

## CLIPS Workshop II - Pet Selection System

This workshop will take about 2-hours to complete.

Develop a **personalized knowledge-based recommender** system to help users select an appropriate pet:- rabbit, mice, fish, cat, dog.

**The following expert rules must be used in the system:**

Rule#1a: IF *small\_pet* THEN *rabbit*(0.5), *mice*(0.8), *fish*(1.0)

Rule#1b: IF *midsize\_pet* THEN *rabbit*(0.8), *cat*(0.6), *dog*(0.2)

Rule#1c: IF *large\_pet* THEN *cat*(0.5), *dog*(0.9)

Rule#2: IF *good\_company* THEN *cat*(0.7), *dog*(1.0) *rabbit*(0.3) ELSE *mice*(0.9), *fish*(0.9)

Rule#3a: IF *short\_life\_span* THEN *fish*(0.7), *mice*(0.7)

Rule#3b: IF *medium\_life\_span* THEN *fish*(0.4), *rabbit*(0.8)

Rule#3c: IF *long\_life\_span* THEN *cat*(0.9), *dog*(0.9)

Rule#4: IF *easy\_care* AND *cheap\_care* THEN *mice*(0.7), *rabbit*(0.6), *fish*(0.4), *cat*(-0.3), *dog*(-0.9)

Rule#5a: IF *busy\_professional* THEN *cat*(-0.1), *dog*(-0.5)

Rule#5b: IF *busy\_professional* AND *work\_in\_IT* THEN *dog*(-0.9)

Rule#6: IF *small\_house* OR *Apartment* THEN *dog*(-0.9)

### Workshop Guidelines:

- (1) Download the file "PetSelection.clp", study the code given
- (2) Load, Reset and Run the file
- (3) Type (facts) and examine the contents of the working memory
- (4) Complete the program using the rules from above
- (5) Test you program thoroughly to see if it produces the expected results
- (6) Have fun with this program 😊