Frameworks for Ethical and Policy Analysis

CSCE 390: Professional Issues in Computer Science and Engineering

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Last Time

• Course Administration
  - Course website (Blackboard)
    » https://blackboard.sc.edu
  - Syllabus and Schedule
    » BB > Course Information (where BB = Blackboard)
  - Class Slides
    » BB > Course Documents
  - Assignments
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    » BB > Recordings

• Course Introduction
  - IT Benefits, Risks, and Controversies
Today’s Agenda

• Frameworks of Ethical and Policy Analysis
  – Teleological (ends/outcome)
  – Deontological (duties/rights)

• Next Class
  – Example Case Report I (Ethical Analysis)
    » Read: CSCE390-Case Example I (PrimeDrive) [pdf]
    » BB > Course Documents
  – In-class assignment
    » We will develop an outline for a case report analysis
Introduction

• Jean-Jacques Rousseau described in *The Social Contract, Or Principles of Political Right* in 1762:
  – *Laws* are the rules the members of a society create to balance the right of the individual to self-determination with the needs of the society as a whole

• Laws generally mandate or prohibit certain behavior within society

• Laws are typically drawn from *ethics* which define socially acceptable behavior

• Ethics, in turn, are often based on *cultural mores* – the fixed moral attitudes or customs of a particular group
Ethics

• Ethics is a branch of philosophy that deals with questions about morality

• Many different areas of study within ethics including:
  – *Normative ethics* – deals with how moral values should be determined
  – *Applied ethics* – deals with how a moral outcome can be arrived at under specific circumstances
  – *Descriptive ethics* – deals with the moral values people actually follow

• Most of our frameworks come from modern normative ethics
There is a difference between ethics and law.
Guidelines

• Guidelines can often help us recognize that we may be dealing with an issue that has an ethical dimension that needs review

• Informal Guidelines
  - Is there something you or others would prefer to keep quiet?
    » Are there "shushers" in the situation? Who wants to keep things quiet?
    » Does it pass the Mom Test? Would you tell her? Would she do it?
    » Does it pass the TV Test? Would you tell a nationwide audience?
    » Does it pass the Market Test? Could you advertise the activity to gain a market edge?
  - Does your instinct tell you there is something wrong?
  - Does it pass the Smell Test? Does the situation "smell"?
Guidelines

• Formal Guidelines
  – Does the act violate corporate policy?
  – Does the act violate corporate or professional codes of conduct or ethics?
    » ACM Code of Ethics and Professional Conduct
ACM Code of Ethics and Professional Conduct

• The Association for Computing Machinery (ACM) “is an educational and scientific society uniting the world's computing educators, researchers and professionals to inspire dialogue, share resources and address the field's challenges. ACM strengthens the profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.” – from ACM Fact Sheet

• ACM “is widely recognized as the premier membership organization for computing professionals, delivering resources that advance computing as a science and a profession; enable professional development; and promote policies and research that benefit society.” – from What is ACM?
ACM Code of Ethics and Professional Conduct

- Section 1 addresses *General Moral Imperatives*
- Section 2 addresses *More Specific Professional Responsibilities*
- Section 3 addresses *Organizational Leadership Imperatives*
- Section 4 addresses *Compliance with the Code*
ACM Code of Ethics and Professional Conduct

• **General Moral Imperatives**
  - Contribute to society and human well-being
  - Avoid harm to others
  - Be honest and trustworthy
  - Be fair and take action not to discriminate
  - Honor property rights including copyrights and patent
  - Give proper credit for intellectual property
  - Respect the privacy of others
  - Honor confidentiality
ACM Code of Ethics and Professional Conduct

• More Specific Professional Responsibilities
  – Strive to achieve the highest quality, effectiveness and dignity in both the process and products of professional work
  – Acquire and maintain professional competence
  – Know and respect existing laws pertaining to professional work
  – Accept and provide appropriate professional review
  – Give comprehensive and thorough evaluations of computer systems and their impacts, including analysis of possible risks
  – Honor contracts, agreements, and assigned responsibilities
  – Improve public understanding of computing and its consequences
  – Access computing and communication resources only when authorized to do so
ACM Code of Ethics and Professional Conduct

- **Organizational Leadership Imperatives**
  - Articulate social responsibilities of members of an organizational unit and encourage full acceptance of those responsibilities
  - Manage personnel and resources to design and build information systems that enhance the quality of working life
  - Acknowledge and support proper and authorized uses of an organization's computing and communication resources
  - Ensure that users and those who will be affected by a system have their needs clearly articulated during the assessment and design of requirements; later the system must be validated to meet requirements
  - Articulate and support policies that protect the dignity of users and others affected by a computing system
  - Create opportunities for members of the organization to learn the principles and limitations of computer systems
Ethical Principles - Teleology

• Focuses on consequences
• Does the action maximize social welfare or minimize actual and potential harm?
  - **Utilitarianism**: good for the group, least harm for the group
• The **right action** is that which produces the most net benefit to society (or optimizes social welfare – not just individual utility)
  - Not concerned with the distribution of welfare or “fairness”
• Assumes that one can measure the benefits and harms produced by an action
  - In practice, requires a sort of “moral calculus” – usually in the form of a cost-benefit analysis
• There are no intrinsically evil acts
• “The ends justify the means”
Spinello notes:

“...presumably, then, even human or moral rights are not absolute, since a person’s or group’s rights could be taken away for the sake of maximizing utility. But are there not rights that transcend utilitarian calculations such as rights to life and liberty? If we could somehow maximize happiness for a society by enslaving a small segment of that society, would that action be justified morally?” - from Case Studies in IT Ethics

From a purely teleological perspective → yes! (if that is how the moral calculus works out)

Another problem is the assumption that the alternatives are comparable and can be measured according to a common scale

But often comparing things like profit to lives saved – how do you compare such things?

