# Engineering Glossary and Readme

Project Virtual Machine Operating System

Author TJ Nielsen

Revision 01

Special instructions for running the VM executable on a Mac (as this was compiled on a Mac and will only run on a Mac).

I have found that on my Mac, just double clicking on the executable will not give it the correct operating directory and the OSX files will not be located. You must open a terminal, navigate to the VM executable and type ./VM.

This will ensure that it is running in the directory where all the OSX. Files are and the OSX compiler.

DEFINITIONs

1. SWI

Definition: Software Interrupt

Supporting Information:

1 – Standard input

2 – Standard output

3 – Quite and wait for input

98 – Fork()

2. VM Command Reference

VM Prompt > execute <switch> <program1> <arrivalTime> <program2> <arrivalTime> <program3 <arrivalTime>

Switch options:

-v = Verbose: Shows decoded output from the program code

-g = Gantt: Suppresses verbose output and shows Gantt chart of each process loaded

3. ASM files available to run

CPUBound.osx – Built-in fork (swi 98)

IOBound.osx – Requires that you hit ‘q’ to continue

Prog1.osx – Copy of test\_cases.osx – but loads at mem address 100

Prog2.osx – Copy of test\_cases.osx but loads at mem address 500

Test\_Cases.osx – From milestone 1, tests all operators in the assembler

badLoadAddress – Designed to overlap load address of test\_cases.osx

Each ASM file is used in the test cases document to demonstrate the completion of each requirement.