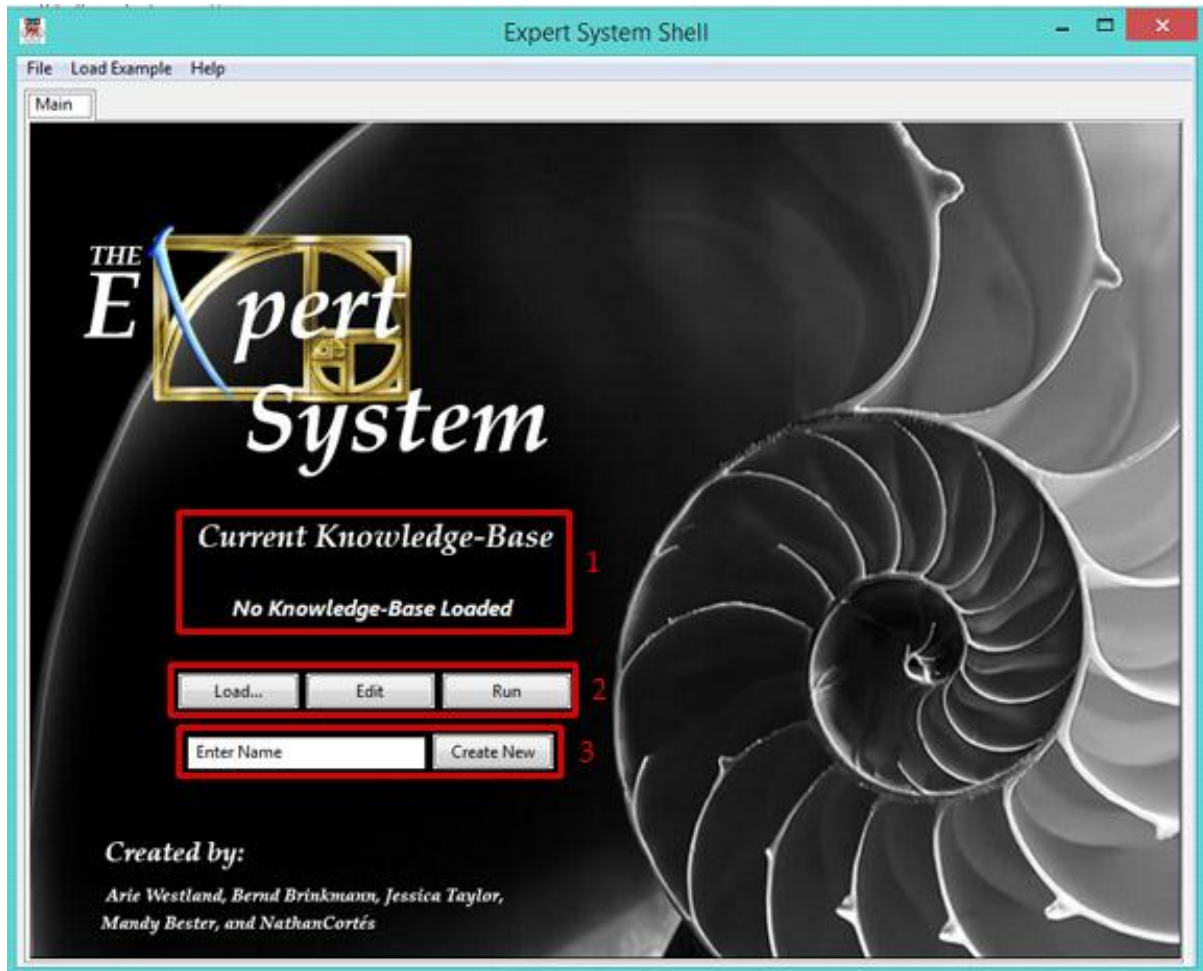


Quick-Start Guide

When you open the program the following screen will appear



- 1- This field tells you which Knowledge-Base you currently have loaded (in this case no Knowledge-Base is loaded).
- 2-
 - a. 'Load...' loads an existing Knowledge-Base. Clicking will take you to a directory to choose your Knowledge-Base from a .kb file type.
 - b. 'Edit' lets you edit or create a Knowledge-Base select the edit button. This will open two tabs, both the Create/Edit Knowledge-Base tab and the Variables tab.
 - c. Clicking the 'Run' button will open the 'Run Knowledge-Base' tab. From here you can run the selected Knowledge-Base.
- 3- To create a new Knowledge-Base, enter the name of the Knowledge-Base into this field and click the 'Create New' button.

