

OCL Expressions for Reservation Class

Context: Reservation

Attributes:

context Reservation
client: Client
connection: Connection
ticket: Ticket

Invariants:

Reservation must have a client

inv hasClient:
self.client <> null

Reservation must have a connection

inv hasConnection:
self.connection <> null

Reservation must have a ticket

inv hasTicket:
self.ticket <> null

Ticket must match the client

inv ticketMatchesClient:
self.ticket.client = self.client

Ticket must match the connection

inv ticketMatchesConnection:
self.ticket.connection = self.connection

Client and connection must be different from null

inv validClientAndConnection:
self.client <> null and
self.connection <> null implies
self.ticket <> null

Two reservations are equal if they have same client and connection
inv uniqueReservation:

```
Reservation.allInstances()->forAll(r1, r2 |  
    r1 <> r2 implies  
    not (r1.client = r2.client and r1.connection = r2.connection)  
)
```

Collection Properties:

Get the route ID from connection

context Reservation::routeId(): String

Get client name

context Reservation::clientName(): String

Get departure city

context Reservation::departureCity(): String

Get arrival city

context Reservation::arrivalCity(): String

Get ticket price

context Reservation::ticketPrice(): Integer