

CS460 Review Sheet

Definition of OS.

List and describe:

- (Human) User's goals
- System's goals

Describe each step in the Computer Startup Sequence

Define Interrupts

Give examples of different types of interrupts. Hardware, Software

System Configurations

- How does a single versus multi-CPU system change the requirements for the OS?
- How does a multi-CPU system differ from a single CPU multi-core system?
- How does a cluster differ from all the of the above?

What is multitasking? Why is this important? What hardware requirements are necessary to effectively support multitasking?

Process

- Draw the process memory map.
- What kernel data structures are used to manage processes?

Describe what a Dual Mode CPU is. How is dual-mode implemented? How it is used?

Describe how a system call in Linux works? Specifically, what happens when you call fork?

What are the advantages of using assembly versus C to write an OS? Disadvantages?
Flip those two questions.

Describe the differences between: Microkernel/layers/monolithic

Describe the benefit of a Virtual Machine.

What is context switching? Why is it important? Describe the process.

Describe some of the common ways data can be passed between processes. What are the advantages and disadvantages of each?

Homework Assignment 6 pts

By **4:45pm Feb 27** write one possible exam question (and answer) and email that to me.