

Ethics in CS and the Impact of CS

CS 64: Computer Organization and Design Logic
Lecture #17

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Lecture Outline

- Ethical Considerations in CS
- Code of Ethics in the Workplace
- CS's Impact on Society
- Optional: Practice Exercises for Final Exam!

Ethics

- Moral principles that govern a person's behavior
- Attempts to answer questions like:
"What is the best way people to do something?"
"What actions are right or wrong"
- In CS, it's not just about the obvious questions, like:
"Is it ok to copy someone else's code and use it?" NO
"Can I take this mouse pad from work home?" NO
"I mean, come oooooon, it's just a mouse pad..." **NO!!!**

Ethical Considerations in CS

- Our work in CS affects people (why do it otherwise?!)
 - Ourselves
 - Our work colleagues
 - Our professional community
 - Society at large

Ethics in CS notes the following:

- Our activities and choices affect other people in significant ways
- We have principles and guidelines that guide ethical action

Ethical Considerations in CS

- Act consistently with the **public interest**, your **clients**, your **employer**, your **colleagues**.
- Make your products/services meet the **highest professional standards** possible.
- Maintain **integrity** in your work. Maintain a good reputation for yourself and your profession
- If you're a manager, **promote an ethical approach** to your work and your team's work.
- Keep **bettering yourself** through education

Who Cares if you Aren't Ethical?

- Everyone does – it's a “***social contract***”
- If you are not ethical, **at best the following can happen...**
 - ... your job will be at risk
 - ... your relationship with others will be at risk
 - ... you are likely to be negatively labeled as “unethical” in your professional circle
 - ... you will give “a bad name” to yourself, your company/employer, and to the field of CS in general
- **At worst**, you will have **major** financial/legal ramifications
 - Get fired (and possibly blacklisted)
 - Get sued
 - Get arrested

Professional Guidelines

- The IEEECS/ACM Joint Task Force on Software Engineering Ethics and Professional Practices

“Code of Ethics and Professional Practice”

Purpose:

- Documents the ethical and professional obligations of software engineers.
- Instructs us about the standards society expects CS professionals to meet.
- What to expect of one another.

Code of Ethics and Professional Practice

Lab 9 – Task 1

- Read the IEEE Computer Society's article
- Then read a collection of case studies on ethics
 - Both on our class website
- Afterwards, go to an online form.
You will choose which *clauses* from the code of ethics are more relevant to each case study.
 - Link on our class website

The Impact of CS in the World

- What do YOU think Computer Science's impact in the world today is?...

The Impact of CS in the World

- Today – more than ever before – CS enables us to make tools that help people:
 - Connect
 - Visualize information
 - Understand the impacts of
environmental, economic, energy happenings
 - Collaborate and work together

Google Talk at CSIT Conference

Lab 9 – Task 2

- View video of Megan Smith’s talk at the 2010 Computer Science & Information Technology (CSIT) Conference about the Impact of CS Worldwide
 - Smith was a VP at Google and then the “U.S. CTO” and Assistant to President Obama
 - Link is on our class website
- Afterwards, go to an online form.
You will identify the impact of CS in a variety of areas.
 - Link is... ahhh... you know where...

Your To Dos

- Lab #8 and #9 due end of day Friday!

</LECTURE>