

Outline for April 6, 2007

Question: Do you find it easier to keep track of your schedule on a computer, cell phone, paper, or in your head?

1. Greetings and felicitations!
 - a. Lab exercise 1 due tonight at 11:59PM
 - b. Prospectus due in class on Monday
2. Operating system configuration
 - a. Linux/UNIX systems: based on numerous configuration files scattered throughout system
 - b. Windows: uses registry; keys are indices used to look up information
 - i. HKEY_CLASSES_ROOT: how system treats files based on extension
 - ii. HKEY_CURRENT_USER: individual settings for this user, such as screen color
 - iii. HKEY_LOCAL_MACHINE: the hardware and software, including configuration information and past hardware
 - iv. HKEY_USERS: generic information, such as about user profiles and the desktop before users log in
 - v. HKEY_CURRENT_CONFIG: configuration information about the current hardware and software
3. Ideas behind transistors
 - a. Review binary system, bits
 - b. Transistors combine to manipulate numbers, add them, and otherwise change them
4. Transistors and RAM
 - a. Writing data to RAM
 - b. Reading data from RAM
5. How a computer adds
 - a. AND gate
 - b. OR gate
 - c. XOR gate
 - d. Half adder
 - e. Full adder