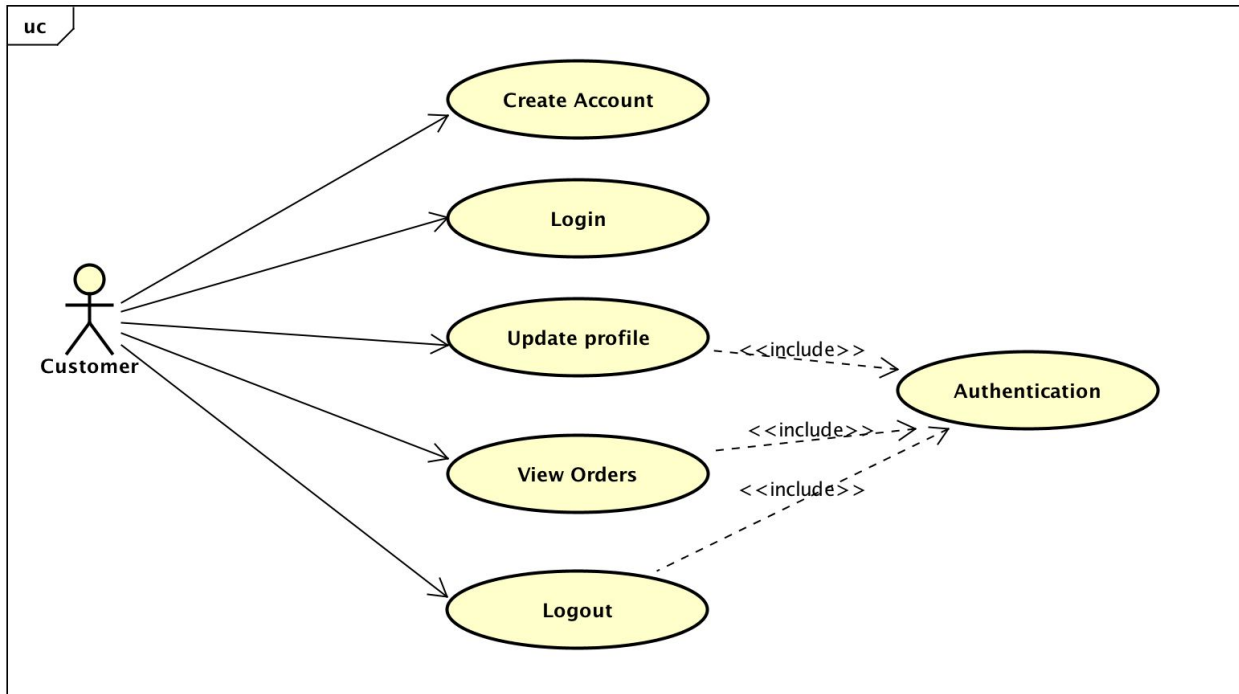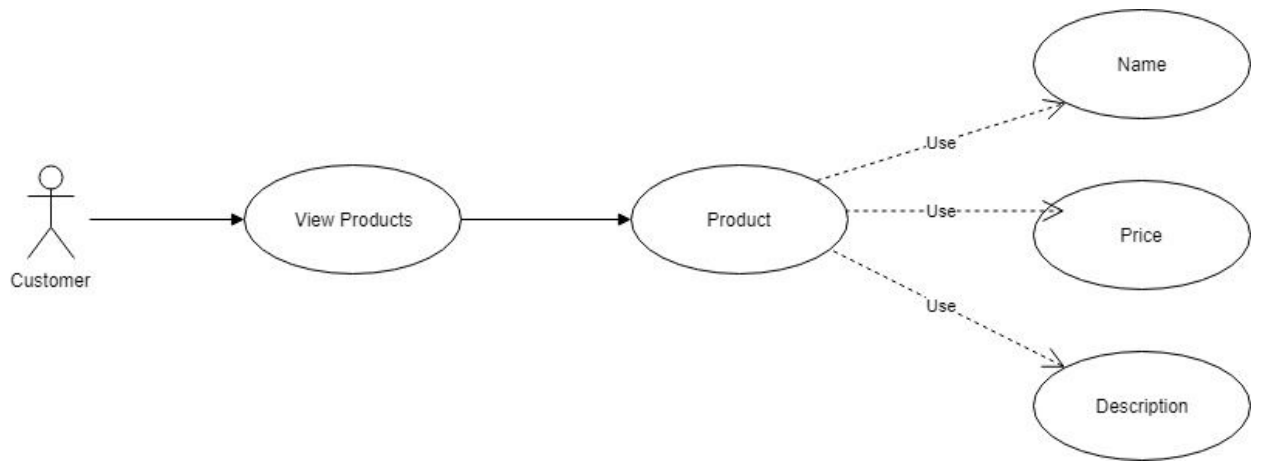# iShop Use Case Diagram

