

F-Safe, diagrammes syntaxiques

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Résumé

Ce document présente la syntaxe du langage F-Safe, sous forme de diagrammes.

Whole programs :

$\langle \text{program} \rangle$

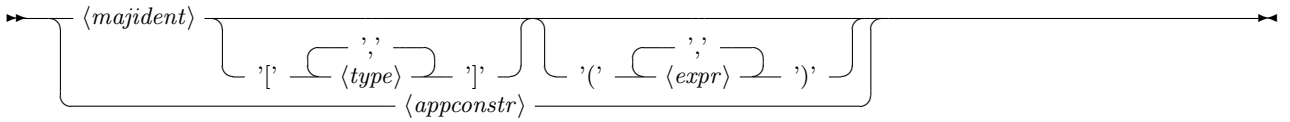


Expressions :

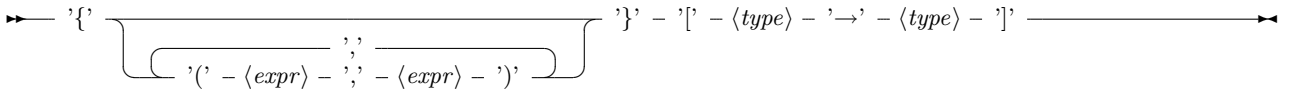
$\langle expr \rangle$



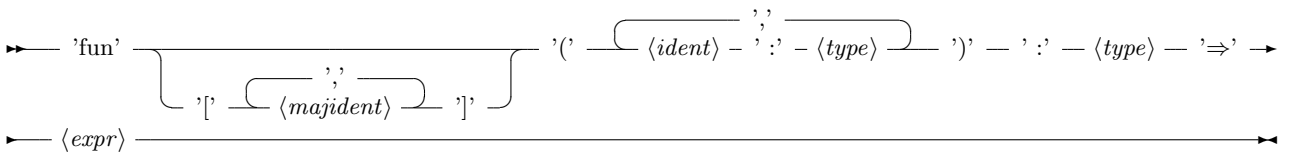
$\langle constant \rangle$



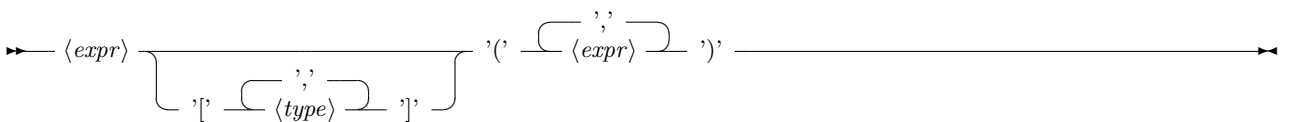
$\langle appconstr \rangle$



$\langle abstraction \rangle$



$\langle application \rangle$



$\langle \text{letbinding} \rangle$

→ 'let' - '(' - $\overbrace{\langle \text{ident} \rangle - ':' - \langle \text{type} \rangle - '=' - \langle \text{expr} \rangle}^{','}$ - ')' - '{' - $\langle \text{expr} \rangle$ - '}'

$\langle \text{patternmatching} \rangle$

→ 'case' - $\overbrace{\langle \text{expr} \rangle}^{','}$ - '{' - $\overbrace{ '|' - \langle \text{pattern} \rangle - ' \Rightarrow ' - \langle \text{expr} \rangle }^{','}$ - '}'

Patterns :

$\langle \text{patterns} \rangle$

→ $\overbrace{\langle \text{pattern} \rangle}^{','}$

$\langle \text{pattern} \rangle$

→ $\overbrace{\langle \text{ident} \rangle - ':' - \langle \text{type} \rangle}^{','}$
 $\overbrace{\langle \text{pattconstr} \rangle}^{','}$
 $\overbrace{\langle \text{pattapp} \rangle}^{','}$

$\langle \text{pattconstr} \rangle$

→ $\langle \text{majident} \rangle$
 $\overbrace{ '|' - \langle \text{type} \rangle }^{','}$ - ']' - $\overbrace{ '(' - \langle \text{pattern} \rangle }^{','}$ - ')'

$\langle \text{pattapp} \rangle$

→ '{' - $\langle \text{couple} \rangle$ - ',' - $\langle \text{ident} \rangle - ':' - \langle \text{majident} \rangle - '[' - \langle \text{type} \rangle - ' \rightarrow ' - \langle \text{type} \rangle - ']'$ - '}'

$\langle \text{couple} \rangle$

→ '(' - $\langle \text{ident} \rangle - ':' - \langle \text{type} \rangle - ',' - \langle \text{ident} \rangle - ':' - \langle \text{type} \rangle - ')'$

Type expressions :

$\langle \text{type} \rangle$

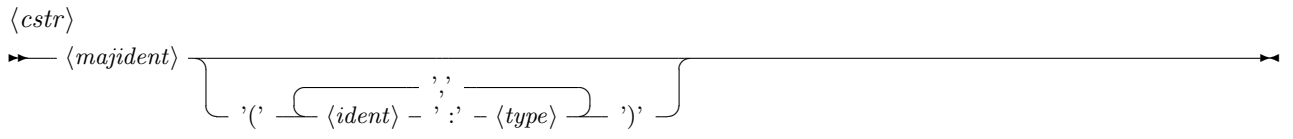
→ $\overbrace{\langle \text{majident} \rangle}^{','}$
 $\overbrace{\langle \text{type} \rangle - ' \rightarrow ' - \langle \text{type} \rangle}^{','}$
 $\overbrace{\langle \text{ident} \rangle}^{','}$
 $\overbrace{\langle \text{majident} \rangle - '[' - \langle \text{type} \rangle - ' \rightarrow ' - \langle \text{type} \rangle - ']' - '}'^{','}$
 $\overbrace{ '(' - \langle \text{type} \rangle - ') ' }^{','}$

Type definitions :

$\langle \text{tdef} \rangle$

→ 'type' - $\langle \text{ident} \rangle$ - $\overbrace{ '[' - \langle \text{majident} \rangle - ']' }^{','}$ - '=' - $\overbrace{ '|' - \langle \text{cstr} \rangle }^{','}$
 $\overbrace{\langle \text{tdef} \rangle - \text{'and'} - \langle \text{tdef} \rangle}^{','}$

Constructor definitions :



Global variables definitions :

