Use Case "PAY ORDER"

1. Use case code

UC002

2. Brief description

This use case outlines the interaction between the customer, AIMS software, and VNPay when a customer opts to pay for an order via credit card.

3. Actors:

Customer: Initiates the payment by providing necessary details.

VNPay: Manages the payment processing through credit cards.

4. Preconditions:

- The customer has already placed an order and received an invoice.
- The VNPay gateway is available for credit card processing.

5. Basic Flow of Events:

1. The system displays the invoice and temporarily saves it (Refer to Table 3).
2. The customer selects the credit card payment option.
3. The system connects to VNPay for processing the payment.
4. The customer provides the required payment details as prompted by VNPay (Refer to Table 2).
5. VNPay validates the payment information and processes the transaction.
6. Upon successful payment, the system receives a confirmation from VNPay.
7. The system returns to the "Place Order" use case.

6. Alternative Flows:

Table 1: Alternative flow of events in use case "Pay Order"

No	Location	Condition	Action	Resume location

1	At step 5	If the credit card information is invalid or the payment fails	1. VNPay returns an error message. 2. The software displays an error and prompts the customer to re-enter payment details or choose a different card.	Step 4

7. Input Data:

Table 2: Input data of payment information

No.	Data Fields	Description	Mandatory	Valid Condition	Example
1	Credit Card Number	Customer's credit card number	Yes	Valid credit card format	0123 4567 8910 1112
2	Expiry Date	Expiration date of the credit card	Yes	Valid future date	"12/29"
3	CVV	Card Verification Value (security code)	Yes	3-4 digit number	"123"
4	Cardholder Name	Name of the credit card holder	Yes	Not empty	VU VIET ANH

8. Output Data:

Table 3: Output data of invoice

No.	Data Field	Description	Display Format	Example

1	Cart Details	List of selected products and quantities	Table format	See Table 4
2	Subtotal (before VAT)	Total price before VAT	Currency, comma-separated	"9,900,000"
3	Delivery Fee	Cost of delivery	Currency, comma-separated	"100,000 VND"
4	Total Payment Amount	Total price (including VAT and delivery)	Currency, comma-separated	"Total amount: 10,000,000 VND"
5	Delivery info			User input in UC "Place order"

Table 4: Output data of cart details

No.	Data Field	Description	Display Format	Example
1	Product Name	Name of the product in the cart	Text	"Phone A"
2	Quantity	Number of units of the product ordered	Numeric	"2"
3	Unit Price	Price per unit of the product	Currency	"10,000,000 VND"

9. Post conditions:

- The payment is successfully processed, and the order status is updated to "Paid".
- The invoice and payment details are stored in the system.
- A confirmation message is displayed to the customer, and a receipt may be sent via email.