Ethics and Computing: Living Responsibly in a Computerized World

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Motivation

- Computers permeate all aspects of society
- Computing professionals need to act in a socially-responsible manner
Tools

- Ethical theory
- Critical thinking
- Codes of ethics
- Career management
- Oral and written communication
- Web resources

marathon.csee.usf.edu/~kwb/ethics-and-computing.html
Major Ethical Issues

- Computer System Security
- Encryption, Law Enforcement, and Privacy
- Safety-Critical Systems
- Whistle Blowing
- Intellectual Property
- Environmental and Health Concerns
- Fairness
What Are Ethics?

Ethics and Computing

Chapter 1
Definition

- Ethics
  - Standards of conduct and moral judgment
- Grounded in notions of right and wrong, good and evil
- Personal ethics vs. societal ethics
Theoretical Ethics

- Relativism
  - No one standard of right and wrong
  - Morality relative to time and culture
  - What is desired by the majority of those who hold power
  - Whatever feels right to you
Theoretical Ethics

- Utilitarianism
  - Morality based on consequences
  - Act so as to increase the utility of all
  - The good of the many outweighs the good of the few
  - Negative consequences for an individual may be extreme
Theoretical Ethics

- Deontological
  - Morality based on motivation and intent
  - Each person has intrinsic worth and deserves basic respect
  - “All men created equal…with certain inalienable rights”
  - How to decide whose rights are curtailed
Applied Ethics

- No one theory purely followed
- Ideal action is not always clear (relative to the situation)
- Want actions to produce greatest common good
- Preserve minimum standard of personal dignity
Applied Ethics

- Not everyone agrees on what is right, good, ethical, moral, legal
- Tolerance in minor disagreements important
Professional Ethics

- Relations between professionals and their clients
- Relations between the profession and society
- Relations among professionals
- Relations between employee and employer
- Specialized technical details of the profession
Professional Ethics

- Codes (ACM, IEEE, NSPE)
- New ethical issues posed by computers
  - Computer-based decision making
- Old ethical issues in new guises
  - E.g., privacy of email
Living Ethically

- Unethical behavior rooted in excessive self-interest
- Have high standards of ethical conduct
- Stick to your standards even in the face of short-term loss
- Serve a larger purpose
Points to Remember

- Expect to face ethically-difficult situations
- Accept responsibility for your actions
- Bad choices usually come from short-term self-interest
- Living ethically requires strong, sincere motivation
Ethics Questions

- Is email correspondence with friends using UTA computers ethical?
- Is logging into another person’s computer account ethical?
  - With their permission?
  - Without their permission?
- Is cheating ethical?