

Problem: Design an app for calling taxis

Identify Objects and Behaviors:

Things:

Passenger:

Data: Name, Phone, Location, Destination,

Behaviors: output, confirmTaxis, cancelTaxis, finishRide

Internet:

Behaviors: connectToApp

App:

Data: taxis, address

Behaviors: searchTaxis, compareTaxis, estimatePrice,  
placeOrder, cancelOrder, payTaxis

Taxis:

Data: Location, Number, Price

Behaviors: inputInfo, acceptOrder, confirmPrice

CreditCard

Data : Number, name, company, expiry, security code

Behavior :

CreditCardCompany

Behavior : authorizeTransaction

Sequence of invoking behaviors on Objects:

Design an app for calling taxis

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Passenger sookie

Internet internet

App app

Taxis taxis

CreditCard card

CreditcardCompany visa

-----program-----

```
if internet.isAvailable{  
    internet.connectToApp()  
    sookie.output-> Name, Phone, Location, Destination  
    int i=0  
    app.searchTaxis()  
    taxis.inputInfo  
  
    if (taxis.acceptOrder){  
        i++  
    }  
    else {
```

```

        i=i
    }

    if (i== 0){
        return Taxis.NONE;
    }

    if ( i>0){
        app.compareTaxis-> taxis, address, price
        return Taxis.no123
        app.estimatePrice-> no123
        return Taxis.Price
    }

    If( sookie.cofirmTaxis){
        app.placeOrder
    }

    else{
        app.cancelOrder
    }

}

else{

    internet. connectToAppAfterAWhileBack

}

```

```
if sookie.finishRide{  
    taxi.confirmPrice  
    app.payTaxis->card  
    visa.authorizeTransaction()  
}
```