

# Class and Method Definitions

- Java program consists of objects
  - Objects of class types
  - Objects that interact with one another
- Program objects can represent
  - Objects in real world
  - Abstractions

# Class and Method Definitions

- A class as a blueprint

**Class Name:** Automobile

**Data:**

amount of fuel \_\_\_\_\_

speed \_\_\_\_\_

license plate \_\_\_\_\_

**Methods (actions):**

accelerate:

How: Press on gas pedal.

decelerate:

How: Press on brake pedal.

# Class and Method Definitions

*First Instantiation:*

**Object name:** patsCar

```
amount of fuel: 10 gallons  
speed: 55 miles per hour  
license plate: "135 XJK"
```

*Second Instantiation:*

**Object name:** suesCar

```
amount of fuel: 14 gallons  
speed: 0 miles per hour  
license plate: "SUES CAR"
```

*Third Instantiation:*

**Object name:** ronsCar

```
amount of fuel: 2 gallons  
speed: 75 miles per hour  
license plate: "351 WLF"
```

Objects that are  
instantiations of the  
class **Automobile**

# Class Files and Separate Compilation

- Each **Java** class definition usually in a file by itself
  - File begins with name of the class
  - Ends with **.java**
- Class can be compiled separately
- Helpful to keep all class files used by a program in the same directory