

Project 2

Pet Info Guide

Introduction

Pet info guide is a fuzzy based system built on JESS that is designed to give information about the user's pet dog and recommend them the right care for the pet.

Features

This system was designed to interact with the user by letting him enter the parameters, it then computes the final result of the application. The various inputs to the system are:

1. Weight
2. Age
3. Breed size
4. Breed weight
5. Deworming-stage
6. Vaccination status

There are 5 fuzzy variables used :

1. Dog_age
 - a. Range - 0-240 months
 2. Dog_breed
 - a. Range - 0-40 kgs (This pertains to Adult breed size)
 3. Dog_weight
 - a. Range - 0-70 kgs (Current weight)
 4. Dog_deworm
 - a. Range - 0-240 months
 5. Dog_vaccine
 - a. Range - 0-240 months
-

Knowledge base

Facts:

Questions:

These following questions are asked to the user to get the required information.

1. How much does your dog weigh? (Numeric value in Kgs)
2. How old is your dog? (Low = Less than 2 years | Medium = 2 to 12 years | High = 12 to 20 years)
3. Is your dog small, medium or large?
4. What is the weight of your dog (in kgs)? (Low = Less than 25 kgs | Medium = 25 to 40 kgs | High = more than 40 kgs)
5. When was your dog dewormed last? (In months)
6. Till which stage is your dog vaccinated? (In months)

Rules:

There are **24 total rules** that decide the output for this system.

1. Age less than 2 months
2. Age between 3-12 months
3. Age is between 12-24 months
4. Age is more than 24 months
- For weight -
5. Recommended weight for age less than 2 months
6. If age is between 2 to 12 months
7. If age is between 12 to 24 months
8. If age is more than 24 months
- For food -
9. If age is till 2 months
10. If age is 2 to 12 months
11. If age is between 12 to 24 months

12. If age above 24 months

For feeding frequency

13. If breed is small

14. If breed is medium

15. If breed is large

For recommended food brands

16. If age is till 2 months

17. If age is 2 to 12 months

18. If age is between 12 to 24 months

19. If age above 24 months

Life expectancy

20. If small breed

21. If medium breed

22. If large breed

23. Deworming

24. Vaccination

Usage manual

Instructions to run the program -

Create a new Java project in eclipse. Make sure you include the JAR file "fuzzyJ-2.0.jar" under New Project > Libraries.

Copy the contents of the files "dog2.clp" into a new text file under the newly created Java project. Save the file with extension ".clp".

Run the project after setting up the correct run configurations. In case you run into errors, make sure that the run as configuration is pointing to the right main class. By default, the main class will be jess.main. For the fuzzy parts to execute it should point to nrc.fuzzy.jess.FuzzyMain.

Test cases

#1 Small dog

```
Welcome to Complete Dog owner's Guide!
What's your name?
Firebrand

Hey, Firebrand. Great name! And what is your dog's name?
Rio

Rio! Wow! Another great name!
Now, select correct answers for the following questions.
How much does your dog weigh? (Numeric value in Kgs)
Positive numbers only.
4
How old is your dog? (Low = Less than 2 years | Medium = 2 to 12 years | High = 12 to 20 years)
Valid Options: Low/Medium/High.
low
Is your dog small, medium or large?
Valid Options: Small/Medium/Large.
small
What is the weight of your dog (in kgs)? (Low = Less than 25kgs | Medium = 25 to 40kgs | High = more than 40kgs)
Valid Options: Low/Medium/High.
low
When was your dog dewormed last? (In months)
Valid Options: One/Two/Three.
one
Till which stage is your dog vaccinated? (In months)
Valid Options: One/Two/Three.
one

Your puppy is still in the weaning stage.
You need to keep your dog on its mother's milk.

Press any key and hit Enter/Return key to continue.1
<
```

Your dog is a small breed and is still a pup.
The recommended weight is about 3kgs.
Weight more by 1 kgs.
Press any key and hit Enter/Return key to continue.1
Since Your Dog is in weaning stage it needs a lot of food.

