Plan for today

Frame layout questions?

Finish example, IR Tree ==> MIPS

Start translation into IR Tree

Structure of the MiniJava Compiler

Analysis

- character stream
- tokens “words”

Synthesis

- IR code generation
- Tree
- instruction selection

PA2
- lexical analysis

PA3 and PA4
- syntactic analysis
- AST “sentences”

PA5 and PA6
- semantic analysis
- IR code generation

PA7
- code generation

PA8
- optimization

AST and symbol table

MIPS

MiniJava Compiler Tree Language (Array Example)

x[2] = 42;
MiniJava Compiler Tree Language (Array Example)

\[ x[2] = 42; \]

Translating the AST into Tree.Exp representation

Translating an array assignment

Member Variables

Translating an array assignment