Review

CS 4513

File Systems

- What is *good* about storing files as contiguous blocks? What is *bad*?
- Why is a file allocation table (FAT) better than a pure linked-list when storing disk blocks?
- What is an i-node?

File Systems

- What is a partition? How do you get access?
- What is a file descriptor?

File Systems

- What is an MBR/GPT for?
- Where are file attributes stored?
- What is an alias in terms of file systems?
 - How is a hard-link in a typical Unix file system implemented?

File Systems

- Describe one method of keeping track of free blocks in a file system
- What is the best block size to choose when formatting a partition with a file system?
- What are the performance tradeoffs in choosing the block size?

Sockets+

- What does bind() do?
 - Who calls bind(), the client or server?
- How do you re-direct stdout to a socket?

HLM02

- Compare and contrast WAFL i-nodes to traditional i-nodes.
- What is a snapshot?
- How is it implemented?
 - What is copy-on-write?

HML02

- Performance methodology for NFS appliance?
 - Why not simply time to open()?
 - Why not simply top throughput?

Distributed File Systems

- Compare and contrast *stateful* vs. *stateless* server for distributed file system
- How does NFS (v3) handle potentially outdated client caches?

RG10

- What are micro-benchmarks?
 - What are the micro-benchmarks used in RG10?
- What are macro-benchmarks?
 - What are the macro-benchmarks used in RG10?

RG10

- How does the performance of FUSE compare to native?
- How does the performance of JavaFuse compare to FUSE and Native?

SKH02

 What are the 3 fundamental limitations faced by MCGs?

SKH02

- What is the tension/tradeoff between responsiveness and consistency in MCGs?
- What is interest management? Describe how it works
- What is dead reckoning? Describe how it works

• Label A-E in Figure • What type of service is this? Data Flow Control Flow

Cla09

- Regarding thin-client games:
 - What is scene complexity?
 - What is *motion*?
- Where are First Person Shooters in that space?

Thin Client Games from [CFGS14]

- Order the following from least to most bitrate
 - A. Virtual Environment
 - B. Thin Game
 - C. Pre-recorded video
 - D. Live Video
 - E. Traditional Game

Latency and Games from [CC10]

- What three ways does latency affect network games?
- What are precision and deadline?
- How do these relate do latency for games?