



Lecture 20

Professional Ethics

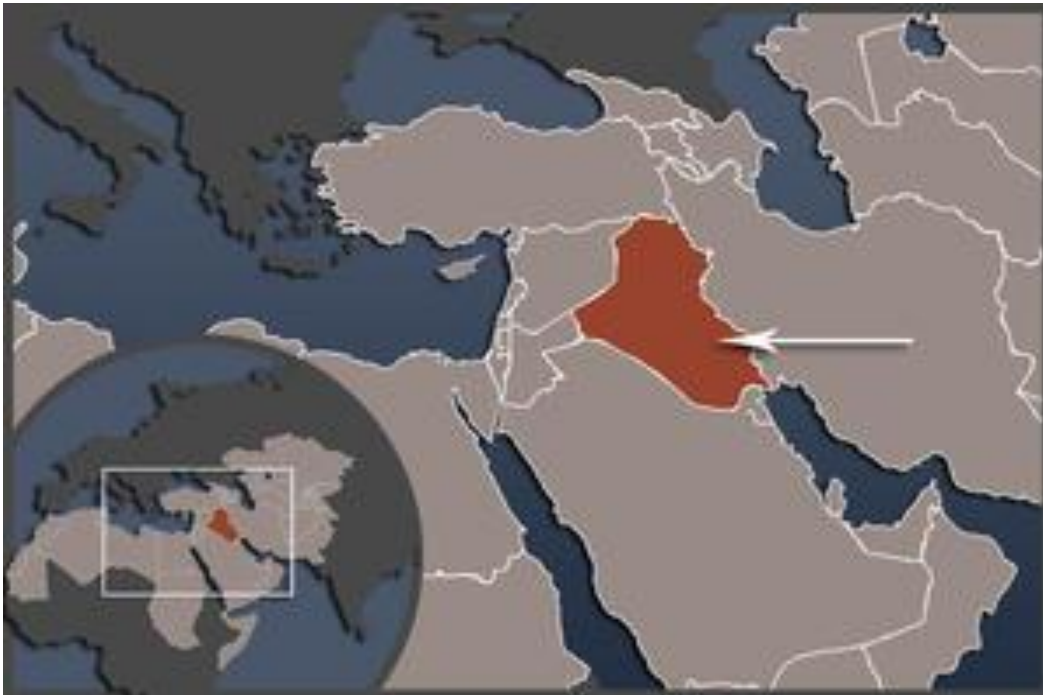
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Participation Quiz

What country is this?



- A. Iran
- B. Jordan
- C. Saudi Arabia
- D. Iraq
- E. Syria

Software Warranties

- Software companies tend to write license agreements saying that the software may not perform as promised
 - “we expressly disclaim ... the implied warranties of merchantability and fitness for a particular purpose”
- Why is this reasonable?
 - Software is expensive
 - Other expensive goods are backed up by warranties
- *Should software come with warranties? If so, what should these warranties cover?*
- *Do software makers have a moral obligation to produce software that does what it promises?*

Is Software Engineering a Profession?

- In many ways software engineering is similar to other professions such as law or accounting
 - Dependence on professional education and practical training
 - Professional associations (IEEE, ACM)
 - Potential for bad decisions to cause significant public harm
- It's not a “full-fledged” profession:
 - No formal accreditation/licensing system
- All the same, sensible to ask software engineers to follow a code of ethics.
 - One with significant support is described in the book.
 - Nothing it says ought to come as a big surprise at this point in the course 😊.

Professional Ethics

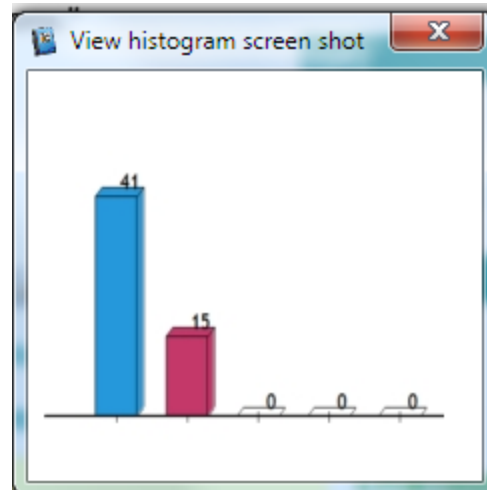
“A UBC CS sysadmin accidentally discovers pornography in a student’s private department file space, depicting a woman the sysadmin believes may be under 18. The sysadmin should inform the department head.”

Whistle-Blowing

- Revealing a real or potential harm to the public being caused by your employer.
 - Not an attempt to take revenge on the employer, e.g., for turning down a promotion
 - Not an attempt to avoid personal responsibility for a problem that is about to come to light anyway.
- *Under what circumstances is whistle-blowing morally **justified**? When is it morally **necessary**?*

Computer and Network Security

“Canadians should have the right to vote online in federal, provincial and municipal elections.”



Online Voting

- Motivation:
 - More people would vote
 - Votes would be counted more quickly
 - Cost less money
 - Avoid disputed elections like Florida 2000
 - Eliminate ballot box tampering
 - Software can prevent accidental over-, under-voting
- Risks:
 - Gives unfair advantage to those with home computers
 - More difficult to preserve voter privacy
 - More opportunities for vote selling
 - Obvious target for a DDoS attack
 - Security of election depends on security of home computers
 - Susceptible to phony vote servers
 - No paper copies of ballots for auditing or recounts