Discussion Forum

Case Study – Ethics

Subject Code and Title	SEP401 Software Engineering Principles
Module Number	Module 11

Instructions:
- Choose one case study you want to answer.
- Apply the Ethical Decision-Making Model to discuss your solution to the ethical dilemma.
- Identify which ACS Code of Ethics and Professional Conduct apply to the case study you have chosen.
- Post your answer on the discussion forum by creating a new thread

Case Study 1

ABC Computer Incorporated is writing the first stage of a more efficient human resource information system that will be used by the government. This system will save tax payers a considerable amount of money every year. A computer professional, who is asked to design the information system, assigns different parts of the system to her staff. One person is responsible for developing the reports; another is responsible for the internal processing; and a third for the user interface. The manager is shown the system and agrees that it can do everything in the requirements. The system is installed, but the staff finds the interface so difficult to use that their complaints are heard by upper level management. Because of these complaints, upper-level management will not invest any more money in the development of the new accounting system and they go back to their original, more expensive system.

Case Study 2

Five years ago, Mary started her own consulting business. She has been so successful that she now has several people working for her and many clients. Their consulting work included advising on how to set up corporate computer network, designing database management systems, and advising about security.

Presently she is designing a database management system for the personnel office of a medium-sized company. Mary has involved the client in the design process, informing the CEO, the director of computing, and the director of personnel about the progress of the system. It is now time to make decisions about the kind and degree of security to build into the system. Mary has described several options to the client. Because the system is going to cost more than they planned, the client has decided to opt for a less secure system. She

believes the information they will be storing is extremely sensitive. It will include performance evaluations, medical records for filing insurance claims, salaries, and so forth.

With weak security, employees working on client machines may be able to figure out ways to get access to this data, not to mention the possibility of on-line access from hackers. Mary feels strongly that the system should be much more secure. She has tried to explain the risks, but the CEO, director of computing and director of personnel all agree that less security will do. What should she do? Should she refuse to build the system as they request?

Case Study 3

John works in a large state department of family protection. The agency administers programs for individuals who are victims of family abuse, 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.

John 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, John 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, John 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.

Discuss the ethical issues and your recommendation.

Case study 4

Sharmila, a data analyst and programmer, is trying to write a large statistical program needed by her company. Programmers in this company are encouraged to write about their work and to publish their algorithms in professional journals. After months of tedious programming, Sharmila has found herself stuck on several parts of the program. Her manager, not recognising the complexity of the problem, wants the job completed within the next few days. Not knowing how to solve the problems, Sharmila remembers that a co-worker had given her source listings from his current work and from an early version of a commercial software package developed at another company. On studying these programs,

she sees two areas of code which could be directly incorporated into her own program. She uses segments of code from both her co-worker and the commercial software, but does not tell anyone or mention it in the documentation. She completes the project and turns it in a day ahead of time.

Discuss the ethical issues and your recommendation.

Case Study 5

Ezaz owns a small consulting business, Ezaz Consulting. The SoftwareCyber company plans to acquire a new Web-site hosting system. It has hired Ezaz to evaluate bids from several software developers and to recommend a bid for acceptance by SoftwareCyber. Max's wife works for WebWorks, one of the bidding software developers, and has written the bid that WebWorks has submitted. Max read his wife's bid before it was submitted and thinks it is excellent, but is not sure whether he should tell SoftwareCyber about his connection with one of the bidding companies.

Discuss Ezaz' ethical dilemma. What should Ezaz do?