Use Case: "Place Rush Order"

1. Use Case Name: Place Rush Order

2. Use Case ID: UC003

3. **Description**:

 This use case describes how a customer places an order with a rush delivery option. The customer can select rush delivery for eligible products and provide additional rush order information, such as preferred delivery time and delivery instructions.

4. Actors:

- Customer: The person placing the order with rush delivery.
- VNPay System: Handles payment processing when the customer pays for the rush order.

5. Preconditions:

 The customer has selected products eligible for rush delivery (the products must be eligible, and the delivery address must be within the supported inner city area of Hanoi).

6. Basic Flow of Events:

- 1. The customer adds products to the cart and selects the "Rush Delivery" option for eligible products.
- 2. The system checks whether the customer's delivery address is within the supported rush delivery area:
 - If yes, continue with the main flow.
 - If no, the system prompts the customer to update the delivery address or choose a different delivery method.
- 3. The customer enters rush delivery information, including the desired delivery time and any special delivery instructions.
- 4. The system recalculates the shipping fee, including the rush delivery fee (if applicable), and displays the total cost, including VAT, regular shipping fees (if any), and the rush delivery fee.
- 5. The customer confirms the order and selects a payment method (credit card via VNPay).
- 6. The system connects to VNPay to process the payment.
- 7. After successful payment, the system generates the invoice and sends an order confirmation email to the customer.

8. The system displays the order information and payment details to the customer, including the transaction ID and rush delivery details.

7. Alternative Flows:

- Product Not Eligible for Rush Delivery:
- 1. If certain products are not eligible for rush delivery, the system notifies the customer and asks them to update the cart.
 - o Delivery Address Not in Rush Delivery Area:
- 1. The system prompts the customer to provide a different delivery address or select regular delivery.
 - o Payment Failure:
- 1. If payment fails, the system notifies the customer and asks them to retry the payment.

8. Input Data:

- o Product information (quantity, name).
- o Rush delivery information (delivery time, address).
- o Payment information (credit card details, VNPay transaction details).

9. Output Data:

- Order confirmation, including total cost, transaction ID, rush delivery fee, and delivery details.
- Invoice and transaction information sent to the customer's email.

10. Postconditions:

- The order is successfully created, and the payment transaction is recorded.
- The customer receives an order confirmation email, including rush delivery details.
- o The products will be delivered according to the requested rush delivery time.