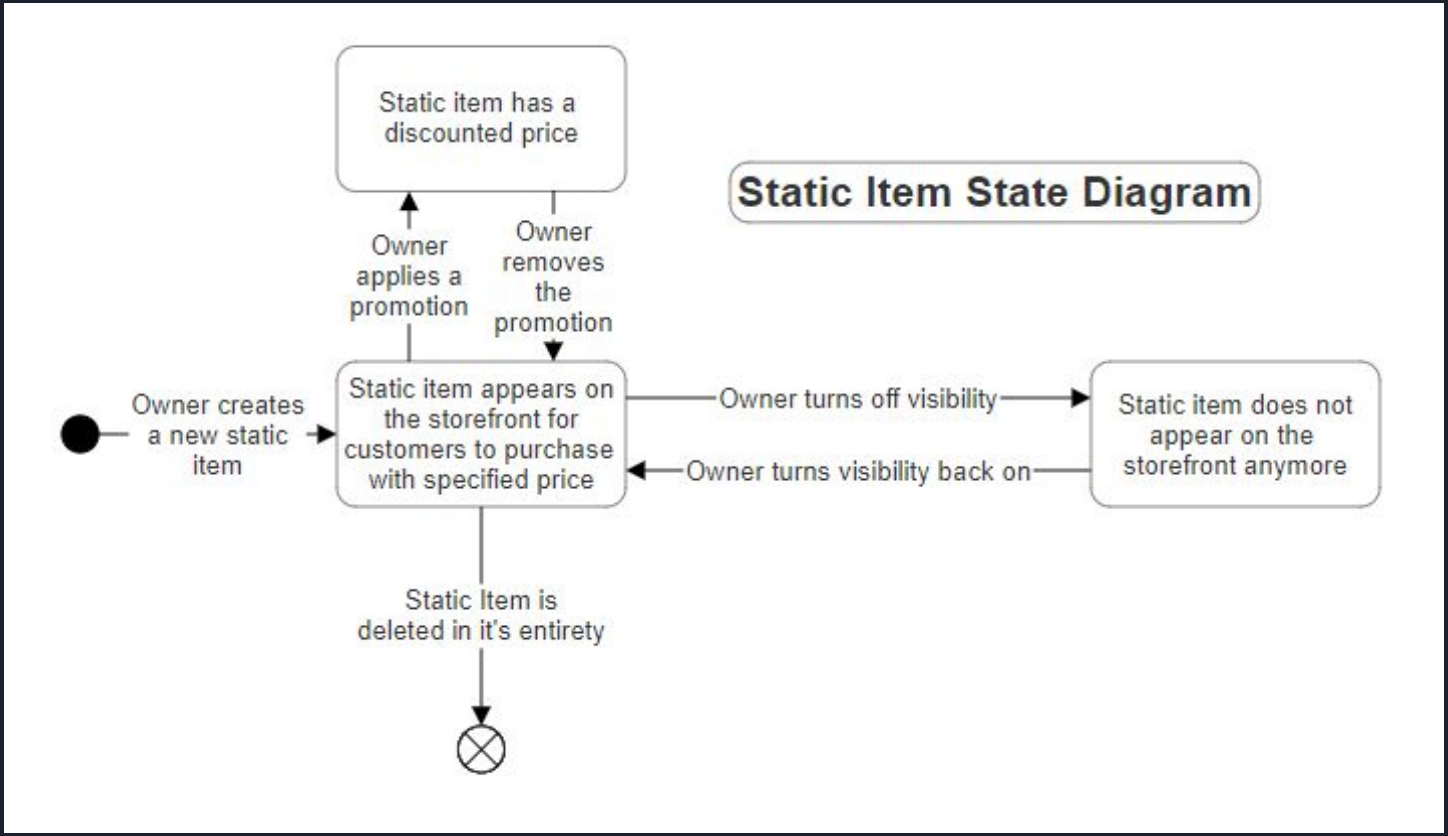
Activity Diagrams



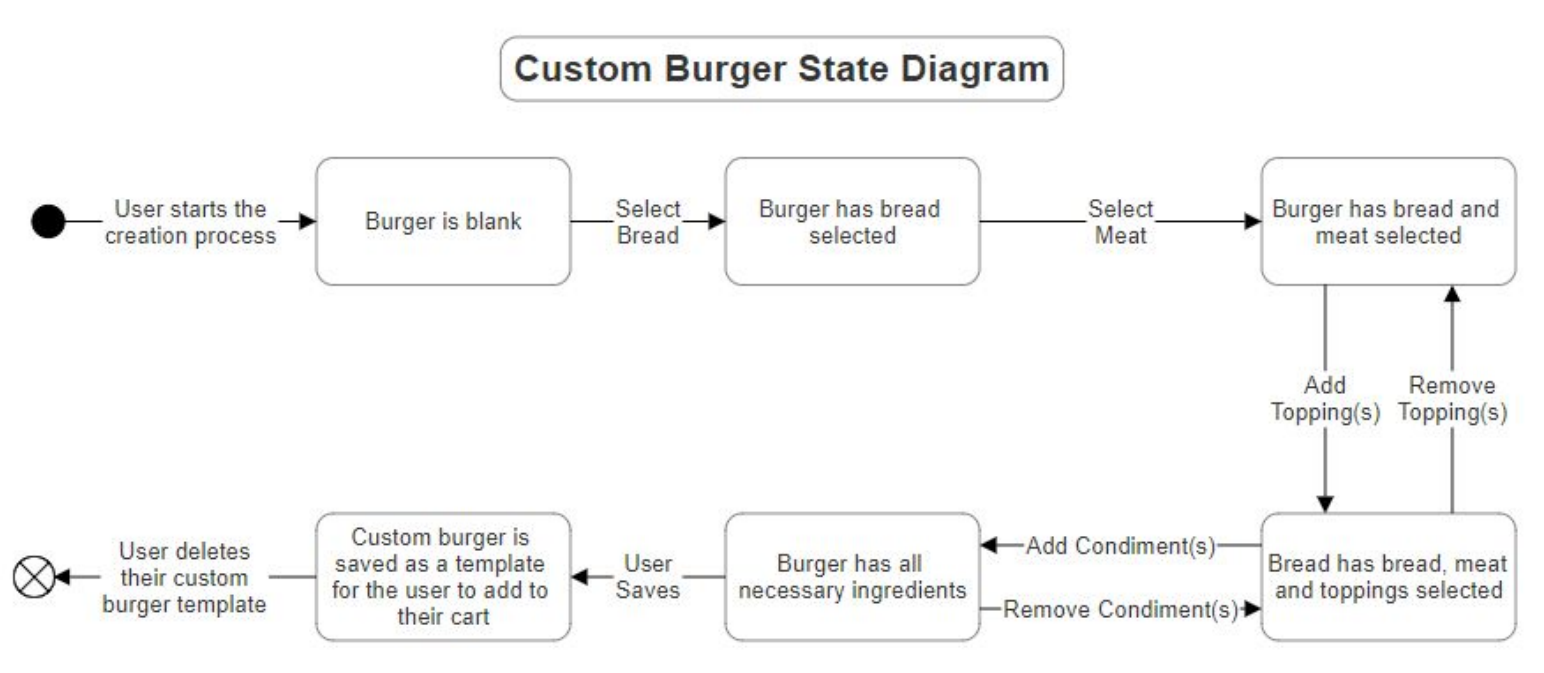
Activity Diagrams



State Diagrams



State Diagrams

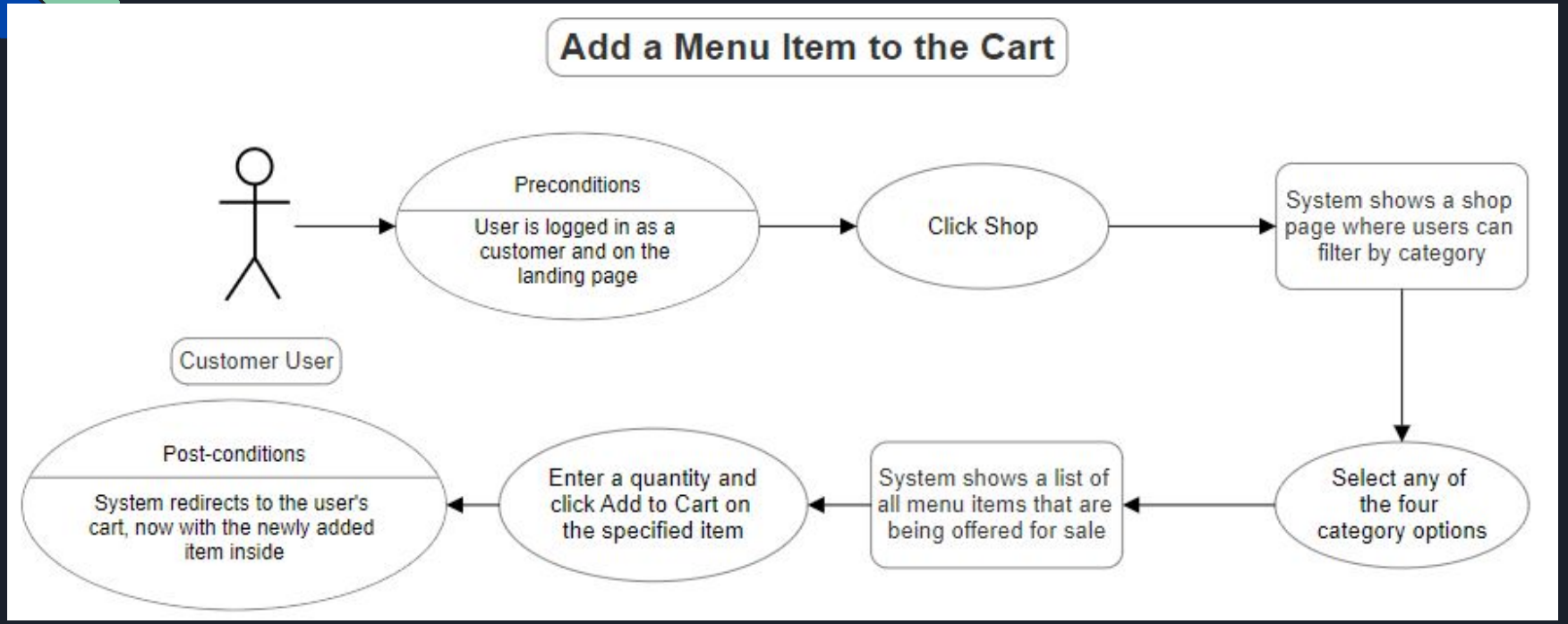


Implementation

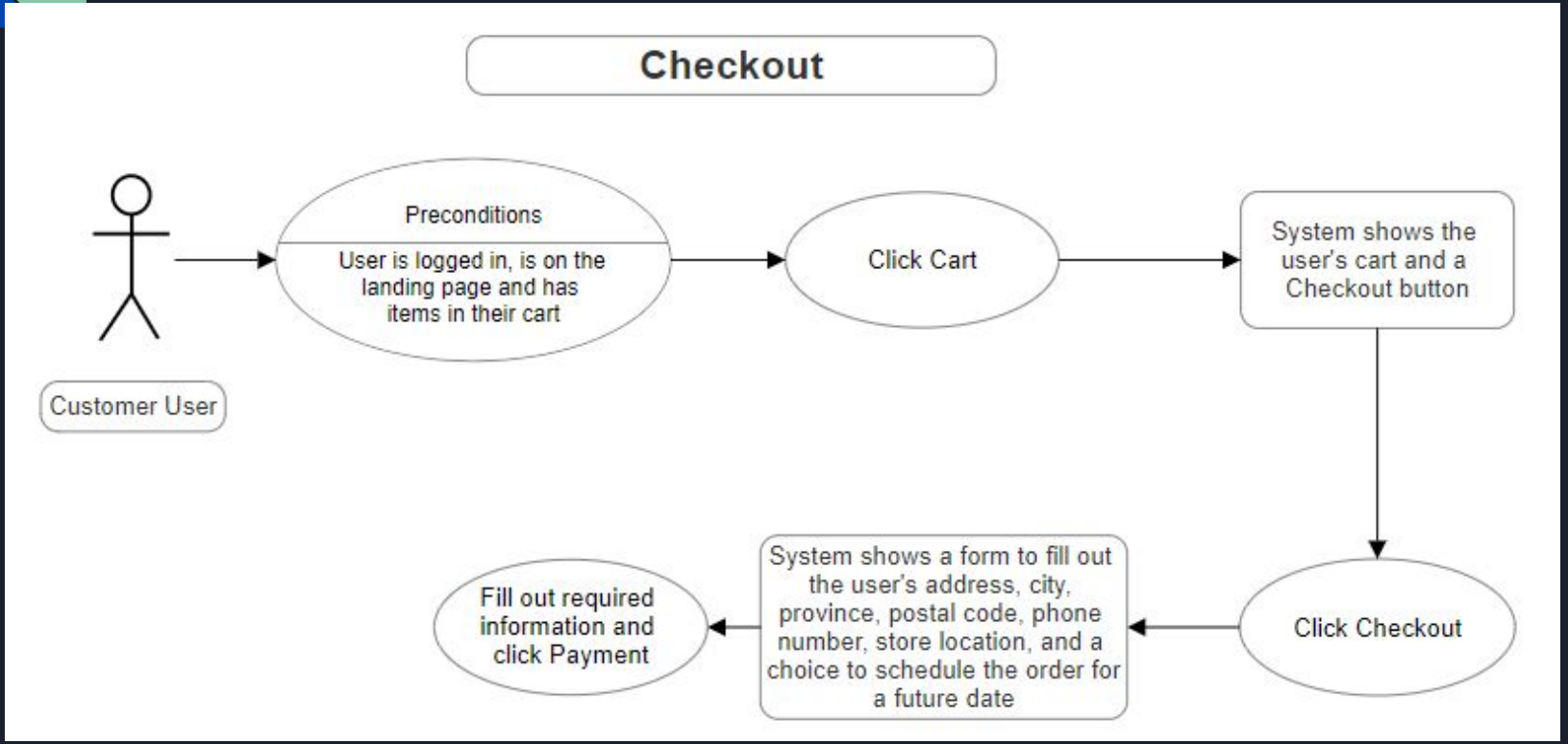
