# **Expert System**

# For Suggesting Pets



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### **Summary:**

- This Expert System will ask the users 8 questions and output potential pets that they may enjoy as a companion. If you have 'no preference' on the listed options, then you are prompted to type 'n'. The questions that we asked are:
  - What type of animal are you interested in?
  - What size animal are you interested in?
  - What is the minimum number of years you wish to spend with your future pet?
  - Do you want an indoor or outdoor pet?
  - What is your budget in dollars for the initial cost of a pet?
  - What is your preference for animal activity level?
  - What is your preference for noise?
  - What is your preference for the amount of maintenance and care required?
- ➤ After the system has either suggested a list of possible pets or told you that no matches were found it then prompts you with a continue or end option.

## **Input Table for Test Cases**

Test Case ID	Classificat ion	Size	Life spa n	Living Space	Budg et	Activ ity	Noise	Mainten ance	Expected	Actual
TC.1	ʻn'	ʻn'	ʻn'	ʻn'	ʻn'	ʻn'	ʻn'	ʻn'	List of 'All available pets'	List of all available pets
TC.2	ʻamphibia n'	'small'	<b>'</b> 5'	ʻindoor	'250'	'low'	'low'	'low'	'No matches'	'No matches'
TC.3	'mammal'	'mediu m'	'10'	ʻindoor	<b>'500'</b>	'high ,	'modera te'	'modera te'	'Abyssini an_cat', 'australia n_shephe rd', 'labrador_retriever', 'oriental_shorthair'	'Abyssinia n_cat', 'australian _shepher d', 'labrador_ retriever', 'oriental_s horthair'
TC.4	'fish'	'mediu m'	'10'	ʻindoor	ʻchea p'	'mod erate ,	'modera te'	'low'	'Angelfish ', 'goldfish'	'Angelfish ', 'goldfish'
TC.5	'reptile'	'large'	ʻn'	ʻn'	;1000 ;	'low'	'high'	'low'	'Boa_con strictor', 'snapping _turtle'	'Boa_con strictor', 'snapping _turtle'

<sup>\*&#</sup>x27;n' = "no preference"

If you have no preference for a question, input: n. The less preferences you have, the higher likelihood of getting results What type of animal you are interested in? (n, amphibian, bird, fish, mammal, reptile):

r

What size animal you are interested in? (n, small, medium, large):

n

What are the minimum number of years you wish to spend with your future pet? (n, \*1-99\*)

n

Do you want an indoor or outdoor pet? (n, indoor, outdoor

n

What is your budget in dollars for initial cost of a pet?: (n, 0 - 999999)

n

What is your preference for animal activity level? (n, low, moderate, high):

n

What is your preference for noise? (n, low, moderate, high)

r

What is your preference for the amount of maintenance and care required? (n, low, moderate, high)

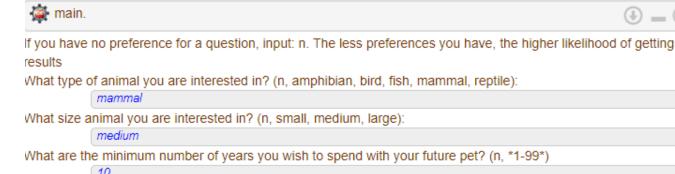
n

Based on your preferences, these pets are recommended:

[abyssinian\_cat, african\_dwarf\_frog, amazon\_milk\_frog, american\_bullfrog, american\_shorthair, angelfish, anole, australian\_shepherd, axolotl, ball\_python, barking\_tree\_frog, beagle, bearded\_dragon, bengal\_cat, bernese\_mountain\_dog, betta\_fish, birman, black\_molly, blue\_poison\_dart\_frog, blue\_tongued\_skink, boa\_constrictor, boxer, british\_shorthair, budgetts\_frog, bulldog, burmese\_cat, capybara, cavalier\_king\_charles\_spaniel, chameleon, cherry\_barb, chinchilla, cichlids, clownfish, corn\_snake, crested\_gecko, dachshund, degu, discus, doberman\_pinscher, egyptian\_mau, exotic\_shorthair, ferret, flying\_squirrel, french\_bulldog, gecko, gerbil, german\_shepherd, glass\_frog, golden\_retriever, goldfish, great\_dane, green\_iguana, green\_tiger\_barb, green\_tree\_frog, guinea\_pig, guppy, hamster, harlequin\_rasbora, hedgehog, himalayan\_cat, horned\_frog, king\_snake, koi, labrador\_retriever, leopard\_frog, leopard\_gecko, maine\_coon, milk\_snake, miniature\_pig, miniature\_schnauzer, mollies, monitor\_lizard, mouse, neon\_tetra, newt, norwegian\_forest\_cat, oriental\_fire\_bellied\_toad, oriental\_shorthair, oscar, pacific\_tree\_frog, persian\_cat, plecostomus, poodle, pot\_bellied\_pig, prairie\_dog, rabbit, ragamuffin, ragdoll, rainbowfish, rat, red\_eared\_slider\_turtle, red\_eyed\_tree\_frog, rottweiler, russian\_blue, russian\_tortoise, scottish\_fold, shetland\_sheepdog, shih\_tzu, siamese\_algae\_eater, siamese\_cat, siberian\_cat, siberian\_husky, siren, skunk, snapping\_turtle, sphynx\_cat, spotted\_salamander, squirrel, sugar\_glider, surinam\_toad, swordtail, tegu, tiger\_salamander, tomato\_frog, turtle, uromastyx, wallaby, yorkshire\_terrier, zebrafish]

Do you want to continue? (yes/no):





Do you want an indoor or outdoor pet? (n, indoor, outdoor

indoor

What is your budget in dollars for initial cost of a pet?: (n, 0 - 999999)

500

What is your preference for animal activity level? (n, low, moderate, high):

hiah

What is your preference for noise? (n, low, moderate, high)

moderate

What is your preference for the amount of maintenance and care required? (n, low, moderate, high)

moderate

Based on your preferences, these pets are recommended:

[abyssinian\_cat, australian\_shepherd, labrador\_retriever, oriental\_shorthair]

If you have no preference for a question, input: n. The less preferences you have, the higher likelihood of getting results What type of animal you are interested in? (n, amphibian, bird, fish, mammal, reptile): What size animal you are interested in? (n, small, medium, large): medium What are the minimum number of years you wish to spend with your future pet? (n, \*1-99\*) 10 Do you want an indoor or outdoor pet? (n, indoor, outdoor indoor What is your budget in dollars for initial cost of a pet?: (n, 0 - 999999) cheap What is your preference for animal activity level? (n, low, moderate, high): moderate What is your preference for noise? (n, low, moderate, high) moderate What is your preference for the amount of maintenance and care required? (n, low, moderate, high) low Based on your preferences, these pets are recommended: [angelfish, goldfish]

If you have no preference for a question, input: n. The less preferences you have, the higher likelihood of getting results

What type of animal you are interested in? (n, amphibian, bird, fish, mammal, reptile):

reptile

What size animal you are interested in? (n, small, medium, large):

large

What are the minimum number of years you wish to spend with your future pet? (n, \*1-99\*)

n

Do you want an indoor or outdoor pet? (n, indoor, outdoor

n

What is your budget in dollars for initial cost of a pet?: (n, 0 - 999999)

1000

What is your preference for animal activity level? (n, low, moderate, high):

low

What is your preference for noise? (n, low, moderate, high)

high

What is your preference for the amount of maintenance and care required? (n, low, moderate, high)

low

Based on your preferences, these pets are recommended: [boa\_constrictor, snapping\_turtle]