INFO5100-Assignment1-Question1-Meng-Wei Hao

Q1. Order a hotel online before a trip

Ans:

Identify Objects and Behaviors:

Thing (Object):

Information (Data):

Services (Behaviors):

Things:

  Customer (Online Booker):

     Data: Name, PhoneNumber, Address

     Behaviors: search, compare, booking, cancel

  Internet

     Data: Hotels.com, Airbnb, Expedia, Trivago, Agoda, Hotelscombined, Booking.com

        , HotelOfficialWebsite: Collection of Websites

     Behaviors: searchForHotelBookingWebsites

  HotelBookingWebsite

     Data: Packages, DiscountInfo, RecommendedDestinations, PriceCompare, StarRating,

        GuestRating, PaymentMethods

     Behaviors: search, compare, sort, present, bookHotelRoom

  Hotels

     Data: Price, Convenience, Comfort, Distance, BreakfastServed, WifiAccess

  CreditCard

     Data: Name, CardNumber, CardCompany, ExpirationDate, SecurityCode

  CreditCardCompany

     Behavior: authorizeTransaction

Sequence of invoking behaviors on Objects:

BookHotelsOnline:

Customer Jane,

Internet internet,

HotelBookingWebsite expedia,

Hotels characteristics,

CreditCard card,

CreditCardCompany visa

BookingConfirmation orderConfirmation

if Internet.hasAccess

jane.searchOnInternet -> internet, question: Collection of HotelBookingWebsite

//jane.findBookingWebsiteInFirstPage -> Collection of Websites: website

pageNumber = 1;

Loop

if jane.findsNothing

break

end

jane.findHotelWebsiteInAPage -> internet, question, page Number: website

expedia = website;

If expedia is disconnect

break

else

pageNumber = pageNumber + 1

end

End

Expedia = website

if expedia is not disconnect or expedia != null

Expedia.searchForHotels -> price, convenience, distance, wifiAccess:

Choice of Hotel

characteristics = hotels

jane.bookingHotels -> characteristics, creditCardNumber, name,

phoneNumber, expedia: BookingConfirmation

orderConfirmation = bookingConfirmation

else

jane.cantOrderHotels

else

jane.searchForHotelsOnInternetLater