

Problem 5: Design an app for booking hotels

Objects and behaviors:

Internet Service:

Data: Name, phoneNumber, isAvailabe

Behaviors: connect, reconnect

App:

Data: listOfHotels, ListOfRoom, map

Behaviors: confirmOrder

User:

Data: Name, Phone, Destination, numberOfTraveller, tripTime,

NumberOfStays

Behaviors: logInToApp, searchHotels, likeToStay, checkPrices,
checkAvailability,

reserve, cancelOrder, reviews, contactHost

Hotel:

Data: Name, location, description, hotelPhotos, licence, hostContactInfo,
availability,

prices, reviews

Behaviors: acceptUserOrder, contactTraveller, prepareRooms

Map System:

Data: hotelLocation, selectedLocation

Behaviors: showNearbyHotels

Payment:

Data: paymentMethod // credit card or pay on stay

Behaviors:

Credit Card:

Data: Name, bankName, cardNumber, address, securityCode, expiryDate

Behaviors:

Bank:

Data:

Behaviors: authorizedTransaction

Help Service:

Data: servicePhoneNumber, serviceEmail,

Behaviors: chatOnLine, Question, Answer, mediate

Sequence of invoking behaviors on objects:

bookingHotelInApp

User Xin

App Booking

InternetService Internet

if Internet.isAvailable

 Xin.logInToApp -> userName, pin: connected

 Xin.searchHotels (Destination, numberOfTraveller,
tripTime,NumberOfStays)

 -> listOfHotels: Hotel

 loop: listOfHotels:

 if Xin.likeToStay:

 Xin.checkAvailability

 if hotel.availibility:

 Xin.reserve -> creditCard

 Booking.acceptUserOrder

 target_hotel = Hotel

 break

 booking.confirmOrder

 bank.authorizeTransaction

else:

 Internet.Reconnect