IT4490 – Software Design and Construction

Nguyễn Hùng Cường – 20215264

# USE-CASE “PAY ORDER”

1. **Use case code**

UC002

1. **Brief description**

This use case describes the interaction between the AIMS software with the customer and VNPay when the customer desires to pay order.

1. **Actors**
   1. The AIMS software with the customer: Send information, calculate total amount
   2. VNPay: Proceed payment
2. **Preconditions**

* Order information and delivery information is valid

1. **Basic Flow of Event**

Step 1: AIMS software displays the invoice (Table 7)

Step 2: Customer asks to pay the invoice

Step 3: Customer enter payment information (Table 6)

Step 4: AIMS software redirects to VNPay

Step 5: VNPay notifies the payment result

Step 6: VNPay sends payment result to AIMS software

1. **Alternative flows**

Table 5: Alternative flow of events for UC "Pay Order"

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Location** | **Condition** | **Action** | **Resume location** |
| 1 | Step 6 | If the customer cancels the payment transaction | The AIMS software notifies that customer just cancels the payment transaction | Step 1 |
| 2 | Step 4 | If VNPay connectiom has an error | The AIMS software saves the invoice for the later transaction | Use case ends |
| 3 | Step 2 | If customer refuses to pay the invoice | The AIMS software notifies that payment is unsuccessful | Use case ends |
|  |  |  |  |  |

1. **Input data**

Table 6: Input data of payment method

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Data fields** | **Description** | **Mandatory** | **Valid condition** | **Example** |
| 1 | Payment method | Choose from a list | Yes | * VNPay | VNPay |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |

1. **Output data**

Table 7: Output data of invoice information

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Data fields** | **Description** | **Display format** | **Example** |
| 1 | Title | Title of a media product |  | DVD Phim Vượt ngục |
| 2 | Price | Price of the corresponding media product | * Comma for thousands separator * Positive integer * Right alignment | 123,000 |
| 3 | Quantity | Quantity of the corresponding media | * Positive integer * Right alignment | 2 |
| 4 | Amount | Total money of the corresponding media | * Comma for thousands separator * Positive integer * Right alignment | 246,000 |
| 5 | Subtotal Before VAT | Total price of products in the cart before VAT | * Comma for thousands separator * Positive integer * Right alignment | 2,106,000 |
| 6 | Subtotal | Total price of products in the cart with VAT | 2,316,000 |
| 7 | Shipping fees |  | 30,000 |
| 8 | Total | Sum of subtotal and shipping fees |  | 2,346,000 |
| 9 | Currency |  |  | VND |

1. **Post-conditions**

* AIMS software receives notification of payment result from VNPay and AIMS software updates order status of customer