WORKSHOP #8

NRC: 14575

CLASS NAME: OBJECT ORIENTED PROGRAMMING

INSTRUCTOR: EDISON LASCANO

TOPIC: PROYECT CHICKEN FARM

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DATE: 28/11/2023

```java
package ec.edu.espe.proyectchickenfarm.view;

import ec.edu.espe.proyectchickenfarm.model.Chicken;
import ec.edu.espe.proyectchickenfarm.model.Egg;
import ec.edu.espe.proyectchickenfarm.model.Poop;
import java.util.Scanner;

/*
@author Rony Cedeño,INTERBYTE,DCCO ESPE_14575
 */
public class ChickenFarmSystem {

    public static void main(String[] args) {

        Chicken vector[] = new Chicken[2];
        Scanner scanner = new Scanner(source: System.in);

        Poop poop = new Poop(id: 15, name: "Robin", color:"Brown", age: 1, isMolting:true);
        Egg egg = new Egg(id: 15);
        Chicken chicken = new Chicken(id: 1, name: "Lucy", color:"White&Black", age: 2, isMolting:true);
        Chicken chicken2 = new Chicken(id: 2, name: "Alisson", color:"Black", age: 1, isMolting:false);

        vector[0] = chicken;
        vector[1] = chicken2;

        //Workshop in class
        System.out.println(x:"Hello Chickens from the simulator");
        System.out.println(x:"My name is --> Rony Cedeño");
        System.out.println("Poop" + poop);
        System.out.println("Egg" + egg);
        System.out.println("Chicken 1 -->" + chicken);
        System.out.println("Chicken 2 -->" + chicken2);
        for (int i = 0; i < vector.length; i++) {
            System.out.println("Chicken #" + (i + 1) + vector[i]);
        }

        //Excersice 3:
        for (int i = 0; i < vector.length; i++) {

            ageCalculate();
            System.out.println("Please enter the ID of the chicken#" + (i + 1) + ":");
            int chickenid = scanner.nextInt();
            scanner.nextLine();

            System.out.println("Enter the name of the chicken#" + (i + 1) + ":");
            String chickenname = scanner.nextLine();

            System.out.println("Enter the color of the chicken#" + (i + 1) + ":");
            String chickencolor = scanner.nextLine();

            System.out.println("Enter the age of the chicken#" + (i + 1) + ":");
            int chickenage = scanner.nextInt();
```

```
53
54              System.out.println("Is the chicken#" + (i + 1) + " moolting? (true/false): ");
55              boolean chickenisMolting = scanner.nextBoolean();
56
57              Chicken otherChickens = new Chicken(id: chickenid, name: chickenname, color:chickencolor, age: chickenage, isMolting:chickenisMolting);
58              vector[i] = otherChickens;
59          }
60
61          //Worshop#2 in class
62          chicken.setId(id: 9);
63          System.out.println("New chicken id -->" + chicken.getId());
64          System.out.println("chicken -->" + chicken);
65      }
66
67      public static void ageCalculate() {
68
69          System.out.println(x:"----------CURRENT DATE----------");
70          System.out.println(x:"Enter current day: ");
71          Scanner scanner = new Scanner(source: System.in);
72          int currentDay = scanner.nextInt();
73          scanner.nextLine();
74
75          System.out.println(x:"Enter the current month: ");
76          int currentMonth = scanner.nextInt();
77
78          System.out.println(x:"Enter the current year: ");
79          int currentYear = scanner.nextInt();
```

```
80
81              System.out.println(x:"--------DATE OF BIRTH OF THE CHICKEN----------");
82              System.out.println(x:"Enter the day of birth of the chicken: ");
83              int dayOfBirth = scanner.nextInt();
84
85              System.out.println(x:"Enter the month of birth the chicken: ");
86              int monthOfBirth = scanner.nextInt();
87
88              System.out.println(x:"Enter the year of birth the chicken: ");
89              int yearOfBirth = scanner.nextInt();
90
91              if (currentMonth >= monthOfBirth || currentDay >= dayOfBirth) {
92                  int years = currentYear - yearOfBirth;
93                  int months = currentMonth - monthOfBirth;
94                  int days = currentDay - dayOfBirth;
95
96                  if (months != 0 || years != 0) {
97                      System.out.println("The chicken´s age is: " + years + " years, " + months + " months, " + days + " days");
98                  } else {
99                      if (months != 0) {
100                         System.out.println("The chicken´s age is: " + years + " years, and  " + months + " months");
101                     } else {
102                         if (days != 0) {
103                             System.out.println("The chicken´s age is: " + years + " years, and " + days + "days");
104                         }
105                     }
106                 }
107             }
```

```java
package ec.edu.espe.proyectchickenfarm.model;

/*
@author Rony Cedeño,INTERBYTE,DCCO ESPE_14575
 */
public class Chicken {

    private int id;
    private String name;
    private String color;
    private int age;
    private boolean isMolting;

    @Override
    public String toString() {
        return "Chiken{" + "id=" + id + ", name=" + name + ", color=" + color + ", age=" + age + ", isMolting=" + isMolting + '}';
    }

    public Chicken(int id, String name, String color, int age, boolean isMolting) {
        this.id = id;
        this.name = name;
        this.color = color;
        this.age = age;
        this.isMolting = isMolting;
    }

    public int getId() {
        return id;
    }
```

```java
package ec.edu.espe.proyectchickenfarm.model;

/*
@author Rony Cedeño,INTERBYTE,DCCO ESPE_14575
 */
public class Poop {

    private int id;
    private String name;
    private String color;
    private int age;
    private boolean isMolting;

    //Polimorfismo
    @Override
    public String toString() {
        return "Poop{" + "id=" + id + ", name=" + name + ", color=" + color + ", age=" + age + ", isMolting=" + isMolting + '}';
    }

    public Poop(int id, String name, String color, int age, boolean isMolting) {
        this.id = id;
        this.name = name;
        this.color = color;
        this.age = age;
        this.isMolting = isMolting;
    }

    /**
     * @return the id
```

```java
package ec.edu.espe.proyectchickenfarm.model;

/*
@author Rony Cedeño,INTERBYTE,DCCO ESPE_14575
 */
public class Egg {

    private int id;

    @Override
    public String toString() {
        return "Egg{" + "id=" + getId() + '}';
    }

    public Egg(int id) {
        this.id = id;
    }

    /**
     * @return the id
     */
    public int getId() {
        return id;
    }
```

```
run:
Hello Chickens from the simulator
My name is --> Rony Cede?o
PoopPoop{id=15, name=Robin, color=Brown, age=1, isMolting=true}
EggEgg{id=15}
Chicken 1 -->Chiken{id=1, name=Lucy, color=White&Black, age=2, isMolting=true}
Chicken 2 -->Chiken{id=2, name=Alisson, color=Black, age=1, isMolting=false}
Chicken #1Chiken{id=1, name=Lucy, color=White&Black, age=2, isMolting=true}
Chicken #2Chiken{id=2, name=Alisson, color=Black, age=1, isMolting=false}
-----------CURRENT DATE-----------------------
Enter current day:
17
Enter the current month:
12
Enter the current year:
2023
--------DATE OF BIRTH OF THE CHICKEN----------
Enter the day of birth of the chicken:
26
Enter the month of birth the chicken:
10
Enter the year of birth the chicken:
2003
The chicken?s age is: 20 years, 2 months, -9 days
```