**Use Case Specification: Place Order**

**1. Place Order**

* **Actors**
* Primary Actor: Customer
* Supporting Actor: System
* **Preconditions**
* Customer has items in their cart
* Customer is logged into the system
* Cart items are available for purchase
* **Postconditions**
* Order is placed successfully
* Delivery information is recorded
* Shipping fee is calculated
* Order total is calculated
* **Basic Flow**

1. Customer initiates order placement
2. System displays delivery information form
3. Customer enters delivery information (name, address, phone, email)
4. System validates delivery information
5. System calculates shipping fee based on:
   * Customer's location
   * Order weight
   * Total order value
6. System checks rush order eligibility
7. System calculates order total
8. Customer confirms order
9. System processes the order
10. System displays order confirmation

* **Alternative Flows**

**A1. Invalid Delivery Information**

* At step 4 of basic flow:

1. System detects invalid delivery information
2. System displays error message
3. System prompts customer to re-enter information
4. Flow returns to step 3 of basic flow

**A2. Rush Order Not Available**

* At step 6 of basic flow:

1. System determines rush order is not available for location
2. System notifies customer that rush order is unavailable
3. System continues with normal delivery option
4. Flow continues at step 7 of basic flow

**A3. Cart Items Unavailable**

* At any point in basic flow:

1. System detects one or more items are no longer available
2. System notifies customer of unavailable items
3. System prompts customer to modify cart
4. Flow returns to step 1 of basic flow

* **Special Requirements**
* Shipping fee calculation must account for:
  + Weight-based charges
  + Location-based rates
  + Special discounts for orders over 1,000,000 VND
* Delivery information validation must check:
  + Valid email format
  + Valid phone number format
  + Complete address information
* **Business Rules**

1. Rush Order Eligibility:
   * Only available in Ha Noi (TP)
   * Must meet minimum order requirements
2. Shipping Fee Rules:
   * Base fee for major cities: 22,000 VND
   * Base fee for other locations: 30,000 VND
   * Additional weight charges: 2,500 VND per 0.5kg
   * Orders over 1,000,000 VND get 25,000 VND shipping discount
3. Validation Rules:
   * Phone number must follow Vietnamese format
   * Email must be valid format
   * Address must include street, city, and province
   * Name cannot be empty

* **Technical Requirements**

1. Response Time:
   * Shipping calculation: < 1 second
   * Order processing: < 3 seconds
2. Data Validation:
   * Real-time field validation
   * Server-side validation required

* **Frequency of Use**
* High (Expected several hundred times per day)
* **Performance Requirements**
* System must handle up to 100 concurrent order placements
* Database transactions must complete within 5 seconds