1. Customer

Use Case: Customer Account

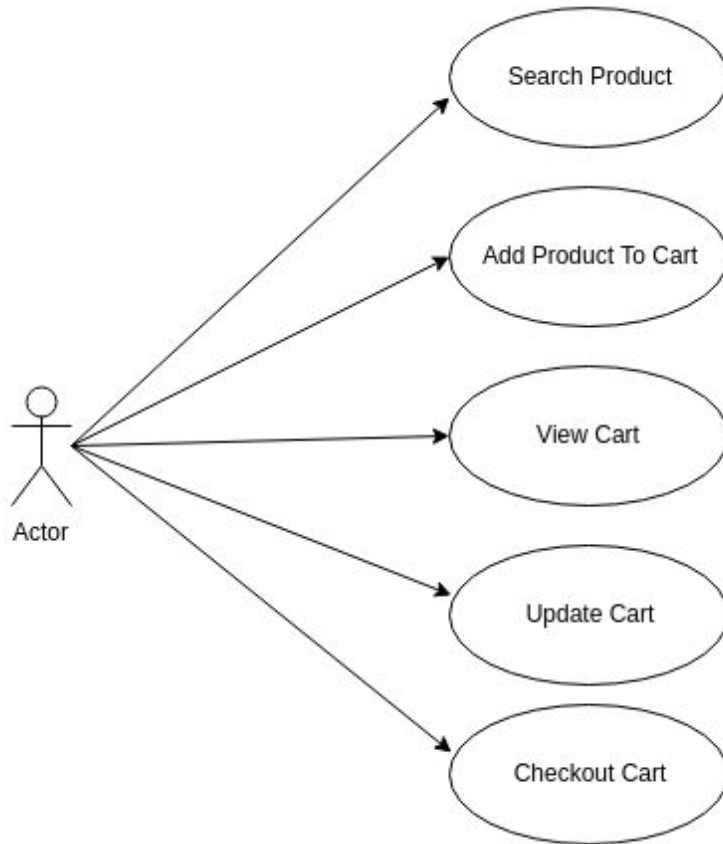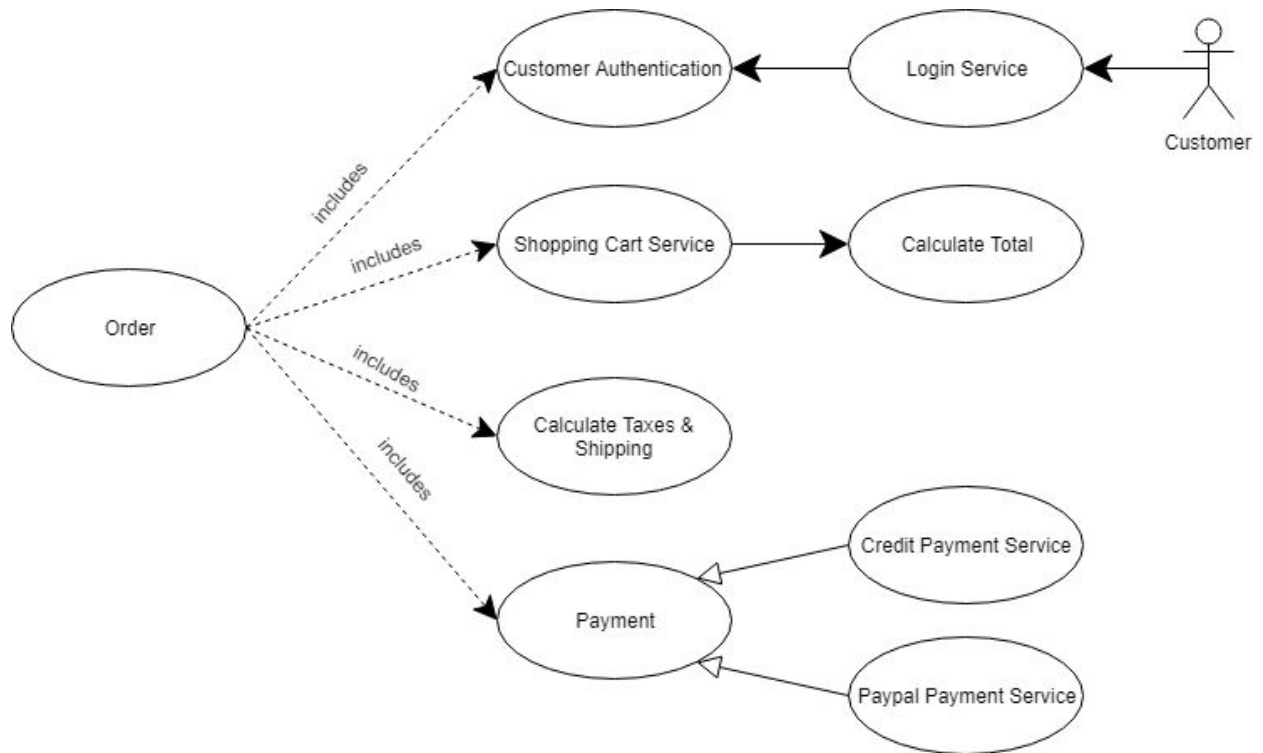2. Product

