

The Language $XLE_F EATURES$

BNF-converter

November 29, 2016

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 $XLE_F EATURES$

Literals

MyIdent literals are recognized by the regular expression $(\langle letter \rangle \mid \langle digit \rangle \mid ' _ ')(\langle letter \rangle \mid \langle digit \rangle \mid ' _ ' \mid ' - ')*$

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 $XLE_F EATURES$ are the following :

o

The symbols used in $XLE_F EATURES$ are the following :

:	&	!
{	}	.
->	\$	%any
<<	[]
	+	-

Comments

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

The syntactic structure of $\text{XLE}_F\text{FEATURES}$

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.

$$\begin{aligned}\langle \text{FEATURE} \rangle & ::= \langle \text{ListRULE} \rangle \\ \langle \text{RULE} \rangle & ::= \begin{array}{l} \langle \text{MyIdent} \rangle : \langle \text{EXP} \rangle \\ | \quad \& \langle \text{MyIdent} \rangle : \langle \text{EXP} \rangle \\ | \quad ! \langle \text{MyIdent} \rangle : \langle \text{EXP} \rangle \\ | \quad \langle \text{MyIdent} \rangle : \{ \langle \text{ListEXDISJ} \rangle \} \\ | \quad \langle \text{MyIdent} \rangle \\ | \quad \circ : : \end{array} \\ \langle \text{ListRULE} \rangle & ::= \begin{array}{l} \epsilon \\ | \quad \langle \text{RULE} \rangle . \langle \text{ListRULE} \rangle \end{array} \\ \langle \text{EXP} \rangle & ::= \begin{array}{l} \rightarrow \$ \{ \% \text{any} \} \\ | \quad \rightarrow \$ \{ \langle \text{ListCATS} \rangle \} \\ | \quad \rightarrow \$ \{ \langle \text{ListSYMS} \rangle \} \\ | \quad \rightarrow << [\% \text{any}] \\ | \quad \rightarrow << [\langle \text{ListCATS} \rangle] \end{array} \\ \langle \text{EXDISJ} \rangle & ::= \langle \text{EXP} \rangle \\ \langle \text{ListEXDISJ} \rangle & ::= \begin{array}{l} \epsilon \\ | \quad \langle \text{EXDISJ} \rangle \\ | \quad \langle \text{EXDISJ} \rangle | \langle \text{ListEXDISJ} \rangle \end{array} \\ \langle \text{CATS} \rangle & ::= \langle \text{MyIdent} \rangle \\ \langle \text{ListCATS} \rangle & ::= \begin{array}{l} \epsilon \\ | \quad \langle \text{CATS} \rangle \langle \text{ListCATS} \rangle \end{array} \\ \langle \text{SYMS} \rangle & ::= \begin{array}{l} + \\ | \quad - \\ | \quad + \langle \text{MyIdent} \rangle \\ | \quad - \langle \text{MyIdent} \rangle \end{array}\end{aligned}$$

$$\begin{array}{lcl} \langle ListSYMS \rangle & ::= & \epsilon \\ & | & \langle SYMS \rangle \langle ListSYMS \rangle \end{array}$$