
PROCESADORES DE LENGUAJES

MEMORIA DE PROYECTO - HITO 2: ANALIZADOR SINTÁCTICO

Grupo 10

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Índice general

1. Especificación del procesamiento de vinculación	2
Índice de figuras	7

1 | Especificación del procesamiento de vinculación

```
var ts //Tabla de simbolos

vincula(prog(Blo)):
    ts = creaTS()
    vincula(Blo)

vincula(bloq(Decs, Insts)):
    abreAmbito(ts)
    recolectaDecs(Decs)
    vincula(Insts)
    cierraAmbito(ts)

recolectaDecs(si_decs(LDecs)):
    recolectaDecs(Ldecs)

recolectaDecs(no_decs()): noop

recolectaDecs(muchas_decs(LDecs, Dec)):
    recolectaDecs(LDecs)
    recolectaDec(Dec)

recolectaDecs(una_dec(Dec)):
    recolectaDec(Dec)

recolectaVars(muchas_var(LVar, Var)):
    recolectaVars(LVar)
    recolectaVar(Var)

recolectaVars(una_var(Var)):
    recolectaVar(Var)

recolectaVar(var(Tipo, id)):
    vincula(Tipo)
    if contiene(ts, id) then
        error
    else
        inserta(ts, id, $)
    end if

recolectaDec(dec_simple(Var)):
    recolectaVar(Var)

recolectaDec(dec_type(Var)):
    recolectaVar(Var)

recolectaDec(dec_proc(id, PFmls, Blo)):
    if contiene(ts, id) then
        error
    else
        inserta(ts, id, $)
    end if
    abreAmbito(ts)
    recolectaPFmls(PFmls)
```

```

vincula (Blo)
  cierraAmbito (ts)

vincula (tipo_array (Tipo, litEnt)):
  vincula (Tipo)

vincula (tipo_punt (Tipo)):
  vincula (Tipo)

vincula (tipo_bool()): noop

vincula (tipo_int()): noop

vincula (tipo_real()): noop

vincula (tipo_string()): noop

vincula (tipo_ident (id)):
  $.vinculo = vinculoDe (ts, id)
  if $.vinculo == false then
    error
  end if

vincula (tipo_struct (LVar)):
  recolectaVars (LVar)

vincula (si_inst (LInst)):
  vincula (LInst):

vincula (no_inst()): noop

vincula (muchas_inst (LInst, Inst)):
  vincula (LInst)
  vincula (Inst)

vincula (una_inst (Inst)):
  vincula (Inst)

recolectaPFmls (si_pformal (LPFml)):
  recolectaPFmls (LPFml)

recolectaPFmls (no_pformal()): noop

recolectaPFmls (muchos_pformal (LPFml, PFml)):
  recolectaPFmls (LPFml)
  recolectaPFml (PFml)

recolectaPFmls (un_pformal (PFml))
  recolectaPFml (PFml)

recolectaPFml (pformal_ref (Tipo, id)):
  vincula (Tipo)
  if contiene (ts, id) then
    error
  else
    inserta (ts, id, $)
  end if

recolectaPFml (pformal_noref (Tipo, id)):
  vincula (Tipo)

```

```
    if contiene(ts,id) then
        error
    else
        inserta(ts,id,$)
    end if

vincula(si_preales(LPReal)):
    vincula(LPReal)

vincula(no_preales()): noop

vincula(muchas_exp(LPReal,Exp)):
    vincula(LPReal)
    vincula(Exp)

vincula(una_exp(Exp)):
    vincula(Exp)

vincula(inst_eval(Exp)):
    vincula(Exp)

vincula(inst_if(Exp,Blo)):
    vincula(Exp)
    vincula(Blo)

vincula(inst_else(Exp,Blo1,Blo2)):
    vincula(Exp)
    vincula(Blo1)
    vincula(Blo2)

vincula(inst_while(Exp,Blo)):
    vincula(Exp)
    vincula(Blo)

vincula(inst_new(Exp)):
    vincula(Exp)

vincula(inst_delete(Exp)):
    vincula(Exp)

vincula(inst_read(Exp)):
    vincula(Exp)

vincula(inst_write(Exp)):
    vincula(Exp)

vincula(inst_call(id,PReales)):
    $.vinculo = vinculoDe(ts,Id)
    if $.vinculo == false then
        error
    end if
    vincula(PReales)

vincula(inst_nl()): noop

vincula(inst_blo(Blo)):
    vincula(Blo)

vincula(exp_asig(Opnd0,Opnd1)):
    vincula(Opnd0)
```

```
vincula (Opnd1)

vincula (exp_menor (Opnd0, Opnd1)) :
    vincula (Opnd0)
    vincula (Opnd1)

vincula (exp_menIgual (Opnd0, Opnd1)) :
    vincula (Opnd0)
    vincula (Opnd1)

vincula (exp_mayor (Opnd0, Opnd1)) :
    vincula (Opnd0)
    vincula (Opnd1)

vincula (exp_mayIgual (Opnd0, Opnd1)) :
    vincula (Opnd0)
    vincula (Opnd1)

vincula (exp_igual (Opnd0, Opnd1)) :
    vincula (Opnd0)
    vincula (Opnd1)

vincula (exp_dist (Opnd0, Opnd1)) :
    vincula (Opnd0)
    vincula (Opnd1)

vincula (exp_sum (Opnd0, Opnd1)) :
    vincula (Opnd0)
    vincula (Opnd1)

vincula (exp_resta (Opnd0, Opnd1)) :
    vincula (Opnd0)
    vincula (Opnd1)

vincula (exp_mult (Opnd0, Opnd1)) :
    vincula (Opnd0)
    vincula (Opnd1)

vincula (exp_div (Opnd0, Opnd1)) :
    vincula (Opnd0)
    vincula (Opnd1)

vincula (exp_mod (Opnd0, Opnd1)) :
    vincula (Opnd0)
    vincula (Opnd1)

vincula (exp_and (Opnd0, Opnd1)) :
    vincula (Opnd0)
    vincula (Opnd1)

vincula (exp_or (Opnd0, Opnd1)) :
    vincula (Opnd0)
    vincula (Opnd1)

vincula (exp_menos (Exp)) :
    vincula (Exp)

vincula (exp_not (Exp)) :
    vincula (Exp)
```

```
vincula (inst_index (Opnd0, Opnd1 )):
    vincula (Opnd0)
    vincula (Opnd1)

vincula (exp_reg (Exp, id )):
    vincula (Exp)
    $.vinculo = vinculoDe (ts, Id)
    if $.vinculo == false then
        error
    end if

vincula (exp_ind (Exp )):
    vincula (Exp)

vincula (exp_true ( )): noop

vincula (exp_false ( )): noop

vincula (exp_litEnt (litEnt )): noop

vincula (exp_litReal (litReal )): noop

vincula (exp_litCad (litCad )): noop

vincula (exp_iden (id )):
    $.vinculo = vinculoDe (ts, Id)
    if $.vinculo == false then
        error
    end if

vincula (exp_null ( )): noop
```

Índice de figuras