Demo Time!

Cart, Order, and Shop

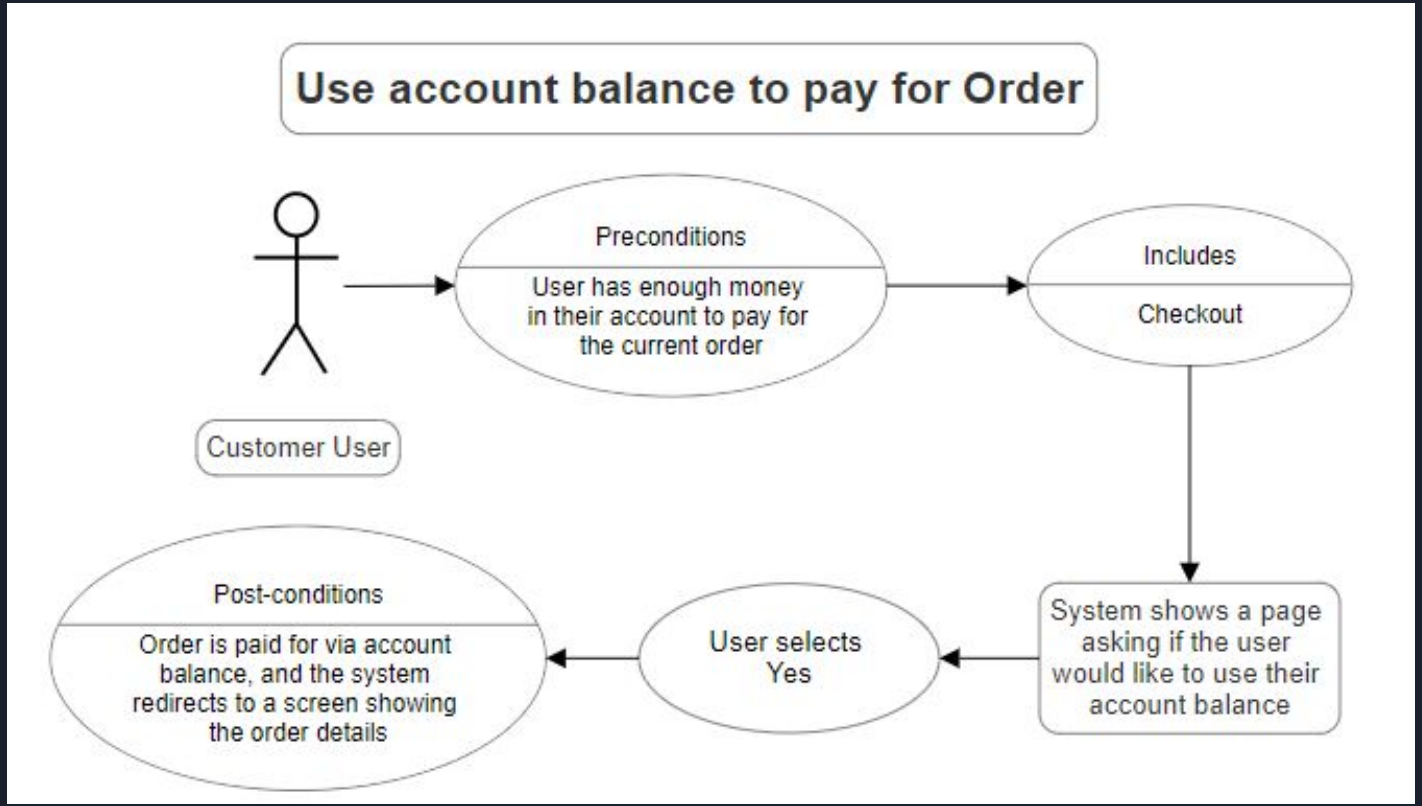
Use cases


Add a Menu Item to the Cart
Customer User
Preconditions
User is logged in as a customer and on the landing page
Click Shop
System shows a shop page where users can filter by category
Select any of the four category options
System shows a list of all menu items that are being offered for sale
Enter a quantity and click Add to Cart on the specified item
Post-conditions
System redirects to the user's cart, now with the newly added item inside

