

# CITS5206 Professional Computing

## Professional Skills Ethics Questions

The ACS Code of Professional Conduct has six principles to guide the conduct of software professionals:

1. Primacy of the public interest
2. Enhancement of quality of life
3. Honesty
4. Competence
5. Professional development
6. Professionalism

### **Question: Professional Ethics**

Max works in a large state department of alcoholism and drug abuse. The agency administers programs for individuals with alcohol and drug problems, and maintains a huge database of information on the clients who use their services. Some of the data files contain the names and current addresses of clients. Max has been asked to take a look at the track records of the treatment programs. He is to put together a report that contains the number of clients seen in each program each month for the past five years, length of each client's treatment, number of clients who return after completion of a program, criminal histories of clients, and so on. In order to put together this report, Max has been given access to all files in the agency's mainframe computer. After assembling the data into a file that includes the clients' names, he downloads it to the computer in his office. Under pressure to get the report finished by the deadline, Max decides he will

have to work at home over the weekend in order to finish on time. He burns the information onto a CD and takes it home. After finishing the report he leaves the CD at home and forgets about it.

Source: From ACS Case No. 3: Max in the State Department

### Question 1

1. Identify one ethical issue in this scenario related to **human behaviour** (rather than technical capability)
2. Which of the principles of the ACS Code of Professional Conduct is most relevant for the situation you have identified. Give a brief justification for your answer.
3. Propose some ways Max and his Department could recover from mistakes that are part of human behaviour

### Question 2

1. Identify one ethical issue in this scenario related to **technical capabilities**
2. Which of the principles of the ACS Code of Professional Conduct is most relevant for the situation you have identified? Give a brief justification for your answer.
3. Identify some practices that Max and his Department could adopt to keep privacy issues at the forefront of database development and management

## **Examples of Ethics Qs from the Take Home Test 2021**

### **Question 6: Professional Ethics**

Consider the following case study sourced from ACS Professional Conduct Case Studies:

Over the years a number of systems have been developed which record coded information across a range of factors about disabilities in ethnic communities. A new coding convention has been developed to rationalise the inconsistent coding conventions of these legacy systems. The new coding convention uses codes which had different meanings in the legacy systems. This means that time series analysis gives inconsistent results, particularly showing both under and over reporting of numbers of particular disability categories. This is significant when making policies for people based on the size of the communities. To fix this would take a lot of work and expense, and management has decreed that historical systems will not be fixed, but new systems will all adopt the new coding convention.

Analyse this case study using of the ACS Code of Professional Conduct as follows:

- a) Select three principles from the ACS Code of Professional Conduct that apply in this situation. (Choose the 3 you believe are most important for this scenario).
- b) For each of the three principles you selected, explain how its principles apply in this specific situation.

## Question 5: Information Technologies

“IT graduates design computing-based solutions to meet user needs using specific, concrete technology components.” [ACM curriculum 2020] New technologies are being developed all the time, some of which have ethical as well as technological consequences. Read the short article on Artificial Influencers at this link:

<https://ia.acs.org.au/article/2018/ethics-part-1--artificial-influencers.html>

The design and deployment of Artificial Influencers raises a number of ethical questions. In particular, Should creators of these simulators always tell you that you are seeing/speaking with/following a real person or not? Answer this question using an ethical framework such as the SCU framework for decision making to structure your answer.

[www.scu.edu/ethics/practicing/decision/framework.html](http://www.scu.edu/ethics/practicing/decision/framework.html)