

2. Design an app for calling taxis

Objects and Behaviors:

InternetService:

Data: Carrier Company

Behavior: connectToInternet

App:

Data: AvailableTaxis

Behavior: geolocation, navigation, cancel, searchForTaxis

Passenger:

Data: PhoneNumber, EmailAddress, Name

Behavior: login, selectPickup, selectDestination, tips, review

Driver:

Data: Name, PhoneNumber, PlateNumber, Rates

Behavior: loginForDriver, confirmOrder, finishOrder, selectOrder

CreditCard:

Data: Number, Name, Company, Expiry, CCV

Behavior:

CreditCardCompany

Behavior: authorizeTransaction

Sequence of invoking behaviors on Objects:

InternetService internetService;

Passenger passenger;

Driver driver;

App app;

while internetService.isNotAvailable:

 reconnectToInternet;

if passenger.login and driver.loginForDriver :

 app.setPickUp -> app.geolocation : app.passengerLocation

 passenger.selectDesitation : makeorder

while orderNotFinished:

 driver.selectOrder;

 if passenger.cancelOrder:

 break;

 if driver.comfirOrder:

```
    app.navigateToPassenger -> app.pickupLocation
    if driver.cancelOrder:
        continue;

    if driver.pickupPassenger:
        loop:
            app.navitateToDestination;
        end
    if app.ariveAtDestination:
        if driver.finishorder:
            passenger.makePayment;
            passenger.giveTipsAndReviews;
            break;
response = orderConfirmation;
app.sendEmail -> passenger.emailAddress, response;
```