

بسم الله الرحمن الرحيم

King Saud University
College of Computer & Information Sciences
Computer Science Department

| | |
|---|-----------------------------|
| Tutorial: N°1 | 28/1/2016 |
| Course Title: Software Engineering | Course Code: CSC 342 |
| Dr. Salah Hammami | Mr. Mudassar |

Exercise 1:

Ali, a statistical database programmer, is trying to write a large statistical program needed by his 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, Ali has found himself stuck on several parts of the program. His manager not recognizing the complexity of the problem, wants the job completed within the next few days. Not knowing how to solve the problems, Ali remembers that a coworker had given him source listings from his current work and from an early version of a commercial software package developed at another company. On studying these programs, he sees two areas of code which could be directly incorporated into his own program. He uses segments of code from both his coworker and the commercial software, but does not tell anyone or mention it in the documentation. He completes the project and turns it in a day ahead of time.

- Is there a violation of the Software Engineering Code of Ethics and Professional Practice?
Give the Software Engineering Code of Ethics to justify your answer?

Exercise 2:

Sameer works in a department of Neurology & Psychiatry. The agency administers programs for individuals 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. Sameer 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, Sameer has been given access to all files in the agency's mainframe computer. After assembling the data into a new file that includes the client names, he downloads it to the computer in his office. Under pressure to get the report finished by the deadline, Sameer decides he will have to work at home over the weekend in order to finish on time. He copies the information onto several disks and takes them home. After finishing the report he leaves the disks at home and forgets about them.

- Is there a violation of the Software Engineering Code of Ethics and Professional Practice? Give the Software Engineering Code of Ethics to justify your answer?

Choose violations from the following list to solve exercise 1 and 2.

- 2.01. Provide service in their areas of competence, being honest and forthright about any limitations of their experience and education.
- 2.02. Not knowingly use software that is obtained or retained either illegally or unethically.
- 2.03. Use the property of a client or employer only in ways properly authorized, and with the client's or employer's knowledge and consent.
- 2.04. Ensure that any document upon which they rely has been approved, when required, by someone authorized to approve it.
- 2.05. Keep private any confidential information gained in their professional work, where such confidentiality is consistent with the public interest and consistent with the law.
- 2.06. Identify, document, collect evidence and report to the client or the employer promptly if, in their opinion, a project is likely to fail, to prove too expensive, to violate intellectual property law, or otherwise to be problematic.
- 2.07. Identify, document, and report significant issues of social concern, of which they are aware, in software or related documents, to the employer or the client.
- 2.08. Accept no outside work detrimental to the work they perform for their primary employer.

- 2.09. Promote no interest adverse to their employer or client, unless a higher ethical concern is being compromised; in that case, inform the employer or another appropriate authority of the ethical concern.