Problem: Design an app for calling taxi

Objects:

Phone:

Data: Uber

Behaviors:

Application:

Data: ApplicationName

Behaviors:

User:

Data: Name, ContactNumber, Email

Behaviors: login(), enterDestinationAddress(), searchForRide(), book(), cancle()

Driver:

Data: Name, ContactNumber

Behaviors: viewRequests(), acceptRequests(), rejectRequests()

Car:

Data: Name, Model, NumberPlate

Behaviors:

CreditCard:

Data: Name, CardNumber, Expiry, SecurityCode

Behaviors: makePayment()

CreditCardCompany:

Data: Name

Behaviors: authorizeTransaction()

Location:

Data:

Behaviors: showLocation()

FareCalulator:

Data:

Behaviors: calculateFare()

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Sequence of invoking behaviors on Objects:

Phone myphone;

Application uber;

User mihir;

Driver alex;

Car bmw;

PaymentGateway magneticStripe;

CreditCard card;

CreditCardCompany visa;

Location googlemaps;

FareCalculator calculator;

BookingConfirmation response;

if myphone.hasInternet

if mihir.applicationLaunch

uber = application;

if firstTime

mihir.createAccount 🡪 mihir, myphone, email : uber

mihir.addCreditCard 🡪 visa, card : payment

else

mihir.accountLogin 🡪 email, password : uber

end

if createAccountSuccessful || loginSuccessful

mihir.enterDestination 🡪 googlemaps

loop

mihir.searchRide

if rideAvailable

mihir.selectRide 🡪 bmw

bmw = Car;

calculator.calculateFare 🡪 calculator

mihir.requestForRide

ashutosh.receiveRequest

ashutosh.acceptRequest

response = bookingConfirmation

mihir.trackRide 🡪 googlemaps

else

mihir.rideNotAvailable

end

end

else

mihir.loginFailed

end

end

else

myphone.tryAgainLater

end