

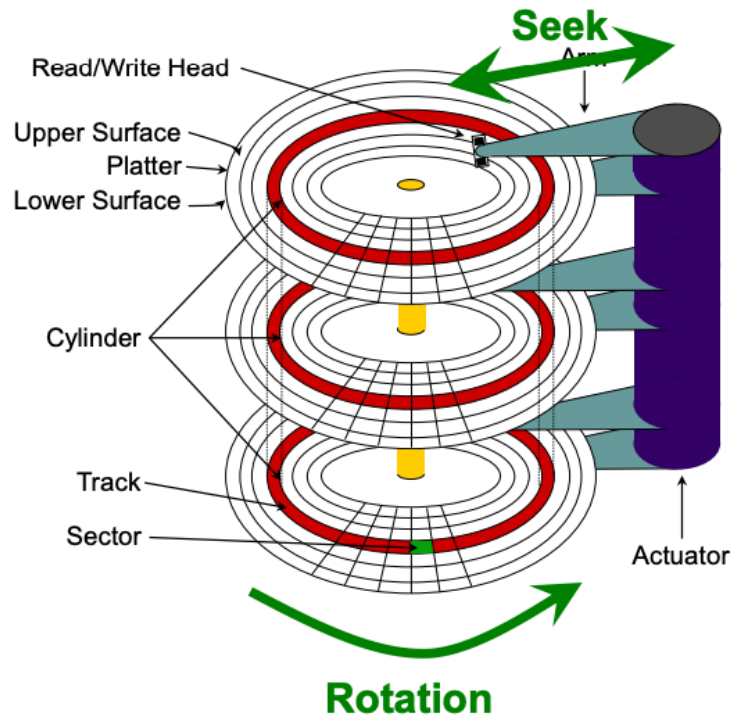
CSC369 Week 9 Notes

Hyungmo Gu

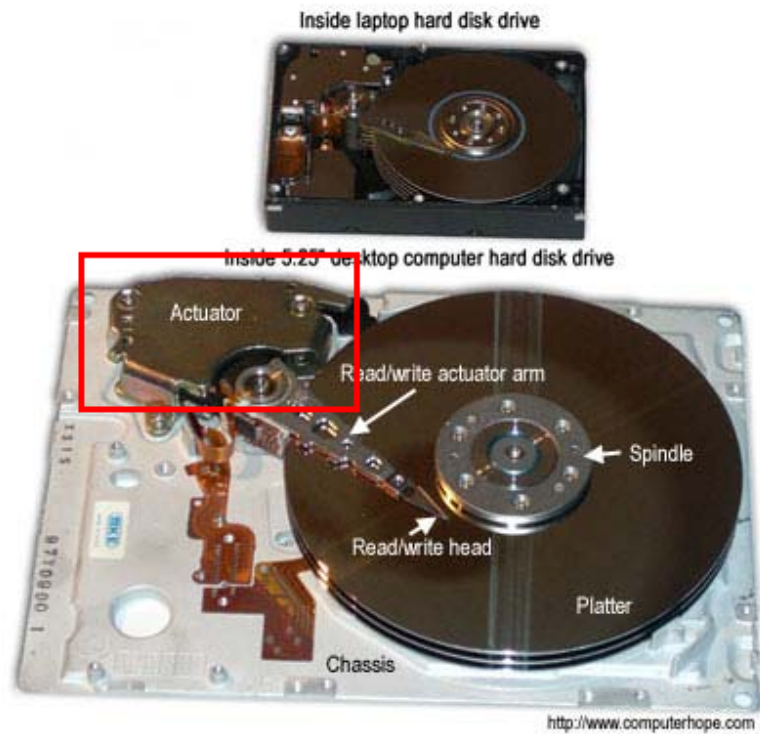
May 29, 2020

1 Disk I/O

- File system implementation
 - Files and directories live on **secondary storage**
 - * Anything outside of “Primary memory”
 - * Is persistent (or non-volatile): Data survives loss of power
- Disk components

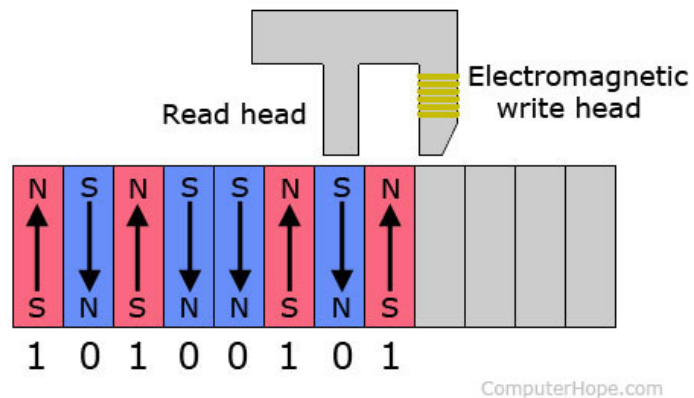


- **Actuator:** is an electronic device controlled by a motor that moves the hard drive head arm. ^[1]



- **Read/Write Heads:** are the small parts of a hard drive which move above the disk platter and transform the platter's magnetic field into electric current ^[1]

Hard drive read/write head



- **Platter:** One or more aluminum, glass, or ceramic disk that is coated in a magnetic media ^[1]
- **Cylinder:**
- **Track:**

– **Sector:**

Refernces:

1) Computer Hope: Actuator, [link](#)

2) Etty94. (2016, August 1). *Hard disk drive components*. Medium. [link](#)

- OS \leftrightarrow disk interaction
- Logical Block Addressing
- Disk Scheduling
- File System Implementation
- Original Unix File System
- FFS
- Cylinder Groups
- Log Structured File System (LSF)
- NTFS (Windows)
- MFT Record