Problem: Order a hotel online before a trip.

Identify Objects and Behaviors:

Thing (Object)/Entity:

Information (Data)/ (State):

Services (Behaviors)/Actions

Things:

Consumer (Traveler or the one who book the hotel online)

Data: Name, Phone, emailAddress，IdorPassport

Behaviors: book, search, pay, reviews, compare, cancel

Internet

Data: Hotels, Expedia, Kayak, Trivago, Booking, Airbnb,

: Group of Websites ( Collection of Websites)

Behaviors: SearchForElectronicWebsites

ElectronicWebsite

Data: URL, BankAccount, Product[] prodects

Behaviors: search, sort, display, compare, placeTheOrder, cancelTheOrder

Hotel

Data: hotelName, hotelAddress, phone, roomType, roomPrice, roomDescription

Behaviors: accept, refuse, contactwithConsumer

CreditCard

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

Behavior:

CreditCardCompany

Behavior: authorizeTransaction

Sequence of invoking behaviors on Objects:

BookAHotelOnInternet:

Consumer Peter,

Internet internet,

ElectronicWebsite Booking,

Hotel hotels,

CreditCard card,

CreditCardCompany visa

BookingingConfirmation response

If Internet.isAvailable

Peter.searchInternet -> internet, question: Collection of ElectronicWebsite

//peter.findDesirableWebsiteInFirstPage –> Collection of Websites: website pageNumber =1;

Loop

If peter.findsNoPages

Break

End

Peter.findDesirableWebsiteInAPage –> internet, question, pageNumber:

Website

Booking =website;

If Booking is not empty

Break;

Else

PageNumber++;

End

End

Booking = website

If Booking is not empty or Booking !=null

Booking.searchForhotel -> priceRange, date，location, review, score: Collection of Hotel

hotels = thehotel

Peter.bookingAHotel -> hotels, creditCard, name，phone, emailAddress, IdorPassport, Booking:

BookingingConfirmation

If account.isAvailable =true

Response = bookingConfirmation

If Response= true

Peter.doubleCheckbookInformation

Break

Else

Booking.searchForHotel

End

Else

Peter.cantBook

End

Else

Peter.browseInternetAfterAWhileBack

End