



UNIVERSITY OF COLOMBO, SRI LANKA



UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING



DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)
Academic Year 2006/2007 – 3rd Year Examination – Semester 5

IT5102: Professional Issues in IT

No. of Pages = 2

- (1) GlobalSoft is a reputed, large software developing company with around 400 employees. The company administration recently sponsored the two Software Engineers Mr. A and Miss B and the System Administrator to participate in a workshop and a training program on 'Computer Security'. When A and B returned to work after training, they tested a password cracking software package which was introduced to them during the workshop, in the premises of GlobalSoft, in the presence of a few other Software Engineers. During this process, they were able to trace passwords of all users of the local area network of the GlobalSoft Company, which included the password of the System Administrator. Those who were present on this occasion, having realized the seriousness of what had happened assured to each other not to reveal what they have discovered. After several days, it was found out that, the System Administrator was unable to log on to the system with his password. An investigation revealed that an intruder had logged on to the system using the password of the System Administrator and had later changed the password.
- (2) A leading bank in Sri Lanka called for tenders to automate its banking operations including the functions of a large network of Automatic Teller Machines (ATMs). One of the major requirements of the bank was that, the proposed software should be able to handle at least 100 concurrent (on-line, real time) ATM transactions per minute. Among the offers for this tender were a few leading software developers from overseas who were already maintaining similar software. GlobalSoft decided to submit an offer for this tender but it was the first time that they were submitting an offer to develop software for such a large banking activity. However, GlobalSoft was unable to test the software in an actual environment so that it was not in a position to determine the number of concurrent ATM transactions per minute, but, the leader of this project in GlobalSoft was confident that they would be able to meet this requirement. Assuming that other bidders would respond to this requirement positively in their offers, GlobalSoft too decided to do the same.
- (3) The Employee Mr. X of GlobalSoft, who was permanently residing in Sri Lanka, was operating a website in India through an Internet Service Provider from India. Upon a complaint from a world famous software developer 'MSoft', Indian investigators found out that, X was advertising and marketing, unauthorized copies of a software package which was originally developed by MSoft, through his website. Subsequently, the Indian investigators requested relevant Sri Lankan authority for an investigation and later it was found out that X was operating his website using the resources at GlobalSoft.

- (4) GlobalSoft was awarded a project from the Department of Social Welfare to expand their automated activities within a specified period. In this project, GlobalSoft was required to develop a Total Solution to the Department of Social Welfare. At the time of the assignment of this project, this department was operating a software package developed and commissioned by another software developing company, SoftSolutions. The leader of the project (at GlobalSoft) decided that, due to the time constraint, GlobalSoft should automate only the remaining manual activities of the department and accommodate the already automated components into their software package as reusable modules. This proposal was approved by the department. GlobalSoft completed the project within the specified period and installed it with a free maintenance agreement of one year. However, GlobalSoft was unable to debug, modify or update the modules developed by SoftSolutions as the source code was not available. When SoftSolutions was called by the department to attend to what they have developed, they were surprised to see GlobalSoft using the software of SoftSolutions inside their software package.

SoftSolutions accused the Department of Social Welfare for allowing GlobalSoft to handle the software developed by them. At the same time, SoftSolutions accused GlobalSoft for fraud and lodged a formal complaint to the respective body.