**Họ và tên: Nguyễn Xuân Nghĩa**

**MSSV: 20184166**

**Use Case “Place Order”**

1. **Use case code**

UC00X

1. **Brief Description**

This use case describes the interaction between customers and AIMS

software when the customer wishes to place order.

1. **Actors**
   1. Customers
   2. System
2. **Preconditions**

None

1. **Basic Flow of Events**
   1. Customer request to place order
   2. System display the cart
   3. Customer confirms to cart
   4. System checks the validity of the products
   5. System displays the form of delivery information
   6. Customer enters and submits delivery information
   7. System check the validity of delivery information
   8. System calculates shipping fees
   9. Customer confirms to place order
   10. System save order
   11. System makes the cart empty
   12. System displays the successful order notification.
2. **Alternative flows**

Table N-Alternative flows of events for UC Place order

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** |  | **Location** | **Condition** | **Alternative flow** | **Resume location** |
|  |  | At Step 5.4 | If the cart has any invalid product | * Notice that a product is not available * Remove invalid products | Resumes at Step 5.2 |
|  |  | At Step 5.7 | If declare information in the wrong format | * show wrong format message | Resumes at Step 5.5 |
|  |  | At Step 5.10 | If the customer does not confirm |  | Resumes at Step 5.2 |
|  |  | At Step 5.11 | If the payment is not successful | * show fail message | Resumes at Step 5.2 |

1. **Input data**

Table A-Input data of delivery information

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Data fields** | **Description** | **Mandatory** | **Valid condition** | **Example** |
|  | Customer's name | String | Yes | No Special character | Nguyen Van A |
|  | Phone | String | Yes | Only digits | 0123456789 |
|  | Province | Choose from list | Yes |  | Ha Noi |
|  | Address | String | Yes |  | 123 duong A, phuong B, quan C, thanh pho D |
|  | Shipping  instructions | String | No |  |  |

1. **Output data**

Table B-Output data of a product

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Data fields** | **Description** | **Display format** | **Example** |
|  | Name | Name of the product | String | DVD Doraemon |
|  | Price | Price of the product | Positive Integer | 200000 |
|  | Quantity | The number of product | Positive Integer | 3 |
|  | Total | Total price of the product | Positive Integer | 600000 |

Table C-Output data of invoice

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Data fields** | **Description** | **Display format** | **Example** |
| 1. | List of product | All information in table B | Name | Price|Quantity|Total | DVD Doraemon| 200000| 3|600000 |
| 2. | Subtotal | Price of all product without VAT | -Positive Integer  -Right alignment | 3000000 |
| 3. | VAT | Value-Added Tax | 300000 |
| 4. | Shipping fees | Total price of the product | 50000 |
| 5. | Total Price | Sum of Subtotal, VAT and fees | 3350000 |
| 6. | Currency |  |  | VND |
| 7. | Name | Recipient Name | String | TRAN VAN B |
| 8. | Phone | Recipient’s phone | String | 0123456789 |
| 9. | Province |  | String | Nghe An |
| 10. | Address | Delivery address | String | 123 Duong A, Phuong B, Thanh pho C |
| 11. | Shipping  instructions |  | String |  |

Table D-Output data of cart

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Data fields** | **Description** | **Display format** | **Example** |
| 1. | List of product | All information in table B | Name | Price|Quantity|Total | DVD Doraemon| 200000|3|600000 |
| 2. | Subtotal | Price of all product without VAT | -Positive Integer  -Right alignment | 3000000 |
| 3. | VAT | Value-Added Tax | 300000 |
| 5. | Total Price | Sum of Subtotal, VAT and fees | 3350000 |
| 6. | Currency |  |  | VND |

1. **Activity diagram**

Diagram

Description automatically generated