

# Assignment: Animals

The assignment covers the following learning goals:

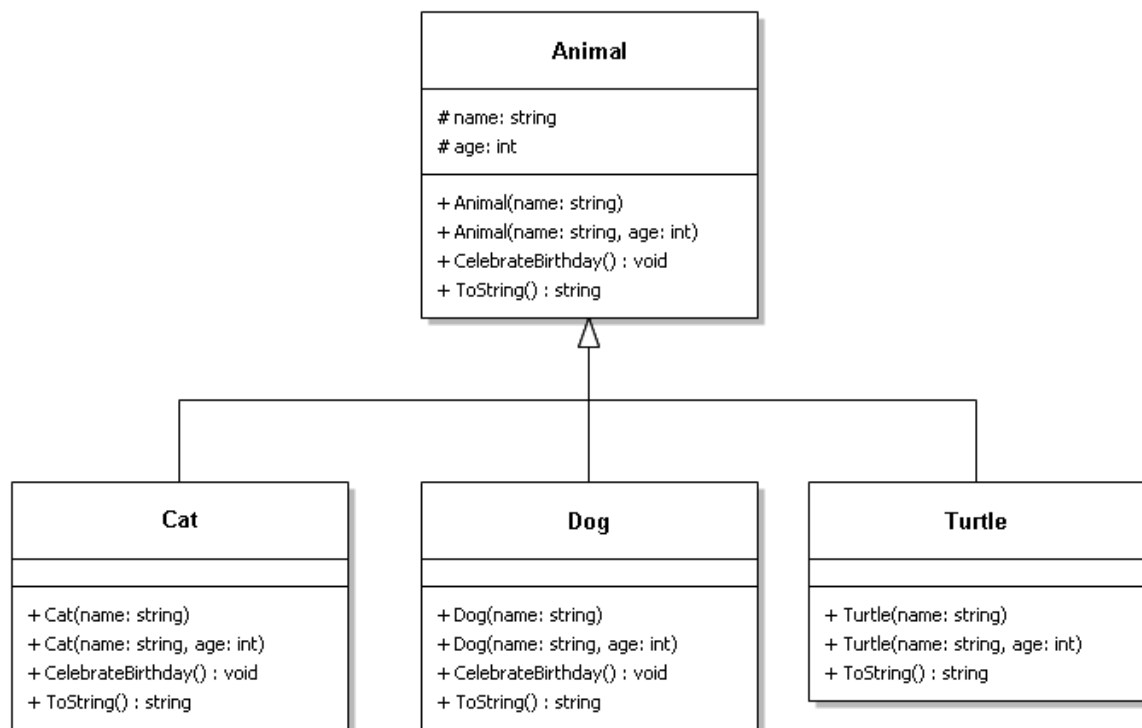
- You can apply inheritance in your implementation.

Question difficulty: ★★☆☆☆

## Case description

This assignment is to get you acquainted with the syntax involved with Inheritance. You will have to implement the supplied UML Class Diagram and do not have to implement a GUI for it (i.e. using the classes).

## UML & Screenshots



UML CLASS DIAGRAM 1: ANIMALS

Animal	
Constructors & methods	Description
<b>Animal</b>	When the <i>age</i> is not supplied, an animal should get the age 1
<b>CelebrateBirthday</b>	Increase the <i>age</i> by one. Make sure that an animal can be at most 100 years old
<b>ToString</b>	Return a string in the following format: <name> (<age> year)

Cat	
Constructors & methods	Description
<b>Cat</b>	When the age is not supplied, a cat should get the age 1
<b>CelebrateBirthday</b>	Increase the <i>age</i> by one. Make sure that a cat can be at most 25 years old
<b>ToString</b>	Return a string in the following format: <i>Cat: &lt;name&gt; (&lt;age&gt; year)</i>

Dog	
Constructors & methods	Description
<b>Dog</b>	When the age is not supplied, a dog should get the age 1
<b>CelebrateBirthday</b>	Increase the <i>age</i> by one. Make sure that a dog can be at most 20 years old
<b>ToString</b>	Return a string in the following format: <i>Dog: &lt;name&gt; (&lt;age&gt; year)</i>

Turtle	
Constructors & methods	Description
<b>Turtle</b>	When the age is not supplied, a turtle should get the age 1
<b>ToString</b>	Return a string in the following format: <i>Turtle: &lt;name&gt; (&lt;age&gt; year)</i>

### Additional features

Add additional animals.

Add additional methods in *Animal* and decide for yourself if they need to be overridden.