# Design an app for calling taxis

## Objects & Behaviours:

**Internet**

Data : uber, lyft

Behaviour : checkForConnection

**TaxiServiceApplication**

Data : taxis, drivers, routeMap,costPerMile, waitingCharges,fromAddress, toAddress

: groupOfTaxis (Collection of taxis)

Behaviour : searchForTaxis,findTaxi, bookTaxi, cancelBooking, sendTripHistory

**Taxi**

Data : model, licensePlate, driverName

Behaviour : goOnTrip

**Traveller**

Data : name, phoneNumber, address

Behaviour : searchForTaxi, confirmBooking, cancelBooking, pay, giveTripFeedback

**TaxiDriver**

Data : name, phoneNumber, authorizationID

Behaviour : : acceptBooking, cancelBooking,startTrip, endTrip, receivePayment

**RouteMap**

Data : road, traffic, routes, highways, tolls, address

Behaviour : showRoute, calculateMiles, calculateBill

## Sequence of invoking behaviours on objects:

Internet xfinity;

TaxiServiceApplication uber;

Taxi elantra;

Traveller ron;

TaxiDriver driver;

RouteMap map;

ron.openApp→Uber

If xfinity.isAvailable

ron.searchForTaxi→Uber, fromAddress,toAddress,routeMap

```
uber.searchForTaxi→ fromAddress,toAddress,routeMap→groupOfTaxis :taxi
Loop
        If uber.findNoTaxi
                break;
        end
        If driver. acceptBooking→uber,taxiNumber,driverDetails : taxi
                elantra=taxi
                If elantra.isNotEmpty
                        break;
                else
                        taxi.nextTaxi
                end
        else
                taxi.nextTaxi
        end
End
elantra=taxi
if  elantra.isNotEmpty or elantra!=null
        ron.checkPrice
        If ron.PriceIsOk
                ron.confirmBooking
                driver.startTrip=true;
        else
                ron.cancelBooking
        end
        If (driver.startTrip is true)
                map.showRoute
                uber.calculateMiles
                uber.calculateBill
                ron.payBill→uber,cash/card
                driver.endTrip
                uber. sendTripHistory
                ron. giveTripFeedback
        end
```

```
        else
                ron.searchForTaxiAfterAWhile
        end
 else
        Ron.openAppAfterCheckingInternetConnection
end
```