CS-341 Lecture 11

March 13, 2001

Exam Post Mortem

- Mean was 72.5
- Median was 73
- 6 each of A, C, D, F; 10 B's
- World grading record

Disk Memory (continued)

- Organization
 - Platters, heads, tracks/cylinders, sectors
- Access Time
 - Seek time
 - Time to move the read/write heads from the current track to the addressed track
 - It takes few milliseconds to go from one track to an adjacent on e
 - Rotational Delay
 - Time for the required sector to rotate into position
 Average value is half of one full rotation

 - 7200 RPM [®] ~4 msec.
 - Transfer Time
 - Time to transfer the sector(s) between disk and memory
 Depends on I/O bus speed as well as rotational speed
 - - Some disks cache tracks; then it's just bus speed

Digital Logic

- Batteries and Power Supplies
 - Mapping voltages to logic values.
 - Noise margin
- Combiner-Restorer Model of Logic Gates
- · Types of gates
 - Inverters and Buffers
 - AND, NAND, OR, NOR
 - XOR, XNOR