

Car Pooling System - Requirement 2

You are a very active member of a Nature Club in your organization. In one of the meetings, it was discussed to build a car pooling system to help cut down the pollution. Being very active and tech savvy, you wish to contribute towards the development of system. One of the members being an architect has understood the requirement and would be sharing you with smaller requirements.

Requirement 2:

The next most important entity of the system is Car.

1. Create a Car Class with the following attributes:

Member Field name	Type
id	Long
name	String
model	String
makeYear	Integer
company	String
comfortLevel	Integer

2. Mark all the attributes as private
3. Create / Generate appropriate Getters & Setters
4. Add a default constructor and a parameterized constructor to take in all attributes.
5. One Member can pool one or many cars that he / she owns. To accommodate this, Create a MemberCar class with following attributes

Member Field name	Type
id	Long
member	Member
car	Car
carRegistrationNumber	String
carColor	String

6. Create / generate appropriate Getters & Setters and constructors.
7. Add a static findMember method in Member class which takes id as input and returns the Member or null object if the member object is not found.
8. Add a static findCar method in Car class which takes id as input and returns the Car or null object if the car object is not found.

9. Introduce an Arraylist (carList) in the member class which holds the list of member-car objects. Include appropriate getters and setters. Given a member, Display the number of cars the member owns along with registration number of each car separated by a line.

Menu:

- 1) Add a Member
- 2) Add a Car
- 3) Assign Car to Member (Assume valid data is supplied)
- 4) Cars Owned
- 5) Exit

1

id:

6

first name:

arun

last name:

kumar

email:

arun@gmail.com

contact number:

9089786756

license number:

TN12ER3423

license start date:

13-12-1998

license expiry date:

12-12-2008

Menu:

- 1) Add a Member
- 2) Add a Car
- 3) Assign Car to Member (Assume valid data is supplied)
- 4) Cars Owned
- 5) Exit

2

id:

5

name:

Verna

model:

CRDI

makeYear:

2008

company:

Hyundai

comfort level:

8

Menu:

- 1) Add a Member
- 2) Add a Car
- 3) Assign Car to Member (Assume valid data is supplied)
- 4) Cars Owned
- 5) Exit

3

member car id

12

member id

3

car id

5

car registration

TN38BR9689

color

White

Menu:

- 1) Add a Member
- 2) Add a Car
- 3) Assign Car to Member (Assume valid data is supplied)
- 4) Cars Owned
- 5) Exit

3

member car id

13

member id

6

car id

2

car registration

TN66AB4214

color

Brown

Menu:

- 1) Add a Member

- 2) Add a Car
- 3) Assign Car to Member (Assume valid data is supplied)
- 4) Cars Owned
- 5) Exit

4

member id

6

Number of cars : 1

Registration Numbers :

TN66AB4214

Menu:

- 1) Add a Member
- 2) Add a Car
- 3) Assign Car to Member (Assume valid data is supplied)
- 4) Cars Owned
- 5) Exit

5

