

map string

SymbolKind

Symbol phase

- NExpIdentifier, NTypeIdentifier

↓
SLocal

↓
SType

- NEx literal

↓
SConstant

Passes

1) topdec

cactus stack picture

1) - put topdec in ST

- add functions to a vector to use for second pass → funcdec

ST (symbol table)

2) func body

foo() {

... }

bar() {

... }

if stmt

if stmt

foo ST

bar ST

NULL

for (func = funcdec) {

create x := new ST()

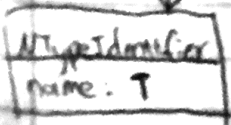
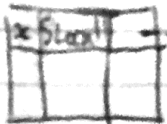
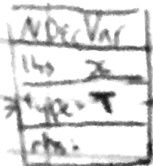
x.parent = cur ST

recurse on x

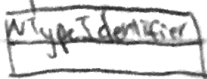
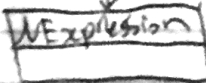
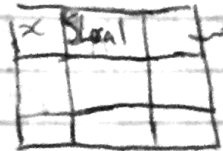
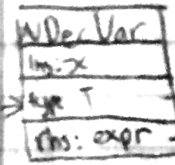
whilst recursing

see diagrams

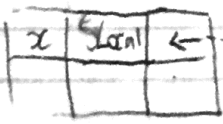
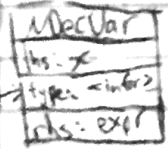
var x T



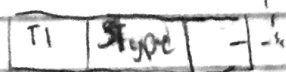
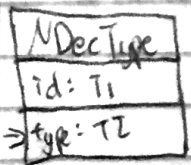
var x T = expr



var x = expr



type T1 T2



func(p1 T1, p2 T2, ..., pn Tn) {}

name: func
id: f
args: p1 T1
type: Tc

{ vector < Member >
→ type type

f	SFunction	1
Pi	SFormal	1