CS 2441: Social Impact of Computing

Case Studies: Teams 9, 10 and 11

Discussion of Scenarios

- How do you figure out what to do when faced with a “situation”? 

- Apply the brainstorming and analysis methodology to each scenario 
  - What will you do in each scenario? 
  - Are you acting in an ethical manner? 
  - Are you applying a code of professional ethics?
Analysis of Scenarios: Brainstorming phase

Methodology:
- Brainstorming phase:
  - List all the people and organizations affected (the stakeholders)
  - List risks, issues, problems, and consequences
  - List benefits. Identify who gets each benefit
  - In cases where there is no simple yes or no decision, but rather one has to choose some action, list possible actions

Scenarios: Analysis Phase

Methodology:
- Analysis phase
  - Identify responsibilities of the decision maker
  - Identify rights of stakeholders
  - Consider the impact of the options on the stakeholders (consequences, risks, benefits, harms, costs)
  - Categorize each potential action as ethically obligatory, prohibited, or acceptable
  - When there are multiple options, select one, considering the ethical merits of each, courtesy to others, practicality, self-interest, personal preferences, etc.
Scenarios

Scenario (a):
- You have a small consulting business. The CyberStuff company plans to buy software to run a new collaborative content-sharing Web site. CyberStuff wants to hire you to evaluate bids from vendors. Your close relative who lives with you (for example, your significant other) works for NetWorkx and did most of the work in writing the bid that NetWorkx plans to submit. You read the bid while your significant other (SO) was working on it and you think it is excellent. Do you tell CyberStuff about your SO’s connection with NetWorkx? Is there a potential conflict of interest situation?

Scenarios

Scenario (b):
- You are working on a mission critical real-time system (for example, avionics system on the Boeing Dreamliner) and the project has to be completed tomorrow. As of today, your program does not meet the timing deadline of the application. You discover that by changing a data structure used in the code, your program will now faster and meet the timing deadline. However, you do not have enough time to debug and test the code.