CMSI 387-01

OPERATING SYSTEMS

Spring 2013

Assignment 0423

This assignment is actually short enough to be done over the weekend, so ideally you should finish this by April 18. The "official" April 23 deadline is merely a courtesy concession **:)** To help you along, starter code has been provided on the course website so that you can just fill in the blanks.

Outcomes

This assignment will affect your proficiency measures for outcomes *1b*, *2d*, and *4a–4f*.

Not for Submission

If you have the SGG textbook, details on deadlocks can be found in SGG chapter 7, and memory management is covered by SGG chapters 8–9 in greater detail.

For Submission

Paged Memory Address Translation

Implement logical-to-physical paged memory address translation. To get you started, test harness and header files have been provided on the course website. Just fill in the `// TODO` comment.

"Extra" Credit: Page Replacement

You will get an additional column for outcomes *1b*, *2d*, and *4a–4f* for each virtual memory page replacement algorithm that you are able to implement. As with the paged address translation program above, test harness and header files have been provided on the course website, included suggested data structures and `// TODO` functions:

1. First in first out (FIFO)
2. Least recently used (LRU)