JArgue: An implemented argumentation system for classical propositional logic

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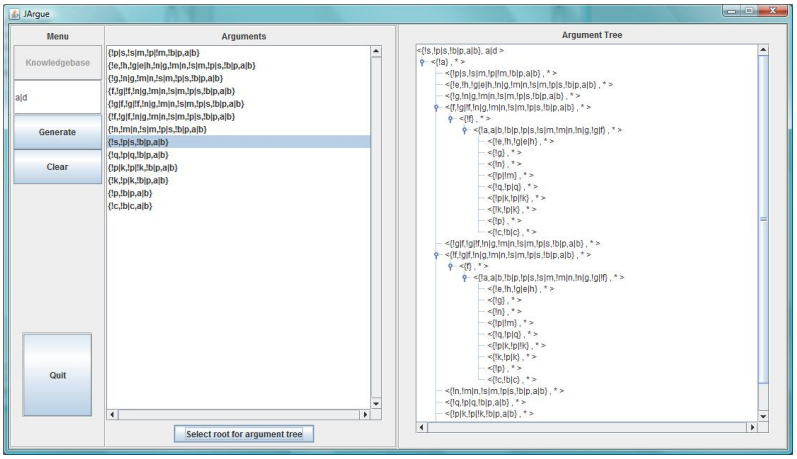
JArgue is an argumentation engine that implements a formalisation for argumentation based on classical logic [1]. It is developed in Java and can be used with propositional clauses, where a claim for an argument, which is a disjunctive clause, and a knowledgebase that consists of disjunctive clauses are given as input. The underlying algorithms are based on connection graphs and resolution theorem proving [2, 3].

The input is given through a graphical user interface where a text file containing the knowledgebase is loaded to the system, and a claim for arguments is typed in the appropriate field. The system first generates all the supports for arguments for the given claim from the given knowledgebase and displays them in a list. The user then can select one of the supports from this list, and the system generates an argument tree where the root of the tree is the argument with the selected support. [1]



References

[1] Ph. Besnard and A. Hunter. A logic-based theory of deductive arguments. *Artificial Intelligence*, 128:203–235, 2001.

[2] V. Efstathiou and A. Hunter. Algorithms for effective argumentation in classical propositional logic: A connection graph approach. In *FoIKS*, pages 272–290. Springer, 2008.

[3] V. Efstathiou and A. Hunter. Focused search for arguments from propositional knowlegde. In *Proceedings of the Second International Conference on Computational Models of Argument (COMMA'08)*. IOS Press, 2008.

[1] For more details or to obtain the source code for JArgue contact Anthony Hunter