

Design an app for calling taxis

Objects and Behaviors:

Passenger:

Data: name, phoneNumber, numberOfPassenger, money, location, destination

Behavior: chooseLocation, setDestination, callTaxi, ride, arrive, pay, rate

Driver:

Data: name, phoneNumber, location, taxi

Behavior: shareLocation, getOrder, drive, arrive, getPaid, rate

CreditCard:

Data: number, name, company, expiry, securityCode

Behaviors: authorizeTransaction

APP:

Data: name, functions, map, wallet, interface

Behavior: provideService, connect, leadWay, makePayment

Sequence of Flow - Invoking Objects with Behaviors

Passenger kevin;

Driver bin;

CreditCard card;

APP taxiApp;

kevin.setDestinationFromCurrentLocation

kevin.connect -> taxiApp, bin: connected

if connected is true

Loop

kevin.call -> taxiApp, bin, order: create

bin.getOrder -> taxiApp, kevin, order: create

if kevin.wantsToGetRide and bin.isAvailable

kevin.getRide -> taxiApp, bin, card

bin.drive -> taxiApp, kevin, card

end

if kevin.wantsToGetRideLater

kevin.doesNotCall -> taxiApp

end

if bin.isNotAvailable

bin.canNotGetOrder -> taxiApp

end

end

else

kevin.connectToAnotherUserDriver

end