"Ticket selling service"

Technical documentation

System overview

"Ticket selling service" is a web based client-server application. Server part exposes its interface via restful web services.

System components are developed in PHP using PHP5.3 new features like namespaces and closures. Class autoloading PHP functionality is used to load classes automatically.

Rest service client uses curl php extension for network communications. Rest client implements the same interface with server service class and theoretically may be transparently replaced with local service implementation.

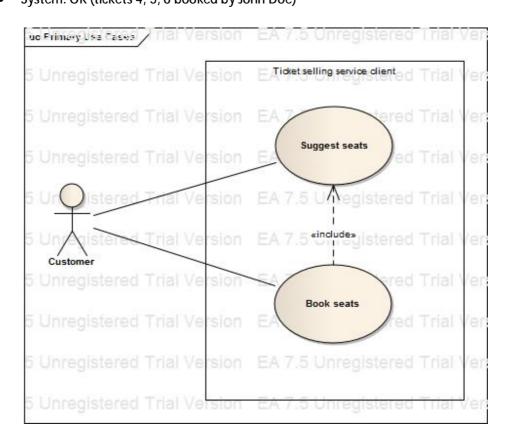
Limitations

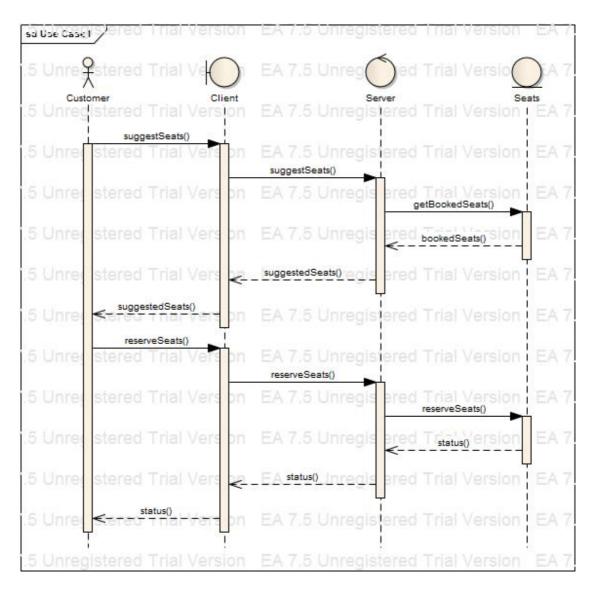
At the moment only scalar types and simple arrays are supported for remote method arguments. Array values are imploded using comma as a glue string and keys are ignored.

Use cases

Customer: give me 3 tickets
System: places 1, 2, 3 OK?
Customer: No, give me other 3
System: places 4, 5, 6, OK?

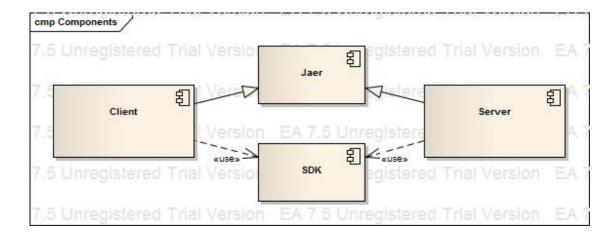
Customer: Yes, I take them, my name is "John Doe"
System: OK (tickets 4, 5, 6 booked by John Doe)





System components

System consists of three main components: service server, service client and SDK package. Additionally server and client are using shared library Jaer which provides base Bootstrap and Factory classes.



Security

All api calls are signed with secret key which is never transferred between client and server. Every api call contains api_key which uniquely identifies partner.

Data model

Reservation table contains information only about reserved theater seats including partner and end client name. Reservation DAO class is aware of theater capacity and contains logic for extracting list of free seats.

