USE CASE “PLACE ORDER”

# Brief description

-This use case describes the interaction bettween the “customer” and the AIMS software when the customer wants to place an order

# 2. Actors

* Customer
* VNPay

# 3. Preconditions

* Customer has products in their cart
* Customer is on the cart view screen

# 4. Basic flow

Step 1. Customer requests to place order in the cart

Step 2. AIMS software checks the availability of products in the cart

Step 3. AIMS software displays the form of delivery information with order information

Step 4. Customer enters and submits delivery information

Step 5. AIMS software calculates and updates order information with shipping fees

Step 6. The customer asks to pay order

Step 7. The AIMS software calls UC “Pay order”

Step 8. The AIMS software creates and saves a new order

Step 9. The AIMS software makes the cart empty

Step 10. The AIMS software sends email about the order notification and information

Step 11. The AIMS software displays the successful order notification, the order and the transaction information

# 5. Alternative flow

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Location** | **Condition** | **Action** | **Resume location** |
| 1. | At Step 3 | If the products are not available | * The AIMS software notifies that the the products in the cart are not available and stay at the use case “View cart” | Use case ends |
| 2. | At Step 5 | If the delivery info is invalid | * AIMS software notifies that the delivery info is invalid (blank or wrong format) | At Step 3 |
| 3. | At Step 5 | If the user chooses to place a rush order | * AIMS software inserts use case “Place rush order” | At Step 6 |
| 4. | At Step 8 | If the order payment is not successul or goes back from payment | * AIMS software notifies the customer that payment failed and go back to step 5 | At Step 5 |

# 6. Input data for deliveries

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Data fields** | **Description** | **Mandatory** | **Valid condition** | **Example** |
| 1. | Receiver Name |  | Yes |  | Bui Minh Tuan |
| 2. | Phone Number |  | Yes | 10 digits | 0987654321 |
| 3. | Province | Choose from a list | Yes |  | Hanoi |
| 4. | Address |  | Yes |  | 123 Dai La, Truong Dinh, Hai Ba Trung |
| 5. | Shipping instructions |  | No |  |  |

# 7. Output data

# a. Order infomation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Data fields** | **Description** | **Display format** | **Example** |
| 2. | Title | Title of a media product |  | DVD Rambo |
| 3. | Price | Price of the corresponding media  product | * Comma for thousands separator * Positive integer * Right alignment | 105,000 |
| 4. | Quantity | Quantity of the corresponding media | * Positive integer * Right alignment | 2 |
| 5. | Amount | Total money of the corresponding media | * Comma for thousands separator * Positive integer * Right alignment | 210,000 |
| 6. | Subtotal without VAT | Total amount of all products in the order without VAT | 2,240,000 |
| 7. | Subtotal with VAT | Total amount of all products in the order VAT | 2,400,000 |
| 7. | Shipping fee |  | 100,000 |
| 8. | Total |  | 2,500,000 |

# b. Transaction info

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Data field** | **Description** | **Display format** | **Example** |
| 1. | Customer name |  |  | Bui Minh Tuan |
| 2. | Phone number |  |  | 0987654321 |
| 3. | Province |  |  | Hanoi |
| 4. | Address |  |  | 123 Dai La, Truong Dinh, Hai Ba Trung |
| 5. | Total amount |  | * Right alignment * Vietnamese currency (VNĐ) | 2.270.000 VNĐ |
| 6. | Transaction ID |  |  |  |
| 7. | Transaction content |  |  |  |
| 8. | Transaction date |  | dd/mm/yyyy | 23/02/2025 |

# 8. Postconditions

* Order is recorded in system with "pending processing" status
* Order awaits approval or rejection by a product manager

Functionality

1. **Data Validation**

* System shall validate all user inputs for format and content
* System shall provide appropriate error messages for invalid inputs
* System shall prevent submission of incomplete required information

1. **Transaction Logging**

* System shall maintain logs of all transactions
* System shall record timestamps for all operations

1. **Notification Management**

* System shall send email notifications for significant events
* System shall display on-screen notifications for immediate user feedback
* System shall provide confirmation messages for completed actions

1. **Inventory Control**

* System shall maintain accurate product inventory counts
* System shall update inventory when orders are placed

1. **Search & Filtering**

* System shall provide search functionality across appropriate data
* System shall support filtering of results