Order a hotel online before a trip

Identify Objects and Behaviors:

Thing (Object)/ Entity:
        Information (Data)/ (State):
        Services (Behaviors)/ (Actions)

Things:

        Traveler:
                Data: Number of people, Date, Names, Phone, Email address
                Behaviors: search, compare, reserve, cancel, reviews

        Internet:
                Data: Booking, Hotels, Expedia, Hotwire, Kayak
                    : Group of Websites (Collection of Websites)
                Behaviors: searchForHotelReserveWebsites

        HotelReserveWebsite
                Data: URL, AvailableHotels, BankAccount
                Behaviors: search, sort, display, compare, placeTheOrder

        Hotel
                Data: Price, Location, availableDate, roomSize, Rate, Facilities, Surroundings
                Behavior:

        CreditCard
                Data: Number, name, company, expiry, security code, address
                Behavior:

        CreditCardCompany
                behavior: authorize Transaction

Sequence of invoking behaviors on Objects:

OrderHotelOnline:

        Traveler peter,
        Internet internet,
        ElectronicWebsite booking,
        Hotel myDestination,
        CreditCard card,
        CreditCardCompany visa,
        ReserveConformation response,

        If Internet.isAvailable
                peter.searchInInternet -> internet, question: Collection of HotelReserveWebsite
                //peter.findDesirableWebsiteInFirstPage -> Collection of Websites: website
                pageNumber = 1;
                Loop
                        if peter.findsNoPages
                                break
                        end

                        peter.findDesirableWebsiteInPage -> internet, question, page Number:
website
                        booking = website;
                        if booking has available hotels
                                break

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            else
                    pageNumber = pageNumber + 1
            end
        End
        booking = website
        if booking has available hotels or booking!=null
            booking.searchForHotel -> priceRange, Location, availableDate: Collection
of Hotel
            myDestination = Hotel
            peter.reserveHotel -> myDestination, creditCard, names, emailAddress,
booking: ReserveConfirmation
            response = reserveConfirmation
        Else
            peter.cantReserveHotel
    Else
        peter.browseInternetAfterAWhileBack
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