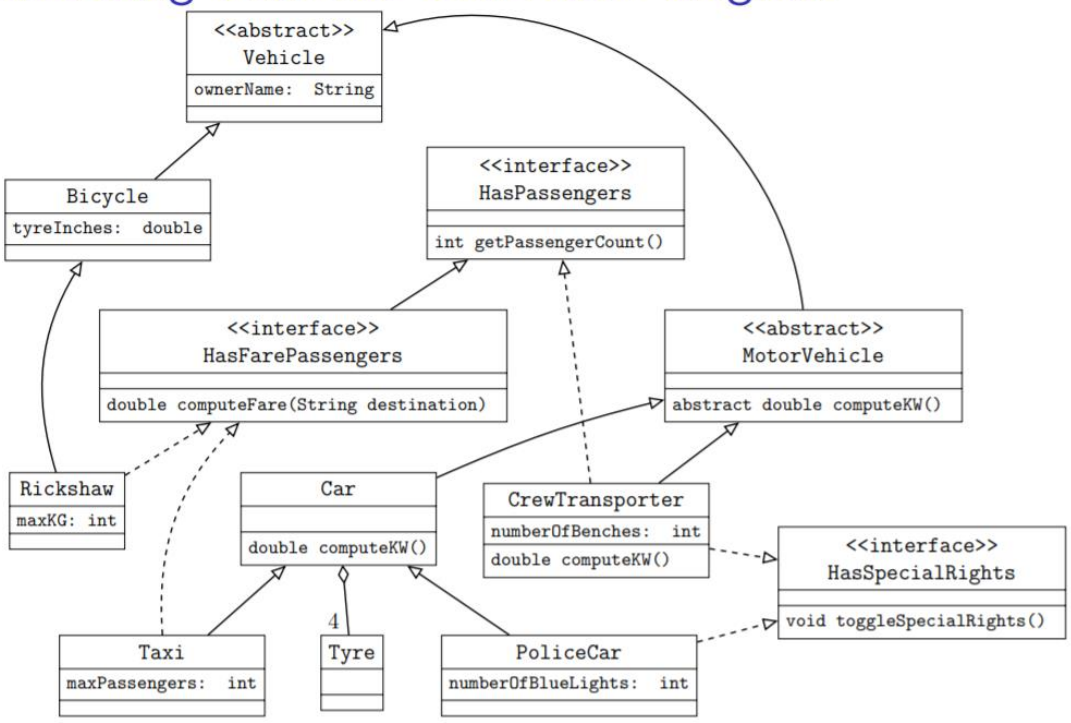
Modelling Vehicles: UML class diagram



Modelling Vehicles: from UML to Java

From class diagram to **Java**: replace aggregation by instance variables (single object or a list of objects), get Java code (use information hiding):

```
1  public abstract class Vehicle {
2      private String ownerName;   . . .
3  }
4  public abstract class MotorVehicle extends Vehicle {
5      public abstract double computeKW();   . . .
6  }
7  public class Car extends MotorVehicle {
8      private List<Tyre> tyres;   . . .
9      public double computeKW() { . . . }
10 }
11 public interface HasPassengers {
12     int getPassengerCount();
13 }
14 public class CrewTransporter extends MotorVehicle
15                               implements HasPassengers, HasSpecialRights {
16     private int numberOfBenches;   . . .
17     public int getPassengerCount() { . . . }
18     public void toggleSpecialRights() { . . . }
19     public double computeKW() { . . . }
20 }     . . .
```