

## Revision Thu:

### Custom Pet Actions Based on Pet Type

In this revision, pets exhibit custom behaviors based on their species and age. As pets grow older, their health and happiness recovery rates change.

To do this, first provide a predefined list of types (Cat, Dog, Rabbit) for the user to choose from rather than allowing arbitrary types. Cats, dogs, and rabbits are considered old if they are 10, 8, and 6 years old or older, respectively.

Custom behavior:

- for the play method: happiness increases differently based on pet type: dogs: 20 (15 if old), cats: 15 (11 if old), and rabbits: 10 (7 if old),
- for the grooming method; health increases differently based on pet type: dogs: 15 (11 if old), cats: 10 (7 if old), and rabbits: 12 (9 if old).

Each time the user selects an option from the menu, the system counts it as a "step." A pet's age should be incremented by 0.5 with each step of the program.

Also, implement functionality for owner change by adding a method to transfer ownership of a pet to another user. This might require changes in the `User` and `VPAManager` classes to handle transferring pets.

Hint: Use a variable in the main class to keep track of the current step as well as any additional data in other classes as needed.

Sample run (Assume Ege & Sarah have successfully registered before this run):

#### Welcome to the Virtual Pet Adoption System!

1. Register
2. Login
3. Exit

Choose an option: 2

Enter your username: Ege

Enter your password: 123

Login successful! Welcome, Ege!

#### Menu:

1. Adopt a new pet

...

Choose an option: 1

Enter pet name: Lusi

Select pet type:

1. Dog
2. Cat
3. Rabbit

2

You have adopted a new Cat named Lusi.

#### Menu:

1. Adopt a new pet

...

Choose an option: 1

Enter pet name: Gofi

Select pet type:

1. Dog
2. Cat
3. Rabbit

1

You have adopted a new Dog named Gofi.

#### Menu:

Your pets:

Name: Lusi, Type: Cat, Health: 60,

Happiness: 65, Mood: Playful, Age: 6.50

Name: Gofi, Type: Dog, Health: 65,

Happiness: 70, Mood: Playful, Age: 6.00

Name: Pamuk, Type: Rabbit, Health: 62,

Happiness: 60, Mood: Playful, Age: 5.50

#### Menu:

...

5. Play with a pet

...

Choose an option: 5

Enter the name of the pet to play with: Gofi

#### Menu:

...

7. Display your pets

...

Choose an option: 7

Your pets:

Name: Lusi, Type: Cat, Health: 60,

Happiness: 65, Mood: Playful, Age: 7.50

Name: Gofi, Type: Dog, Health: 65,

Happiness: 90, Mood: Happy, Age: 7.50

Name: Pamuk, Type: Rabbit, Health: 62,

Happiness: 60, Mood: Playful, Age: 6.50

#### Menu:

...

5. Play with a pet

...

Choose an option: 5

Enter the name of the pet to play with:

```
1. Adopt a new pet
...
Choose an option: 1
Enter pet name: Pamuk
Select pet type:
1. Dog
2. Cat
3. Rabbit
3
You have adopted a new Rabbit named Pamuk.

Menu:
...
7. Display your pets
...
Choose an option: 7
Your pets:
Name: Lusi, Type: Cat, Health: 50,
Happiness: 50, Mood: Sad, Age: 1.50
Name: Gofi, Type: Dog, Health: 50,
Happiness: 50, Mood: Sad, Age: 1.00
Name: Pamuk, Type: Rabbit, Health: 50,
Happiness: 50, Mood: Sad, Age: 0.50

Menu:
...
5. Play with a pet
...
Choose an option: 5
Enter the name of the pet to play with: Gofi

Menu:
...
5. Play with a pet
...
Choose an option: 5
Enter the name of the pet to play with: Lusi

Menu:
...
5. Play with a pet
...
Choose an option: 5
Enter the name of the pet to play with:
Pamuk

Menu:
...
7. Display your pets
...
Choose an option: 7
Your pets:
Name: Lusi, Type: Cat, Health: 50,
Happiness: 65, Mood: Playful, Age: 4.00
Name: Gofi, Type: Dog, Health: 50,
Happiness: 70, Mood: Playful, Age: 3.50
Name: Pamuk, Type: Rabbit, Health: 50,
Happiness: 60, Mood: Playful, Age: 3.00

Menu:
...
7. Display your pets
...
Choose an option: 7
```

```
Pamuk

Menu:
...
7. Display your pets
...
Choose an option: 7
Your pets:
Name: Lusi, Type: Cat, Health: 60,
Happiness: 65, Mood: Playful, Age: 8.50
Name: Gofi, Type: Dog, Health: 65,
Happiness: 90, Mood: Happy, Age: 8.50
Name: Pamuk, Type: Rabbit, Health: 62,
Happiness: 67, Mood: Playful, Age: 8.00

Menu:
...
11. Transfer a pet to another user
...
Choose an option: 11
Enter the name of the pet to transfer: Pamuk
Enter the username of the new owner: Sarah
You have released Pamuk the Rabbit.
You have adopted Pamuk the Rabbit.
Pet Pamuk has been transferred to Sarah.

Menu:
...
12. Logout
Choose an option: 12
You have been logged out.

Welcome to the Virtual Pet Adoption System!
1. Register
2. Login
3. Exit
Choose an option: 2
Enter your username: Sarah
Enter your password: 456
Login successful! Welcome, Sarah!

Menu:
...
7. Display your pets
...
Choose an option: 7
Your pets:
Name: Pamuk, Type: Rabbit, Health: 62,
Happiness: 67, Mood: Playful, Age: 9.00

Menu:
...
12. Logout
Choose an option: 12
You have been logged out.
Welcome to the Virtual Pet Adoption System!
1. Register
2. Login
3. Exit
Choose an option: 3
```