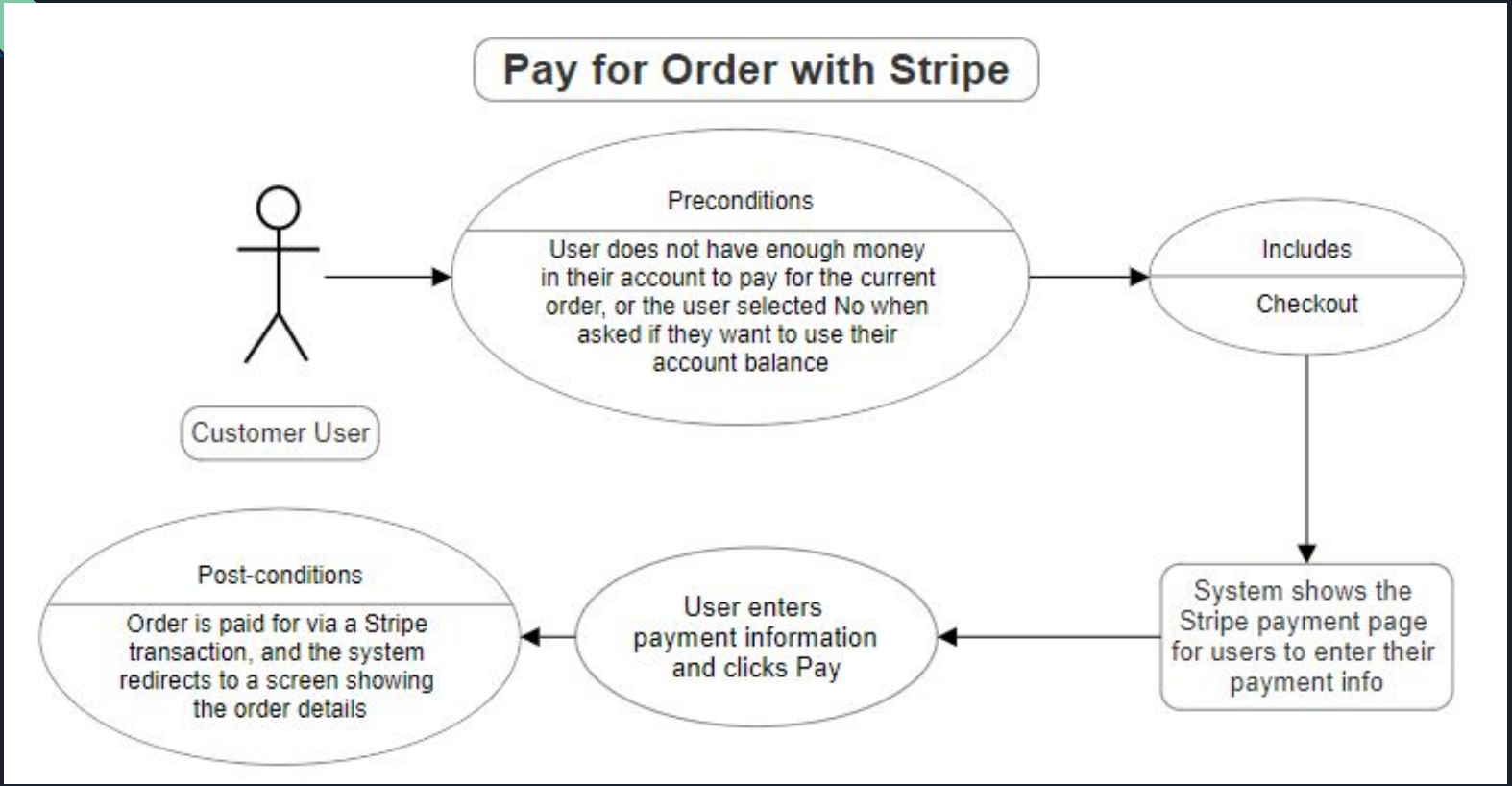
Use cases


Checkout
Customer User
Preconditions
User is logged in, is on the landing page and has items in their cart
Click Cart
System shows the user's cart and a Checkout button
Click Checkout
System shows a form to fill out the user's address, city, province, postal code, phone number, store location, and a choice to schedule the order for a future date
Fill out required information and click Payment

