

Unit 1: Technology in Focus

Information Technology Ethics

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Ethics: is the study of the general nature of morals and of the specific moral choices individuals make. Morals are usually conforming to ideas of right & wrong while ethical issues often involve subtle distinctions like the difference btw fairness & equity.

System of Ethics:

Relativism: No universal moral truth - Moral Principles dictated by cultural tastes and customs

Divine Command Theory: God is all-knowing and sets moral standards. Conforming to God's law is right; breaking it is wrong

Utilitarianism: Actions are judged solely by consequences - Actions that generate greater happiness are judged to be better than actions that lead to unhappiness -

* Individual happiness is not important - consider greater good

Virtue Ethics: Morals are internal - strive to behave well spontaneously

Deontology: Focus on adherence to moral duties and rights
Morals should apply to everyone equally

- Unethical behavior isn't necessarily illegal (Death Penalty)

Positive Psychology: is a new focus in psychology that works to discover the cause of happiness instead of addressing the treatment of mental dysfunctions.

Whistle-Blower: are ppl who report businesses to regulatory agencies for committing illegal acts

Sarbanes-Oxley Act of 2002: requires companies to provide mechanisms for employees to report complaints

Powering Up a PC: (howstoffsworks.com)

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- When you turn on PC, machine goes through a boot process before it's ready for use.
- The **BIOS** (input-output system) is a software store on a flash memory chip and embedded on the motherboard that makes sure all other chips function, and controls the boot process.

Summary of Boot Process:

1. Power Button activates power supply, sending power to motherboard.
2. PC performs **POST**, which checks for hardware failures. Single beep signals that everything's okay while others signal hardware failures.
3. PC displays info on monitor showing details of boot process. Now, many PCs have replaced displaying this info by showing manufacturer's logo.
4. The BIOS tries to access the first sector of the drive designated as the boot disk, where 1st sector is the 1st kilobyte of the disk in sequence.
5. The BIOS confirms there is a boot loader in that 1st sector of boot disk, and loads it onto RAM.
6. Once boot loader is on memory, BIOS hands over its work to boot loader, which loads operating system into memory.
7. When boot loader is done, turns control of PC to operating system. Then, OS is ready for use.