

CS224 – Project 4: Code Generation

Background

We are finally ready to have our compiler generate VM code!

Objective

You will then modify the `CompilationEngine` so that you write VM code to a file with same name as the file being compiled but with a VM extension.

I have provided two classes for you: `VMWriter.java` used for writing the .vm files, and `Segment.java`. You will then need to make calls throughout the `CompilationEngine` methods to produce your code.

Criteria for Success

After a successful compilation you should be able to execute your compiled code using the `VMEmulator` in the same way you executed your compiled Jack program in Project 0. (Be sure to include all the OS files in your directory).

One technique you may find helpful is to use the supplied Jack compiler to compile the test files and examine the resulting .vm files to see what your code should look like. Be aware, however that your code need not be absolutely identical since labels and implementations can vary somewhat.

Resources

The relevant reading for this project is in Chapter 11 in the `nand2tetris` text. I will be testing your compiler on the program test files of `Square` and `Pong`.

Submission and Assessment

Submit in Canvas your entire `JackCompiler` project as a single ZIP archive. Your project will be graded using the rubric provided in the Canvas submission.