FUN FACT: Puppies need more food than an adult dogs.

Your dog is a small breed and less than 2 months old.
The recommended food quantity is 0.44 kgs per day.

Press any key and hit Enter/Return key to continue.1

A puppy eats more times a day than an adult dog.

but you need to equally divide the food.

Your total intake should not cross recommended food quantity.
Your dog is a small breed and is still puppy less than 2 months.
You should feed your dog 3 to 4 times a day.

Press any key and hit Enter/Return key to continue.1
Your pup needs all the nutrients the best quality food.

Here are some milk powder brands for your pup.

- 1)Brand 13A
- 2)Brand 13B
- 3)Brand 13C

Press any key and hit Enter/Return key to continue.1

Your dog is a small dog. Its life expectancy is about 15 to 16 years.
<

Worms are very serious problem for a dogs' health.

Deworming of dog is essential to make sure it recieves all the nutrients properly.

Good to know you have dewormed your dog.

But you still need to do deworming at regular intervals.

You need to deworm your dog at 6th and 8th week

Then again at 3rd and 4th month

Again at 6th and 12th month

After that once every Year.

Press any key and hit Enter/Return key to continue.1

Vaccination information.

Good to know you have vaccinated your dog.

But you still need to do vaccination again at regular intervals.

You need to give next vaccination to your dog by 3rd Month:

Vaccinations: DHPP (vaccines for distemper, adenovirus [hepatitis], parainfluenza, and parvovirus)

Then again at 6th month of :

Vaccinations: Rabies, DHPP

Again after 12th month you should give:

Vaccinations: DHPP- Every 1 - 2 Years

Rabies- Every 1-3 Years

Press any key and hit Enter/Return key to continue.1

Hope this was helpful!

#2 Medium dog

Welcome to Complete Dog owner's Guide!

What's your name?

Astropixel

Hey, Astropixel. Great name! And what is your dog's name?

Theo

Theo! Wow! Another great name!

Now, select correct answers for the following questions.

How much does your dog weigh? (Numeric value in Kgs)

Positive numbers only.

10

How old is your dog? (Low = Less than 2 years | Medium = 2 to 12 years | High = 12 to 20 years)

Valid Options: Low/Medium/High.

medium

Is your dog small, medium or large?

Valid Options: Small/Medium/Large.

medium

What is the weight of your dog (in kgs)? (Low = Less than 25kgs | Medium = 25 to 40kgs | High = more than 40kgs)

Valid Options: Low/Medium/High.

medium

When was your dog dewormed last? (In months)

Valid Options: One/Two/Three.

two

Till which stage is your dog vaccinated? (In months)

Valid Options: One/Two/Three

<

Till which stage is your dog vaccinated? (In months)

Valid Options: One/Two/Three.

two

Your puppy is still in the weaning stage.

You can now start to feed it dry food and take it off its mother's milk.

Press any key and hit Enter/Return key to continue.2

The following tells you about your dog's recommended weight:

Your dog is a medium breed and is between 2 to 12 months old.

The recommended weight is 22 kgs.

Weight less by 12 kgs.

Press any key and hit Enter/Return key to continue.2

Since Your Dog is in Growing stage and needs to eat in the recommended quantity to avoid getting overweight at adulthood

Puppies need more food than an adult dog

Your dog is a medium breed and is between 3 to 12 months old.

The recommended food quantity is 0.65 kgs per day.

Press any key and hit Enter/Return key to continue.2

A puppy eats more times a day than an adult dog

Reason being that puppy's digestive system is still not fully developed

NOTE: You need to equally divide the recommended food quantity per day into the number of times feeding is required.

Your total intake should not cross recommended food quantity (kgs per day)

Your dog is a medium breed and is between 2 to 12 months old.

You should feed your dog 3 times a day.

Press any key and hit Enter/Return key to continue.2

Since Your Dog is not an adult and needs to get nutrients essential from weaning till adult stage

Here are some milk powder brands for your pup.