3. Shopping Cart

Use Case: **Add/Edit/Delete Item to Shopping Cart**

4. Order

iShop: Use Case Description

Use Case Number: 1

Name: Customer Account

Brief description This use case shows the different actions a customer can perform while using the platform

Actor Customer (Anonymous + Authenticated)

Flows of Event

1. **Basic flow**

1.0 Create an account

Step	User Actions	System Actions
1	The customer calls the create profile command	The system displays the create account form with the fields for firstname, lastname, email, address, city, zip, country, and the password.
2	The customer fills out the form and send data to system	The system verifies that there's no other account in the database with the same email address, saves the account and returns the success message

Postconditions
Customer account persisted in the system

Business Rules
No duplicate customer account. A unique account is identified by email address.
1.2 Login to Account

Step	User Actions	System Actions
1	The customer calls the login to account command	The system displays the login form with the fields of email and password.
2	The customer fills out the login form and send data to system	The system verifies the existence of the account in the database and returns the success message

Postconditions

If login was successful, the customer is now logged into the system.

Business Rules

No duplicate customer account. A unique account is identified by email address.

1.3 Update Profile

Preconditions

The customer must be logged in to the system

Step	User Actions	System Actions
1	The customer calls the edit account command	The system displays the edit account form with the fields for firstname, lastname, address, city, zip, country, and the password.
2	The customer fills out the edit account form and send data to system	The system update the data of the account in the database and returns the success message

Postconditions

The customer profile details will be updated

Business Rule

The customer cannot change the email address.

1.4 View Orders	
Preconditions	
The customer must be logged in to the system	

Step	User Actions	System Actions
1	The customer calls the view orders command	The system returns a list of all the orders made by the logged in customer.

Postconditions	
Business Rule	
The customer cannot change the informations on the orders.	
1.5 Logout from system	
Preconditions	
The customer must be logged in to the system	

Step	User Actions	System Actions
1	The customer calls the logout from account command	The system logged out the customer.

Postconditions	
The customer must be logged out of the system	

Use Case Number: 3

Name: Add/Edit/Delete Item to Shopping Cart
Brief description This use case allows customer to add product to shopping basket, remove item from basket and also allows customer to update item quantity to shopping cart
Actor Customer (Anonymous + Authenticated)

Precondition

Flows of Event

1. **Basic flow**

1.1.0 Add Item to Shopping Cart for Anonymous user

Step	User Actions	System Actions
1	Search particular item	System will search in its catalog, and return bunch of products that matches with the search criteria
2	Add Item to shopping cart	The system verifies that there is already same product exists in his current shopping cart, if it's true then it will increase the item count, otherwise it will add a new item in the existing shopping cart

Postconditions

Persist the shopping cart in the browser's local storage

1.1.1 Add Item to Shopping Cart for Authenticated user

Step	User Actions	System Actions
1	Search particular item	System will search in its catalog, and return bunch of products that matches with the search criteria
2	Add Item to shopping cart	The system verifies that there is already same product exists in his current shopping cart, if it's true then it will increase the item count, otherwise it will add a new item

		in the existing shopping cart

Postconditions

Persist the shopping cart data in the system

Business Rules

- No duplicate item should be in the shopping cart item, if he add the same item more than once, quantity should be updated.
- Price should be match with the current price

1.1.2 Remove Item from Shopping Cart

Step	User Actions	System Actions
1	Click on View Shopping cart	System will display all the items that exists in the shopping cart with price and quantity in a table
2	Click Remove button	System will remove the item from the shopping cart

Postconditions

Persist the shopping cart data in the system

Business Rules

- **Empty cart should not have any checkout option**

1.1.3 Update Item quantity to Shopping Cart

Step	User Actions	System Actions
1	Click on View Shopping cart	System will display all the items that exists in the shopping cart with price and quantity in a table

2	Update quantity in text field	System will validate input (should be a number) and Verify enough quantity available in the stock

Postconditions

Persist the updated shopping cart data in the system

Business Rules

- Any Item should not have 0 quantity
- Item quantity should be available in the stock

Use Case Number: 4

Name: Order

Brief description This use case allows customer to order items that are within shopping basket

Actor Customer (Authenticated only)

Precondition

Flows of Event

Basic flow

4.1.0 Authenticating User

Step	User Actions	System Actions
1	Checking User	System will get user login status from login service and will redirect to login page if not logged in

Postconditions

Persist the User is logged in before continuing checkout process

4.1.1 Add Item to Shopping Cart for Authenticated user

Step	User Actions	System Actions
1	View Shopping Cart	System will calculate total price of shopping cart if user need to check out all items.
2	Selecting items for checkout	The system will calculate price for selected items only

4.1.2 Calculate Taxes and Shipping

Step	User Actions	System Actions
1	Entering Shipping Address	System will calculate shipping cost for the items plus the taxes

4.1.3 Update Item quantity to Shopping Cart

Step	User Actions	System Actions
1	Select Payment by Credit Card	System will call credit service to validate credit info
2	Select Payment by Paypal	System will use Paypal Service to Validate payment info