Testing Plan

We will not be using JUnit officially to test our code. We will instead be using test programs with specific functionality to test each issue or non-issue.

What I need from each person:

Each test program should be a well commented SAL560 program. Along with the testing code, I need the following:

Program Name: The program name needs to be meaningful to what you are testing. ie, if you are testing a register out of bounds error, call your program RegOutOfBounds or something that gives an indication as to the purpose of the test.

COMMENTS: I need everyone to COMMENT their programs. This is not only for me to help know what you’re testing, but it will also be going into our testing documentation. Therefore, I ask that you comment as much as possible.

What to send to me: I need the following sent to me for each test you do. I ask that you put all of the items for each test into a folder with an appropriate naming scheme relative to the test case so that I don’t have to dig through a bunch of files to see what matches up to what. Each folder should contain the following:

Test File: Your test code (your program).

Results File: This file will contain any results from your test. i.e. errors thrown etc. This is anything that happened as a result of your test.

Symbol Table: A visual representation of the symbol table created.

Intermediate Version: The intermediate version of the program you wrote after pass 1.

Explanation of test: A short description of the test case. This should include what you are testing, how you tested it, the expected results and the actual results along with whether or not the expected results were replicated. This does not need to be extremely in detail, but please copy/paste the line where the error should occur so I don’t have to hunt it down.

I’m going to be essentially copy/pasting all of this into our documentation after I look over each case, so please make my life a little easier by making sure everything looks presentable and professional. I’d rather not spend an all nighter formatting everyone’s test cases. I made an example below of what I’m looking for.

Example:

Test File:

.start:RegOutOfBounds,00

.data  
XX Int.data 20  
YY Int.data 10

.text  
LW $1,XX | Load 20 into register 1  
LW $2.YY | Load 10 into register 2  
ADD $9,$1,$2 | Add register 1 and 2 and store in 9. Should throw register oob error.

.end:RegOutOfBounds

Results: Error [ ] Thrown. XX and YY added to symbol table. Intermediate version created.

Symbol Table: (The resulting symbol table with XX and YY as members)

Intermediate Version: (The intermediate version passed to Pass 2. I’m not going to hand assemble this example xD)

Explanation:

This program tests the register out of bounds error. The error should come from LC 04:

ADD $9,$1,$2 | Add register 1 and 2 and store in 9. Should throw register oob error.

The destination register 9 is out of the available bounds for registers. Expected: Error [\_] Thrown. Results: Error [\_] Thrown.

Test Case Validated

I will go over this in our meeting on Friday and we may want to dictate who tests what functionality so that we aren’t wasting our time duplicating test cases.