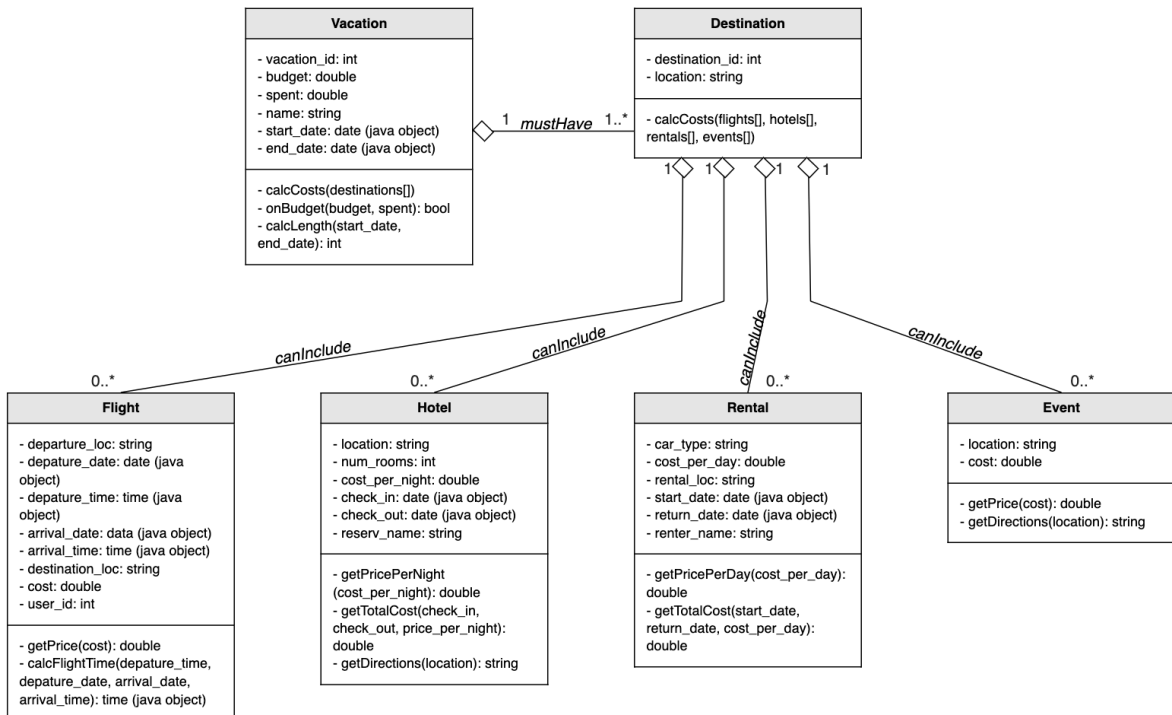
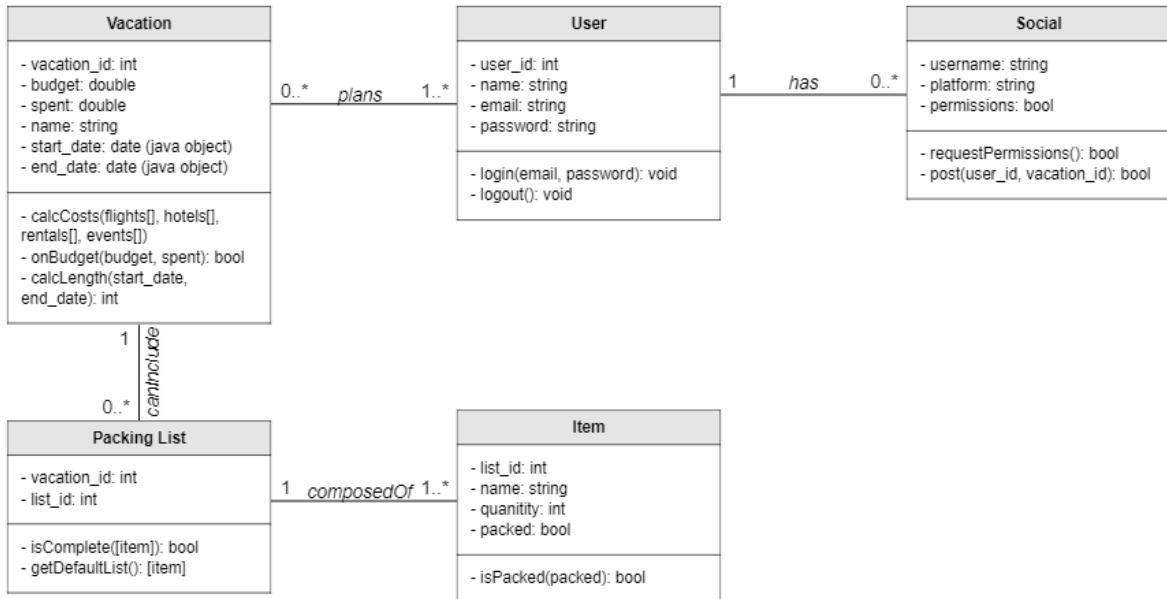


TravelGavel Domain Model



Description

Each user has a user ID, a name, email address, and a password. This class is able to login with an email and password, and logout. The users also have the option of giving permission to link their social media accounts on different platforms. The social media class stores the user's username and can post information from a user's vacation to that user's social media account, given that permission has been granted. Each user in the app has access to a list of vacations that they create and share access to with other users. Each vacation can also have one or more associated packing lists that are linked by their vacation ID and packing ID numbers. Each packing list is composed of one or more items that are linked to their respective packing list by the packing ID number, and each item is represented by the name of the object, the quantity of that object, and a status of whether or not it has been packed. Based on if the items in a packing list are packed or not, the packing list will be able to find if it is complete. The packing list is also able to generate a default packing list, if the user does not input their own items.

Each vacation has its own vacation ID number, a budget value, a value showing how much of that budget has been spent, the vacation's name, and a start and end date. The vacation class can determine the total cost of the trip based on the sum of the cost of each destination, as well as if the trip is on budget and how many days the trip is. Each vacation must have at least one destination, which has an associated destination ID number and a location name. The destination class can calculate the sum of the costs of its aggregate classes. Each destination has the option of containing zero or more flights, hotels, rentals, or events. Flights have a departure location, date, and time as well as an arrival location, date, and time. They also have their associated cost of the flight, and which user will be on that flight. This class can get the price of the flight and calculate the length of time the flight will take. Hotels have their respective location, as well as the cost per night for a room at the hotel and how many rooms are booked at the hotel. There are also the check-in and check-out dates, as well as the name of the user the hotel reservation is under. The hotel class can get the cost per night and the total cost of the hotel based on the cost per night and how many nights it is being booked for, as well as directions to the hotel based on its

location. Rentals refer to any rental vehicles needed for the vacation. This includes the type of vehicle, the cost per day to rent it, where it's rented from, the start and return dates for the rental period, as well as the name of the user the vehicle is rented under. This class can get the cost per day and the total cost of the rental based on the cost per day. Events are any activities that the group does on the vacation. These are represented by their location and the cost of the event. The event class can get the cost of the event and direction to the event based on its location.

Since the vacation class has so many relations to other classes, the model has been split into two models, with the vacation class' relation to the destination class and its aggregate classes in one model, and all other classes and their relations to the vacation class in the other model.