



Lecture 20

Professional Ethics

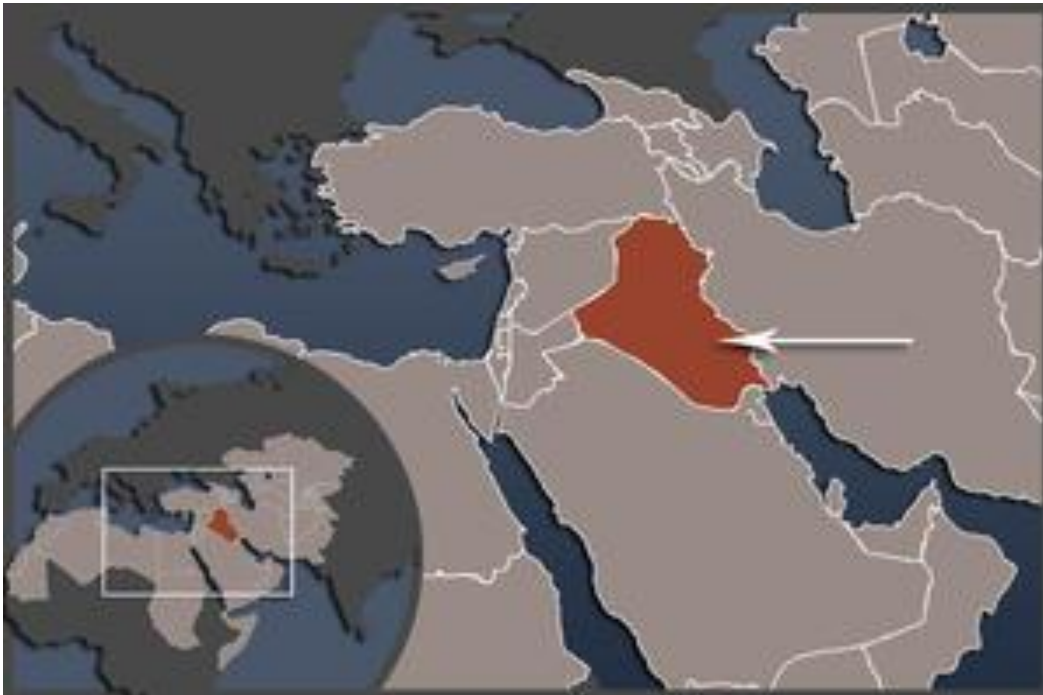
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Participation Quiz

What country is this?



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

Computer Simulations

- Simulations are used to answer questions about scenarios that can't be easily observed in the real world
 - Nuclear explosions
 - Climate change
 - Car crashes
- Models are only useful if they accurately describe reality
- What would you need to see to trust a simulation? How accurate does a simulation have to be to be useful?

Software Warranties

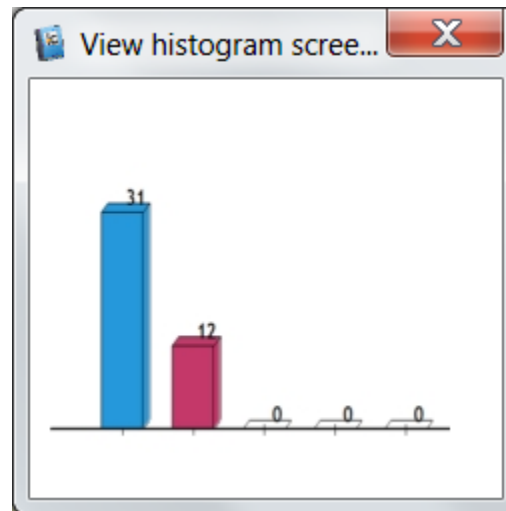
- Software companies tend to write license agreements saying that the software may not perform as promised
 - “we expressly disclaim ... the implied warranties of merchantability and fitness for a particular purpose”
- Why is this reasonable?
 - Software is expensive
 - Other expensive goods are backed 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.
- Question: Under what circumstances is whistle-blowing morally *justified*? When is it morally *necessary*?