

Superclasses & Subclasses

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Java

What are superclasses and subclasses?

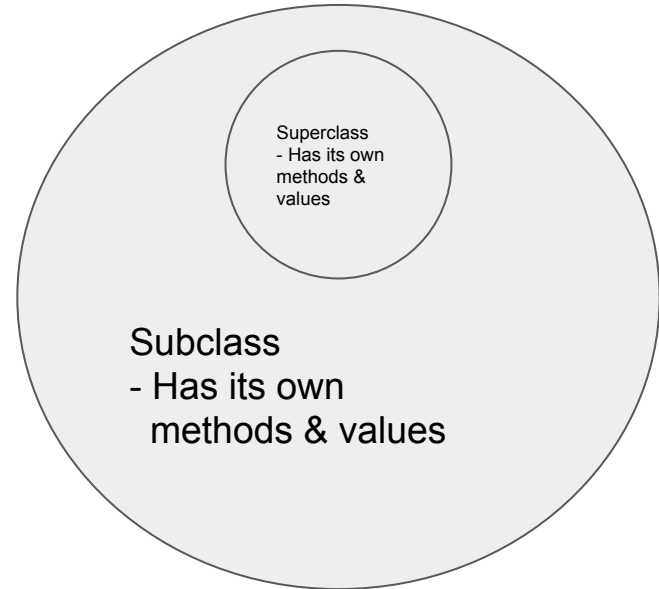
Superclass (parent)

- The class being inherited from

Subclass (child)

- The class that inherits from another class

Scope of super and subclasses

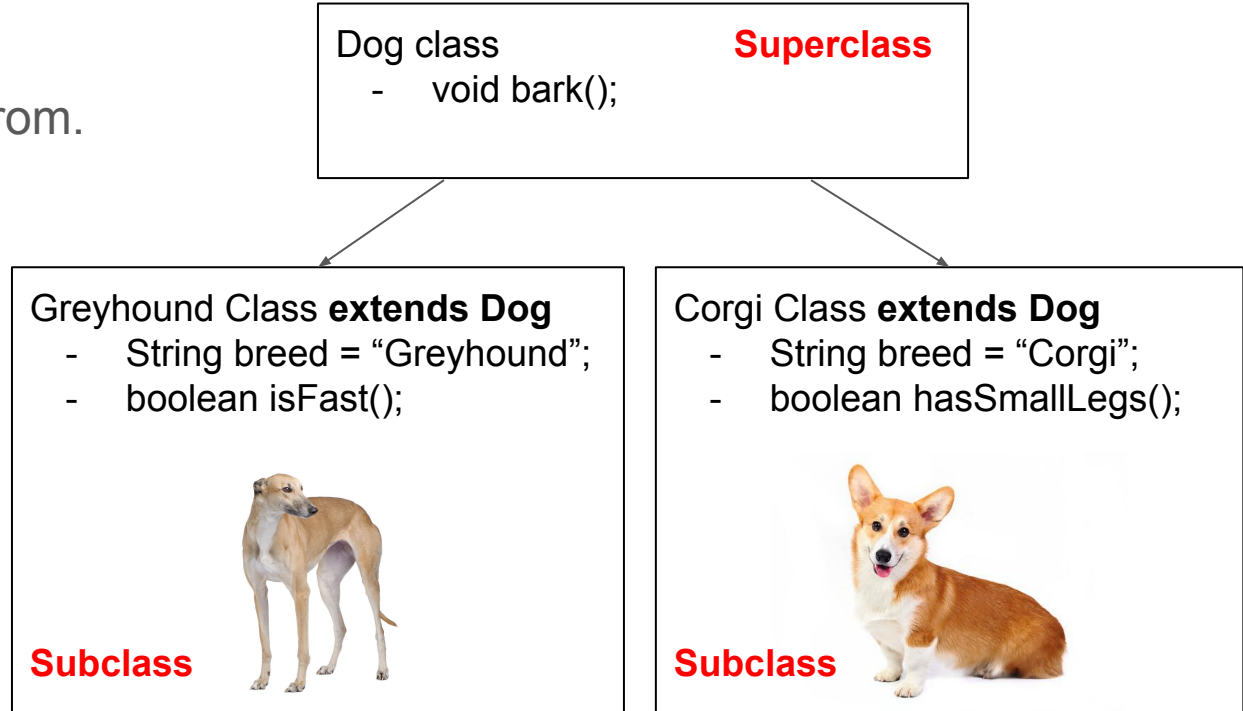


Back to the Dog example

Let's label these.

Dog is being inherited from.
It is the **Superclass**.

Corgi and Greyhound
are inheriting from Dog.
They are **Subclasses**.



Lab Part 1: Superclasses & Subclasses

1. Create the Performer Superclass

- a. Global Variables - String name and int age
- b. Constructors
 - i. Empty - Default name "Doja Cat" and default age is 26.
 - ii. String name, int age
- c. Methods
 - i. String getName() - Returns name of the Performer.
 - ii. void practice() - Prints out the name is practicing.
 - iii. void perform() - Print out the name is performing.

2. Create the Musician Subclass

- a. Global variable - String instrument
- b. Constructors
 - i. Empty - Default instrument is "Cello"
 - ii. String instrument
- c. Methods
 - i. String getInstrument() - Returns instrument
 - ii. void playInstrument() - Plays instrument

Lab Part 2: Superclasses & Subclasses

3. In main

- a. Create a 2 Performers
 - i. One with empty constructor
 - ii. One with String, int constructor
- b. Create 2 Musicians
 - i. One with empty constructor
 - ii. One with String constructor
- c. On Performer 1
 - i. Call getName() and practice()
- d. On Performer 2
 - i. Call getName() and perform()
- e. On Musician 1
 - i. Call getName(), perform(), and playInstrument
- f. On Musician 2
 - i. Call practice() and getInstrument()