Running a Knowledge-Base:

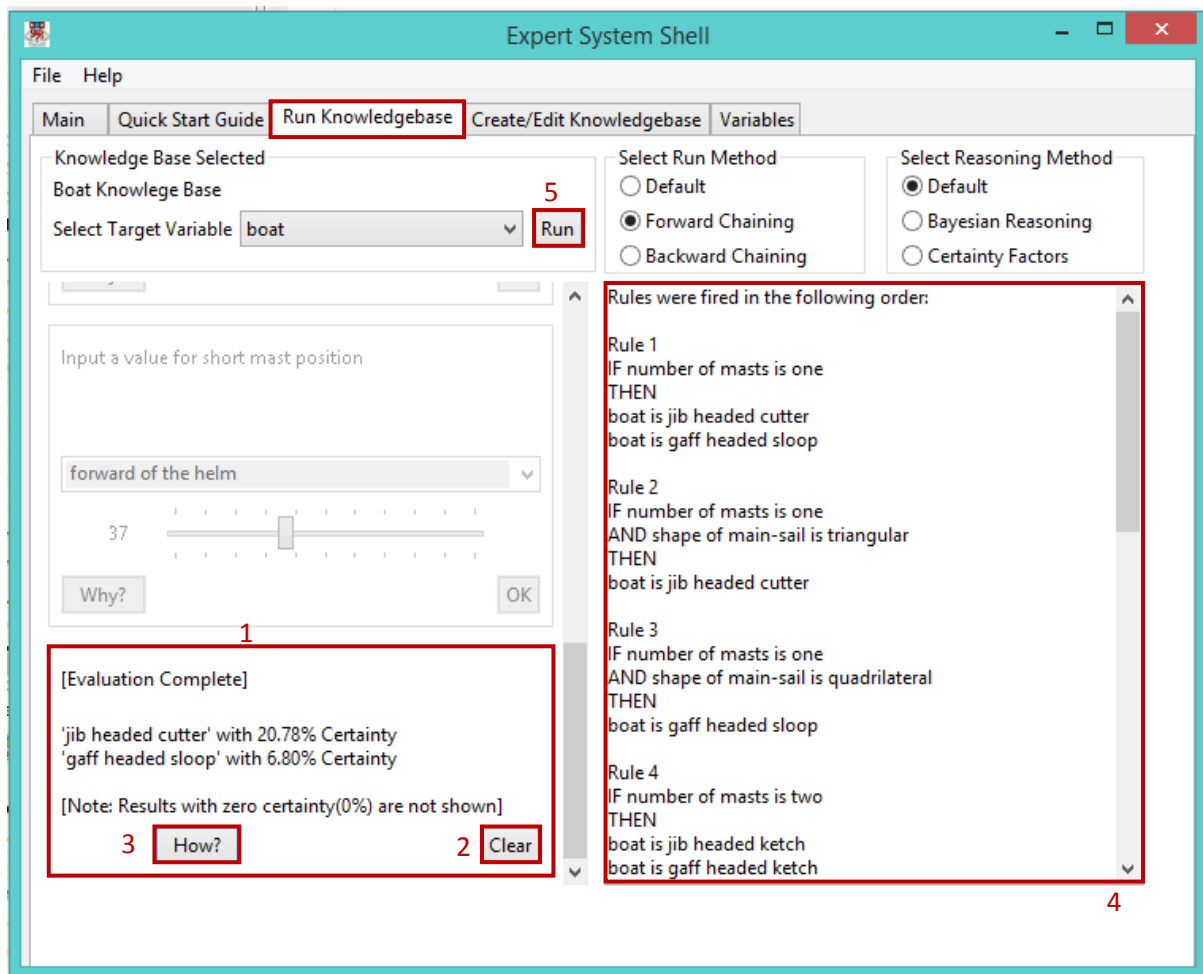
To run a Knowledge-Base click the open Knowledge-Base and select the Knowledge-Base you wish to run.

Once you have loaded the Knowledge-Base you will need to follow the following steps in the RUN tab

The screenshot shows the 'Expert System Shell' window with the 'Run Knowledgebase' tab selected. The interface includes a menu bar (File, Help), a tab bar (Main, Quick Start Guide, Run Knowledgebase, Create/Edit Knowledgebase, Variables), and a main content area. The 'Run Knowledgebase' tab contains several sections: 'Knowledge Base Selected/Opened' with a dropdown set to 'Forecast Knowledge Base' and a 'Stop' button; 'Select Target Variable' with a dropdown set to 'tomorrow'; 'Select Run Method' with radio buttons for Default, Forward Chaining, and Backward Chaining; 'Select Reasoning Method' with radio buttons for Default, Bayesian Reasoning, and Certainty Factors; 'Input a value for today' with a dropdown set to 'rain'; a slider for a certainty factor; a 'Why?' button; and an 'OK' button. A large text area on the right displays the inference engine's current rule: 'Inference Engine is currently trying to fire Rule 1: IF today is rain THEN tomorrow is rain. It needs the value of Variable: today from user.' Red boxes and numbers 1-10 are overlaid on the interface to highlight specific steps in the process.