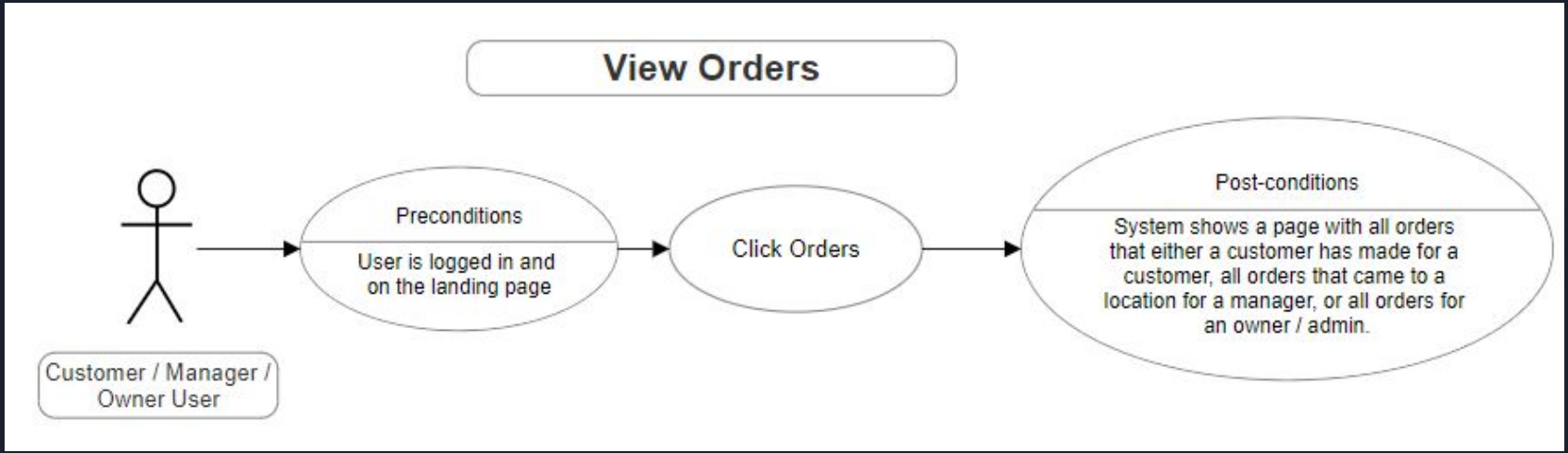
Use cases


Use account balance to pay for Order
Preconditions
User has enough money in their account to pay for the current order
Includes
Checkout
Customer User
Post-conditions
Order is paid for via account balance, and the system redirects to a screen showing the order details
User selects Yes
System shows a page asking if the user would like to use their account balance

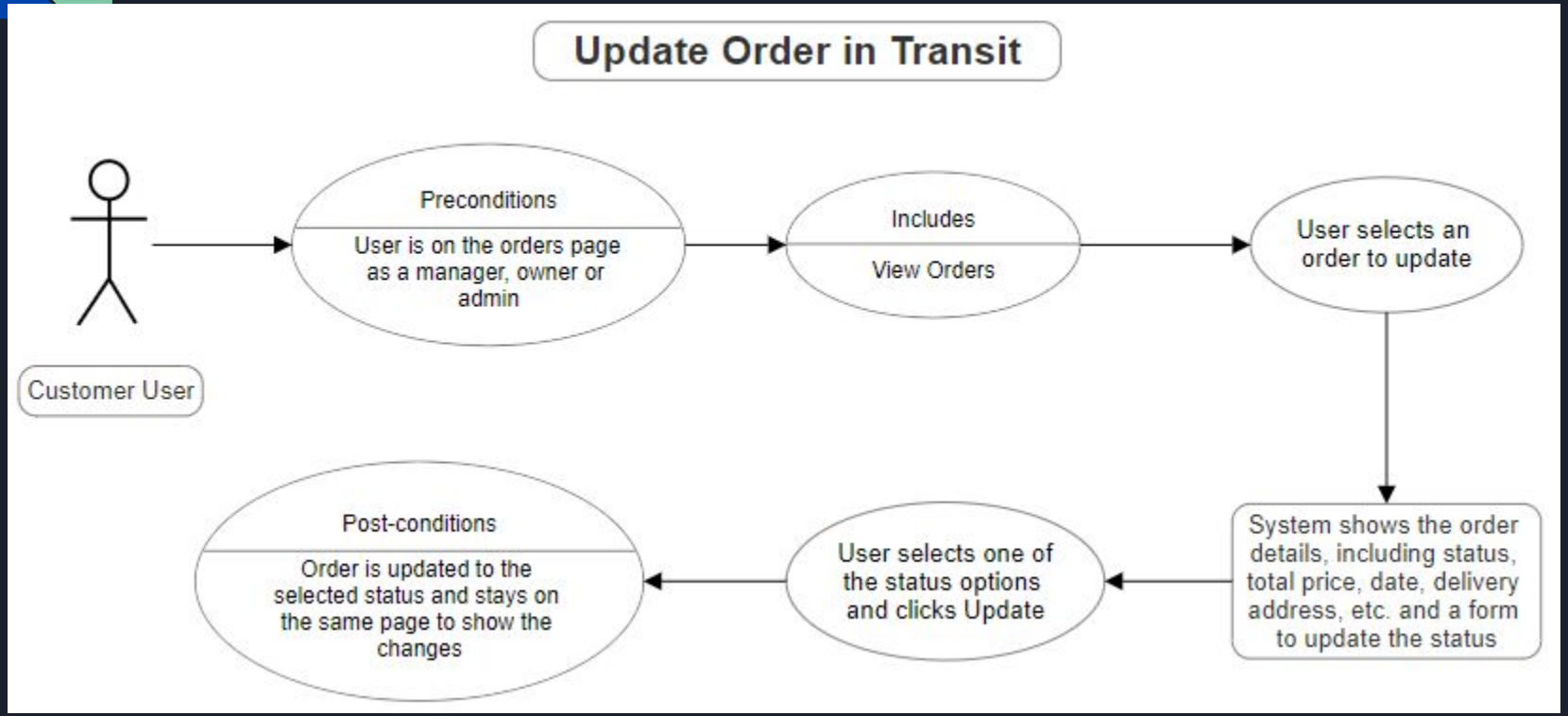
Use cases


Pay for Order with Stripe
Preconditions
User does not have enough money in their account to pay for the current order, or the user selected No when asked if they want to use their account balance
Includes
Checkout
Customer User
System shows the Stripe payment page for users to enter their payment info
User enters payment information and clicks Pay
Post-conditions
Order is paid for via a Stripe transaction, and the system redirects to a screen showing the order details

