

Problem 4: Ordering food in Restaurant

Objects and Behaviors:

Customer

Data: Name, Phone, Address, EatingTime

Behavior: choice, open, placeAnOrder, pay, cancel, searchFood, choicePayment,satisfied,quit

Restaurant

Data: Name, Address, Runtime, Food[] foods

Behavior:foodAvailable, rejectOrder

ThirdParty

Data:

Behavior: searchByType, sendMessage, display, deal, payRestaurant

Company

Data: Account

Behavior: verify, authority, reject

Sequence of Flow - Invoke Objects with Behaviors

orderingFood

Customer yue

Restaurant r

ThirdParty app

Company company

yue.open-> app: requestion

loop

yue.searchFood->app:search

app.searchByType->collection of restaurants

app.display

if yue.satisfied

loop

yue.choice->app,r:requestion

```
yue.searchFood->app,r:requeston
yue.choice->app,r:requeston
yue.placeAnOrder->app:requeston
app.sendMessage->r:message+1
r.viewMessage
if r.foodAvailable
    r.sendMessage->app
    app.makeDeal->yue:message
    yue.pay->app:info
    loop
        yue.choicePayment
        if yue.choicePaymentIsPrePaid:
            app.sendMessage->company:verify
            if company.verify
                company.authority->app
                app.deal
                app.sendMessage->r:Message+1
                app.payRestaurant
            end
        else
            company.reject
        end
    else
        app.sendMessage->r:Message+1
    end
else
    r.rejectOrder->app:request
    app.sendMessage->yue
end
```

end

else

yue.quit

end