

A Gift of Fire

Third edition

Sara Baase

Chapter 9: Professional Ethics and Responsibilities

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What We Will Cover

- What is Professional Ethics?
- Ethical Guidelines for Computer Professionals
- Scenarios

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- Professional ethics includes relationships with and responsibilities toward customers, clients, coworkers, employees, employers, others who use one's products and services, and others whom they affect
- A professional has a responsibility to act ethically. Many professions have a code of ethics that professionals are expected to abide by
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 - Medical doctors
 - Lawyers and judges
 - Accountants
 - Computer professionals are expected to abide by the ACM Code of Ethics

<http://www.acm.org/about/code-of-ethics>

What is "Professional Ethics"? (cont.)

- There are special aspects to making ethical decisions in a professional context
- Honesty is one of the most fundamental ethical values

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- A lie deliberately sabotages these essential activities of being human:
 - absorbing and processing information
 - making choices in pursuit happiness.

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What is "Professional Ethics"? (cont.)

- Not telling the whole truth may or may not constitute a lie.
- But deliberate obscuring the reality is a lie.

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- Many choices are based on statistical sampling.
- Deliberate delivery of biased sample is a lie.

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What is "Professional Ethics"? (cont.)

- Example:
 - 999 students got scores 1, 2, .., 999 on a test.
 - Thus the average score was 500.

What is "Professional Ethics"? (cont.)

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- An unbiased sample would have similar average.
- For instance, selection of 9 students with scores 100, 200, ... 900 would produce a sample with the average score of 500.

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What is "Professional Ethics"? (cont.)

- Selection of 9 lowest-score students, or selection of 9 highest-score students, would produce biased samples.
- The former has the average of 5 and the latter has the average of 995.

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What is "Professional Ethics"? (cont.)

- Biased sampling is what most (all?) of TV News Networks are doing while reporting.

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- Lies are attempts to manipulate people.
- Emanuel Kant:
 - A lie treats people as merely means to ends, not ends in themselves.

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- It adds unnecessary uncertainty to decisions by others.
- Falsifying research or other forms of work is an indirect form of theft of research funds and salary.

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- The costs and indirect effects of lies can cascade and do much harm.

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- Can a society always enforce honesty?
- It can't.
- But ...

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- Can a society always enforce honesty?
- It can't. One of the reason being is that there is no mechanical way to tell the truth from falsehood.
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What is "Professional Ethics"? (cont.)

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- Society can:
 - turn honesty into adaptive behavior
 - turn dishonesty into maladaptive
 - or at least avoid contributing to the opposite

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- Honesty is one of the most fundamental ethical values; however, many ethical problems are more subtle than the choice of being honest or dishonest
- Some ethical issues are controversial

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- In health care, doctors and researchers must decide how to set priorities for organ transplant recipients.

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- Computer professionals confront issues such as:
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Suppose a private company offered your software company a contract to develop, for marketing purposes, a database of information obtained from government public records and credit bureaus.

- How will you decide whether to accept the contract?

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- You could accept on the grounds that the records are already public and available to anyone.
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You could refuse it to make marketing lists, but agree to make lists of people convicted of certain crimes or delinquencies, using as a guide *Posner's principle* that certain derogatory information, such as convictions and non-payment of credit, should be in the public domain.

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– **Posner's principle** cont'd:

- “He paid his debt to the society” is a fallacy.
- What one has done in the past may be indicative of one's future actions.
- Hence the need of maintaining certain derogatory information about individuals in public domain.

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- Is hacking that does no direct damage or theft a victimless crime?
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Guidelines and Professional Responsibilities:

- Understand what success means
- Include users (such as medical staff, technicians, pilots, office workers) in the design and testing stages to provide safe and useful systems
- Do a thorough, careful job when planning and scheduling a project and when writing bids or contracts
- Design for real users

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Ethical Guidelines for Computer . . . (cont.)

Guidelines and Professional Responsibilities (cont.):

- Don't assume existing software is safe or correct; review and test it
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- Require a convincing case for safety
- Pay attention to defaults
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