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1 //Kevin Lopez 17/09/2019 Week 3 Lab 05 Pets
2
3 //We are simulating one of those old games where we had a virtual pet.
4
5 import java.util.Scanner;
6
7
8 public class Main {
9
10
11     public static void main(String[] args) {
12
13
14         Scanner reader = new Scanner(System.in);
15
16         System.out.println("-Virtual Orangutan-");
17         System.out.println("-----m-----m-----");
18         System.out.println("      @(o.o)@");
19         System.out.println("      (0)~");
20         System.out.println("      o o");
21         System.out.println("Please Enter a name for your pet Orangutan ");
22
23
24         String name = reader.nextLine();
25         //reating the pet, playing God.
26         Pet Orangutan = new Pet(name);
27         System.out.println("Initializing stats...");
28         System.out.println(Orangutan.getName() + "'s Stats-");
29         Orangutan.displayStats();
30         int x = 0;
31         System.out.println(Orangutan.getName() + " was born!");
32
33         //while loop and switch case to do the loop and menu
34         while(x < 10) {
35             Orangutan.setAge(Orangutan.getAge() + 1);
36             printMainMenu();
37             int input;
38             input = reader.nextInt();
39             switch(input) {
40
41                 case 1:
42                     Orangutan.feed();
43                     System.out.println("WOW HE SWALLOWED THE BANANA WHOLE and winked! ");
44                     Orangutan.displayStats();
45                     break;
46                 case 2:
47                     Orangutan.wash();
48                     System.out.println(Orangutan.getName() + " seems to really enjoy cleaning certain parts..");
49                     Orangutan.displayStats();
50
51                     break;
52                 case 3:
53                     Orangutan.play();
54                     System.out.println(Orangutan.getName() + " is a bit aggressive");
55                     Orangutan.displayStats();
56                     break;
57                 case 4:
58                     Orangutan.health();
59                     System.out.println(Orangutan.getName() + " has a wierd bump on his butt");
60                     Orangutan.displayStats();

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60         Orangutan.displayStats();
61         break;
62     case 5:
63         x = 10;
64         break;
65
66
67     }
68
69     x++;
70     if(x == 10){
71         //shame..
72         System.out.println(Orangutan.getName() + " this foo died ! ");
73         System.out.println("Quitting program...");
74     }
75 }
76
77 }
78
79 //created a function to print the menu to avoid boiler plate code (?)
80 public static void printMainMenu() {
81     System.out.println("Main Menu:");
82     System.out.println(" 1. Feed \n 2. Wash \n 3. Play \n 4. Health\n 5. -Quit- \n");
83     System.out.println("Enter a number 1-5");
84
85 }
86 }
87

```

```

1  import java.util.Random;
2  |
3  //Create a virtual pet class. A pet is identified by its attributes of name,
4  //hunger, cleanliness, happiness, health, and age. Display a menu with
5  //actions to improve one of the attributes by 1. With every action the pet's
6  //age is increased by 1. When the pet is 10 years old it dies of old age
7
8  public class Pet {
9      String name;
10     int hunger, cleanliness, happiness, health, age;
11     //just a constructor
12     public Pet(String name) {
13         this.name = name;
14         this.hunger = randomGen();
15         this.cleanliness = randomGen();
16         this.happiness = randomGen();
17         this.health = randomGen();
18         this.age = 0;
19     }
20     //created a function to randomly generate a number from 1 to 10
21     public int randomGen() {
22         Random rand = new Random();
23         int number = rand.nextInt(10) + 1;
24         return number;
25     }
26     //the following are just getters and setters
27     public String getName() {
28         return name;
29     }
30
31     public void setName(String name) {
32         this.name = name;
33     }
34
35     public int getHunger() {
36         return hunger;
37     }
38
39     public void setHunger(int hunger) {
40         this.hunger = hunger;
41     }
42
43     public int getCleanliness() {
44         return cleanliness;
45     }
46
47     public void setCleanliness(int cleanliness) {
48         this.cleanliness = cleanliness;
49     }
50
51     public int getHappiness() {
52         return happiness;
53     }
54
55     public void setHappiness(int happiness) {
56         this.happiness = happiness;
57     }
58
59     public int getHealth() {
60         return health;
61     }

