Professional Ethics

Outline

• What is a profession?
• Is software engineering a profession?
• Codes of conduct
• Case studies
• Whistleblowing
**Introduction**

- Definition of a Profession (informal)
  - High level of education
  - Practical experience
  - Decisions have impact

- Examples
  - Doctors
  - Lawyers

- We expect professionals to act for public good

**Formal Characteristics of a Profession**

- Initial professional education
- Accreditation
- Skills development
- Certification
- Licensing
- Professional development
- Code of ethics
- Professional society
Certified Public Accountants

- Bachelor’s degree
  - 150+ semester hours
  - 24+ hours of accounting-related classes

- Two years’ experience working under supervision of a CPA

- CPA exam

- To retain certification
  - Continuing education
  - Follow code of ethics

Software Engineers

- Certification and licensing not needed

- Without these, other characteristics are irrelevant:
  - No college education needed
  - No apprenticeship needed
  - No membership in professional society needed
  - No continuing education needed
Analysis of ACM Code

• No mechanical process for determining if an action is right or wrong

• Should not take an overly legalistic view of the Code
  – If Code doesn’t forbid something, that doesn’t mean it is morally acceptable
  – Judgment required

• Code reflects principles drawn from multiple ethical theories
**Virtue Ethics**

- Aristotle
  - Happiness results from living a life of virtue
  - Intellectual virtue: developed through education
  - Moral virtue: developed by repeating appropriate acts
  - Deriving pleasure from a virtuous act is a sign that the virtue has been acquired
- Some virtues: Benevolence, courage, fairness, generosity, honesty, loyalty, patience, tolerance
- A person of strong moral character
  - possesses many virtues
  - knows right thing to do in each situation

**List of ACM Principles**

- Be impartial.
- Disclose information that others ought to know.
- Respect the rights of others.
- Treat others justly.
- Take responsibility for your actions and inactions.
- Take responsibility for the actions of those you supervise.
- Maintain your integrity.
- Continually improve your abilities.
- Share your knowledge, expertise, and values.
**Case: Child Pornography**

- Joe Green a system administrator
- Asked to install new software package on Chuck Dennis’ computer
- Green not authorized to read other people’s emails or personal files
- Green sees suspicious-looking file names
- He opens some of Dennis’ files and discovers child pornography
- What should he do?

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Overview of Whistleblowing

- A Whistleblower is someone who:
  - Tries to report harmful situation through internal channels
  - Rebuffed by organization
  - Makes disclosure through unauthorized channels

- Whistleblowers sometimes punished for their actions
  - Lose job or all chances of advancement
  - Financial and emotional hardship

- False Claims Act

- Whistleblower Protection Act
**False Claims Act - 1863**

Allows people to file suit against federal contractors claiming fraud against the government.

Persons filing under the Act stand to receive a portion (usually about 15–25 percent) of any recovered damages.

The government has recovered nearly $22 billion under the False Claims Act between 1987 (after the 1986 amendments) and 2008.[1]

-Wikipedia

**Whistleblower Protection Act - 1989**

- Law that protects federal whistleblowers, or persons who work for the government who report agency misconduct.

- What about state employees?
- What about private employees?
Boisjoly vs. Morton
Thiokol/NASA

• Wrote memo in 1985 about possible danger
  – Roger Boisjoly and Morton Thiokol engineers
documented dangers of low-temperature launches
  – Morton Thiokol executives and NASA officials
overrode and hid concerns
• Challenger explosion in 1986
• Boisjoly shared information with Presidential
commission
• Morton Thiokol retaliated
  – Boisjoly took medical leave for stress, then quit
  – Found job as a consultant two years later
Motives of Whistleblowers

• People become whistleblowers for different reasons

• Morality of action may depend on motives
  – Good motives
    • Desire to help the public
    • Fulfilling job responsibility
  – Questionable motives
    • Retaliation
    • Avoiding punishment

Corporate Response to Whistleblowing

• Whistleblowers are disloyal
• Whistleblowing has many harms
  – Bad publicity
  – Disruption of organization’s social fabric
  – Makes it hard for people to work as team
• If company causes harm, public can use legal remedies to seek damages
• Critique: Overly legalistic view of public harm?
**Whistleblowing as Organizational Failure**

- Whistleblowing harms organization
  - Bad publicity
  - Ruined careers
  - Erodes team spirit
- Whistleblowing harms whistleblower
  - Retaliation
  - Estrangement
- Organizations should improve communication
- Critique
  - Is this realistic?
  - Robert Spitzer: Organizations should return to using principle-based ethics in decision making

**Whistleblowing as Moral Duty**

Richard DeGeorge’s questions for whistleblowing

1. Is serious harm to the public/owners at stake?
2. Have you told your manager?
3. Have you tried every possible inside channel?
4. Do you have persuasive documented evidence?
5. Are you sure whistleblowing will work?

Under what conditions must you blow the whistle?

- DeGeorge: If all five conditions are met
- Others: If conditions 1-3 are met
- Still others: Whistleblowing is never morally required