CSE451 Jeopardy

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UW CSE

Misc - 100

$$EAT = P_{hit}T_{hit} + P_{miss}T_{miss}$$

What is the cache access time formula?

Misc - 200

When the OS is spending all of its time swapping.

What is thrashing?

Misc - 300

An abstraction that makes writing distributed programs easier.

What is RPC?

Misc - 400

The difference between RAM, disk, and tape.

What is the cost of random access?

Procs/Threads - 100

Multiple proccess in memory
at the same time.

What is multi-programming?

Procs/Threads - 200

The structure containing the PID, UID, and the process state.

What is the PCB?

Procs/Threads - 300

The PC, registers, SP, and stack.

What is the state of a thread?

Procs/Threads - 400

The process state with no tranistions to running.

What is waiting?

Sync - 100

If there are multiple threads accessing shared data.

When is synchronization necessary?

Sync - 200

The only sync. primitive that is “held” by a thread.

What is a lock?

Sync - 300

The two things synchronization can provide.

What are inter-thread scheduling and mutual exclusion?

Sync - 400

An operation that can be repeated without changing the outcome.

What is an idempotent operation?

VM - 100

The set of virtual addresses a process can reference.

What is a processe’s address space?

VM - 200

The allocation scheme with no internal fragmentation.

What is base+bounds?

VM - 300

The property that an algorithm must have to avoid Beladay's anomaly.

What is the stack property?

VM - 400

Increasing page size would increase it.

What is internal fragmentation?

Disk/FS - 100

Seek time + Rotational delay
+ Transfer time

What is the disk access time?

Disk/FS - 200

Names and inode numbers.

What are the contents of a directory entry on UNIX?

Disk/FS - 300

The disk scheduling algorith most commonly used in practice?

What is CSCAN?

Disk/FS - 400

File growth may be extremely expensive.

What is the disadvantage of contiguous allocation?