INFO5100-Assignment1-Question2-Meng-Wei Hao

Q2. Design an app for calling taxis (e.g. Uber).

Ans:

Class, Object, Behaviors, Input, Output, Data

AppSystem

Data: feeCalculator, automaticPayment

Behaviors: connect(), trackDrivers(),

Passenger

Data: Name, phoneNumber, Address, bookingHistory

Behaviors -> loginToAppSystem(), setLocation(), selectCabType(), matchDriver(),

makePayment(), rating()

Driver

Data: Name, CarType carType(), bookingHistory

Behaviors -> register(), matchPassenger(), approveRequest(), disapproveRequest(), updateStatus()

Phone

Behaviors -> passengerLogin(), driverLogin()

AppSystem callTaxi

callTaxi.trackDrivers()

-----Program----------

Passenger ann

Driver christopher

Phone annPhone

Phone christopherPhone

```
trackDrivers() {
        annPhone.passengerLogin()
        christopherPhone.driverLogin()
        if(ann.setLocation() != null) {
                ann.chooseCarType()
        }
        else {
                ann.cantChooseCarTypes()
        }
}
public class AppSystem {
public static void main(String args[]) {
        System.out.println("Which car type do you want?");
        CarType carType = new CarType();
        MatchDriver matchDriver = new MatchDriver();
         if (CarType.isRegular()) {
                System.out.println("I want regular car type.");
          }
          if (CarType.isIntermediate()) {
                 System.out.println("I want intermediate car type.");
           }
           else {
                  System.out.println("I want high level car type.");
            }
            if(ann.chooseCarType() != null) {
                ann.matchDriver()
                christopher.matchPassenger()
            }
```

```
        else {
            ann.cantMatchDrivers()
        }
        if (matchDriver.hasApproved()) {
            System.out.println("Make  a payment.");
        }
        else {
            System.out.println("Disapprove request.");
        }
}
```