

## Question 1: Buy a camera from Amazon.com

### Objects and Behaviors

Customer	Data: name, creditCard, address, phoneNumber Behaviors: login, search, confirm, isCheckout, cancel
Store	Data: itemCategories, customerReview Behaviors: confirmOrder, cancelOrder
Item	Data: name, price, specifications
Order	Data: orderNumber, orderDate, shippingAddress, billingAddress Behaviors: cancelOrder, changeAddress, confirmReceived, return
Payment	Data: name, cardNumber Behaviors: makePayment
Internet	Data: userName, password, emailAddress Behaviors: isConnected, loginToAmazon, authorize

### Sequence of Flow - Invoke Objects with Behaviors

Customer Jiali

Internet Service Amazon.com

Jiali.loginToAmazon -> Amazon: authorize

if authorize if true

    Jiali.isConnected

    Jiali. search -> itemCategories: cameras found

    Jail. search -> item: Sony 6000 found

if item is available

    Jiali.confirm -> item ready to make a payment

else

    end

if Jiali.isCheckout

    Jiali.makePayment -> order placed

    end

else

    cantLoginToAmazon

end

## Question 2: Design a platform for buying tickets of local events

### Objects and Behaviors

Customer	Data: userName, phoneNumber, creditCard Behaviors: search, confirm, Cancel
Event	Data: categories, location, price, time Behaviors: confirmOrder, cancelOrder
Item	Data: name, price, specifications
Order	Data: orderNumber Behaviors: cancelOrder, changeEvent
Payment	Data: name, cardNumber Behaviors: makePayment
Internet	Data: userName, password, emailAddress, listOfEvent Behaviors: isConnected, authorize, login

### Sequence of Flow - Invoke Objects with Behaviors

Customer Jiali

Internet Service bookingEvent

Jiali.login -> bookingEvent: authorize

if authorize if true

    Jiali.isConnected

    Jiali. search -> categories: event found

    Jail. search -> time: time available

if time is available

    Jiali.confirm -> event: ready to make an reservation

else

    end

if the event is reserved

    Jiali.makePayment -> order placed

end

### Question 3: Design an app to book a doctor's appointment using your medical insurance provider

#### Objects and Behaviors

Customer	Data: name, age, gender, phoneNumber, insuranceCard Behaviors: search, confirm, Cancel
Doctor	Data: doctorName, clinicLocation, price, time Behaviors: confirmReservation
Order	Data: orderNumber Behaviors: cancelOrder, changeTime
Payment	Data: name, cardNumber Behaviors: makePayment
App	Data: classificationOfDiseases, listOfDoctor, comment Behaviors: search
Internet	Data: userName, password, emailAddress Behaviors: loginToApp, authorize, isConnected

#### Sequence of Flow - Invoke Objects with Behaviors

Customer client  
App Evergreen

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clinet.loginToApp -> Evergreen: authorize
if authorize if true
    clinet.isConnected
    client. search -> classification: found
    client.search -> doctorName: found
    client. search -> time: time available
if time is available
    client.confirm -> ready to make an appointment
if the appointment is confirmed
    clinet.makePayment -> order placed
end
```

## Question 4: Design a job searching platform

### Objects and Behaviors

User	Data: name, phoneNumber, degree Behaviors: search, apply
job	Data: position, location, salary, workTime
website	Data: company, jobTitle, Behaviors: search, findJob, postJob
Internet	Data: userName, password, emailAddress Behaviors: loginToMyIndeed, authorize, isConnected

### Sequence of Flow - Invoke Objects with Behaviors

User student

Website MyIndeed

student.loginToMyIndeed -> userName, password : connected  
if connected is true

Loop

student.search -> company: found

student.search -> jobTitle: found

student.findJob -> position: found

student.search -> workTime: available

student.apply

end

## Question 5: Order pizza from Dominos

### Objects and Behaviors

Customer	Data: name, phoneNumber, address Behaviors: search
Item	Data: type, size, price, flavor, spicy
Order	Data: orderNumber, date, quantity, trackingNumber Behaviors: viewOrder, confirmOrder, cancelOrder, trackOrder
Payment	Data: name, creditCard Behavior: makePayment
Delivery	Data: name, phoneNumber, orderNumber Behaviors: contact, deliveryFood
Internet	Data: userName, password, emailAddress Behaviors: loginToDominos, authorize, isConnected

### Sequence of Flow - Invoke Objects with Behaviors

Customer Jiali

Website Dominos

Jiali.loginToDominos -> userName, password : connected

if connected is true

    Jiali.search -> type: available

    Jiali.choose -> item: selected

if confirmOrder is true

    Jiali.makePayment -> orderNumber: available

else

    end

if Delivery is available

    Jiali.trackOrder -> trackingNumber: can be tracked

    delivery.deliveryFood -> address: delivered

end