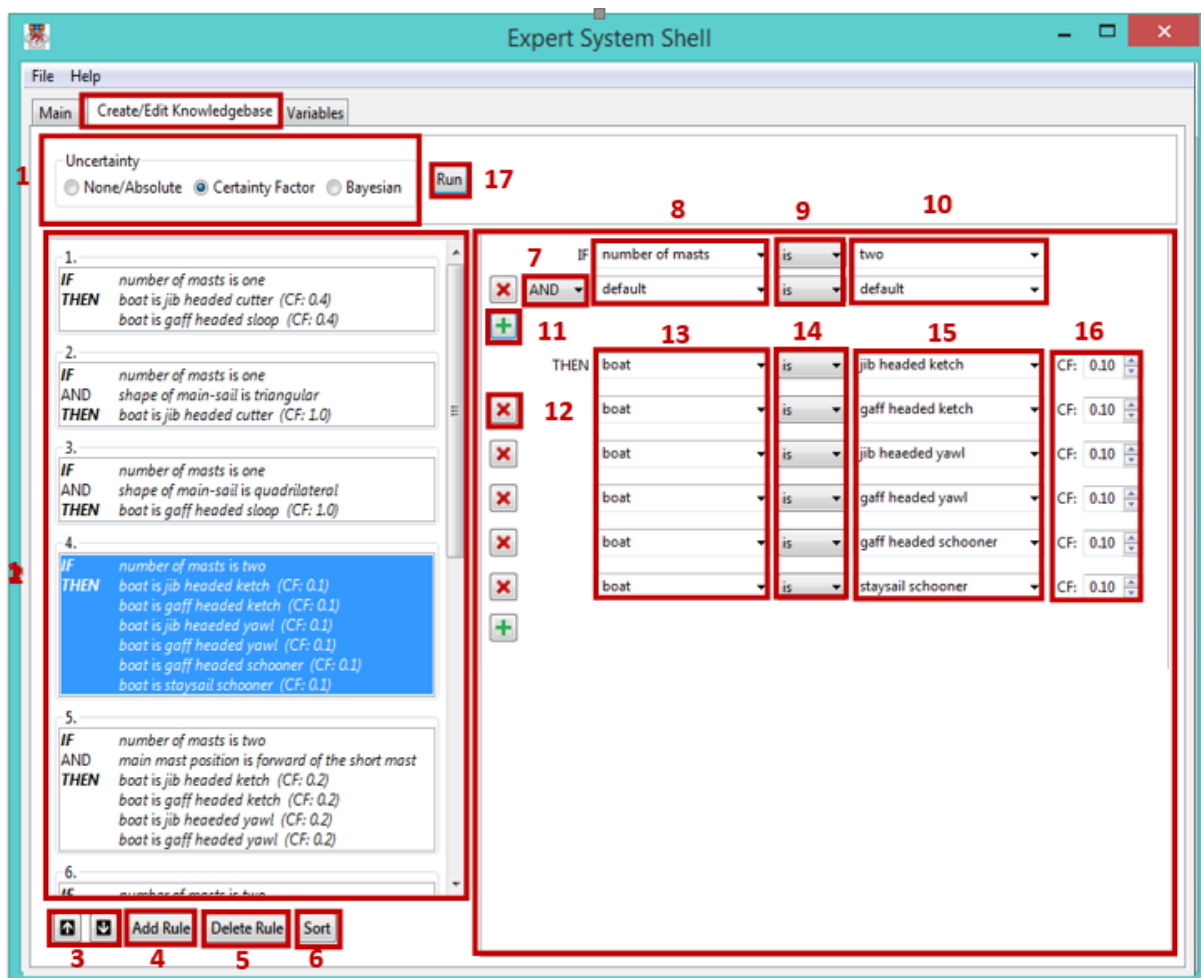
- 1- Select a target variable from the drop down menu
- 2- Select a run method
- 3- Select a reasoning method
- 4- The question the program wants the answer to
- 5- Select a possible value for the answer to the current question
- 6- If a certainty factor is required this slider will appear to set the value
- 7- If this button is pushed it will display the rule it is trying to determine in section 8
- 8- The current rule that the program is trying to solve
- 9- Once all information is added click ok and the next rule will appear
- 10- The stop button stops the program you cannot restart from where you stopped

When the evaluation has completed this is what you will be able to see.



- 1- The results of the evaluation will appear in the box
- 2- The clear button will clear the current evaluation
- 3- The how button will display the rules that were evaluated to come up with the results in 4
- 4- How the results were determined
- 5- The run button will re run the evaluation. It will also clear the current evaluation.

Create/Edit Knowledge-Base



1. Choose an uncertainty method for this Knowledge-Base;
2. Displays the list of rules within the Knowledge-Base – select rule to edit;
3. Up and Down arrows allow the user to rearrange rules;
4. Add a new rule with this button;
5. Delete a rule with this button;
6. Sort the rules by “most specific first” conflict resolution method;
7. Select AND/OR depending on type of rule;
8. Select/create antecedent Variables;
9. Select from numerous linguistic and numeric operators depending on rule type;
10. Select/create antecedent values;
11. Add new antecedent/consequent;
12. Delete antecedent/consequent;
13. Select/create consequent Variables;
14. Select from numerous linguistic and numeric operators depending on rule type;
15. Select/create consequent values;
16. Depending on uncertainty method chosen, either CF for Certainty Factors, LN/LS/Prior for Bayesian, or nothing for None/Absolute will appear. Fill in as required;
17. Switch to Run Knowledge-Base Interface.