

CS4450 Lecture 34 Notes

Wednesday, November 7, 2018

3:03 PM

Simple While Language

If b then c1 else c2

If we input some memory (m) into the above statement, we must evaluate the memory and get either true or false in b. Depending on which one we get, then we either go to c1 or c2.

If we input m=T, then we execute c1, and the new updated memory pops out and is fed to the outside.

The while slides have a great deal of information regarding the abstract syntax of while.

E and B semantics

Question: What are the types of evE and evB?

$\text{evE} :: E \rightarrow \text{Memory} \rightarrow \text{Int}$

$\text{evB} :: B \rightarrow \text{Memory} \rightarrow \text{Bool}$

$(C, \text{Memory}) \rightarrow \text{Memory}$
 $\quad \quad \quad \longrightarrow (C, \text{Memory})$