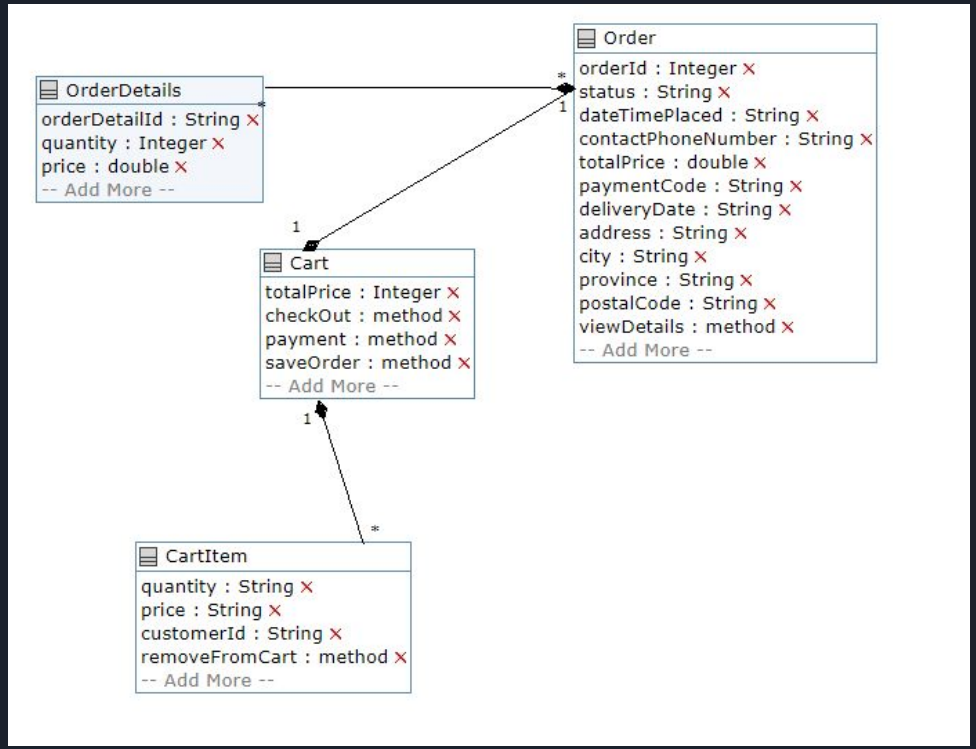
Use cases


View Orders
Customer / Manager / Owner User
Preconditions
User is logged in and on the landing page
Click Orders
Post-conditions
System shows a page with all orders that either a customer has made for a customer, all orders that came to a location for a manager, or all orders for an owner / admin.

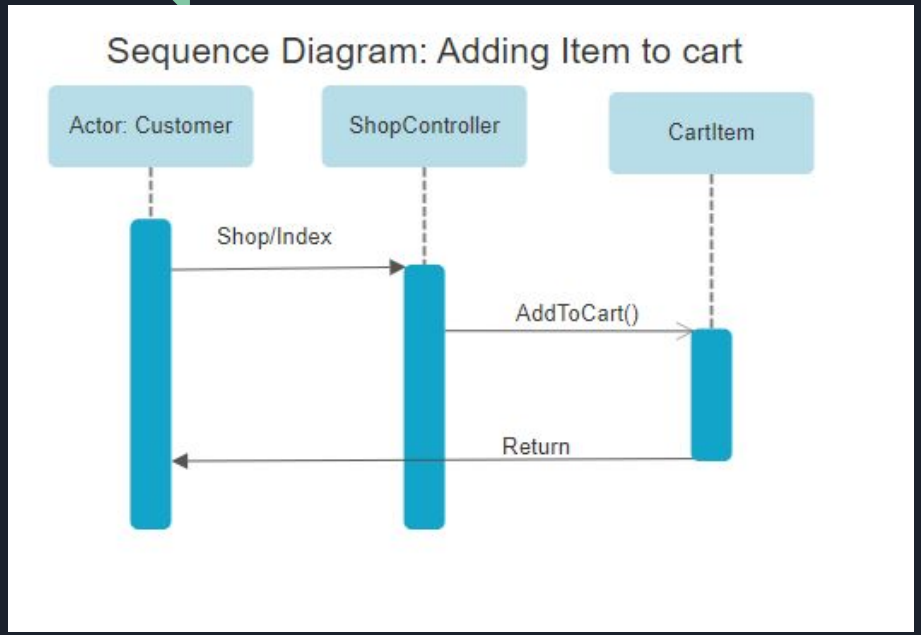
Use cases

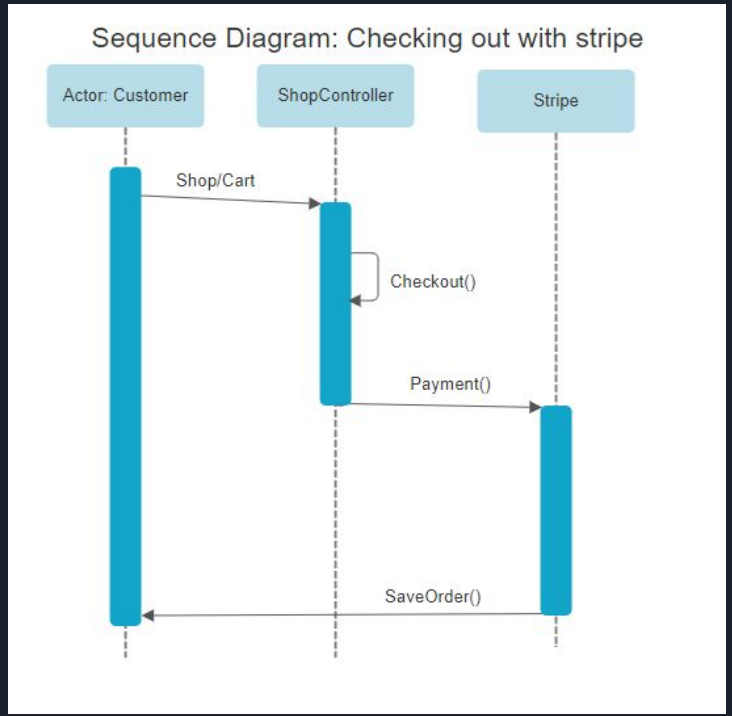

Update Order in Transit
Customer User
Preconditions
User is on the orders page as a manager, owner or admin
Includes
View Orders
User selects an order to update
System shows the order details, including status, total price, date, delivery address, etc. and a form to update the status
User selects one of the status options and clicks Update
Post-conditions
Order is updated to the selected status and stays on the same page to show the changes

