

-----Design an app for calling taxis-----

Objects and Behaviors:

RideshareApp

Data: userAccount, phoneNumber, locations, paymentAccount

Behaviors: connect, search, sendInformation, charge, authorize

Passenger

Data: name, phoneNumber, account, locations

Behaviors: login, loginOut, inputLocation, requestRide, compare, navigete, call, pay, review, cancel

Driver

Data: name, phoneNumber, account, locations

Behaviors: login, loginOut, recieveOrder, call, navigate, getMoney, review

Trip

Data: locationFrom, locationTo

Behavior: N/A

CreditCard

Data: cardNumber, name, bank, expirationDate, securityCode

Behavior: N/A

CreditCardCompany

Data: name, money, time

Behaviors: authorizeTransaction

Sequence of Flow - Invoke Objects with Behaviors

Rider ann;

Driver ben;

RidershareApp uber;

CreditCard creditCard,

CreditCardCompany visa,

if uber.isAvailable

ann.loginToRideshareApp->uber:authorize

ben.loginToRideshareApp->uber:authorize

if(authorize is true)

ann.inputLocations ->uber:searchDrivers

uber.sendInformation ->ben,uber:confirmTheTrip

loop

if ann.wantToCallDriver

ann.callDriver ->uber,ben:answer

end

if ben.wantToCallDriver

ben.callDriver ->uber,ann:answer

```
    end
    ben.navigate ->uber
    ben.completeTheTrip ->uber
    uber.sendBillToPassenger ->ann
    ann.payForTheTrip ->trip, creditCard, uber:paymentConfirmation
    ben.getMoney ->trip, creditCard, uber:paymentConfirmation
    uber.requestForReview ->ann,ben:review
else
    ann.cantMakeOrders
    return
end
```