Information Technology and Society

Topic 7: Ethics of IT professionals

1. Professional ethics
2. Ethics of IT professionals
3. Some ethical-choice scenarios

1. Professional ethics

Responsibilities may exist toward

- Customers and clients
- Coworkers, employees, employers
- Others affected by products and services

Examples in other fields

- Ethics of journalists
- Business ethics
- Science research

Ethical decision making

- Who is affected? What are their rights?
- What are risks or issues?
- What are benefits?
- What actions are possible?
- What are responsibilities of actors?
- What are ethically acceptable choices?

2. Ethics of IT professionals

- *Concerns*
  - Honesty
  - Privacy
  - Free expression
  - Intellectual property
  - Safety, security
- *Factor:* persons affected by IT work are often not customers of IT professional doing the work, and have no control
- Obligations include limiting risk to others

Ethical considerations for software developers

- Costs, benefits to end users, including safety
- Effects on employer reputation, profits
- Some internal whistle blowing may be heard, helping company and whistle blower
- Some issues are worth going public or quitting over
- The issue is not always safety or quality versus profit
- To assess risk one must have sufficient expertise
- Disclosure of conflicts of interest is crucial
- Testing should be realistic and by persons independent of product development
- Maintenance of systems should be treated as professionally as initial development

Codes of ethics for computer professionals

- Central concern: the public good, including human rights and diversity of culture
- Honesty and fairness in communication about software and related topics
- Use client or employer property only as authorized
- High quality, reasonable cost and schedule
- Respect for privacy, intellectual property
- Disclose conflicts of interest
- Address software errors
- Lifelong learning
- Honor agreements and assigned responsibilities

Some guidelines

- Define objectives reasonably
- Involve users in design and testing
- Plan, estimate and schedule carefully
- Design for human users, validating input
- Validate components and default settings
- Speak honestly of risks and limitations

3. Some ethical-choice scenarios

- A clinic for families with problems with violence wants its staffers to have laptops for home visits – issue is client privacy protection via security steps
- Designing an email system with targeted ads – issue is storage of customer data related to ads and responses to them
- Implementing a system design where demographic data is missing from input – ethical issue is related to following system specs

More scenarios

- Testing of a safety-critical central application under deadline pressures to ship – should delivery be delayed?
- Copyright violations by installing more copies than licensed
- Requests to sell confidential information
- Conflict of interest – stakeholders should be informed
- Kickbacks – recommendations are expected to be honest opinions, not paid for
- Expert system for judicial sentencint

References

S. Baase. *A Gift of Fire*, 3rd ed. Pearson Prentice Hall, 2008, Ch. 9.

ACM/IEEE. Software Engineering Code of Ethics.

ACM IT professionals' code of ethics.