

In my diagram I am representing my first class of Duck. Duck is going to have 4 properties first of which is eggs.

Eggs is going to be a collection of several eggs so it makes sense to store this as a list containing multiple versions of the class egg. Colour will be represented by a string for example grey and age by an integer eg 3.

Sex will be represented by a string which will either be male or female depending on the different sex of the duck.

The duck class will have 3 methods. Swim which is inherent to all ducks, Fly which is dependent on the age of the duck so it requires the age property as an argument.

Similar to the fly method lay_eggs will require the property from sex to test if the duck is capable of laying eggs.

My second class of Eggs will represent each individual Egg on the list of eggs. These will have properties of size represented by an integer and colour which will be represented by a string.

The egg only has one method which is to hatch.

My objects created from these classes are Daisy who has 1 egg in her current list of eggs is brown age 2 and is female.

The egg object is created to represent one egg on the list its size is 10 and its colour is egg shell.