Languages-beta: SL-1-Lexemes *

The PLanCompS Project

SL-1-Lexemes.cbs | PLAIN | PRETTY

OUTLINE

1 Lexemes
    Identifiers
    Numerals
    Strings

Language   "SL"

1 Lexemes

Identifiers

Lexis   *Id* : id ::= ('a'−'z' | 'A'−'Z') ('a'−'z' | 'A'−'Z' | '0'−'9')*

Semantics   id⟦ *Id* : id ⟧ : ⇒ ids
Rule   id⟦ *Id* ⟧ = "*Id*"

Numerals

Syntax   *Int* : int ::= '-'? nat
Lexis   *Nat* : nat ::= ('0'−'9')+

Semantics   int-val⟦ *Int* : int ⟧ : ⇒ integers
Rule   int-val⟦ '-' *Nat* ⟧ = integer-negate int-val⟦ *Nat* ⟧
Rule   int-val⟦ *Nat* ⟧ = decimal-natural "*Nat*"

Strings

Syntax   *String* : string ::= '"' string-chars '"'
Lexis   *StringChars* : string-chars ::= string-char*
     string-char ::= ∼('"' | '\n')

Semantics   string-val⟦ *String* : string ⟧ : ⇒ strings
Rule   string-val⟦ '"' *StringChars* '"' ⟧ = "*StringChars*"