

1. “Offerings are unique. In other words, multiple offerings on the same day and time slot must be offered at a different location.”

context Lesson

```
inv: self.offering → forAll( o1, o2 : Offering | o1.id <> o2.id  
    and o1.timeSlot.dayOfWeek = o2.timeSlot.dayOfWeek  
    and o1.timeSlot.startTime = o2.timeSlot.startTime  
    and o1.timeSlot.endTime = o2.timeSlot.endTime  
    implies o1.space.id <> o2.space.id)
```

2. “Any client who is underage must necessarily be accompanied by an adult who acts as their guardian.”

context Client

```
inv: self.age < 18 implies self.guardian <> null  
    and self.guardian.age >= 18
```

3. “The city associated with an offering must be one the city’s that the instructor has indicated in their availabilities.”

context Offering

```
inv: self.instructor.city → includes(self.space.location.city)
```

4. "A client does not have multiple bookings on the same day and time slot."

context Client

```
inv: self.booking → forAll( b1,b2 : Booking | b1.id <> b2.id  
    implies b1.offering.timeslot <> b2.offering.timeslot)
```