

Functive

Henry Blanchette

Contents

1	Grammar	2
1.1	Formalization	2
1.2	Notation	2

1 Grammar

1.1 Formalization

$program ::= \overline{s}$

$s ::= \text{Definition } n : t := e .$

$\quad \quad \quad | \text{Signature } n := t .$

$\quad \quad \quad | \text{Assumption } n : t .$

$e ::= n \mid \text{primitive-value} \mid (e' e) \mid (\text{let } n := e \text{ in } e)$

$\quad \quad \quad | (\text{fun } n => e) \mid (\text{rec } n \text{ of } n => e)$

$t ::= n \mid \text{primitive-type} \mid (t -> t) \mid (t t)$

$\quad \quad \quad | (\text{forall } n , t)$

$n ::= \text{string}$

1.2 Notation

- An expression with an overline may be repeated any natural number of times.