Ethics in CS and the Impact of CS

CS 64: Computer Organization and Design Logic
Lecture #18

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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?" NO

  "I mean, come ooooon, 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 10 – Task 1

- Read the IEEE Computer Society's article

- Then read a collection of case studies on ethics

  – Both in the lab description

- Afterwards, go to an online form.
  You will choose which *clauses* from the code of ethics are more relevant to each case study.

  – Link in the lab description

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 10 – 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 in the lab description

- 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 #9 and #10 due end of day Friday!
- Study for your final exams!

- Take a breather and get enough sleep!

</LECTURE>