**CONTRACT CO1: viewTrips** 

Operation: viewTrips()
Cross References: none

**Preconditions:**Connected to the Console **Postconditions:**- Client trips are displayed

**CONTRACT CO2: bookTrip** 

Operation: bookTrip()
Cross References: none

**Preconditions:** Connected to the Console

**Postconditions:** - Trip instance trip is created

trip is associated with TripCatalogue

**CONTRACT CO3: create ConnectionsCatalogue** 

**Operation:** create ConnectionsCatalogue(startCity, endCity)

Cross References: none

**Preconditions:** Connected to the Console, startCity and endCity are

valid cities

**Postconditions:** - ConnectionsCatalogue instance cc is created

TrainConnection instance tc is created for

every possible connection

- All tc instances associated with TrainRoute

that populate it

- All tc instances associated with cc

CONTRACT CO4: sortBySecondClassRate

**Operation:** sortBySecondClassRate()

Cross References: none

**Preconditions:** TrainConnections have been found

**Postconditions:** Connections Catalogue.connections was sorted

CONTRACT CO5: sortByFirstClassRate

**Operation:** sortByFirstClassRate()

Cross References: none

**Preconditions:** TrainConnections have been found

**Postconditions:** Connections Catalogue.connections was sorted

**CONTRACT CO6: sortByDuration** 

**Operation:** sortByDuration()

Cross References: none

**Preconditions:** TrainConnections have been found

**Postconditions:** Connections Catalogue.connections was sorted

**CONTRACT CO7:** getTrainConnection

**Operation:** getTrainConnection(chosenConnection)

Cross References: none

**Preconditions:** chosenConnection is a valid TrainConnection, a Trip

instance trip has been created

**Postconditions:** chosenConnection is associated with trip

**CONTRACT CO8: addReservation** 

**Operation:** addReservation(firstName, lastName, age,

passengerID)

Cross References: none

**Preconditions:** A Trip instance trip has been created and has an

associated TrainConnection, firstName, lastName,

age, passengerID are all valid

**Postconditions:** A Client instance client is created and associated with

trip

**CONTRACT CO9: exitProgram** 

**Operation:** exitProgram()

**Cross References:** none

**Preconditions:** Connected to the Console

**Postconditions:** Program exited