

The Language XLE_RULES

BNF-converter

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This document was automatically generated by the *BNF-Converter*. It was generated together with the lexer, the parser, and the abstract syntax module, which guarantees that the document matches with the implementation of the language (provided no hand-hacking has taken place).

The lexical structure of XLE_RULES

Identifiers

Identifiers $\langle \text{Ident} \rangle$ are unquoted strings beginning with a letter, followed by any combination of letters, digits, and the characters `_` `'`, reserved words excluded.

Literals

Reserved words and symbols

The set of reserved words is the set of terminals appearing in the grammar. Those reserved words that consist of non-letter characters are called symbols, and they are treated in a different way from those that are similar to identifiers. The lexer follows rules familiar from languages like Haskell, C, and Java, including longest match and spacing conventions.

The reserved words used in XLE_RULES are the following :

`e`

The symbols used in XLE_RULES are the following :

.	-->	*
:	(^
)	;	{
}		=
!	\$	

Comments

There are no single-line comments in the grammar.
Multiple-line comments are enclosed with " and ".

The syntactic structure of XLE_RULES

Non-terminals are enclosed between \langle and \rangle . The symbols $::=$ (production), $|$ (union) and ϵ (empty rule) belong to the BNF notation. All other symbols are terminals.

$$\langle \text{GRAMMAR} \rangle ::= \langle \text{ListRULE} \rangle$$

$$\langle \text{ListRULE} \rangle ::= \epsilon$$

$$| \langle \text{RULE} \rangle . \langle \text{ListRULE} \rangle$$

$$\langle \text{RULE} \rangle ::= \langle \text{LHS} \rangle \rightarrow \langle \text{ListRHS} \rangle$$

$$\langle \text{ListRHS} \rangle ::= \epsilon$$

$$| \langle \text{RHS} \rangle \langle \text{ListRHS} \rangle$$

$$\langle \text{LHS} \rangle ::= \langle \text{Ident} \rangle$$

$$\langle \text{RHSSYMBOL} \rangle ::= \langle \text{RHSSYMB} \rangle *$$

$$| \langle \text{RHSSYMB} \rangle$$

$$\langle \text{RHSSYMB} \rangle ::= \langle \text{Ident} \rangle$$

$$\langle \text{EPSILONSymb} \rangle ::= \epsilon$$

$$\begin{aligned}
\langle RHS \rangle & ::= \langle EPSILONSymb \rangle : (\sim \langle SYMBOL \rangle) \\
& | \langle EPSILONSymb \rangle : (\sim \langle SYMBOL \rangle) ; \\
& | \langle RHSSymb \rangle \\
& | \langle RHSSymb \rangle : \langle ListSCHEMA \rangle \\
& | \langle RHSSymb \rangle : \langle ListSCHEMA \rangle ; \\
& | (\langle RHSSymb \rangle) \\
& | (\langle RHSSymb \rangle : \langle ListSCHEMA \rangle) \\
& | \{ \langle ListDRHS \rangle \} \\
\langle ListSCHEMA \rangle & ::= \epsilon \\
& | \langle SCHEMA \rangle \langle ListSCHEMA \rangle \\
\langle DRHS \rangle & ::= \langle RHSSymb \rangle \\
& | \langle RHSSymb \rangle : \langle ListSCHEMA \rangle \\
& | (\langle RHSSymb \rangle) \\
& | (\langle RHSSymb \rangle : \langle ListSCHEMA \rangle) \\
\langle ListDRHS \rangle & ::= \epsilon \\
& | \langle DRHS \rangle \\
& | \langle DRHS \rangle | \langle ListDRHS \rangle \\
\langle SCHEMA \rangle & ::= \sim = ! \\
& | (\sim \langle SYMBOL \rangle) = ! \\
& | (! \langle SYMBOL \rangle) = \langle VALUE \rangle \\
& | (\sim \langle SYMBOL \rangle * \{ \langle ListDSYMBOL \rangle \}) = ! \\
& | ! \$ (\sim \langle SYMBOL \rangle) \\
\langle DSYMBOL \rangle & ::= \langle Ident \rangle \\
\langle ListDSYMBOL \rangle & ::= \epsilon \\
& | \langle DSYMBOL \rangle \\
& | \langle DSYMBOL \rangle | \langle ListDSYMBOL \rangle \\
\langle SYMBOL \rangle & ::= \langle Ident \rangle \\
\langle VALUE \rangle & ::= \langle Ident \rangle
\end{aligned}$$