UML Classes

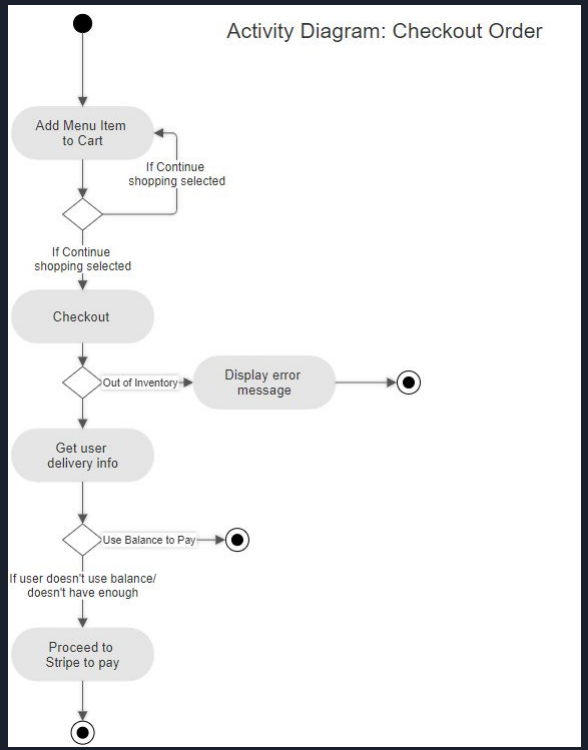

Order
orderId : Integer
status : String
dateTimePlaced : String
contactPhoneNumber : String
totalPrice : double
paymentCode : String
deliveryDate : String
address : String
city : String
province : String
postalCode : String
viewDetails : method
-- Add More --
OrderDetails
orderDetailId : String
quantity : Integer
price : double
-- Add More --
Cart
totalPrice : Integer
checkOut : method
payment : method
saveOrder : method
-- Add More --
CartItem
quantity : String
price : String
customerId : String
removeFromCart : method
-- Add More --
*
1
1
*
1
*

