Report

The concert-booking system is designed to three parts: the client service, common and server.

On the server side, multiple resource classes are used for different http services. This increases the scalability of the system because it is more flexible to add different http methods or introduce new resource classes to the system compared to using one single resource class. Since HTTP is a stateless protocol, cookies are used to store the client state on the client side. However, in order to authenticate the user for some of the methods in resource classes, cookies are used as parameters and each time, which requires a method, which needs to be used for all the resource classes. Therefore, all the resource classes need to extends an abstract class called ServiceResource, which stores the common method for making cookies and fields that need to be used in the resource classes. This reduces redundancy code in the system, which, in other words, increases the flexibility of the system.

Domain model is separated from the DTO classes, which is different to one of our labs. The domain model classes are mainly for the database and the DTO classes are the objects that need to transfer to the clients.

To increase the usability of the system, a config class is added to the common package for storing the path that needs to use for the resource classes to decrease the number of magic numbers in the system. Whenever a new service is added into the system, the path of the new resource class or the new methods in the resource class can be added to the Config class, which increases the scalability of the system.