

Revision Wed:

Limit the Number of Pets a User Can Adopt and Other Constraints

This revision limits how many pets a user can adopt (a maximum of 3 pets). This encourages users to focus on managing a smaller number of pets. Specifically:

- Restrict the number of pets a user can adopt to a maximum of 3.
- Instead of allowing the user to enter any type of pet, provide a predefined list of types (Cat, Dog, Rabbit) for the user to choose from.
- Ensure that the name of the pet starts with a capital letter
- When a pet is adopted, its initial health and happiness should be randomized within specific ranges (health between 30 and 50, happiness between 40 and 60). This adds variability to each pet adoption.

Pet-to-Pet Interactions:

Pets within the same user's collection can influence each other's happiness based on their mood. This feature increases complexity by requiring the user to manage not just individual pets, but also the overall mood of their collection.

Interaction Logic:

- **Happy/Playful Pets:**
 - ◆ If a pet is in a "Playful" mood, it boosts the happiness of other pets in the collection by **5 points** (up to a maximum of 100). The playful pet must have happiness greater than 70 for this to happen.
- **Sad or Sick Pets:**
 - ◆ If a pet's mood is "Sad" or its health is below 30 (indicating sickness), it decreases the happiness of other pets in the collection by **10 points**.
- These interactions occur automatically **after every user action** (feeding, playing, or grooming a pet).

Also, modify the method for adopting an unowned pet so that the user can specify the type of pet they would like to adopt, and only pets of that type are listed as choices.

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: 12345

Login successful! Welcome, Ege!

Menu:

1. Adopt a new pet

...

Choose an option: 1

Enter pet name: Gofi

Select pet type:

1. Dog

Menu:

...

7. Display your pets

...

Choose an option: 7

Your pets:

Name: Gofi, Type: Dog, Health: 35,
Happiness: 0, Mood: Sad

Name: Pamuk, Type: Rabbit, Health: 48,
Happiness: 0, Mood: Sad

Name: Lusi, Type: Cat, Health: 36,
Happiness: 0, Mood: Sad

Menu:

...

6. Groom a pet

2. Cat
3. Rabbit
1
You have adopted a new Dog named Gofi.

Menu:

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:

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

You cannot adopt more than 3 pets.

Menu:

...

7. Display your pets

...

Choose an option: 7

Your pets:

Name: Gofi, Type: Dog, Health: 35, Happiness: 0, Mood: Sad

Name: Pamuk, Type: Rabbit, Health: 48, Happiness: 0, Mood: Sad

Name: Lusi, Type: Cat, Health: 36, Happiness: 16, Mood: Sad

Menu:

...

5. Play with a pet

...

Choose an option: 5

Enter the name of the pet to play with: Gofi

...

Choose an option: 6

Enter the name of the pet to groom: Lusi

Menu:

...

7. Display your pets

...

Choose an option: 7

Your pets:

Name: Gofi, Type: Dog, Health: 35, Happiness: 0, Mood: Sad

Name: Pamuk, Type: Rabbit, Health: 48, Happiness: 0, Mood: Sad

Name: Lusi, Type: Cat, Health: 51, Happiness: 0, Mood: Sad

Menu:

...

12. Switch User

Choose an option: 12

You have been logged out.

Enter your username: Sarah

Enter your password: 4567

Login successful! Welcome, Sarah!

Menu:

1. Adopt a new pet

...

Choose an option: 1

Enter pet name: kitty

Select pet type:

1. Dog

2. Cat

3. Rabbit

2

You have adopted a new Cat named Kitty.

Menu:

...

7. Display your pets

...

Choose an option: 7

Your pets:

Name: Kitty, Type: Cat, Health: 36, Happiness: 40, Mood: Sad

Menu:

...

11. Logout

...

Choose an option: 11

You have been logged out.

Welcome to the Virtual Pet Adoption System!

1. Register

2. Login

3. Exit

Choose an option: 3