## Use Case "Place order"

### 1. Use case code

UC001

## 2. Brief Description

This use case describes the interaction between AIMS and customer when the customer wants to place an order.

### 3. Actors

- Customer
- VNPay

### 4. Preconditions

- There is at least one item in the cart
- The inventory is sufficient

### 5. Basic Flow of Events

- 1. Customer requests to place order in the cart.
- 2. AIMS software checks the availability of products in the cart.
- 3. AIMS software displays the form of delivery information with order information.
- 4. Customer enters and submits delivery information (see Table 1).
- 5. AIMS software calculates and displays order and shipping fees (see Table 2).
- 6. The customer asks to pay order.
- 7. The AIMS software calls UC "Pay order".
- 8. The AIMS software creates a new order.
- 9. The AIMS software makes the cart empty.
- 10. The AIMS software sends email about the order notification and information.
- 11. The AIMS software displays the successful order notification, the order and the transaction information (see Table 3).

#### 6. Alternative flows

#### Table 4-Alternative flows of events for UC Place order

| No | Location  | Condition                                 | Action  | Resume location  |
|----|-----------|---|---|------------------|
| 1. | At Step 3 | If the products are not available         | <ul> <li>The AIMS software notifies<br/>that the the products in the<br/>cart are not available and<br/>stay at the use case "View<br/>cart"</li> </ul> | Use case<br>end  |
| 2. | At Step 4 | If the delivery info is invalid           | <ul> <li>AIMS software notifies that<br/>the delivery info is invalid<br/>(blank or wrong format)</li> </ul>  | Resume at step 3 |
| 3. | At Step 5 | If the user chooses to place a rush order | • AIMS software inserts use case "Place rush order"   | Resume at step 6 |

| 4. | At Step 7 | If the order payment is not successul or goes back from payment |  | Resume<br>at step 5 |
|----|-----------|---|--|---------------------|
|----|-----------|---|--|---------------------|

# 7. Input data

# Table 1-Input data of delivery information

| No | Data fields           | Description        | Mandatory | Valid<br>condition | Example                             |
|----|-----------------------|--------------------|-----------|--------------------|-------------------------------------|
| 1. | Receiver name         |                    | Yes       |                    | Nguyen Thanh Dat                    |
| 2. | Phone numbers         |                    | Yes       | 10 digits          | 0989160060                          |
| 3. | Province              | Choose from a list | Yes       |                    | Ha Noi                              |
| 4. | Address               |                    | Yes       |                    | Le Trong Tan, Thanh<br>Xuan, Ha Noi |
| 5. | Shipping instructions |                    | No        |                    | Weekdays delivery                   |

# 8. Output data

# Table 2-Output data of order information and shipping fee

|    | _           |                       |                                      |              |  |  |
|----|-------------|-----------------------|--------------------------------------|--------------|--|--|
| No | Data fields | Description           | Display format                       | Example      |  |  |
| 1. | Title       | Title of a product    |                                      | Chung ta cua |  |  |
|    |             |                       |                                      | tuong lai    |  |  |
| 2. | Price       | Price of the          | Comma for thousands                  | 300,000      |  |  |
|    |             | corresponding media   | separator                            |              |  |  |
|    |             | product               | <ul> <li>Positive integer</li> </ul> |              |  |  |
|    |             |                       | <ul> <li>Right alignment</li> </ul>  |              |  |  |
| 3. | Quantity    | Quantity of the       | <ul> <li>Positive integer</li> </ul> | 2            |  |  |
|    |             | corresponding media   | <ul> <li>Right alignment</li> </ul>  |              |  |  |
| 4. | Amount      | Total money of the    | Comma for thousands                  | 600,000      |  |  |
|    |             | corresponding media   | separator                            |              |  |  |
|    |             |                       | <ul> <li>Positive integer</li> </ul> |              |  |  |
|    |             |                       | <ul> <li>Right alignment</li> </ul>  |              |  |  |
| 5. | Subtotal    | Total amount of all   | Comma for thousands                  | 2,345,678    |  |  |
|    |             | products in the order | separator                            |              |  |  |
|    |             |                       | <ul> <li>Positive integer</li> </ul> |              |  |  |
|    |             |                       | <ul> <li>Right alignment</li> </ul>  |              |  |  |
| 6. | Shipping    |                       | Comma for thousands                  | 40,000       |  |  |
|    | fee         |                       | separator                            |              |  |  |
|    |             |                       | Positive integer                     |              |  |  |
|    |             |                       | Right alignment                      |              |  |  |

Table 3-Output data of order and transaction information

| No | Data fields         | Description | Display format   | Example                             |
|----|---------------------|-------------|--|-------------------------------------|
| 1. | Customer name       |             |  | Nguyen Thanh Dat                    |
| 2. | Phone number        |             |  | 0989160060                          |
| 3. | Province            |             |  | Ha Noi                              |
| 4. | Address             |             |  | Le Trong Tan, Thanh<br>Xuan, Ha Noi |
| 5. | Total amount        |             | <ul> <li>Comma for thousands separator</li> <li>Right alignment</li> <li>Vietnamese currency (VNĐ)</li> <li>Vietnamese locale</li> </ul> | 2.000.000 VNĐ                       |
| 6. | Transaction ID      |             |  |                                     |
| 7. | Transaction content |             |  |                                     |
| 8. | Transaction date    |             | dd/mm/yyyy   | 09/03/2024                          |

## 9. Postconditions

A new order is created, and its information is sent via email to the customer or nothing happens if payment is not successful