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.”);

}

}