UNIVERSITY OF RUHUNA

FACULTY OF TECHNOLOGY

DEPARTMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY

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ICT 2133 – OBJECT ORIENTED ANALYSIS & DESIGN

Assignment 1

2023/02/28

Question 01

Use case name:

Placing an Order through Online Shopping System

Primary actor:

Customer

Scope:

Ordering an order through an online shopping system.

Stakeholders:

- **Customer:** The person who places the order
- **Online Shopping System:** The system that facilitates the order placement process.
- **Delivery Company:** The company responsible for delivering the order.
- **Payment Gateway:** Payment processing system authorizes and completes order payment.

Preconditions:

- The customer has a registered account with the online shopping system.
- The customer has selected the products they wish to purchase.
- The customer has entered the delivery address and payment details.
- The products are in stock.

Success Guarantee:

- The customer receives an order confirmation message with a tracking number and estimated delivery date, and the order is processed successfully.
- The products are delivered to the customer within the specified timeframe.

Main Success Scenario:

1. The customer logs in to their account on the online shopping system.

2. The customer selects the products they wish to purchase and adds them to the cart.

3. The customer proceeds to checkout

4. The system prompts the customer to confirm their delivery address and payment details.

5. The customer confirms the details and proceeds to payment.

6. The payment gateway authorizes and completes the payment.

7. The system generates an order confirmation message with a tracking number and estimated delivery date and sends it to the customer.

8. The system notifies the delivery company to arrange for delivery of the order.

9. The delivery company delivers the order to the customer within the specified timeframe.

Extensions:

1. If the payment is declined, the system prompts the customer to re-enter payment details.

2. If the delivery address is invalid, the system prompts the customer to enter a valid address.

3. If the products are out of stock, the system notifies the customer and prompts them to remove the out-of-stock items from their cart or wait for the items to be restocked.

4. If the delivery is delayed, the system notifies the customer and updates the expected delivery timeframe.

5. If the customer wants to cancel the order before it is delivered, the system refunds the payment and cancels the order, and sends a confirmation email to the customer.

6. If the customer wants to return the order after it is delivered, the system prompts the customer to initiate the return process and provides instructions on how to do so and sends a confirmation email to the customer with details about the return process.

Question 02