

1. Unique Offerings Constraint

context Offering

inv uniqueTimeSlotLocation: Offering.allInstances()->forAll(o1, o2 |
o1 <> o2 implies o1.timeSlot <> o2.timeSlot or o1.location <> o2.location)

2. Underage Client with Guardian Constraint

context Client

inv underageWithGuardian: self.isUnderage implies not self.guardian->isEmpty()

3. Single Booking Per Time Slot Constraint

context Client

inv singleBookingPerTimeSlot: self.bookings->forAll(b1, b2 |
b1 <> b2 implies b1.timeSlot <> b2.timeSlot)

4. Offering Availability Constraint

context Offering

inv availableOnlyOnce: self.isAvailable = true implies not self.bookings->exists(b | b.status = 'Confirmed')