CSE 542/498J HWP 3: RAID file system

Assigned: Tues, Oct 2

Due: Tues, Oct 17, 11:00AM

Late submissions will not be accepted

For this homework, we will continue with our implementation of the simple file system (that was built on top of our own simulated disk storage system). In the last home work, we implemented a disk scheduling mechanism. In this home work, you will implement a RAID file system (any level is fine) on top of the simulated disk. You will use the same access traces from HWP2 and compare the performance of your algorithm from HWP2 for your current file system.

Submission

Submit your project, along with a succinct report called REPORT.txt (plain text is fine) describing your approach, the merits of your approach and compilation instructions. You will turn in your complete project as a single tar file. On wizard, please use submit/your tar file to submit your assignment. You can submit your assignment multiple times. I will only use the latest submission. To see the files that you had submitted, try turnin HWP3. Remember, I may randomly choose students who will be asked to explain their approach in person.

Evaluate your implementation on the following issues in the REPORT.txt:

Access patterns: File system access patterns affect the performance. Discuss the access pattern that will benefit from your implementation strategy **and** the access pattern that will perform poorly for your system.