

# Programming II Lab

Term 2 (2014-15)

SESSION 4

## Working with association

The focus of this lab session is to learn how to work with associations involving different cardinality.

Consider the following classes (only direct attributes / methods are shown):

<b>Ticket</b>	<b>Passenger</b>
PNR number – string source – string destination - string	pName – string age – int gender – char
Ticket(TrainRun *, source, dest); addPassenger( name, age, gender,coach,seat_number); printTicket();	Passenger(name,age,gender) string showPassenger()

  

<b>TrainRun</b>	<b>Reservation</b>
trainNumber - string Source – string destination – string	coach – string seat number – int
printReservationChart()	string showReservation()

## Tasks to be performed

1. Add additional data members for the purpose of capturing the relationship between the above classes
2. Implement the above classes / methods
3. Integrate your classes with session4\_train\_test.cc (uploaded in LMS).

Sample output of Ticket::printTicket() method:

Train Number: XXXX	Train Source: XXXXX	Train Dest: XXXXX
PNR: XXXXX	Date of Journey: XXXX	
Ticket Source: XXXXX	Ticket Destination: XXXXXX	
Passenger List	Name	Age Gender
1	XXXXX	XXX X
2	XXXXX	XXX X

continued....

Sample output of Train::printReservationChart() method (coach-wise output):

Train Number: XXXX		Train Source: XXXXX		Train Dest: XXXXX	
Coach: XX		Date of Journey: XXXX			
PNR	Name	Age	Gender	Seat Number	
XXXXX	XXXXX	XXX	X	XX	
XXXXX	XXXXX	XXX	X	XX	

## What to submit

Create a zip file containing the following files upload the following files:

1. Ticket.h / Ticket.cc
2. Passenger.h / Passenger.cc
3. TrainRun.h / TrainRun.cc
4. Reservation.h / Reservation.cc

Name the zipfile as **session4-rollno.zip**