Use Case "Place Order"

1. **Use case code.**

   UC001

2. **Brief description.**
   This use case describes the interaction between Customer and AIMS System when Customer wishes to place an order with the selected items.

3. **Actors**
   - Primary actor: Customer
   - Secondary actor: VNPay

4. **Preconditions.**

   Customer is in Cart view and wishes to place an order.

5. **Basic Flow of Events**

   Step 1: Customer selects the products they wish to purchase   (See table 1)

   Step 2: Customer request for order

   Step 3: AIMS checks for quantity and temporarily keep the selected products in stock and displays to customer

   Step 4: The AIMS software asks for delivery information with order infomation

   Step 5: Customer fill in delivery information. (see Table 2)

   Step 6: The AIMS software calculates delivery fees and show the invoice (see Table 3)

   Step 7: The AIMS software asks customer to pay for the order.

   Step 8: Customer pay for order (Use Case Pay Order)

   Step 9: AIMS software creates a new order in its system

   Step 10: AIMS software sends email about the order information

   Step 11: AIMS displays successful order and transaction information. (see Table 4)

6. **Alternate flows**

No	Location	Condition	Action	Resume location
1.	At step 3	If the product quantity is not sufficient	1. AIMS Software notify the customer 2. AIMS Software update the customer's cart.	Resume at step 1.

2.	At step 4	The customer request rush order	Call Use Case "Request Rush Order"	Resume at Step 7
3.	At step 6	The customer wishes to adjust delivery methods	AIMS software redirects the customer to Step 4	Resume at Step 4
4.	At step 6	The customer wans to adjust products and quantity to purchase	AIMS software redirects the customer to Step 1	Resume at Step 1
5.	At step 5	The customer fill in invalid details or does not fill in required fields	AIMS software notify the customer.	Resume at Step 5

7. Input data

Table 1: Input data of selected products for placing order

No	Data fields	Description	Mandatory	Valid condition	Example
1.	Product name	Choose from cart	Yes		Taylor Swift – Album "evermore"
2.	Quantity	Use "+" or "-" symbol	Yes	Number greater than zero	3
3.	Product type	Choose from a list	Yes		Vinyl

Table 2: Input data of delivery information

No	Data fields	Description	Mandatory	Valid condition	Example
1.	Receiver name		Yes		Phạm Tuấn Tài
2.	Phone number		Yes	10 digits, number	0123456789
3.	Province	Choose from a list	Yes		Hanoi
4.	District	Choose from a list	Yes		Quận Đống Đa
5.	Address		Yes		1 Đại Cồ Việt
6.	Instructions		No		Giao vào giờ hành chính

8. Output data

Table 3: Output data of fee information and invoice

No	Data fields	Description	Display format	Example
1.	Product title	Title of the media product		Taylor Swift Album "evermore"
2.	Price	Price of the each product in the list	In Vietnam Dong, separated by comma for thousand	600,000đ
3.	Type	The type of corresponding product		Vinyl
4.	Quantity	Quantity of corresponding product	Positive integer	3
5.	Subtotal	Total amout of products in the order		1,800,000đ
6.	Shipping fee		Positive integer	30,000đ

Table 4: Output data of order information and transaction

No	Data fields	Description	Display format	Example
1.	Customer name			Phạm Tuấn Tài
2.	Phone number		10 number digits, greater than 0	0123456789
3.	Province			Hanoi
4.	District			Quận Hai Bà Trưng
5.	Address	Detailed address of customer (building, house number, ...)		Số 1, Đại Cồ Việt
6.	Total amount	Total amout of products in the order and shipping fee	Positive integer, in Vietnam Dong, separated by comma for thousands.	1,830,000đ
7.	Transaction ID	According to VNPay		
8.	Transaction content	According to VNPay		
9.	Transaction date		Dd/mm/yy	05/10/2023

9. **Postcondition.**
   - A new order is created for processing in the AIMS system.
   - The customer receives email about order information & transaction details.
   - The customer sees the displayed information regarding transaction & order information.

