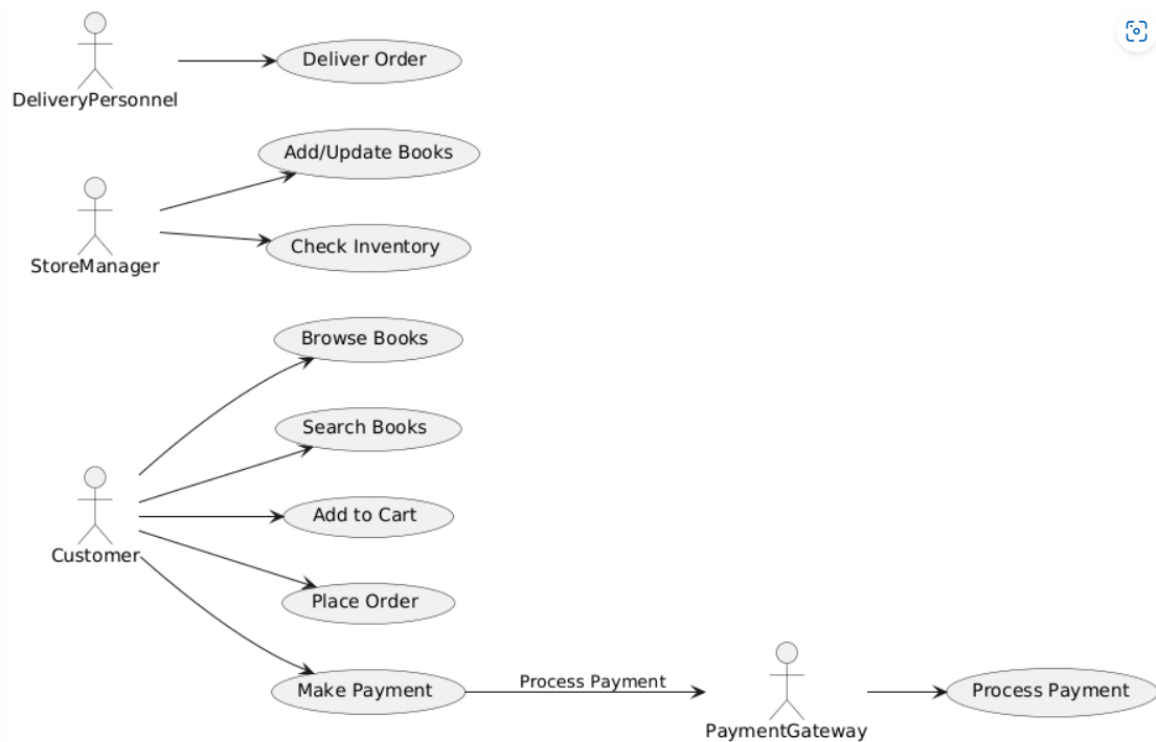**Name: Abdullah**

Reg no: FA22-BSE-022

SODTWARE DESIGN AND ARCHITECTURE

Abdullah (FA22-BSE-022)

