

Domain description

Session abstract class that manages the session lifecycle with methods

- getID()
- isActive()
- start()
- end()
- static nextUniqueID()

ReservationSession manages the reservation session

- createQuote()
- getCurrentQuotes()
- confirmQuotes()
- getAvailableCarTypes()
- getCheapestCarType()

ManagerSession manages the manager session

- registerCompany
- unRegisterCompany
- getCompanies
- getNumberOfReservationsForCarType()
- getTopCustomer

Rental Manager top level object that is available through RMI can provide users with a session it holds a dictionary with CarRentalCompanies and supports the methods to get available time slots for cars en to confirm quotes and to return a list of carrentalcompany descriptions and statistics

CarRentalCompany Same as last time except that it is no longer remotely available as this is not necessary for the design

CarRentalCompanyDescription The name in stringtype and a list of strings that represent the different available car types for this company. This class is serializable as it is used as return value

ReservationConstraint as last time, still serializable as it is used as argument for multiple functions

ReservationException

Quote same as last time as last time, still serializable as this is used as return arg

CarType only lives on the server, the communication is done with strings

Car only lives on the server, the client does not care about individual cars

Reservation only lives on the server...

Design decisions

1. Session life cycle management

Session life cycle is managed by the abstract base class session, the functionality is provided by subclasses, the remote RentalManager provides the client with a session that has an unique ID and is running

<not sure if this is the right way to go as manager sessions dont need to be stateful....>

2. name service

The naming service for CarRentalCompanies is done by the RentalManager with the use of a dictionary. Each CRC is identifyable through a string and can be accessed that way by the RM

3. Synchronisation

Where is syncing needed?

- at the confirmquotes section
- at start up of sessions