CSCE 351 Operating System Kernels

Fall 2001 Steve Goddard

Team Programming Assignment 4 (PA4), November 15

Due: 6:00pm December 14

Sector by Sector or Track at a time?

In this assignment each team will modify the MINIX floppy disk driver to do track-at-a-time caching.

Measure the change in performance, if any due to the code change.

Is transferring data sector by sector better than a track at a time? Explain.

Grading Policy for Programs

The programs you hand in should work correctly and be documented. When you hand in your programming assignment, you should include:

- 1. A program listing containing in-line documentation clearly identifying what changes you made. Only turn in files that you changed (or created).
- 2. A separate (typed) document of approximately two pages describing the overall program design, a verbal description of "how it work's" and design tradeoffs considered and made (if any). Also include answers to the questions asked above.
- 3. A separate description of the tests you ran on your program to convince yourself that it is indeed correct and how you timed the changes in performance. Also describe any cases for which your program is known not to work correctly.
- 4. A make file that compiles your program(s), if any changes were required with the original make file.

Please hand in your source file(s), the Makefile, and your documentation using the Web handin program. If your program is handed in after 6:00 pm on December 14 it will be considered late.

The program should be neatly formatted (*i.e.*, easy to read) and structured and documented. Use the handin program to submit your program(s) for grading. This is assignment 4. Your grade will be determined as follows:

Program Listing
works correctly 40%
in-line documentation 15%
quality of design/readability 25%
Design Document 15%
Thoroughness of test cases 05%