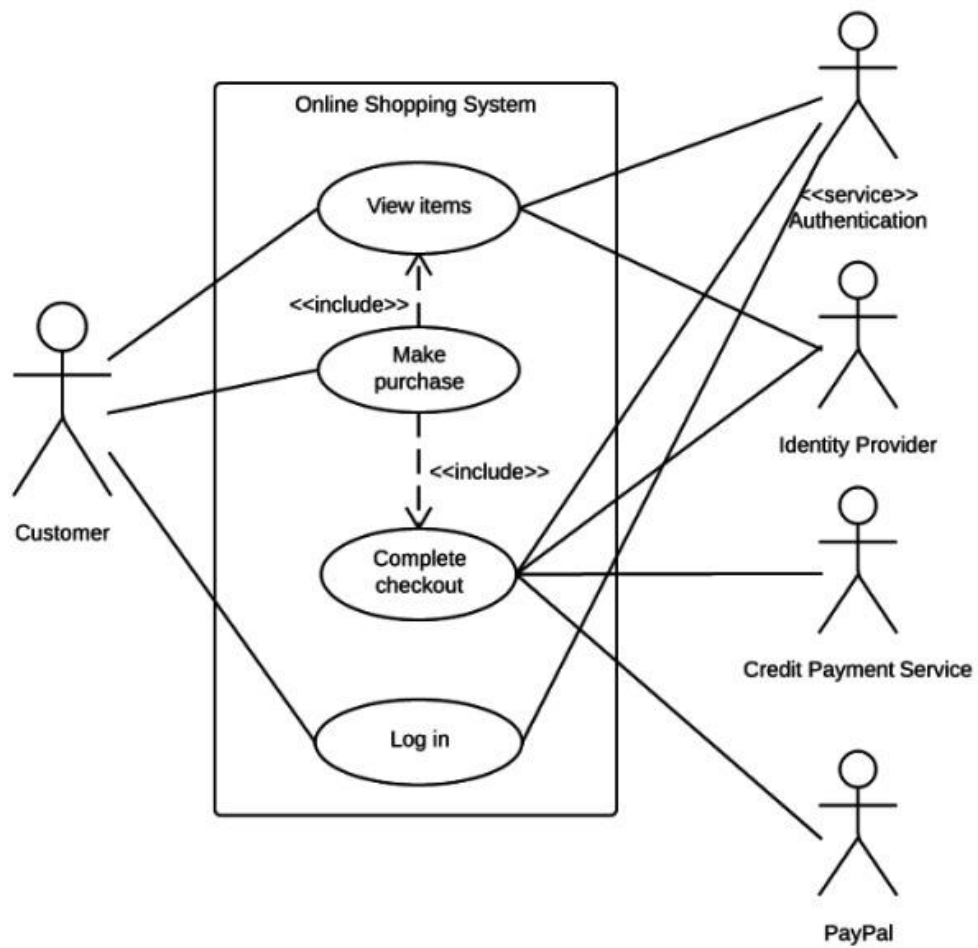




Software Design and Architecture

ONLINE SHOPING SYSTEM

USE CASE:



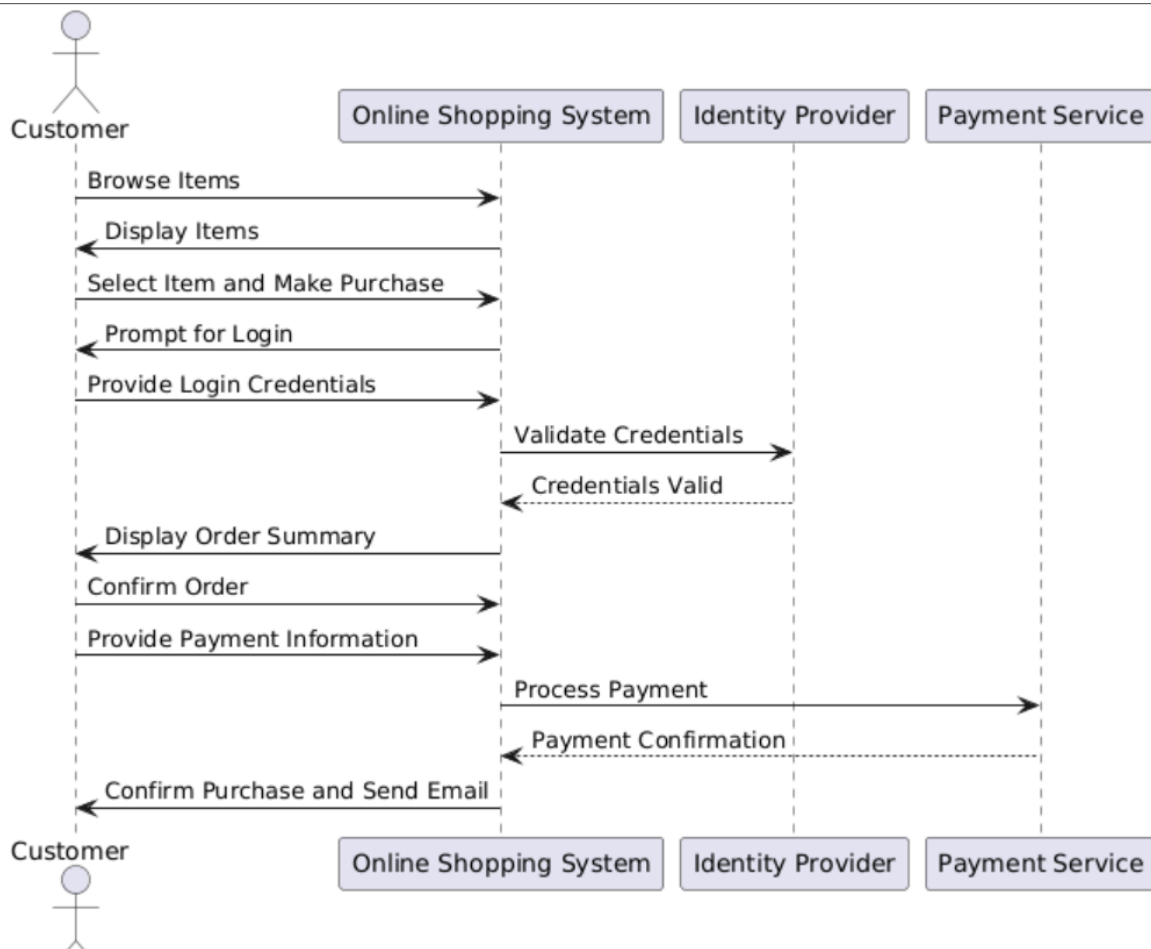
FULLY DRESSED USE CASE:(Make Purchase):

Use Case Element	Description
Use Case Name	Make Purchase
Primary Actor	Customer
Goal	The customer successfully selects and purchases items from the online shopping system.
Preconditions	<ol style="list-style-type: none"> 1. The customer must be logged into the system. 2. The customer has items in the shopping cart. 3. The system is connected to payment services.
Postconditions	<ol style="list-style-type: none"> 1. The customer's purchase is successfully processed and confirmed. 2. The system updates inventory levels. 3. The system generates and sends an order confirmation email to the customer.
Main Success Scenario (Basic Flow)	<ol style="list-style-type: none"> 1. Customer reviews the items in their shopping cart. 2. Customer selects the option to proceed to checkout. 3. System prompts the customer to provide or confirm shipping details. 4. Customer confirms or edits shipping information. 5. System prompts the customer to choose a payment method.
	<ol style="list-style-type: none"> 6. Customer selects a payment method (e.g., credit card, PayPal) and enters payment details. 7. System validates the payment details and processes the payment through the selected payment service. 8. System confirms the purchase and displays a confirmation screen with the order number and summary. 9. System sends a confirmation email with the order details to the customer.
Extensions (Alternate Flows)	<p>6a. Payment Method Declined: - If the payment method is declined, the system prompts the customer to try a different payment method or correct errors.</p> <p>3a. Invalid Shipping Information: - If the shipping information is invalid, the system prompts the customer to correct it.</p> <p>7a. Payment Service Unavailable: - If the payment service is down, the system informs the customer to try again later or choose another method.</p>

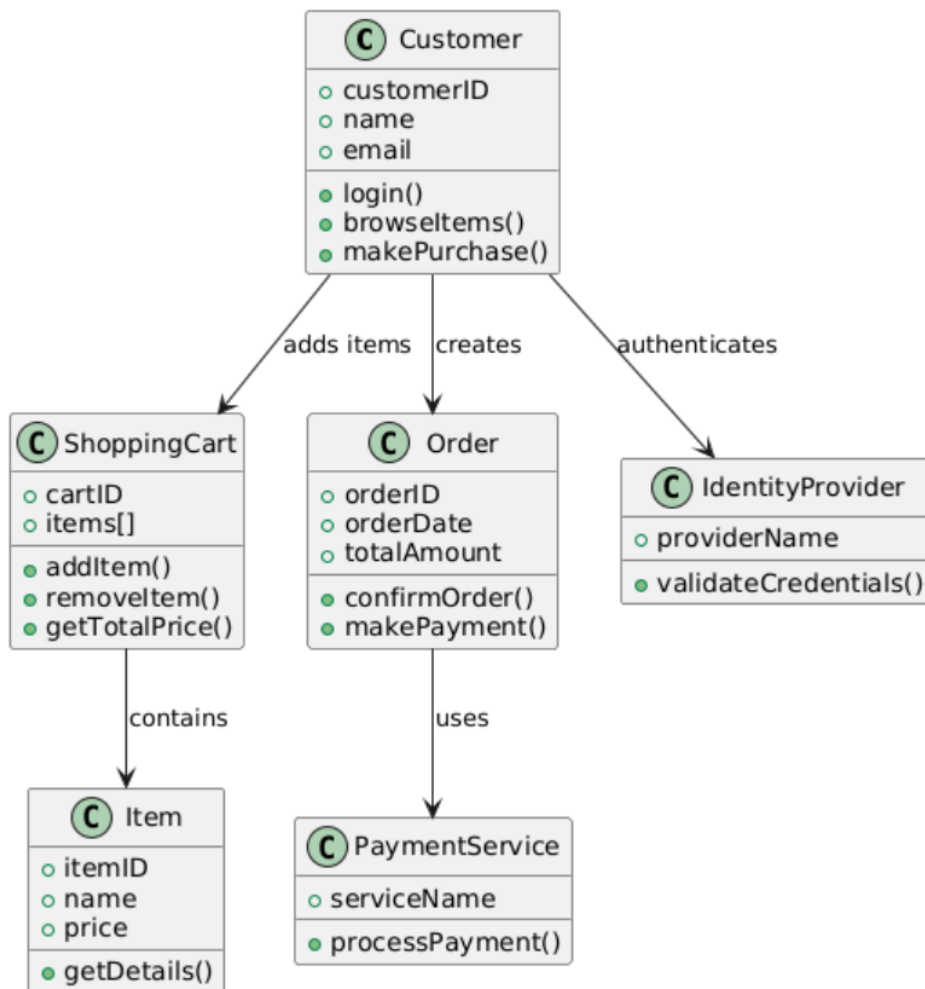
SOFTWARE DESIGN AND ARCHITECTURE

Special Requirements	1. Secure and fast payment processing. 2. Real-time inventory update upon purchase confirmation. 3. Customer-friendly error handling and retry options for failed payments.
Frequency of Use	Frequent, as every purchase follows this process in the system.
Open Issues	1. Should the system store payment information for future purchases? 2. Should the system offer an option to gift-wrap or personalize items during the purchase process?

SYSTEM SEQUENCE SEQUENCE DIAGRAM:



CLASS DIAGRAM:



COMMUNICATION DIAGRAM:

