

Rule Ingredient	RuleML
fact	Asserted Atom
rule	Asserted Implies
head	then
body	if
atom	Atom
conjunction	And
predicate	Rel
constant	Ind
variable	Var

Figure 5.1: RuleML vocabulary

The RuleML family provides descriptions of rule markup languages in XML, in the form of RELAX NG or XML schemas (or document type definitions for earlier versions). The representation of rule ingredients is straightforward. Figure 5.1 describes the key vocabulary of Datalog RuleML.

The expression of rules using the RuleML vocabulary is straightforward. For example, the rule “*The discount for a customer buying a product is 7.5 percent if the customer is premium and the product is luxury*” is represented in RuleML 1.0 as follows.

```

<Implies>
  <then>
    <Atom>
      <Rel>discount</Rel>
      <Var>customer</Var>
      <Var>product</Var>
      <Ind>7.5 percent</Ind>
    </Atom>
  </then>
  <if>
    <And>

```