CS6795
Project Description

Group #5
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Project title: A java-based rule parser using JDOM

Programming Language: Java

Instructor: Bruce Spencer, Harold Boley

Proposal:

The goal of our project is parsing First Order Logic RuleML (FOL RuleML) using JDOM. The parser we will develop is a specialized software program that recognizes FOL RuleML markup in a document or file, whose extension name is xml or fol. The parser, which goes beyond the FOL RuleML rules for well-formedness and validates the document or file, is a validating parser. The document or file follows FOL RuleML syntax. If the syntax is incorrect, error and warning messages are produced. Moreover, our concern is the efficiency in parsing.

Actually, in jDrew, there is a parser for RuleML. We will improve the parser or build another parser for FOL RuleML. Depending on the time and effort required, the parser may tell the users what kind of error and where the error is, beside the basic functionality of reading the document, validating some kind of syntax, and printing errors messages.

Background and Reference:

1. XML: extensible Markup Language
   http://www.xml.org/
2. RuleML: the Rule Markup Language
   http://www.ruleml.org/
3. FOL RuleML: First Order Logic RuleML
   http://www.rulenl.org/fol/
4. jDREW: A Java Deductive Reasoning Engine for the Web
   http://www.jdrew.org/jDREWWebsite/jDREW.html
5. JDOM: A Java-based solution for accessing, manipulating and outputting XML
   http://www.jdom.org/