

Use Case “Pay Order”

1. **Use Case Name:** Pay Order
2. **Use Case ID:** UC002
3. **Description:**
 - This use case describes how a customer makes a payment for an order using a credit card via VNPay. After placing an order, the customer provides payment information, and the system processes the payment with VNPay.
4. **Actors:**
 - **Customer:** The person who initiates the payment for the order.
 - **VNPay System:** The external system that processes credit card payments.
5. **Preconditions:**
 - The customer has already placed an order.
 - The system has generated the invoice with the total amount, including VAT and shipping fees.
6. **Basic Flow of Events:**
 1. The customer reviews the invoice, which includes product details, total cost (including VAT), shipping fees, and total amount due.
 2. The customer initiates the payment by selecting the "Pay" option.
 3. The system connects to VNPay and redirects the customer to the VNPay payment gateway.
 4. The customer enters credit card details and confirms the payment on the VNPay gateway.
 5. VNPay processes the payment and sends the payment result back to the AIMS system.
 6. The AIMS system records the payment transaction and updates the order status to "Paid."
 7. The system displays the payment confirmation to the customer, including the transaction ID and payment details.
 8. The system sends an email to the customer with the order confirmation, invoice, and payment transaction information.
7. **Alternative Flows:**
 - **Payment Failure:**

1. If the payment is not successful (e.g., insufficient funds, incorrect card details), VNPay sends a failure notification to the system.
2. The system informs the customer about the payment failure and prompts them to try again or use another payment method.
3. The customer can either retry the payment or cancel the process.

- **Customer Cancels Payment:**

1. If the customer cancels the payment at the VNPay gateway, the system returns the customer to the invoice page without completing the transaction.
2. The order status remains "Pending" until a successful payment is made.

8. Input Data:

- Payment information (credit card details, VNPay transaction details).
- Invoice information (order details, total amount including VAT and shipping fees).

9. Output Data:

- Payment confirmation, including transaction ID and payment amount.
- Updated order status to "Paid."
- Email with order and payment details sent to the customer.

10. Postconditions:

- The order is successfully paid for and marked as "Paid" in the system.
- The payment transaction is recorded, and the customer receives a confirmation email with the invoice and payment details.