Assignment 1 – COMP-3220

Q1. All the uses cases and actors

Actors

1. Online Customer
2. New Customer
3. Returning Customer
4. Customer Database
5. Payment Services
6. Accountant Admin
7. Store Clerk
8. Store Manager

Use Cases

1. Process an Order
2. Customer Login
3. Customer Registration
4. Search Product
5. Select Product
6. Order Product
7. Email Confirmation
8. Credit Card Payment
9. Send Order Confirmation
10. Process Order
11. Package Order
12. Report Inventory
13. Manage Inventory
14. Schedule Pickup
15. Check order status
16. Order history
17. Process Pay

Q3.

A customer proceeds to the checkout section of the online retail shop system with items to order. The cashier or payment\_services uses the “point of sale” system to record and verify each purchased item. The system presents a running total of and line-item details (cart). The customer then enters his/her credit card or payment information which the Account\_admin validates and records. Then the customer receives a receipt and email confirmation from the system and is notified for order pickup.

Q4 use case diagram - **FULLY DRESSED FORMAT**

Use Case UC1 : Process an order

**Scope:** Online Retail Shopping System

**Level:** user goal

**Primary Actor:** Customer (New and Returning Customer)

**Secondary Actors :** New\_Customers, Returning\_Customers, Customer Database, accountant\_admin, store\_clerk, store\_manager, payment\_services.

**Stakeholders and Interests:**

* Store\_manager - Person responsible for the system management.
* New Customers - Person who is new to the system and registers to the system to purchase products.
* Returning Customers- Person who is registered with the system and access the system through log in. He/She can view, search and select products. So they can place orders ,view order history and status.
* Payment\_Services - provides service to the system by validating and authorizing credit card of customer.
* Store Clerk - main duty is to collect and pack items for the customer, update order statuses and notify the customer(s).

**Preconditions** : Customer should be registered to the system with valid and acceptable credit card number.

**Success Guarantee (or Postconditions):**Order is placed, order is processed ,packed and picked up by the customer .

**Main Success Scenario (or Basic Flow):**

1. New customer for the system will register with all the details including the credit card or he/she will login into the system with their information.
2. Customer search for the product on specifying amount or weight.
3. Customer repeats the steps 1-2 till customer selects the products to buy .
4. Customer places order with the pickup times (which have minimum of 24 hour minimum pickup time).
5. the system will check the inventory if the selected product is available or not
6. Customer receives confirmation email with order details if the product (also quantity requested )is available and Updates the inventory by the accountant\_admin
7. When order is received , the system transfers order to order processors.
8. Order Processors collects the order from the inventory and package them.
9. A confirmation Email is sent by accountant\_admin to customer regarding completion of order.
10. After sending confirmation email ,the accounting\_admin will charge the order amount to the credit card details given at the time of registration.
11. Customer picks up the order on scheduled time
12. The Store\_manager keeps record of all orders, what was ordered, charge of the order and current order status.
13. Customers can view details of all orders containing their status and cost.

**Extensions (or Alternative Flows):**

After the order is placed ,the system will check the manage\_inventory and if the product is not available an email will be send to the customer about it and notify the Accounting team .So the customer is not charged for the same by the account\_admin.

**Special Requirements:**

* Any Smart Device which is connected to Internet and with touch screen probably.
* Credit authorization with in less than 60 seconds for most of the time
* Somehow, we want fast recovery when access to remote services such the inventory system is failing.
* Language internationalization on the text displayed
* Business rules and models.

**Technology and Data Variations List:**

* Credit account information entered by card reader or keyboard.
* Credit payment signature captured on paper receipt. But within two years, we predict many customers will want digital signature capture.
* Manager override entered by swiping an override card through a card reader.
* Item identifier entered by bar code laser scanner

**Frequency of Occurrence:** Could be nearly continuous.

**Open Issues:**

* Explore the remote service recovery issue.
* What are the tax law variations?
* What happens if the delivery not picked up on time or never picked up?
* Quality Issues with the product
* Lack of Security for product, and purchase
* Additional Charges