Introduction to Computer Ethics

- Computer Ethics
  - Definition
  - Information Ethics
  - Areas of Ethical Problems
  - Computer Ethics Issues
  - Computer Ethics: Academic Discipline
    - History of Computer Ethics as a field of study
  - Computer Ethics: Standards of Conduct
    - Ten Commandments of Computer Ethics
    - Netiquette

Objectives

- Define computer ethics and information ethics

- Identify areas of ethical problems and issues

- Discuss computer ethics as an academic discipline.

- Determine the computer ethics standards of conduct.

Computer Ethics

- A branch of philosophy that deals with computing-related moral dilemmas
  - defines ethical principles for computer professionals
  - professionals must try to avoid unethical behavior whether it is illegal or legal

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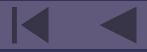
Computer Ethics

- Today there are numerous illegal and unethical actions that can arise through computer usage
  - Plagiarism and copyright infringement
  - Software Piracy
  - Computer crimes, unauthorized computer access

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Computer Ethics

- As a professional you should
  - Safeguarding secure information
  - Use Email and the Internet responsibly
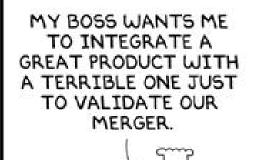
Applied Computer Ethics

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How Does This Apply to Me?

(Scott Adams, http://www.dilbert.com, 1/19/06)

Information **Ethics**

- Applying this to:
  - Direct interaction
  - Personal correspondence
  - Telephone
  - Print media
  - Radio and television

Information **Ethics**

- How it might differ when using a computer:

    – Scope

    – Speed

    – "It seems different with a computer"

Areas of Ethical Problems

- Personal intrusion
- Privacy
- Morality
- Deception
- Security
- Resources
- Intellectual property
- Inappropriate use
- Technology and social responsibility

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Computer Ethics Issues: Examples

- Computers in the Workplace

- Computer Crime

- Privacy and Anonymity

- Intellectual Property

- Professional Responsibility

- Globalization

General Comments on Ethics

- The world of ethics is gray

- Ethical conflict is characterized by

  - Intense feelings

  - Rapid development

Computer Ethics: Standards of Conduct

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The Top Ten Rules of Computer Ethics

1. Thou shalt not use a computer to harm other people.
2. Thou shalt not interfere with other people's computer work.
3. Thou shalt not snoop around in other people's computer files.
4. Thou shalt not use a computer to steal.
5. Thou shalt not use a computer to bear false witness.
6. Thou shalt not copy or use proprietary software for which you have not paid.
7. Thou shalt not use other people's computer resources without authorization or proper compensation.
8. Thou shalt not appropriate other people's intellectual output.
9. Thou shalt think about the social consequences of the program you are writing or the system you are designing.
10. Thou shalt always use a computer in ways that insure consideration and respect for your fellow humans.

(From the Computer Ethics Institute)

Introduction to Computer Ethics

Netiquette - Network etiquette

- The conventions of politeness recognized on Usenet, in mailing lists and email.
- The most important rule of netiquette is "Think before you post".
- Re-read and edit your email carefully before you send. Check the spelling and grammar.
- When responding to a newsgroup posting, quote the minimum necessary to give some context to your reply and be careful to attribute the quote to the right person.
- Only send email to the necessary recipients.
- Email is permanent and can be saved forever!

Computer Ethics: Academic Discipline

History of Computer Ethics as a Field of Study

- 1940s-1950s – Norbert Wiener (MIT)
  - Notes the social/ethical implications of computer technology

  "…we were here in the presence of another social potentiality of unheard-of importance for good and for evil."

  (Cybernetics: or control and communication in the animal and the machine, pp. 27-28, 1948)

History of Computer Ethics as a Field of Study

- 1960s – Donn Parker (SRI International)
  - Unethical and illegal uses of computers
  - 1968: Led *Code of Professional Conduct for the Association for Computing Machinery* (ACM). Adopted by ACM in 1973.
- 1970s – Walter Maner (ODU)
  - Coined "computer ethics"

History of Computer Ethics as a Field of Study

- 1980s – Computer ethics becomes an academic discipline
  - Public issues:
    - Computer-enabled crime
    - Disasters caused by computer failure
    - Privacy invasion via databases
    - Law suits over software ownership

History of Computer Ethics as a Field of Study

- 1990s – Lots of research …
  - Health – HIPAA
  - Wealth
  - Opportunity
  - Freedom
  - Democracy
  - Knowledge
  - Privacy
  - Security

Notion of (computer) professional ethics
  - Computer professional == "anyone involved in the design and development of computer artifacts" (Gotterbarn, 1991)

Sources and Other Information

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Sources and Other Information (cont'd)

- Netiquette:
  - The Net: User Guidelines and Netiquette – Index http://www.fau.edu/netiquette/net/
  - Netiquette Home Page http://www.albion.com/netiquette/
  - Online Netiquette Home Page http://www.onlinenetiquette.com/

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