FEEDBACK TUTORIAL LETTER

1st SEMESTER 2019

ASSIGNMENT 2

INFORMATION ADMINISTRATION 3A

IAD710S
ASSIGNMENT 2 MEMO

QUESTION 1

Software theft occurs when:

Someone steals software media
Someone intentionally erases programs
Someone illegally copies a program
The first type of software theft involves a perpetrator physically stealing the media that contain the software or the hardware that contains the media. For example, an unscrupulous library patron might steal the Microsoft Encarta Encyclopaedia CD-ROM.

The second type of software theft can occur when a programmer is terminated from, or stops working for a company. Although the programs are company property, some dishonest programmers intentionally remove the programs they have written from company computers.

The third type of software theft occurs when software is stolen from software manufacturers. This type of software, called piracy, is the unauthorised and illegal duplication of copyrighted software. We will discuss software piracy in detail in forthcoming sections.

**Safeguards against software theft**

To protect software from being stolen, owners should keep original software boxes and media in a secure location, out of sight of prying eyes.

All computer users should back up their files and disks regularly, in the event of theft. When some companies terminate a programmer of if the programmer quits, they escort the employee off the premises immediately. These companies believe that allowing terminated employees to remain on the premises gives them time to sabotage files and other network procedures.

To protect themselves from software piracy, software manufacturers issue **user’s licence agreements**.

A user must accept the terms in the licence agreement before using the software. These terms usually are displayed when you install the software. Use of the software constitutes acceptance of the terms on the user’s part.

**Type of licenses**

The most common type of license included with software purchased by individual users is a **single-user license agreement**, also called an **end-user license agreement (EULA)**. A single-user license agreement typically includes many of the following conditions that specify a user’s responsibility upon acceptance of the agreement.

Users **are permitted to:**

- Install the software on only one computer.
- Make one copy of the software as a backup.
- Give or sell the software to another individual, but only if the software is removed from the user’s computer first.

Users **are NOT permitted to:**
Install the software on a network, for example a school computer lab.
Give copies to friends and colleagues, while continuing to use the software.
Export the software.
Rent or lease the software.
Unless otherwise specified by a license agreement, you do not have the right to copy, loan, borrow, rent or in any way distribute software.
Doing so is a violation of copyright law. It is also a federal crime. Despite this, some experts estimate for every authorised copy of software in use, at least one unauthorised copy exists.

QUESTION 2

ENCRYPTION is a process of converting readable data into unreadable characters to prevent unauthorised access.
To protect transmitted information, many organisations and individuals use encryption software to scramble their transmissions.
When a user encrypts a message by applying a secret numerical code, called an encryption key, the message can be transmitted or stored as an indecipherable garble of characters. The message can be read only after it has been destructed with a matching key.
An encrypted (coded) message cannot be read by anyone except the intended recipient.

In the encryption process, the unencrypted, readable data is called plaintext. The encrypted (scrambled) data is called ciphertext.

To encrypt the data, the originator of the data converts the plaintext into ciphertext using an encryption key.

In its simplest form, an encryption key is a programmed formula that the recipient of the data uses to decrypt ciphertext.

QUESTION 3

SYSTEM FAILURE is yet another type of computer security risk.
A system failure is the prolonged malfunction of a computer. It can also cause loss of hardware, software, data or information.
A variety of causes can lead to system failure:
- Aging hardware
- Natural disasters such as fires, floods or hurricanes.
- Random events such as electrical power problems.
- Errors in computer programs.

One of the more common causes of system failure is an electrical power variation. Electrical power variations can cause loss of data and loss of equipment. It includes noise, under voltages and over voltages.

Electrical disturbances
Electrical disturbances include:
- Noise
- Under voltage
- Overvoltage/power surge

Noise

Noise is any unwanted signal, usually varying quickly. It mixes with the normal voltage entering the computer.

Noise is caused by external devices such as fluorescent lighting, radios and televisions, as well as by components within the computer itself.

Under voltage

Under voltage occurs when the electrical supply drops below 120 volts.
A burnout is a prolonged under voltage.
A blackout is a complete power failure
Under voltage can cause data loss but generally do not cause equipment damage.

Overvoltage/power surge

This occurs when the incoming electrical power increases significantly above the normal 120 volts.
Over voltages can cause immediate and permanent damage to hardware.

QUESTION 4

Analysis Phase
The second phase of the system development life cycle is the analysis phase. The systems analyst or the systems development team determines precisely what the new system or
modified system should accomplish. Here the emphasis is placed on what the system should do, not how. This phase is divided into two major activities:

1) Conduct a preliminary investigation
2) Perform detailed analysis

Preliminary investigation

The preliminary investigation is sometimes also called the feasibility study. The purpose of the feasibility study is to determine the exact nature of the problem or improvement and decide whether it is worth pursuing.

In this phase the systems analyst defines the problem or improvement accurately. Upon completion of the preliminary investigation, the systems analyst writes the feasibility report. This report presents the team’s findings to the steering committee.

Detailed analysis

The detailed analysis involves three major activities:

- Study how the current system works
- Determine the users’ wants, needs and requirements
- Recommend a solution

Detailed analysis sometimes is called logical design because the systems analysts develop the proposed solution without regard to any specific hardware of software. They make no attempt to identify the procedures that should be manual.

This letter serves to give feedback on Theory Assignment 2, which was part of the First Tutorial letter.

With regard to the answers you have provided, I will give general remarks on each question. The correct answers are specified in the memorandum provided.

**Question 1**

In general, you answered this question well, and satisfactory facts were provided.
Question 2

Most of you provided good-structured answers to this question.

Question 3

You answered this question satisfactory. Most of you did not provide enough facts for the sum total of the question.

Question 4

In general, you answered this question well enough, although some did not provide enough detail. Read carefully before you answer.

GENERAL

Keep the following in mind when you answer an assignment:

1. Always remember to read each question carefully before you answer it.
2. Think about the question first and then decide what the answer should be and how you should formulate it.
3. Rather write too much than too little.
4. Look at the mark allocation at each question - that should give you an idea of how many facts you need to provide
5. Apply the knowledge that you have and make the questions your own.
6. Think practically.
7. Do research and read more about the contents of the questions you need to answer.
8. Read my remarks at your answers in the assignment and try to avoid the same mistakes in the next assignment.
After all, your assignments were satisfying. Keep on studying and read about the subject whenever you can.

Best regards

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