1)Brand 14D

2)Brand 14E

3)Brand 14F

Press any key and hit Enter/Return key to continue.2

Yours is a medium dog. Its life expectancy is about 11 to 13 years.

Press any key and hit Enter/Return key to continue.2

Worms are very serious problem for a dog's health.

Deworming of dog is essential to make sure it receives all the nutrients properly.

Good to know you have dewormed your dog.

But you still need to do deworming at regular intervals.

You need to deworm your dog again at 6th and 12th month

After that once every Year.

Press any key and hit Enter/Return key to continue.2

Vaccination information.

Good to know you have vaccinated your dog.

But you still need to do vaccination again at regular intervals.

You need to give next vaccination again at 6th month of :

Vaccinations: Rabies, DHPP

Again after 12th month you should give:

Vaccinations: DHPP- Every 1 - 2 Years

Rabies- Every 1-3 Years

Press any key and hit Enter/Return key to continue.2

<

Hope this was helpful!

#3 Large dog

Welcome to Complete Dog owner's Guide!

What's your name?

Thepixelixir

Hey, Thepixelixir. Great name! And what is your dog's name?

Mercedes

Mercedes! Wow! Another great name!

Now, select correct answers for the following questions.

How much does your dog weigh? (Numeric value in Kgs)

Positive numbers only.

40

How old is your dog? (Low = Less than 2 years | Medium = 2 to 12 years | High = 12 to 20 years)

Valid Options: Low/Medium/High.

high

Is your dog small, medium or large?

Valid Options: Small/Medium/Large.

large

What is the weight of your dog (in kgs)? (Low = Less than 25kgs | Medium = 25 to 40kgs | High = more than 40kgs)

Valid Options: Low/Medium/High.

high

When was your dog dewormed last? (In months)

Valid Options: One/Two/Three.

three

Till which stage is your dog vaccinated? (In months)

Valid Options: One/Two/Three.

three

Now your pup has become a dog! You must be so proud!

Press any key and hit Enter/Return key to continue.³

Your dog is a large breed and older than 12 months old.

<

The recommended weight is 40 kgs.
Weight less by 8 kgs.
Press any key and hit Enter/Return key to continue.3
Your dog is now an adult and needs to have a balanced diet

Puppies need more food than an adult dog

Your dog is a large breed and is above 12 months old.
The recommended food quantity is 0.95 kgs per day.

Press any key and hit Enter/Return key to continue.3

A puppy eats more times a day than an adult dog
Reason being that puppy's digestive system is still not fully developed

NOTE: You need to equally divide the recommend food quantity per day into the number of times feeding is required.

Your total intake should not cross recommended food quantity (kgs per day)
Your dog is a large breed and is above 12 months old.
You should feed your dog 2 times a day.

Press any key and hit Enter/Return key to continue.3
Your adult dog needs best food to keep its health.

Here are some milk powder brands for your pup.

- 1)Brand 15G
- 2)Brand 15H
- 3)Brand 15I

Press any key and hit Enter/Return key to continue.3

Yours is a small dog. Its life expectancy is about 10 to 12 years

<

Here are some milk powder brands for your pup.

- 1) Brand 15G
- 2) Brand 15H
- 3) Brand 15I

Press any key and hit Enter/Return key to continue.3

Yours is a small dog. Its life expectancy is about 10 to 12 years

Press any key and hit Enter/Return key to continue.3

Worms are very serious problem for a dogs' health.

Deworming of dog is essential to make sure it receives all the nutrients properly.

Good to know you have dewormed your dog.

But you still need to do deworming at regular intervals.

As your dog is adult you need to deworm your dog after once every year.

Press any key and hit Enter/Return key to continue.3

Vaccination information.

Good to know you have vaccinated your dog.

But you still need to do vaccination again at regular intervals.

After 12th month you should give:

Vaccinations: DHPP- Every 1 - 2 Years

Rabies- Every 1-3 Years

Press any key and hit Enter/Return key to continue.3

|

Hope this was helpful!