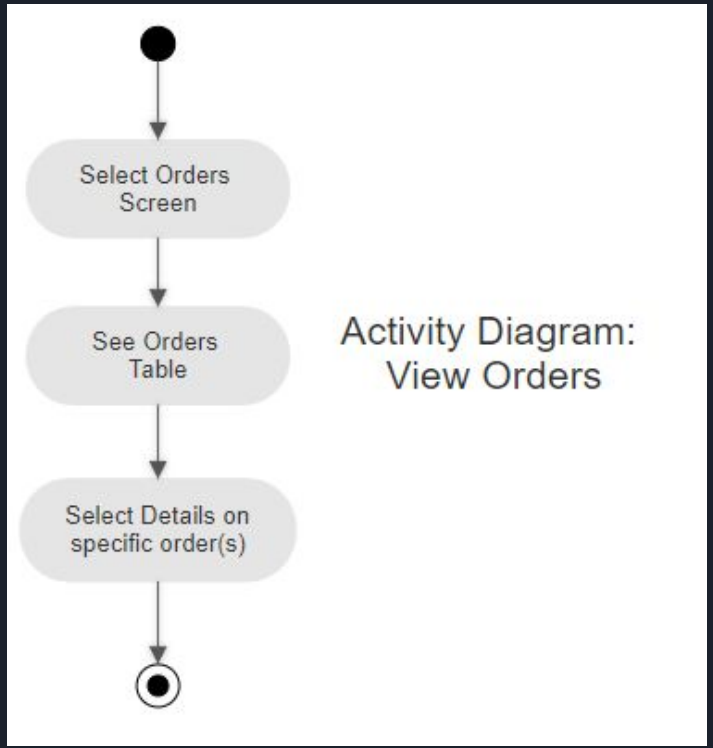
Sequence Diagrams



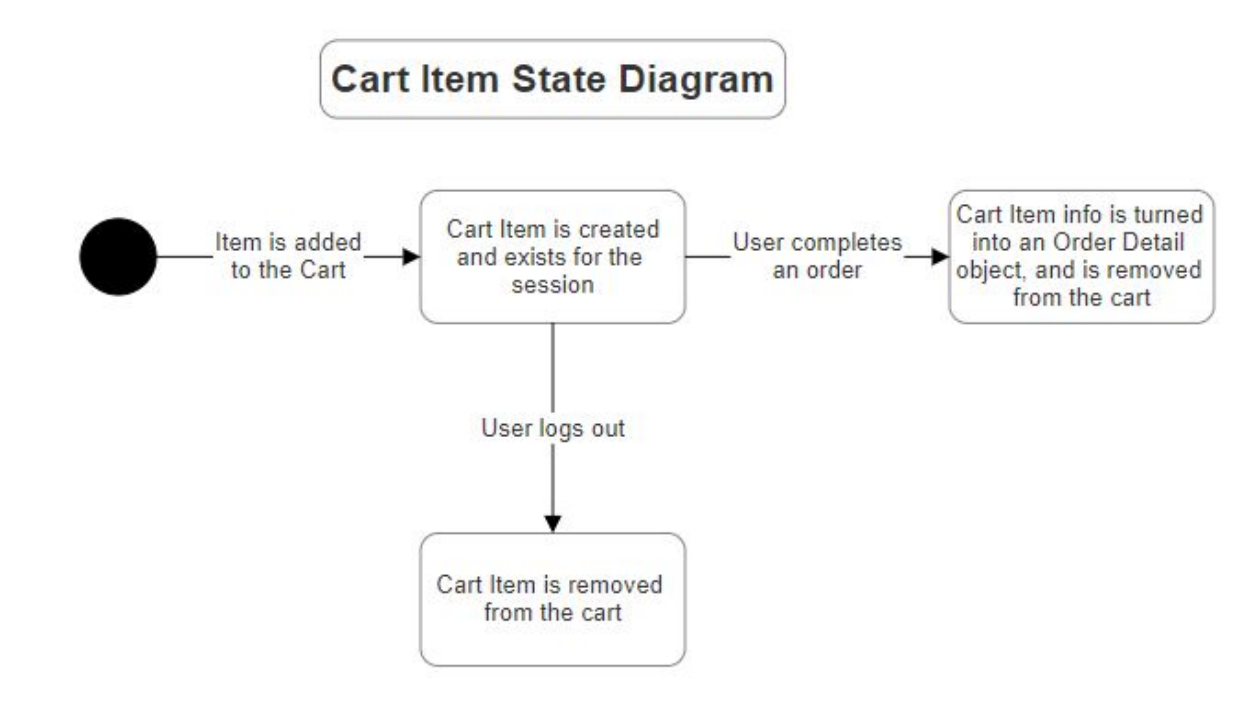


Activity Diagrams

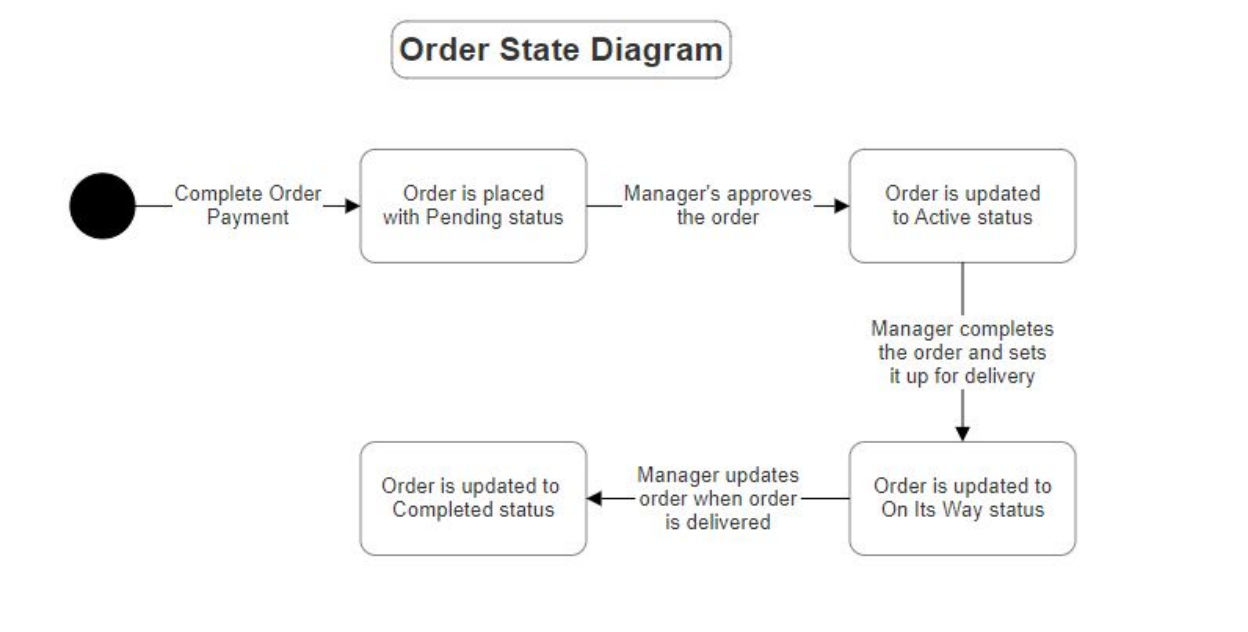




State Diagrams



State Diagrams



Live Demo!

Testing and QA for burgerBurger

Featuring a demo from Mikey!

What else would we implement?

Powerbi for Customer data

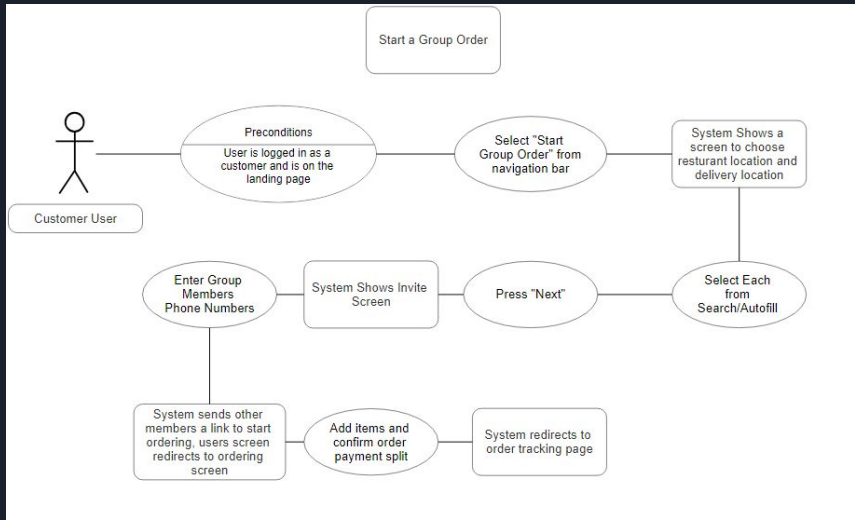
Party Mode

-The one part of it we were able to implement was scheduling orders

What we wanted to add

-Allow multiple customer accounts to pay for 1 order

-Distribute pay between accounts



AODA Compliance

Ontario

ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT (AODA)

WCAG 2.0 A and AA checklist

As you test your digital asset for its level of accessibility, or partner with a company to conduct testing, the following checklist will serve as a helpful guide for meeting the WCAG 2.0 success criteria required for AODA compliance.

WCAG 2.0 Level A checklist

Success Criteria	Description	Pass/Fail	Complete
1.1.1 – Non-text Content	Provide text alternatives for non-text content	○ ○	☐
1.2.1 – Audio-only and Video-only (Prerecorded)	Provide an alternative to video-only and audio-only content	○ ○	☐
1.2.2 – Captions (Prerecorded)	Provide captions for video with audio	○ ○	☐
1.2.3 – Audio description or Media Alternative (Prerecorded)	Video with audio has a second alternative	○ ○	☐
1.3.1 – Info and Relationships	Logical structures	○ ○	☐
1.3.2 – Meaningful Sequence	Present content in a meaningful order	○ ○	☐
1.3.3 – Sensory Characteristics	Use more than one sense for instructions	○ ○	☐
1.4.1 – Use of Color	Don't use presentation that relies solely on color	○ ○	☐
1.4.2 – Audio Control	Don't play audio automatically	○ ○	☐
2.1.1 – Keyboard	Accessible by keyboard only	○ ○	☐

Meal Combos