**Use Case “Pay Order”**

## Use case code

UC004

## Brief Description

This use case describes the interaction between the customer, the AIMS software, and VNPay when the customer desires to pay for an order. The customer initiates the payment process, and the AIMS software facilitates the transaction through VNPay.

## Actors

* Customer
* VNPay

## Preconditions

* The order must be placed and invoiced.
* The customer has a valid payment method available (credit card).

## Basic Flow of Events

Step 1. The AIMS software displays the invoice.

Step 2. The customer requests to pay the invoice.

Step 3. The AIMS software redirects the customer to VNPay for payment processing.

Step 4. VNPay processes the payment and sends the payment result to AIMS.

Step 5. The AIMS software saves the invoice and payment transaction.

Step 6. VNPay notifies the AIMS system about the success or failure of the payment.

Step 7. The AIMS software displays the transaction information (successful or failed).

## Alternative Flows

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Location | Condition | Action | Resume location |
| 1. | At Step 5 | If the customer cancels the payment transaction. | * VNPay notifies AIMS that the payment was canceled. * The AIMS software redirects the customer back to the order screen to retry or leave the process. | At Step 1 |

## Input Data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Data fields | Description | Mandatory | Valid condition | Example |
| 1 | Receiver Number |  | Yes | string | Do Minh Hieu |
| 2 | Phone Number |  | Yes | 10 digits | 0987654321 |
| 3 | Province | Choose from a list | Yes |  | Hanoi |
| 4 | Address |  | Yes | string | 34 Alley of Tran Thai Tong street, Cau Giay district |
| 5 | Shipping Instructions |  | No | string | Leave with concierge |
| 6 | Delivery Time | Rush Order | Yes | timestamp | 10:00 AM - 12:00 PM |

## **Output Data**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Data fields | Description | Display format | Example |
|  | Title | Title of a media product |  | DVD Movie Escape |
|  | Price | Price of the corresponding media product | * Comma for thousands separator * Positive integer * Right alignment | 123,000 |
|  | Quantity | Quantity of the corresponding media | * Positive integer * Right alignment | 2 |
|  | Amount | Total money of the corresponding media | * Comma for thousands separator * Positive integer * Right alignment | 246,000 |
|  | Subtotal before VAT | Total amount of all products in the order | * Comma for thousands separator * Positive integer   Right alignment | 2,316,600 |
|  | Shipping fee |  | 30,000 |
|  | Subtotal |  | 2,346,600 |

*Table 2 - Output data of the invoice*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Data field | Description | Display format | Example |
|  | Customer name |  | String | Do Minh Hieu |
|  | Phone number |  | 10 digits | 0987654321 |
|  | Province |  | String | Hanoi |
|  | Address |  | String | 34 Alley of Tran Thai Tong street, Cau Giay district |
|  | Total amount |  | * Right alignment * Vietnamese currency * Vietnamese locale | 1.200.000 VND |
|  | Transaction ID |  |  | TXN20240911\_12345ABC |
|  | Transaction content |  |  | Payment for Order #AIMS20240911\_001, Customer: John Doe, Total: 1,200,000 VND |
|  | Transaction date |  | dd/mm/yyyy | 05/10/2023 |

*Table 3 – Transaction Information*

## **Post-Conditions**

* The order is successfully paid, and transaction information is saved in the AIMS system. A confirmation email is sent to the customer.
* If the payment fails, no transaction is recorded, and the customer can attempt payment again.