# Requeriments

- 1. Create a system called CCTZoo
- 2. CCTzoo must have 100 animals
- 3. The animals are broken down into types: Mammal, Reptile, Avian, Aquatic, Insect
- 4. Each Animal has a Zoo keeper that looks after it, 40 in total
- 5. A zoo keeper can look after the max of 3 animals.
- 6. The system must allow the user the following: Search for Animals, Search for Keepers, Add new animals, Add new keepers, Update animals, Update keepers.

#### **About Interfaces**

As the objective is to present how the interfaces works, the animal code will only consist of message print commands.

The keyword "implements" compels us to program and write the code corresponding to all methods with their respective signatures. In addition, all interface methods must be the public.

Using interfaces is possible to ask third parties to write parts of the program without this person has to know the rest of the program or even have access to its source code. So then we could work on this project as a group.

# **Features of the Object Oriented**

The following packages were used:

package animals; package keeper; package animals.interfaces; package cctzoo; package health; package setuphelper;

### Polymorphism.

We used polymorphism in different moments classes with different behaviors, switching from one behavior to another when necessary.

The use of interfaces Mammal, Reptile, Avian, Aquatic and Insect allows this switching to be done both when the program is compiled, as well as during its execution.

# Heritage

Classes of animals inherited the following attributes of the animal class, name/ petname/ date of birth / date of arrival / gender / offspring / medication / vaccine / exhibit number.

Enums

**Abstract Classes** 

# **Class Diagram**

