Design an app for calling taxis

Object and Behaviors:

Customer

Data: name, phoneNumber, money

Behavior: callACab, pay, callTheDriver, loginToTaxisService, ScoreTheDriver, SelectOrInsertTips, meetdriver, checkCarAndDriverInfo, getin, getoff, findtherightCar

Driver

Data: name, phoneNumber, car, ID

Behavior: driveTheCar, connectTheCustomer, LoginToTaxisService, accept, meetcustomer, relocateCustomer, confirmFinish

Car

Data: brand, Color, platenumber

Behavior: drive

Phone

Data: number, location,

Behavior: receiveAPhoneCall, makeAPhoneCall, SendLocation,

InternetTaxisService

Data: carLocation, customerLocation, EmptyCar

Behavior: MatchCustomerAndDriver, authorize, sendDiverphotoAndCarInfo, sendCustomerNameAndLocationInfo, showDriverTrack

CreditCard

Data: Number, name, company, expiry, securityCode

Behavior:

CreditCardCompany

Data:

Behavior: authorizeTransaction

Sequence of invoking behaviors on Objects:

Customer Peter;

Driver Tom;

Car BMW;

InternetPhoneService Uber;

Phone customerphone;

Phone driverphone;

CreditCard card;

CreditCardCompany visa

Peter. LoginToTaxisService -> Uber: authorize

Tom. LoginToTaxisService -> Uber: authorize

If (authorize ==true)

Driverphone.sendlocation

Peter.callACab ->customerphone.SendLocation

uber. MatchCustomerAndDriver

Loop

If (MatchCustomerAndDriver ==success)

Tom.accept-> InternetTaxisService.sendDiverphotoAndCarInfo, InternetTaxisService.sendCustomerNameAndLocationInfo, InternetTaxisService.showDriverTrack

Tom.drivetheCar

Peter.meetdriver

Tom.meetcustomer

If (meetdriver is true OR meetcustomer is true)

Peter. checkCarAndDriverInfo

If (checkCarAndDriverInfo is true)

Peter.getin

Tom.drivethecar

Peter.getoff

Tom.confirmfinish

Peter.ScoreTheDriver

Peter .SelectOrInsertTips ->card, visa. authorizeTransaction

If (authorizeTransaction is False)

InternetTaxisService.alertPaymentMethodFailed

Peter.addANewCard

Peter.repay

Else

InternetTaxisService.recordthistrip

Break the loop;

End

Else

Peter.tryToFindTherRightCar,

End

Else

Tom.connectTheCustomer OR Peter. callTheDriver-> Tom.relocateCustomer

End

Else

uber. MatchCustomerAndDriver

End

End Loop

Else

Peter.cannotCallACab

End