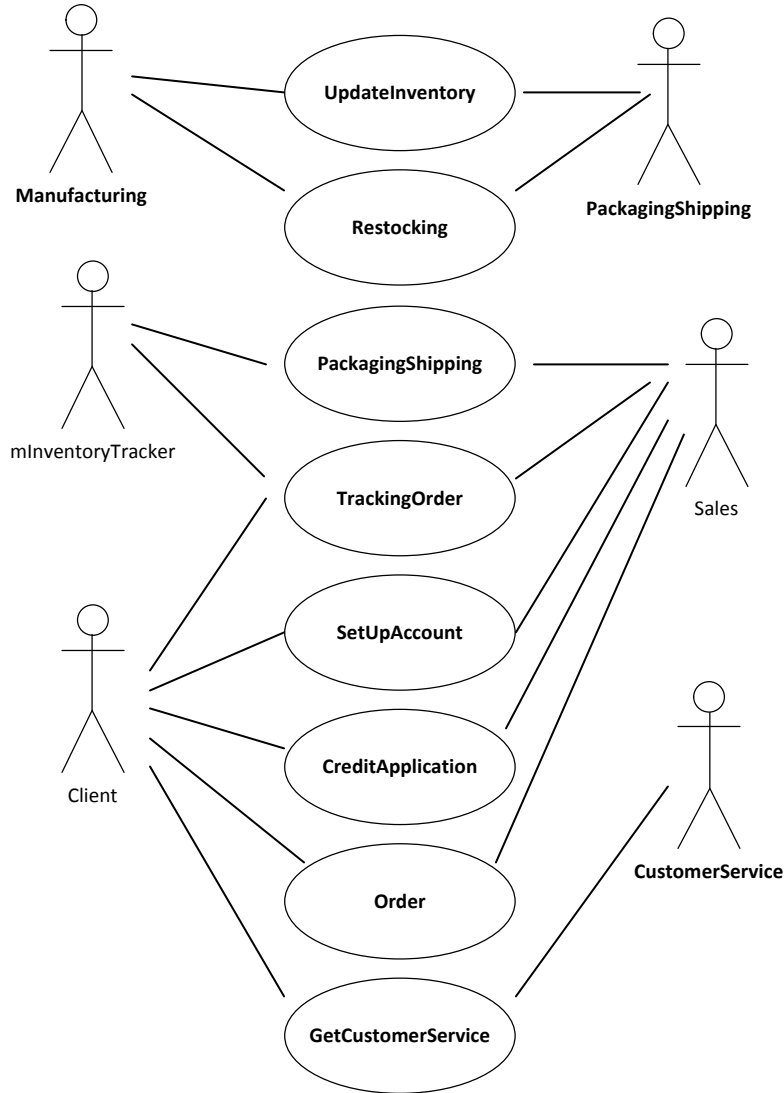


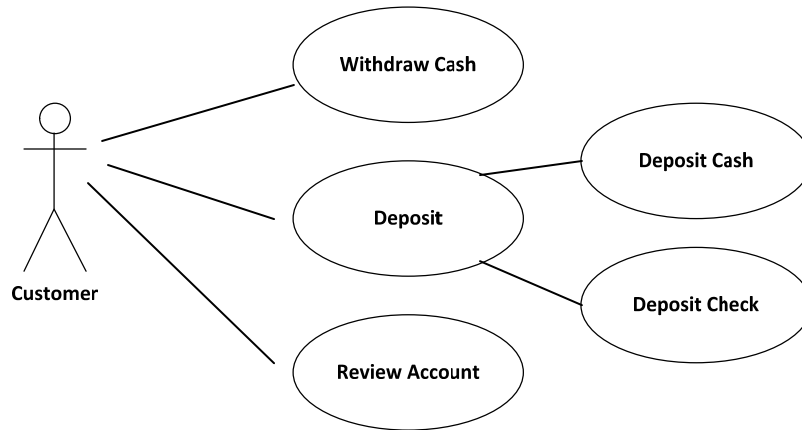
CPET 565/CPET 499 Mobile Computing Systems

Lecture Note
UML Diagrams
2012/11/19

Use Cases (Inventory Tracking Example)



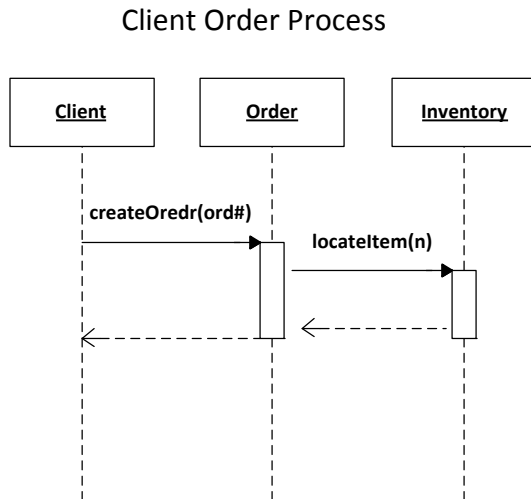
Use Cases (ATM Machine Example)



Use Case Specification (An Example)

- Use Case Name: Withdraw Cash
- Use Case Purpose: This use case provides the function for a customer to withdraw cash from an ATM machine.
- Optimistic flow:
 - a) Customer slides the bank card, enters the pin#.
 - b) Customer chooses either Checking account or Saving account for withdrawing.
 - c) Customer makes a choice, enter the desired amount, and the ATM machine checks if the fund is sufficient for withdrawing.
 - d) ATM counts and dispenses the bills.
 - e) ATM asks if a printed receipt is needed.
 - f) ATM exits and redisplay welcome message.
- Pragmatic flows
 - Conditions triggering alternative flow
 - Condition 1: Customer slides the bank card, but enter an incorrect pin#
 -
 - Condition 2: There is insufficient fund in the account
 -
 - Condition 2:

Sequence Diagram (Client Order Process)



Example Classes for Inventory App

Source: [9][10]

InventoryItem class (collaborators: NONE)

- itemNumber
- name
- description
- unitPrice
- totalPrice

Order class (responsibility; collaborators: OrderItem class, Customer class)

- orderID: string
- orderDate: String
- dateShipped
- orderItems
- orderedTotals
- orderDate: String
- costRange: float
- priceRange: float
- tax: float
- priorityCode: int
- completionProgress: float
- rawMaterialIssued: Boolean
- customerInfo: String
- deliveryInfo: String
- printInvoice()
- cancel()

Customer class (collaborators: Order class, CustomerAddress class)

- name
- phoneNumber
- customerID
- makeOrder()
- cancelOrder()
- makePayment()

OrderItem class (collaborators: InventoryItem class)

- quantity
- inventoryItem()
- calculateTotal()

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