

### OCL expression for the method that creates a reservation

```
context Traveler::createReservation(): Reservation Object
  pre: Traveler.allInstances() -> exists(t: Traveler | t.traveler_id = self.traveler_id and
    t.traveler_f_name = self.traveler_f_name and
    t.traveler_l_name = self.traveler_l_name and
    t.traveler_age = self.traveler_age)

  post: r.Reservation <> null and
    self.reservations -> last() = r and
    self.reservations -> size() = self.reservations -> size()@pre + 1
```

### OCL expression for the class that represents a reservation

```
context Reservation:
  inv: self.traveler -> not isEmpty()
  inv: self.ticket -> not isEmpty()

  context Reservation::setTraveler(t:Traveler): void
    pre: t <> null and t -> not isEmpty()
    post: self.traveler = t@pre

  context Reservation::setTicket(t:Ticket, tripId:Trip.trip_id): void
    pre t <> null and t -> not isEmpty() and
      tripId <> null
    post: rg:Reservation_Gateway <> null and
      rg.insertReservation(ticket:Ticket, self.traveler, tripId:Trip.trip_id): void
      self.ticket = t@pre

  context Reservation::getTraveler(): Traveler Object
    pre: self.traveler <> null and self.traveler -> not isEmpty()
    post: self.traveler = self.traveler@pre

  context Reservation::getTicket(): Ticket Object
    pre: self.ticket <> null and self.ticket -> not isEmpty()
    post: self.ticket = self.ticket@pre
```