Can managers and professionals work through moral calculus objectively and avoid self-serving assumptions and prejudices?

The case of Lockheed (American Aerospace company)

Long-run vs. short-run social welfare
Ethical Principles - Deontology

- Deals with Rights and Duties
- Are any rights abridged?
  - The right to know
  - The right to privacy
  - The right to property
  - The right to free speech
- Are any duties or responsibilities not met?
  - Personal duties
  - Professional duties (responsibilities)
- Acts are intrinsically right or wrong based on such rights or duties

Immanuel Kant
Categorical Imperative
Ethical Principles - Deontology

• Personal duties – as defined by philosopher W. D. Ross
  - **Fidelity** – Keep your promises and tell the truth
  - **Reparation** – Right the wrongs you have done to others
  - **Justice** – Distribute goods justly
  - **Beneficence** – Improve the lot of others with respect to virtue, intelligence, and happiness
  - **Self-improvement** – Improve yourself with respect to virtue and intelligence
  - **Gratitude** – Exhibit gratitude when appropriate
  - **Noninjury** – Avoid injury to others
Ethical Principles - Deontology

• Professional duties (responsibilities)
  – For all professionals
    » Maintain appropriate professional relationships
    » Maintain efficacy
  – For information professionals in particular
    » Maintain confidentiality
    » Maintain impartiality
What do you do when two moral duties conflict?

- Spinello offers
  
  “Consider the overwrought but helpful example of telling a lie to save someone from a ruthless murderer. In this case there is a conflict of universal laws: the law to tell the truth and the law to save a life in jeopardy. We must, of course, admit an exception to one of these laws.” - from *Case Studies in IT Ethics*

- But which one? Which has better consequences? Whoops! That leads back to teleology...

- How would you prioritize rights/duties that are in conflict with each other?
Rights-based ethics focuses on individual rights and respect for these.

A right can be thought of as an entitlement to something:
- Some are derived from law (*legal rights*) – Bill of Rights in U.S. Constitution, such as freedom of speech.
- Others are considered universal rights that all people should have (*human rights*).

Again, problem when rights of stakeholders conflict.
Ethical Frameworks Summary

- **Teleological**
  - Ends/outcome
  - Gives priority to the good of society in general over the rights of individuals
  - The right action is that which produces the most net benefit to society (or optimizes social welfare – not just individual utility)
    » Not concerned with the distribution of welfare or “fairness”
  - The right action depends on the outcome or consequence
  - No intrinsically evil acts → “the ends justify the means”

- **Deontological**
  - Means/process
  - Gives priority to the rights of individuals or obligation of duty over the good of society in general
  - The right action is independent of the outcome or consequence
  - Actions are intrinsically wrong or right based on rights or duties
  - You should take actions that preserve people’s rights
Steps for Ethical Analysis  
(Case Report)

1. Identify (1-2 sentences) the “ethical dilemma” — or ethical question — in the case. Pose an open-ended question that generates many potential answers, not a question that can be answered with a “yes” or “no”. (1 point)

2. Identify (1-2 sentences) the role that information technology played in creating the special circumstances of the case. (1 point)

3. List four (4) critical stakeholders in the case and identify an important right/duty of each stakeholder. (4 points)

4. List and describe four (4) alternative courses of action that may be taken (to address the ethical dilemma) and determine the likely consequences of each proposed action for each stakeholder (2 pages). (12 points)

5. From a teleological perspective which action from Part 4 is morally right? Explain (1/2 page). For example, explain your “moral calculus” or your cost/benefit analysis. Explain why the action you chose generates more social welfare than the other 3 actions. Be sure to include each action listed in Step 4 in your analysis. (4 points)

6. From a deontological perspective which action from Part 4 is morally right? Explain (1/2 page). For example, explain how you prioritized the stakeholder’s rights. Be sure to include each action listed in Step 4 in your analysis. (4 points)

7. Describe your normative recommendation in this case (1 page). That is, explain what actions would you recommend to address the ethical dilemma (e.g., law, norms, market forces, technology). Explain the basis of your recommendation. Be creative! Please do not cut this discussion short! (4 points)
Case Report Examples

• Case Report Example I (Ethical Analysis)
  – BB > Course Documents
  – Next class

• Case Report Example II (Ethical Analysis)
  – BB > Course Documents
  – In two classes
Online Computer Ethics Resources

• Ethics in Computing from NCSU
• Ethics Cases – includes computer
• Online Ethics Center at National Academy of Engineering
Summary

- There are several competing frameworks for making ethical decisions including teleology and deontology

- Some questions you should be able to answer
  - Are there differences between what’s legal and what’s ethical?
  - What guidelines may help us detect a potential ethical dilemma?
  - What are the differences between a teleological approach and a deontological approach?
  - How do we resolve conflicts between competing ethical frameworks?