

Problem 2: Design an app for calling taxis (e.g. Uber)

Objects and Behaviors:

Customer:

Data: Name, Phone, Address, Destination

Behavior: register, signIn, rating, call, openApp, hasAccount, findDriver, cancelOrder, pay

Driver:

Data: Name, Phone, CarType, CarNumber, CarColor

Behavior: sendTexts, call, rating, respond, startTrip, endTrip, cancelOrder, receiveIncome

Application:

Data: Name

Behavior: verify, findRoute, payDriver

Sequence of Flow - Invoke Objects with Behaviors

CallingTaxis:

Customer yue

Driver driver

Application app

yue.openApp-> requestion to app

Loop

 If yue.hasAccount is False

 yue.register

 yue.signIn-> app:verify

 End

 Else

 yue.signIn->app:verify

 End

 If app.verify is True

 yue.findDriver->app,driver:respond

 If driver.respond is True

```
app.buildOrder->driver, yue: connection
  If connection is True
    app.findRoute->
      If driver.wantToSendTexts
        driver.SendText
      End
      If driver.wantToCall
        driver.call
        If driver.wantToEndCall
          driver.endCall
        End
      End
    End
  driver.startTrip->requestion to app
  driver.endTrip-> requestion to app
  customer.pay-> app:verify
  If app.verify is true
    app.payDriver
    driver.receiveIncome
  End
  customer.rating-> requestion to app
  driver.rating-> requestion to app
End
End
End
```