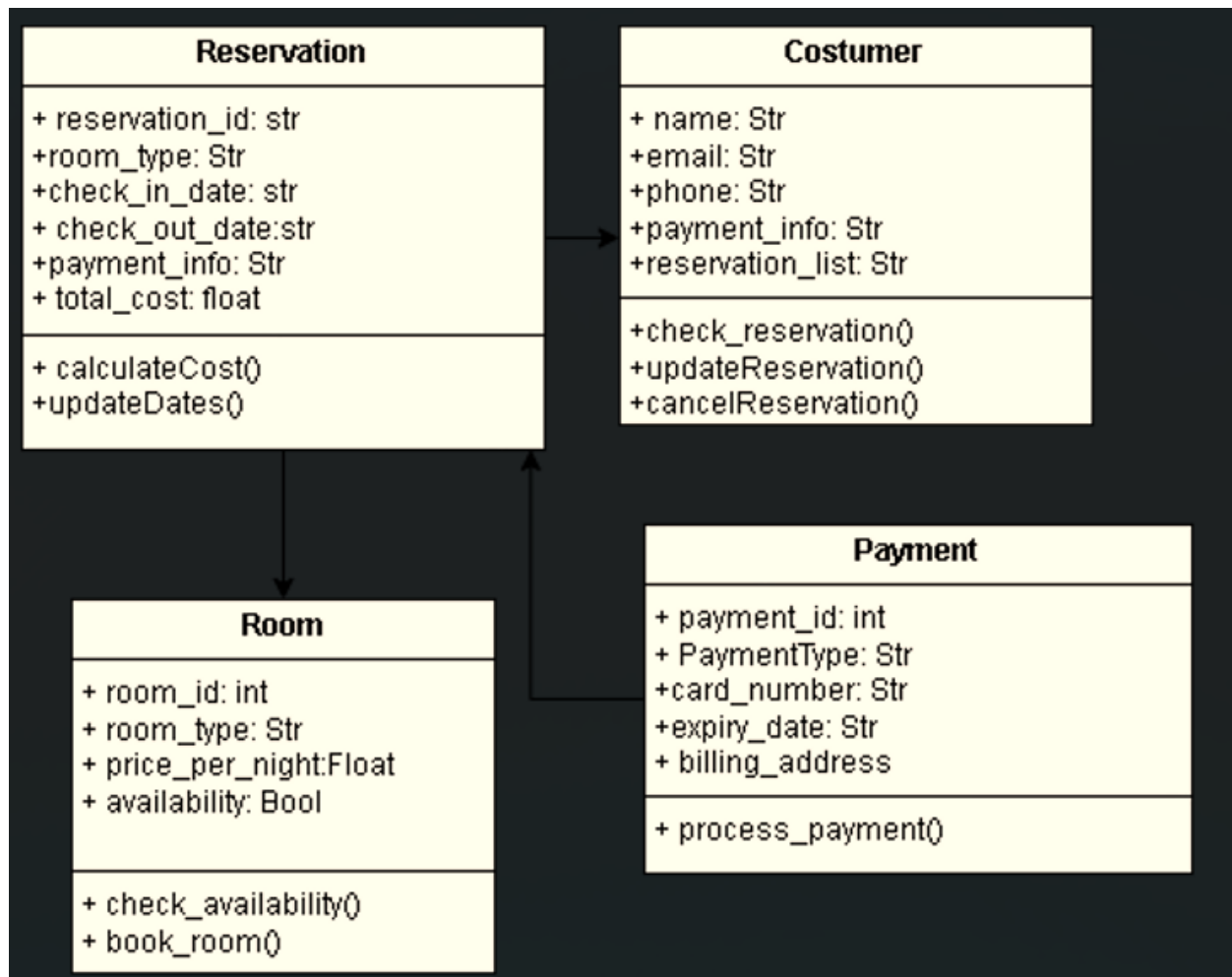


Use Case:	Description
Scenarios:	
Create Reservation	The customer provides personal details, room preferences, and payment info to create a new reservation.
View Reservation	The system displays reservation details when provided with the reservation ID or customer email.
Update Reservation	The customer updates the room type, check-in date, or number of nights in the existing reservation.
Cancel Reservation	The customer cancels their reservation using a reservation ID.
Check-In/Check-Out	The hotel clerk uses the system to check the customer in or out based on their reservation details.



Code:

```

class Customer:    # creating the costumer class
    def __init__(self, name, email, phone):    #initializing attributes
        self.name = name
        self.email = email
        self.phone = phone
        self.reservation_list = []

    def view_reservation(self, reservation_id):    # function for viewing
reservation
        pass

    def update_reservation(self, reservation_id, new_room_type, new_dates):
# function for updating reservations
        pass
  
```

```

    def cancel_reservation(self, reservation_id): #function for canceling
reservations
        pass

class Reservation: # Reservation class
    def __init__(self, reservation_id, room_type, check_in, check_out,
payment_info, total_cost): #initializing attributes
        self.reservation_id = reservation_id
        self.room_type = room_type
        self.check_in = check_in
        self.check_out = check_out
        self.payment_info = payment_info
        self.total_cost = total_cost

    def calculate_cost(self): # function that calculates cost
        pass

    def update_dates(self, new_check_in, new_check_out): #update check-
in/check-out dates
        pass

class Room:
    def __init__(self, room_id, room_type, availability, price_per_night):
        self.room_id = room_id
        self.room_type = room_type
        self.availability = availability
        self.price_per_night = price_per_night

    def check_availability(self): # function that check room availability
        pass

    def book_room(self): # function that books a room
        pass

class Payment: # payment class
    def __init__(self, payment_id, payment_type, card_number, expiry_date,
billing_address): # initializing attributes
        self.payment_id = payment_id
        self.payment_type = payment_type
        self.card_number = card_number
        self.expiry_date = expiry_date
        self.billing_address = billing_address

    def process_payment(self): # function that processes payment
        pass

#creating objects
customer = Customer("Ted Vera", "tedvera@mac.com", "555-1234")
reservation = Reservation("123456", "2 Queen Beds", "2022-08-22", "2022-08-
24", "Mastercard", 201.48)
room = Room("101", "2 Queen Beds", True, 89.95)
payment = Payment("98765", "Mastercard", "123456789012", "12/23", "123
Trinity Drive")

```

```
# testing the classes through the objects
print(f"Customer: {customer.name}")
print(f"Room Type: {reservation.room_type}")
print(f"Check-In Date: {reservation.check_in}")
print(f"Total Cost: {reservation.total_cost}")
```