[COMPANY NAME] [Company address]
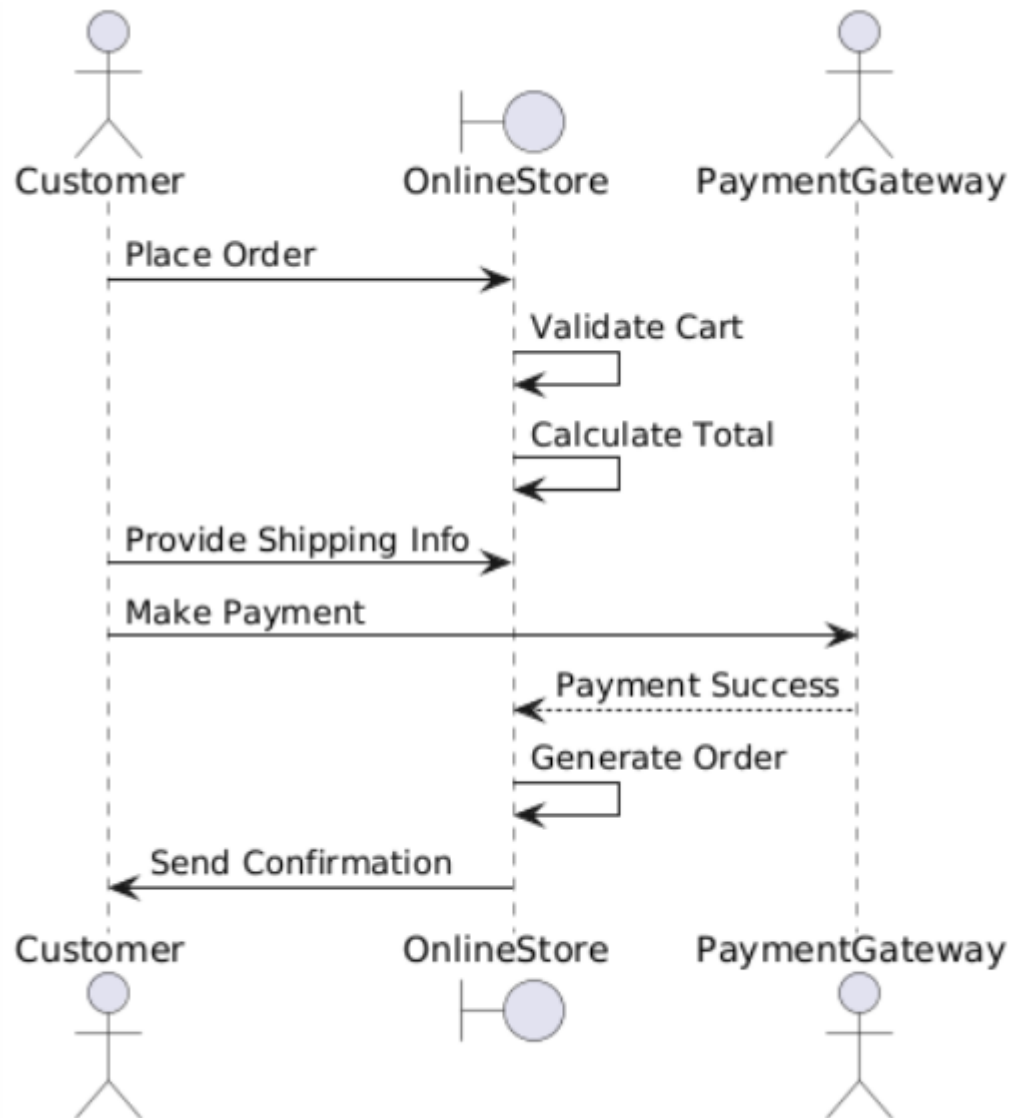
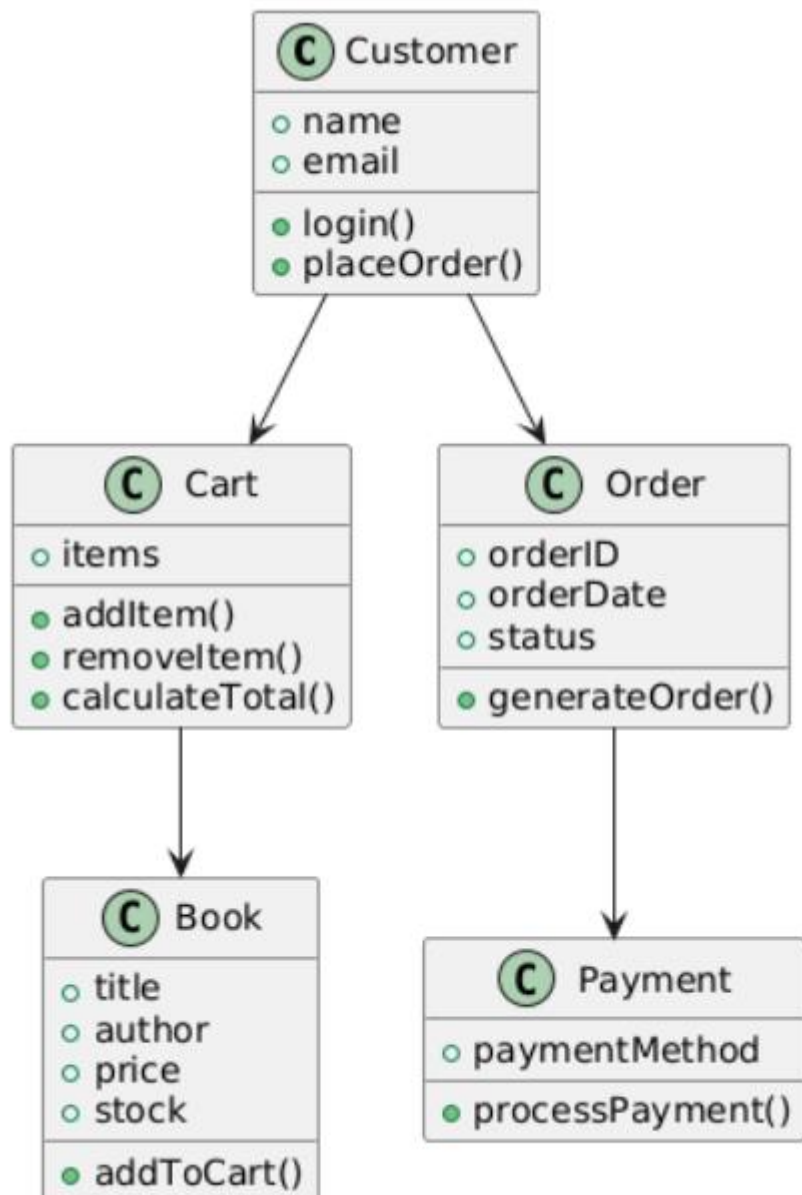## Use Case Diagram:

Full Dressed Use case:

Use Case Name	Place Order
Primary Actor	Customer
Stakeholders	Customer, Store, Payment System
Preconditions	Customer is logged in and has items in the cart
Postconditions	Order is placed, inventory is updated, confirmation sent
Main Success Scenario	1. Customer reviews the items in the cart 2. Customer enters delivery information 3. System calculates the total amount including shipping 4. Customer chooses a payment method 5. Payment is processed 6. System generates order confirmation
Extensions	4a. Payment fails: Show error message and retry option 6a. Inventory not available: Inform customer and adjust cart
Triggers	Customer clicks "Place Order" button

System Sequenced Diagram:

Class Diagram:

Customer
- name
- email

- login()
- placeOrder()

Cart
- items

- addItem()
- removeItem()
- calculateTotal()

Order
- orderID
- orderDate
- status

- generateOrder()

Book
- title
- author
- price
- stock

- addToCart()

Payment
- paymentMethod

- processPayment()

Communication Diagram: