

Intermediate Object-Oriented Programming with Java



Java Packages - Built-in packages

java.lang

String

Math

String

Integer

Long

⋮

Example:

`String.length(str)`

** java.lang does not need to be imported

java.util

Collection

Queue

ArrayList

Map

⋮

Java Packages - Name spaces

package.a

Record

package.b

Record

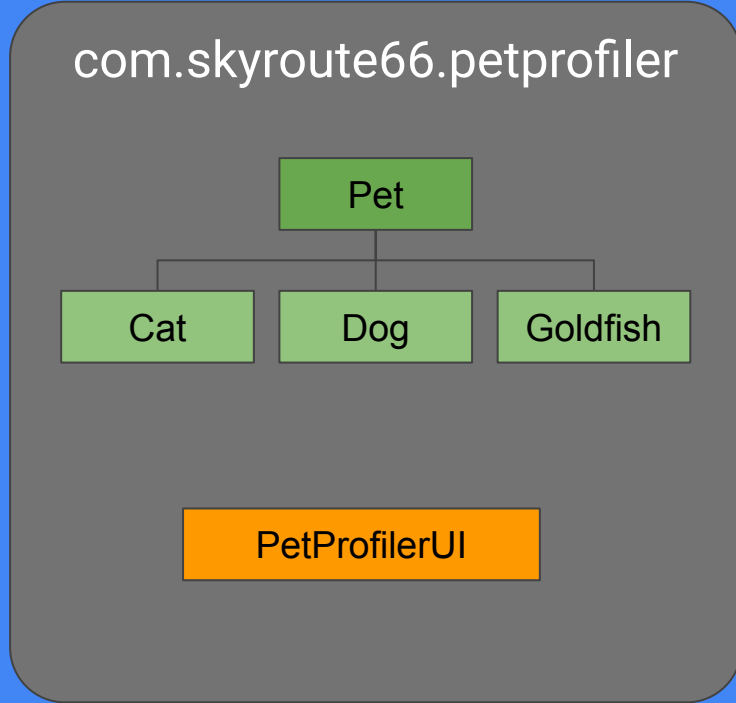
Okay if using fully qualified name:

`package.a.Record`

`package.b.Record`

`Record` if only one package is included

Java Packages - User-defined packages



Java Packages - User-defined packages

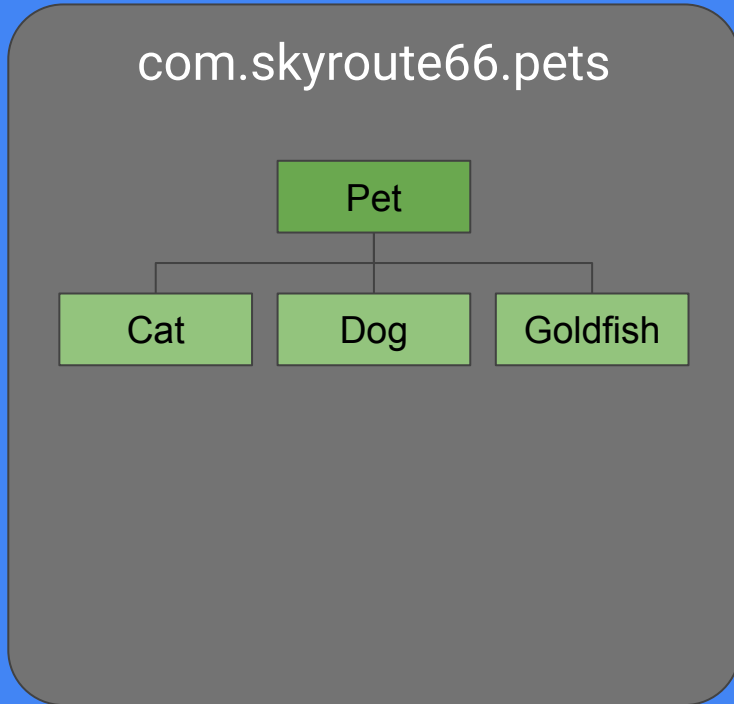
com.skyroute66.petprofiler

PetProfilerUI

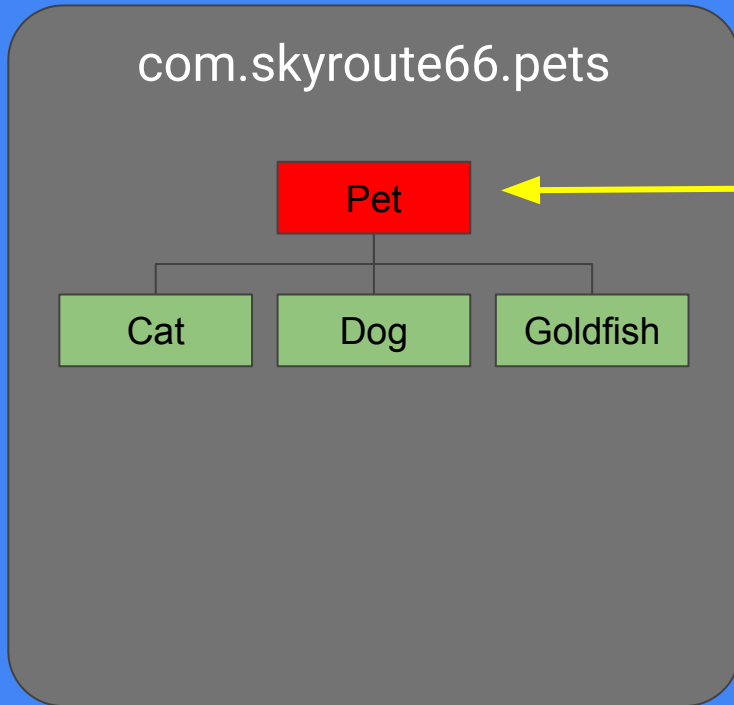
com.skyroute66.pets



Abstract Classes

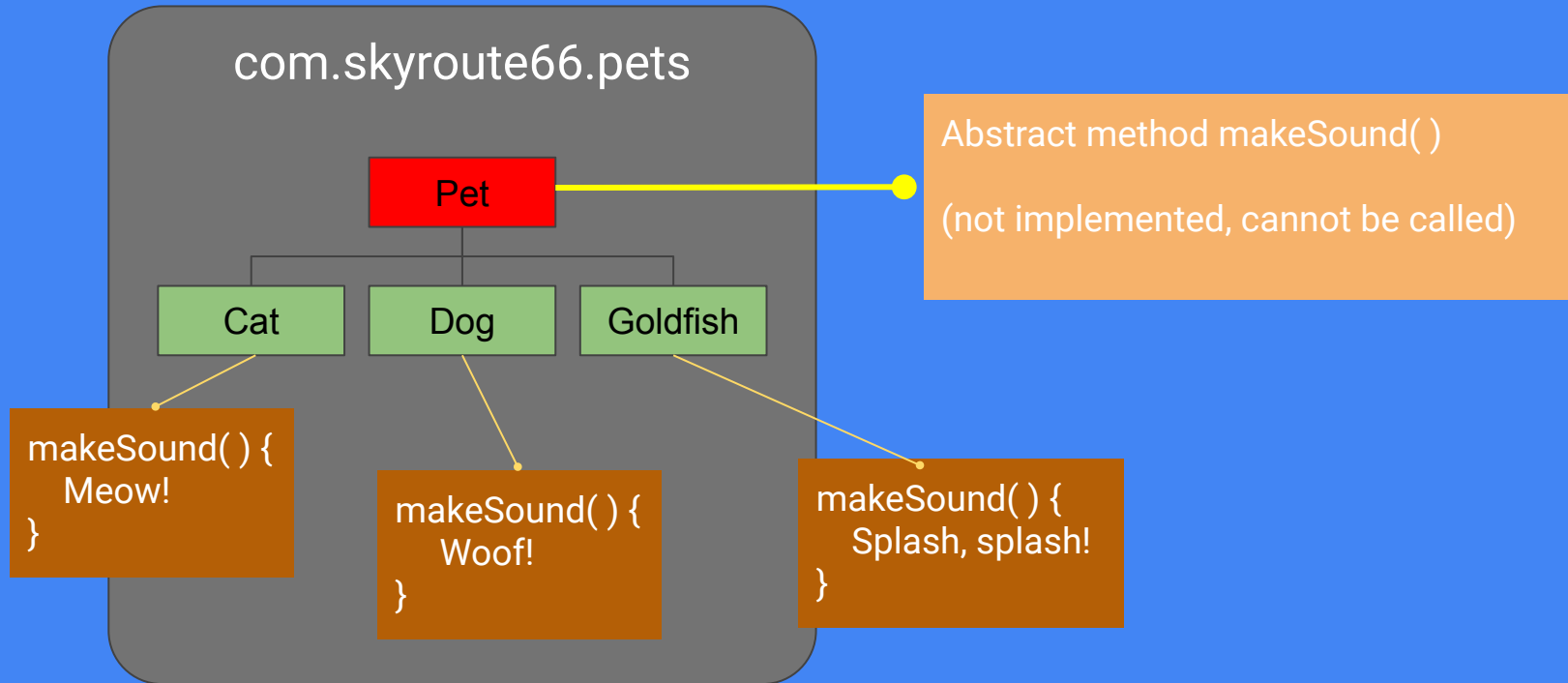


Abstract Classes



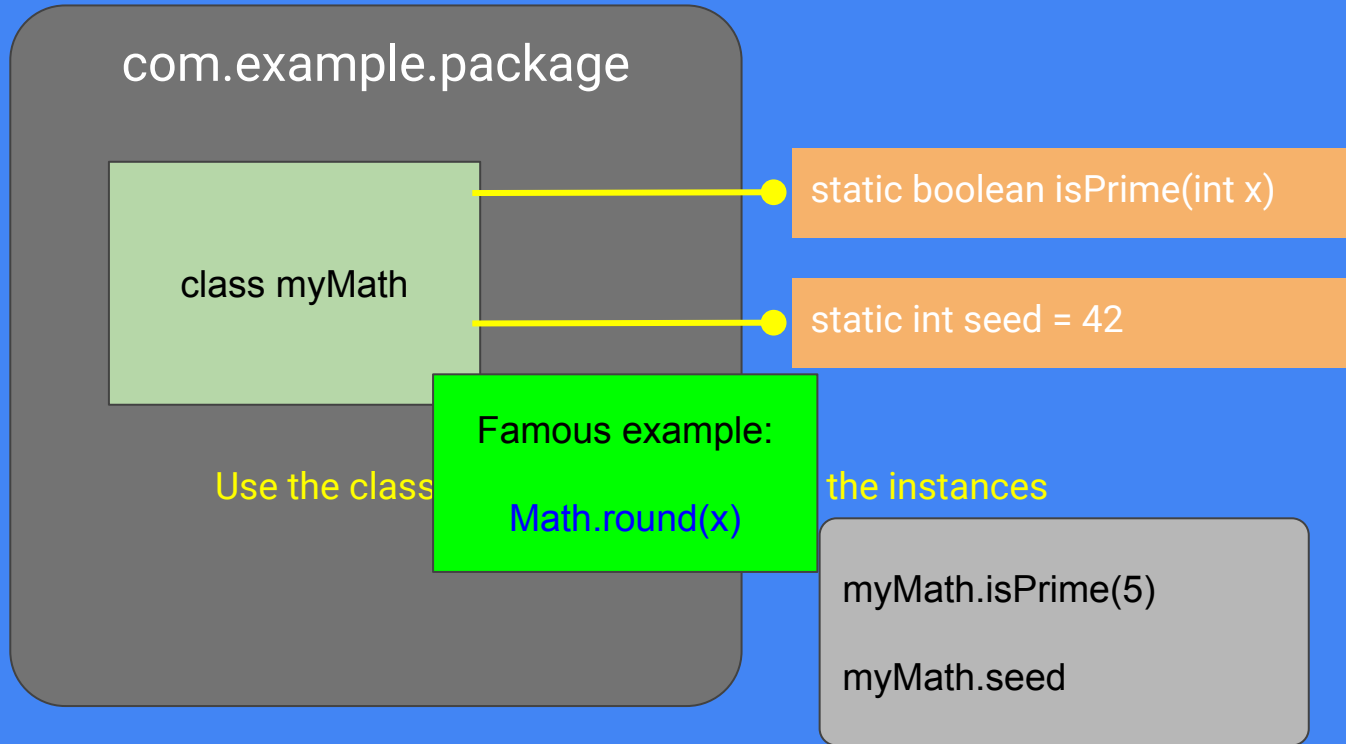
Cannot be instantiated
Must be inherited

Abstract Methods



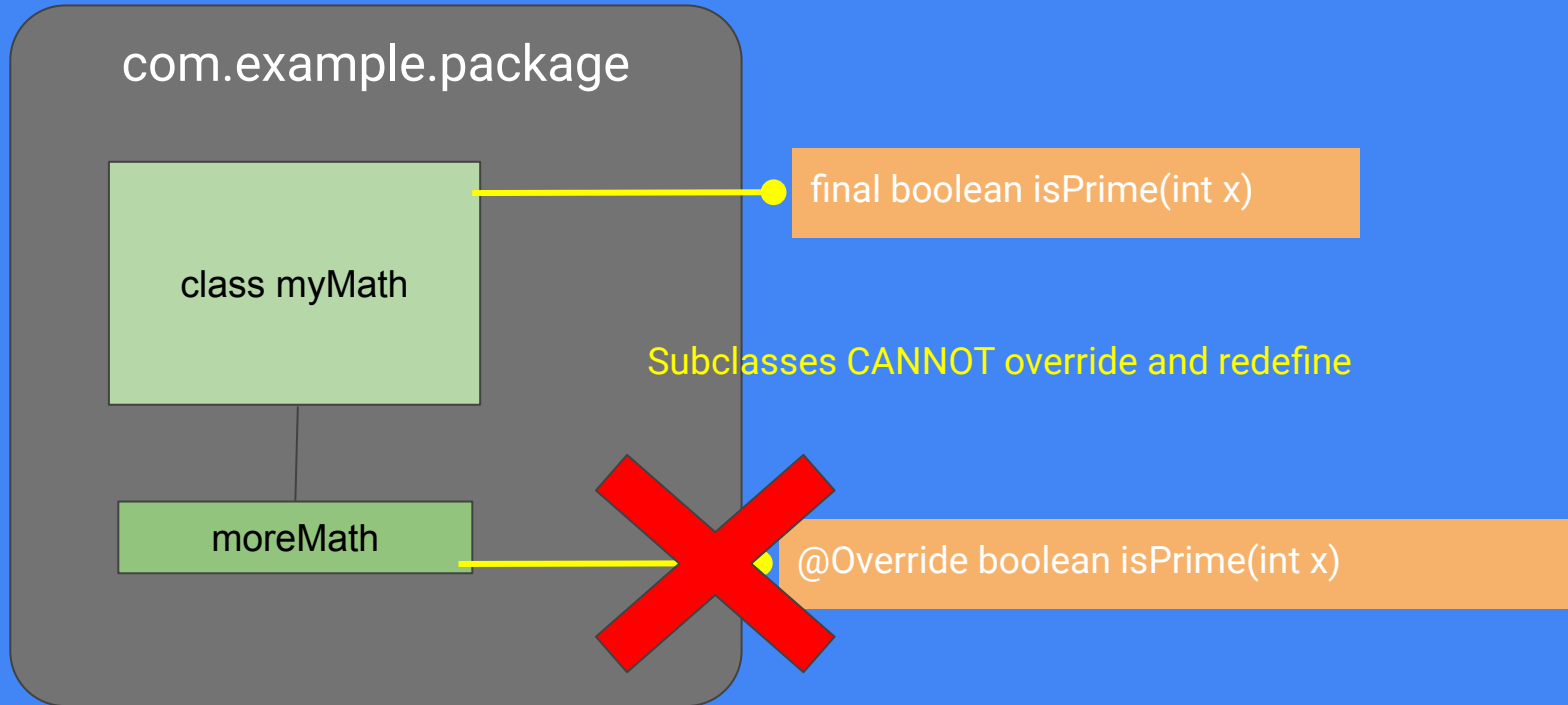
Subclasses that are not abstract must implement it!

Static methods and variables



No need to instantiate the class

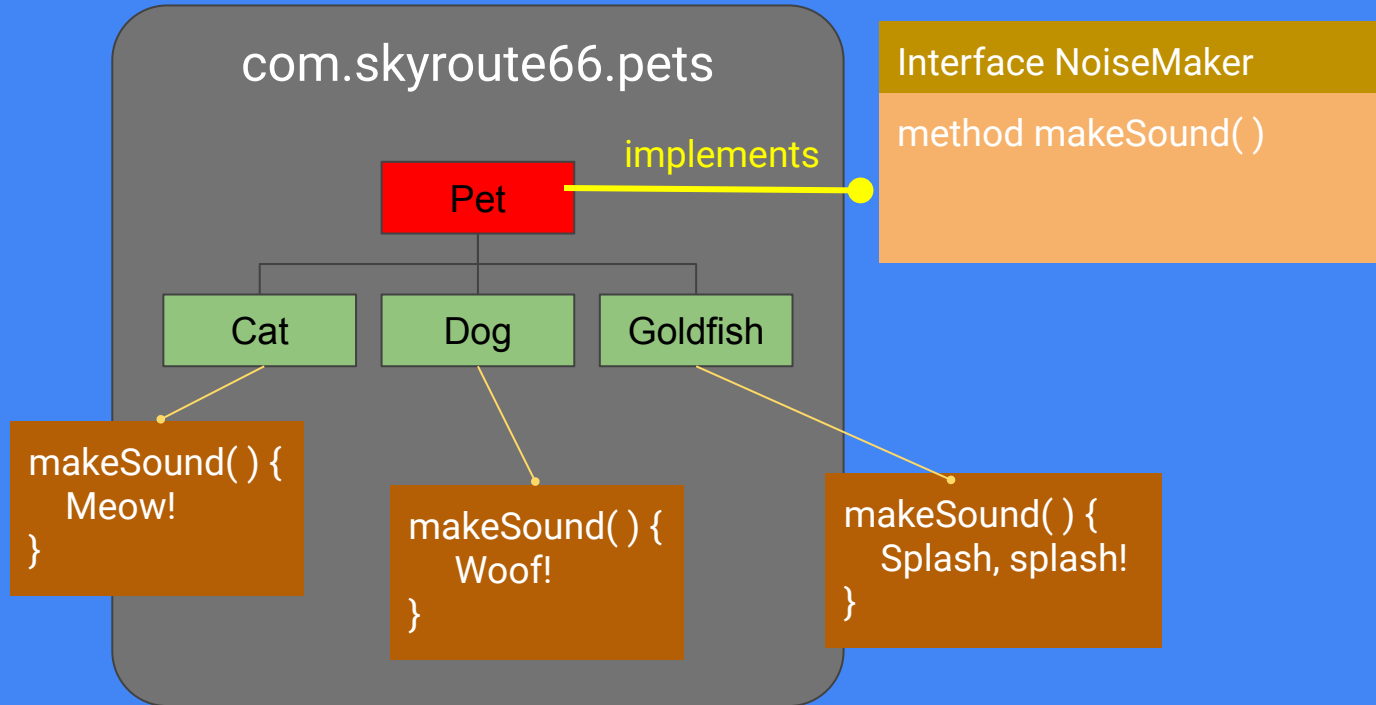
Final methods



Interface - think of it as a treaty

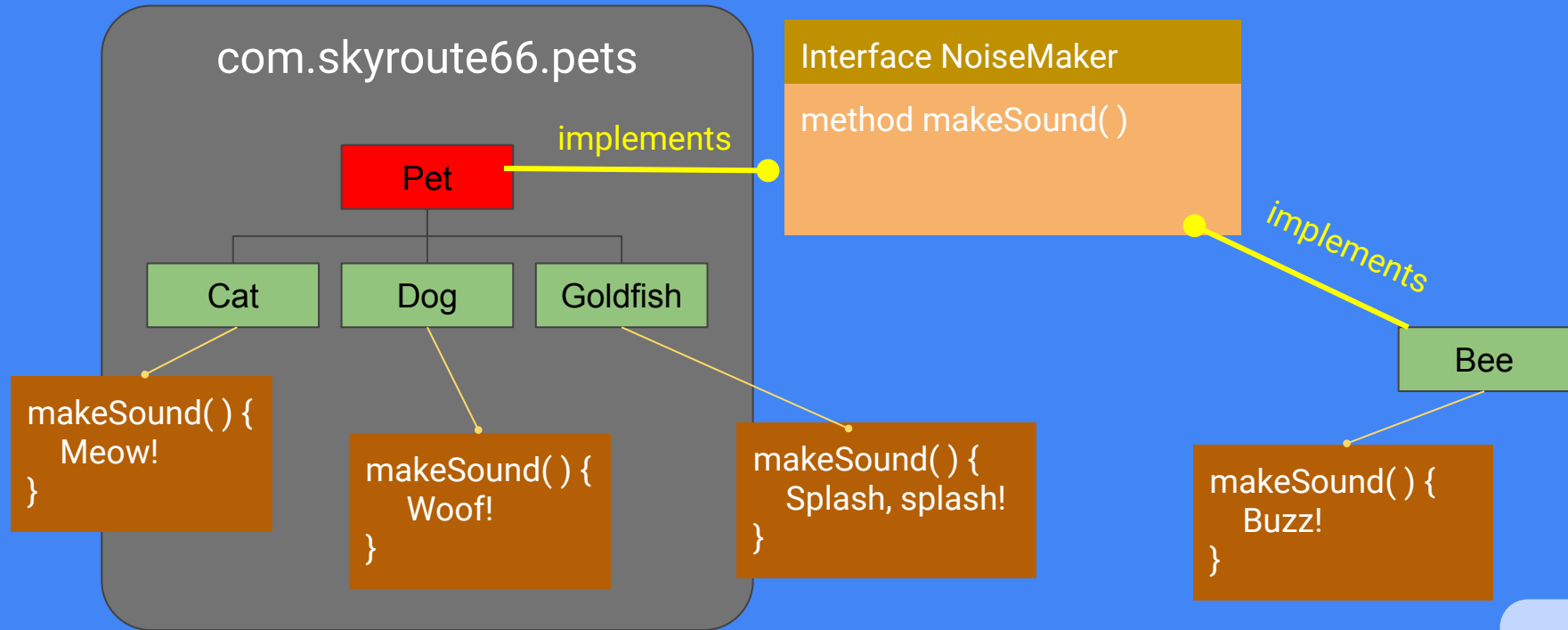


Interfaces



Because `Pet` is abstract and chooses not to implement it, first descendents that are not abstract must implement it. Otherwise, only `Pet` has to implement it.

Interfaces



Because Bee is not abstract, it will have to implement it and its subclasses do not unless they also choose to implement it themselves.