# Inheritance: the Motorcycle subclass

The MotorVehicle class has all the characteristics shared by motorcycles and cars, but it leaves the number of wheels unspecified, and it doesn't have a numberDoors field since not all motor vehicles have doors.

Next you define two subclasses of MotorVehicle, one for cars and one for motorcycles. To do this you use the keyword extends.

public class Motorcycle extends MotorVehicle {  
  
 private int numberWheels = 2;   
   
   
 // constructors  
 public Motorcycle(String licensePlate, double maxSpeed,  
 String make, String model, int year, int numberOfPassengers) {  
 this(licensePlate, 0.0, maxSpeed, make, model, year, numberOfPassengers);   
 }  
  
 public Motorcycle(String licensePlate, double speed, double maxSpeed,  
 String make, String model, int year, int numberOfPassengers) {  
   
 // invoke superclass constructor  
 super(licensePlate, speed, maxSpeed, make, model, year,   
 numberOfPassengers);   
 }  
   
 public int getNumberOfWheels() {  
 return this.numberWheels;  
 }  
   
}

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