Specify an OCL expression for the method that creates a reservation.

context Booking::addReservation(c : Client, t : Trip) : Reservation

pre:
ClientProvided:
   c <> null

TripProvided:
   t <> null

NoDuplicateReservationForClientInSameTrip:
   self.reservations->forAll(r | r.client <> c or r.trip <> t)

post:
ReservationCreated:
   result <> null

ReservationLinkedToClient:
   result.client = c

ReservationLinkedToTrip:
   result.trip = t

ReservationHasTicket:
   result.ticket <> null and result.ticket.reservation = result

AddedToBooking:
   self.reservations = self.reservations@pre->including(result)

UniqueReservationID:
   Reservation.allInstances()->isUnique(r | r.reservationID)

Specify an OCL expression for the class that represents a reservation.

context Reservation

inv **ClientRequired**:
   client <> null
inv **TripRequired**:
   trip <> null
inv **TicketExists**:
   ticket <> null and ticket.reservation = self
inv **ValidReservationIDFormat**:
   reservationID.matches('^RES[0-9]{4}$')
inv **UniqueID**:
   Reservation.allInstances()->isUnique(r | r.reservationID)