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| **Use Case “Pay order”**   1. **Use case code**   UC002   1. **Brief Description**   This use case describes the interaction between the customer, AIMS software, and VNPay payment gateway when the customer completes the payment for an order.   1. **Actors**    1. Customer    2. VNPay    3. AIMS Software 2. **Preconditions**   The customer has confirmed the order and is ready to proceed with payment.  The order is available for payment.   1. **Basic Flow of Events**   *Table 1 Basic flow of Events for "Pay order"*   |  |  | | --- | --- | | Step | Description | | 1 | AIMS software displays the invoice, including all products, VAT, and shipping fees. | | 2 | The customer requests to pay the invoice. | | 3 | AIMS software redirects the customer to VNPay for payment. | | 4 | VNPay processes the payment and sends the result to AIMS. | | 5 | AIMS software saves the payment transaction details and updates the order status. | | 6 | VNPay notifies the customer of the payment result. |  1. **Alternative flows**   *Table 2 Alternative flow of Events for "Pay order"*   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **No** | **Location** | **Condition** | **Action** | **Resume location** | |  | At Step 3 | The customer cancels the payment process. | * The use case returns to Step 1, and the order remains unpaid. | End of use case | |  | At Step 5 | The payment fails due to insufficient funds or system error. | * The customer is prompted to retry the payment. | Step 1 |  1. **Input data**   *Table 3 Input for "Pay order"*   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **No** | **Data fields** | **Description** | **Mandatory** | **Valid condition** | **Example** | |  | Receiver Name | Name of the recipient. | Yes | Non-blank, valid name. | “Nguyễn Văn A” | |  | Phone Number | Customer's phone number. | Yes | 10 digits. | (012) 345-6789 | |  | Province | Province selected from a dropdown list. | Yes | Must select a province. | Hà Nội | |  | Address | Full address of the recipient. | Yes | Non-blank, valid address. | 123 Phố Chính, Quận 1 | |  | Shipping Instructions | Any additional delivery instructions. | No | Optional. |  |  1. **Output data**   *Table 4 Output of shipping fee information for "Pay order"*   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **No** | **Data fields** | **Description** | **Display format** | **Example** | |  | Title | The title or name of the product. | Text | “Phim vuot nguc” | |  | Price | The price of a single unit of the product. | Currency (e.g., $XXX.XX) | 123.000 | |  | Quantity | The number of units of the product. | Number | 2 | |  | Amount | The total cost for the quantity of the product. | Currency (e.g., $XXX.XX) | 246.000 | |  | Subtotal before VAT | The subtotal amount before adding VAT. | Currency (e.g., $XXX.XX) | 2.316.000 | |  | Subtotal | The subtotal amount after including VAT. | Currency (e.g., $XXX.XX) | 2.316.000 | |  | Shipping fees | The cost associated with shipping the order. | Currency (e.g., $XXX.XX) | 30.000 | |  | Total | The total amount including subtotal and shipping fees. | Currency (e.g., $XXX.XX) | 2.346.000 | |  | Currency | The currency used for the amounts. | Text (e.g., USD, EUR) | VND | |  | Name | The name of the recipient for the shipment. | Text | Nguyễn Văn A | |  | Phone number | The contact phone number of the recipient. | Phone number (e.g., (XXX) XXX-XXXX) | (012) 345-6789 | |  | Province | The province where the delivery is to be made. | Text | Hà Nội |  1. **Postconditions**   The order is marked as "Paid" if the payment is successful.  If payment fails, the order remains in "Pending" status. |