Use case "Pay Order"

1. **Use case code.**
   UC003
2. **Brief description.**
   This use case describes the interaction between Customer, AIMS System and VNPay when Customer wishes to pay for an order.
3. **Actors.**
   - Primary actor: Customer
   - Secondary actor: VNPay
4. **Preconditions.**
   Customer has requested for an order and AIMS software have checked the order's availability and displayed the invoice the the Customer.
5. **Basic flows of event.**
   Step 1. Customer select payment method as VNPay
   Step 2. The AIMS software requests VNPay for handling the transaction
   Step 3. Customer proceed with VNPay to make transaction
   Step 4. VNPay processes the transaction sends details to the software
   Step 5: The AIMS software displays transaction details.   (See Table 1)
   Step 6. Customer proceeds to Step 9 – Use Case Place Order
6. **Alternate flows of event.**

No	Location	Condition	Action	Resume location
1.	Step 4	If the transaction processed by VNPay is failed	AIMS Software notifies the customer	Resume at Step 6 – Use Case "Place Order"
2.	Step 3	If the customer exit the payment process	AIMS Software redirects Customer to Step 6 – Use Case "Place Order"	Resume at Step 6 – Use Case "Place Order"

7. **Input data.**

According to VNPay's requirements.

8. **Output data**

Table 1: Output data of transaction details.

No	Data fields	Description	Display format	Example
1.	Transaction Status	Status of the transaction processed by VNPay	Text	Successful

2.	Transaction date	The date of the transaction received from VNPay	Dd/mm/yy	13/03/2024

9. **Postconditions.**
   - Customer receives information about transaction status
   - Customer proceed to Step 9 – Use Case "Place Order"

Use case "Place Rush Order"

1. **Use case code**
   UC003
2. **Brief discription.**
   This use case describes the interaction between Customer and AIMS System when Customer wishes to place an rush order with the confirmed items.
3. **Actors.**
   - Primary actor: Customer
   - Secondary actor: None
4. **Preconditions.**
   - Customer has selected all the products that need to be purchased
   - Customer has proceed to request for order and the AIMS has checked the availability of products.
   - Customer has filled in and submit delivery information
5. **Basic flow of events.**

   Step 1: Customer chooses rush order.

   Step 2: The AIMS software checks for address and product eligibility

   Step 3: The AIMS software asks for more information for rush delivery (See Table 1)

   Step 4: Customer fills in the form

   Step 5: The AIMS software calculate the money for rush delivery and displays invoice and delivery information.   (See Table 2)

   Step 6: The customer proceed to Step 7 – Use Case "Place Order"

6. **Alternate flows.**

No	Location	Condition	Action	Resume location
1.	At step 2	If no products are eligible for rush delivery	The AIMS software asks customer to update the cart.	Resume at step 1 – Use case "Place Order"
2.	At step 2	If the address does not suports rush delivery	The AIMS software asks customer to update delivery information.	Resume at Step 5 – Use case "Place Order"

7. Input Data

Table 1: Input data of further information for rush delivery.

No	Data fields	Description	Mandatory	Valid condition	Example
1.	Delivery Date	Choose from the displayed calendar	Yes	Delivery date no smaller than current date	March 12th 2024
2.	Delivery Time	Time for delivery in format hh:mm (24-hour form)	Yes	-hh must be in range (06, 22) -mm must be in range (00, 59) -No smaller than current time	15:30
3.	Delivery instruction	Text	No		Call 15 minutes in advance

8. Output data

Table 2: Output data of fee information and invoice

No	Data fields	Description	Display format	Example
1.	Product Title	Title of the media product		Taylor Swift Album "evermore"
2.	Eligibility for rush delivery	Corresponding checkbox for each product.	Green "V" for "Eligible" and red "X" for "Not eligible".	X
3.	Total fee for non-eligible products	Delivery fee for products that can not be rush delivery.	Positive integer, in Vietnam Dong, separated by comma for thousands.	30,000đ
4.	Total fee for eligible products.	Delivery fee for products that can be rush delivery.	Positive integer, in Vietnam Dong, separated by comma for thousands.	30,000đ
5.	Total delivery fee		Positive integer, in Vietnam Dong, separated by	60,000đ

			comma for thousands.	

9. Postcondition
- Customer receives information about rush delivery order
- Continue to Step 7 – Use Case "Place Order"