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```
62
63 public void setHealth(int health) {
64     this.health = health;
65 }
66
67 public int getAge() {
68     return age;
69 }
70
71 public void setAge(int age) {
72     this.age = age;
73 }
74
75 //to feed the pet
76 public void feed() {
77     this.hunger += 1;
78 }
79 //to wash the pet
80 public void wash() {
81     this.cleanliness += 1;
82 }
83
84 //to play with the pet
85 public void play() {
86     this.happiness += 1;
87 }
88
89 //to take care of the pet
90 public void health() {
91     this.health += 1;
92 }
93
94
95 //created a function because I dont want to type more often.
96 public void displayStats() {
97
98     System.out.println("Hunger: " + this.hunger);
99     System.out.println("Cleanliness: " + this.cleanliness);
100     System.out.println("Happiness: " + this.happiness);
101     System.out.println("Health: " + this.health);
102
103
104
105 }
106
107 }
108
```

```
-Virtual Orangutan-
-----m-----m-----
      @(o.o)@
      (0)~~
      o o
Please Enter a name for your pet Orangutan
Arnold
Initializing stats...
Arnold's Stats-
Hunger: 8
Cleanliness: 8
Happiness: 4
Health: 10
Arnold was born!
Main Menu:
  1. Feed
  2. Wash
  3. Play
  4. Health
  5. -Quit-

Enter a number 1-5
1
WOW HE SWALLOWED THE BANANA WHOLE and winked!
Hunger: 9
Cleanliness: 8
Happiness: 4
Health: 10
Main Menu:
  1. Feed
  2. Wash
  3. Play
  4. Health
  5. -Quit-

Enter a number 1-5
2
Arnold seems to really enjoy cleaning certain parts..
Hunger: 9
Cleanliness: 9
Happiness: 4
Health: 10
Main Menu:
  1. Feed
  2. Wash
  3. Play
  4. Health
  5. -Quit-
```

Enter a number 1-5

3

Arnold is a bit aggressive

Hunger: 9

Cleanliness: 9

Happiness: 5

Health: 10

Main Menu:

1. Feed
2. Wash
3. Play
4. Health
5. -Quit-

Enter a number 1-5

4

Arnold has a wierd bump on his butt

Hunger: 9

Cleanliness: 9

Happiness: 5

Health: 11

Main Menu:

1. Feed
2. Wash
3. Play
4. Health
5. -Quit-

Enter a number 1-5

1

WOW HE SWALLOWED THE BANANA WHOLE and winked!

Hunger: 10

Cleanliness: 9

Happiness: 5

Health: 11

Main Menu:

1. Feed
2. Wash
3. Play
4. Health
5. -Quit-

Enter a number 1-5

2

Arnold seems to really enjoy cleaning certain parts..

Hunger: 10

Cleanliness: 10

Happiness: 5

Health: 11

Main Menu:

1. Feed
2. Wash
3. Play
4. Health
5. -Quit-

Enter a number 1-5

3

Arnold is a bit aggressive

Hunger: 10

Cleanliness: 10

Happiness: 6

Health: 11

Main Menu:

1. Feed
2. Wash
3. Play
4. Health
5. -Quit-

Enter a number 1-5

4

Arnold has a wierd bump on his butt

Hunger: 10

Cleanliness: 10

Happiness: 6

Health: 12

Main Menu:

1. Feed
2. Wash
3. Play
4. Health
5. -Quit-

Enter a number 1-5

3

Arnold is a bit aggressive

Hunger: 10

Cleanliness: 10

Happiness: 7

Health: 12

Main Menu:

1. Feed
2. Wash
3. Play
4. Health
5. -Quit-

Enter a number 1-5

2

Arnold seems to really enjoy cleaning certain parts..

Hunger: 10

Cleanliness: 11

Happiness: 7

Health: 12

Arnold this foo died !

Quitting program...

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