Week 06
Classes

Lab 05 - Virtual Pet

Create a virtual pet class. A pet is identified by its attributes of name, ***hunger, cleanliness, happiness, health, and age***. Display a menu with actions to improve one of the attributes by 1. With <u>every action</u> the pet's age is increased by 1, and a random attribute is decreased by 1. When the pet is 5 years old it dies of old age. If an attribute reaches 0 the pet dies tragically.

Constructor

Write a constructor that creates a pet object by using a name. Initialize the pets age to 0, and randomly generate statistics for the other attributes (1-5).

Useful Code:
#include <time.h> //header
srand(time(0));   //should be the 1st line in main()
// generate number in the range of 1 - 5
generatedNum = rand() % 5 + 1; //everytime you need a new generated number

Class Functions

Create **getters** & **setters** where appropriate. Additionally create a **feed**, **wash**, **play**, and **heal** Functions in your virtual pet class. Additionally, create **displayAttributes()**, **displayMenu()**, and a bool function **isAlive()**. You may add more functions if you desire.

Expected Output: On back

Note: user input is bolded

RUN TIME EXAMPLE 1	RUN TIME EXAMPLE 1 Cont.	RUN TIME EXAMPLE 2

-Virtual Orangutan-
---- - m------m------
    @(o.o)@
     (0)~~
     o o
Please Enter a name for your pet
Orangutan :
George
	Main Menu :
	1. Feed
	2. Wash
	3. Play
	4. Health
	Enter a number(1 - 4)
	3
	George goes for a bike ride.
		-Virtual Orangutan-
		---- - m------m------
		    @(o.o)@
		     (0)~~
		     o o
		Please Enter a name for your pet
		Orangutan :
		George

--George's stats --
Hunger: 2
Cleanliness: 2
Happiness: 5
Health: 5
Age: 0
Main Menu :
1. Feed
2. Wash
3. Play
4. Health
Enter a number(1 - 4)
1
George dances with joy and devours pasta.

--George's stats --
Hunger: 3
Cleanliness: 1
Happiness: 5
Health: 5
Age: 1
Main Menu :
1. Feed
2. Wash
3. Play
4. Health
Enter a number(1 - 4)
2
George puts up a fight to resist, however he gives in and becomes squeaky clean.

--George's stats --
Hunger: 3
Cleanliness: 2
Happiness: 4
Health: 5
Age: 2

--George's stats --
Hunger: 2
Cleanliness: 2
Happiness: 5
Health: 5
Age: 3
Main Menu :
1. Feed
2. Wash
3. Play
4. Health
Enter a number(1 - 4)
4
George thrashes around the vet's office, breaking a window trying to escape from a shot.

--George's stats --
Hunger: 2
Cleanliness: 1
Happiness: 5
Health: 6
Age: 4
Main Menu :
1. Feed
2. Wash
3. Play
4. Health
Enter a number(1 - 4)
2
George puts up a fight to resist, however he gives in and becomes squeaky clean.

--George's stats --
Hunger: 2
Cleanliness: 2
Happiness: 4
Health: 6
Age: 5
George died of old age.
Press any key to continue . . .

--George's stats --
Hunger: 2
Cleanliness: 2
Happiness: 1
Health: 4
Age: 0
Main Menu :
1. Feed
2. Wash
3. Play
4. Health
Enter a number(1 - 4)
1
George dances with joy and devours pasta.

--George's stats --
Hunger: 3
Cleanliness: 2
Happiness: 0
Health: 4
Age: 1
George died tragically.
Press any key to continue . . .