Instruction Selection Documentation

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Description

This is the segment of the compiler which performs instruction selection.

Overview

We implemented maximal munch in codegen.sml, which includes three functions munchStm, munchExp, and munchArgs, which take IR subtrees and convert them to MIPS assembly.

We implemented tempMap in MipsFrame, which converts known registers to special strings like "fp" and unknown registers to strings like "t101". We also implemented four lists of registers that our codegen needs to replace temporary registers with real ones.