FSCK A File is Not A File

Emmett Witchel CS 380L

• When writing a new data block to an existing file (in ext3/ext4), how many blocks must be written to a file system and describe the blocks.

 What can go wrong if the computer crashes during this update? • When creating a file, what is the minimum number of block writes?

- Describe data journaling and metadata only journaling.
- What is the biggest advantage of metadata only journaling?
- What is the biggest danger of metadata only journaling?

• Why is a file not a file?

How sequential are reads/writes to iLife files?

 "The overwhelming majority of file descriptors are used exclusively for reading or writing; read-write file descriptors are quite uncommon." Why?

- What is fsync?
- What is rename?
- Why is writing data via these system calls less efficient?

• Why have multiple threads do I/O?