

OCL Expressions

1. “Experts cannot be double booked. In other words, a service by a single expert cannot be available to multiple clients on the same day and time.”

context Expert

inv: self.availability->forAll(a1, a2 |

a1 <> a2 implies

(a1.weekDayAvailable <> a2.weekDayAvailable or

a1.startTime >= a2.endTime or

a2.startTime >= a1.endTime)

)

2. “A consulting service for an auction visit may be available during a time that is within the availability of the auction house.”

context ServiceRequest

inv: self.auctionHouse.availability->exists(a |

a.weekDayAvailable = self.requestDate.dayOfWeek and

a.startTime <= self.requestTime and

a.endTime >= self.requestTime

)

3. “A client does not have multiple requests on the same day and time slot.”

context Client

inv: self.serviceRequest->forAll(r1, r2 |

r1 <> r2 implies

(r1.requestDate <> r2.requestDate or

r1.requestTime >= r2.requestTime + 1 or

r2.requestTime >= r1.requestTime + 1)

)