

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

context Offering

```
inv: Offering.allInstances() -> forAll(o1, o2 |  
    (o1 <> o2 and o1.dayOfWeek = o2.dayOfWeek and o1.timeSlot = o2.timeSlot)  
    implies o1.location <> o2.location  
)
```

**#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.availabilities -> includes(self.city)
```

**#4 “A client does not have multiple bookings on the same day and time slot.”**

context Client

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