CMSI 387-01

OPERATING SYSTEMS

Spring 2013

Assignment 0411 Feedback

Haley Young

All of Time and Space

3b — You did a great job with tracking down your selected papers and recording their connections and differences. With evaluating their authors, you got a little bit generic though. For example, if you dig a little more on Per Brinch Hansen you would have noticed that he's got a little bit more to him than the others **:)** Still, overall well-done. (**+**)

4d — Excellent work with finding papers from the digital library. (**+**)

4e — Your commits and messages were very appropriate given the work performed. (**+**)

4f — Submitted on time. (**+**)

The Dining Philosophers Problem

2d — You got an implementation of dining philosophers up and running, with a neat ASCII art scheme (well, once you allocate enough memory for it!—see the inline comments and outcome *4a*) and a correct critical section implementation. However, the *trylock* function is used here, which is fine, but because it is outside the API that was seen in class, you need to show that you understand what it is doing and why the choice was made to use it rather than plain old *lock* and *unlock*. (**|**)

4a — Your code miscalculated the amount of memory needed to display your ASCII art table state, and unfortunately this alone terminates your program prematurely (it's C after all **:)**). But all is otherwise well once that is fixed. There are little C-ism suggestions in the inline comments if you're interested, but other than that things are functional and meet the specs of the assignment. (**|**)

4b — I suspect you may have adapted this from a separate example online; there is some degree of separation here, but not as cleanly drawn as the *bounded-buffer* example. Notable omissions include the hardcoding of "5" for the number of philosophers, the missed opportunity for *left* and *right* chopstick index functions, and the placement of some dining philosopher-specific code in *utils* rather than *diningPhilosopher*. You did put together a functioning *Makefile* and your *.h* files contain the appropriate information. (**|**)

4c — The code is fairly easy to understand, and is decently spaced by and large. There is an occasional hiccup with regard to spaces and punctuation (typically a missing space when there should be one), but other than that your code is clean. Note that some of the suggestions in *4b* will make your code even more readable. (**+**)

4d — You showed some good resource and documentation use in digging up and adapting a dining philosophers implementation that uses *trylock*, along with making sure that the requested functionality from the assignment is there. You just need to show that you are clear on why *trylock* is used here rather than the conventional *lock* and *unlock* mutex functions. (**|**)

4e — Your commit frequency and messages show excellent version control habits. (**+**)

4f — Initial tweaks to the sample code were submitted on time, but quite a few changes—including a significant API shift—were made after the deadline. (**|**)