



Republic of the Philippines
Department of Education
REGION III
SCHOOLS DIVISION OFFICE OF NUEVA ECija

LEARNING ACTIVITY SHEET
SPECIAL PROGRAM IN ICT 7
OFFICE PRODUCTIVITY 7
First Quarter, Week 4

Name of Learner: _____

Date: _____

Grade Level /Section: _____

Computer Software

BACKGROUND INFORMATION FOR LEARNERS

Are you a computer user enthusiast, a fond user of online 3D games, or an avid fan of social networking sites? If you are, do you know what are the behind the scenes to make the applications work? Indeed, these operations are possible through the so called computer software.

COMPUTER SOFTWARE

The term *software* refers to the procedures or steps that make the computers work. It is a set of computer programs or procedures dealing with the operation of information of processing system. Software makes the computer run and tell what to do to come up with the desired result.

Types of Software

A. SYSTEMS SOFTWARE OR OPERATING SYSTEM (OS)

System software or *operating system* is the most essential software that runs on a computer. It manages the computer's memory and processes also its software and hardware. Without an operating system, a computer will be useless.

Some popular operating systems include *Linux*, *Windows*, *Mac OS*, *UNIX*, and *OS/2 Warp*. Below are some of important functions of an operating system:

1. Memory
2. Processor Management
3. Device Management
4. File Management

B. APPLICATION SOFTWARE

Application software is used to realize specific tasks rather than just running the computer system. Some of the common application software are as follows:

1. Word Processors – these are used in creating letters, memos, reports, and alike.

Examples: *MS Word, WordStar, WordPerfect*

2. Electronic Spreadsheet – this software is equipped with rows and columns where data may be entered and processed automatically or tabulated.

Examples: *MS Excel, VisiCalc, Lotus 1-2-3*

3. Database Programs – are programs that use to organize data in a customized way.

Examples: *MS Access, Dbase, FoxBASE*

4. Multimedia, Desktop and Image Editing Software – are software used to create graphics, publications, and to edit images.

Examples: *Adobe PageMaker, Photoshop, CorelDraw*

5. Entertainment Software – these are especially designed for fun and relaxation.

Examples: *Real Player, WinAmp, Quick Time Movie, Windows Media Player, VLC Media*

6. Anti-Virus Utilities – these include special programs that are created to cure infected files. Examples:

AVG, Norton, McAfee

7. Engineering/Architectural Tools – these are used to design structures like bridges and buildings.

Examples: *AutoCAD, Revit*

8. Network and Communicating Software – these include browsers, instant messaging programs, and other similar programs.

Examples: *Mozilla Firefox, Messenger, Facebook*

COMPILER

It is a software program that transforms high level ASCII (*American Standard Code for Information Interchange*) text file that is written by a developer during a high level programming language into a low level object code called *binary code* in machine language as understood by the processor. The process of converting high-level programming into machine language is *compilation*.

LOADERS AND LINKERS

Linker and loader are the utility programs that plays a serious role within the execution of a program. The ASCII text file of a program passes through compiler, assembler, linker, loader within the respective order, before execution. The *linkers* take the object codes generated by the assembler combining them to generate executable module.

MULTIPROGRAMMING

Is a form of limited parallel processing where some programs are run at the same time on a uniprocessor. Since there is just one processor, there are often no true simultaneous execution of various programs. Instead, the OS executes part of a program, then a part of another, and so on.

The main idea of multiprogramming is to maximize the operation of CPU time.

TIME-SHARING OPERATING SYSTEM

Since there are many users involved to one system, each user has given time by the CPU to process and to run seamlessly without any problem. Users were ready to access an equivalent computer through different terminals and were prompted when it had been their turn.

Time-sharing Operating Systems includes Multics & UNIX operating systems. *Time-sharing* is synonymous with *multi-user*.

GROUPWARE

It is a computer assembly program that enable individual to work together on projects with a common goal while located remotely through shared Internet interfaces as means to communicate within the group. Its services include calendar sharing, collective writing, e-mail handling, sharing database access, electronic meetings and other related activities.

Examples were Lotus Notes and Microsoft Exchange. CU-SeeMe and Microsoft NetMeeting enable electronic face to face meetings. Groupware is also well-known as *collaborative software*.

The widespread use of groupware on the Web helped contribute to the event of Web 2.0, which uses instant messaging, Web conferencing, group calendars, document sharing, etc.

COMPUTER VIRUS

Aside from hardware failures and scientific and logical problems, computers also have other problems which may cause electronic memory damage, data processing interruptions, and important data loss. Such problems are caused by computer virus. *Computer virus* is a type of malicious software program in which can be inserted or attached its executable duplicates into other programs.

Another type of program associated with virus is so-called *worm*. Worm (Write Once, Read Many) is the term used for a program that reproduces itself without necessarily infecting the *host program*.

These viruses are fabricated by men and the reasons behind creating these undesirable things: to sabotage some large installations or just plain old hobby. Whatever the reason there is a law against developing programs that create viruses because it is a crime.

ANTIVIRUS SOFTWARE

It is a program intended for preventing, searching, detecting, and removing software viruses, and other malicious software such as Trojans, WORMS, and adware. Antivirus tools are necessary for users to be installed and be updated because a computer without antivirus protection may be infected after connecting to the internet.

Some of the antivirus programs are Norton, Bullguard, Bitdefender, Avira, Kaspersky, and a lot more.

Always be sure to have the best, up-to-date security software installed to protect one's computers, laptops, tablets, and smartphones.

SECURITY MEASURES

Everyday technology continuously offering increased flexibility and efficiency. Limitless innovations from smartphones, tablet PCs and internet figuring are widespread so as present growing security concerns surges.

Following are the safety tips that will enable to help protect against high technology failure:

1. Protect with passwords.

Each user should have a distinctive password wherever it appears on a device or network. Access to all devices should be safeguarded with unique user names and passwords using the strongest passwords containing numbers, letters and symbols, and should not base on usual words, typical dictionary terms or easy-to-guess dates like birthdays.

2. Design safe systems.

Minimize the scope of potential damage to the networks by using a unique set of email addresses, logins, servers and domain names.

3. Conduct screening and background checks.

This is to be done to avoid penetration of illicit invasions that may occur from inside network firewalls.

4. Provide basic training.

Building a company culture that emphasizes computer security that warn of the risks of careless password practices and therefore the thoughtless use of networks, programs and devices are often addressed through proper training programs.

5. Avoid unknown email attachments.

Do not click on unwanted email attachments for which it contain viruses, Trojan programs or computer worms. Before opening always contact the sender to verify message contents.

6. Hang up and call back.

If a claimed representative from the bank and seeking sensitive data calls, always end the decision and hang up. Then contact the organization or one of its public numbers to confirm the legitimacy of the call.

7. Think before clicking.

Phishing scams is activated though sending emails from seemingly trusted sources posing for usernames, passwords or personal information. Some scammers even create fake internet sites that encourage possible victims from keying the information themselves.

LEARNING COMPETENCY

Identify the different computer softwares

ACTIVITIES

ACTIVITY 1

Directions: The puzzle below consists of hidden computer softwares. Encircle at least ten (10) components vertically, horizontally or diagonally.

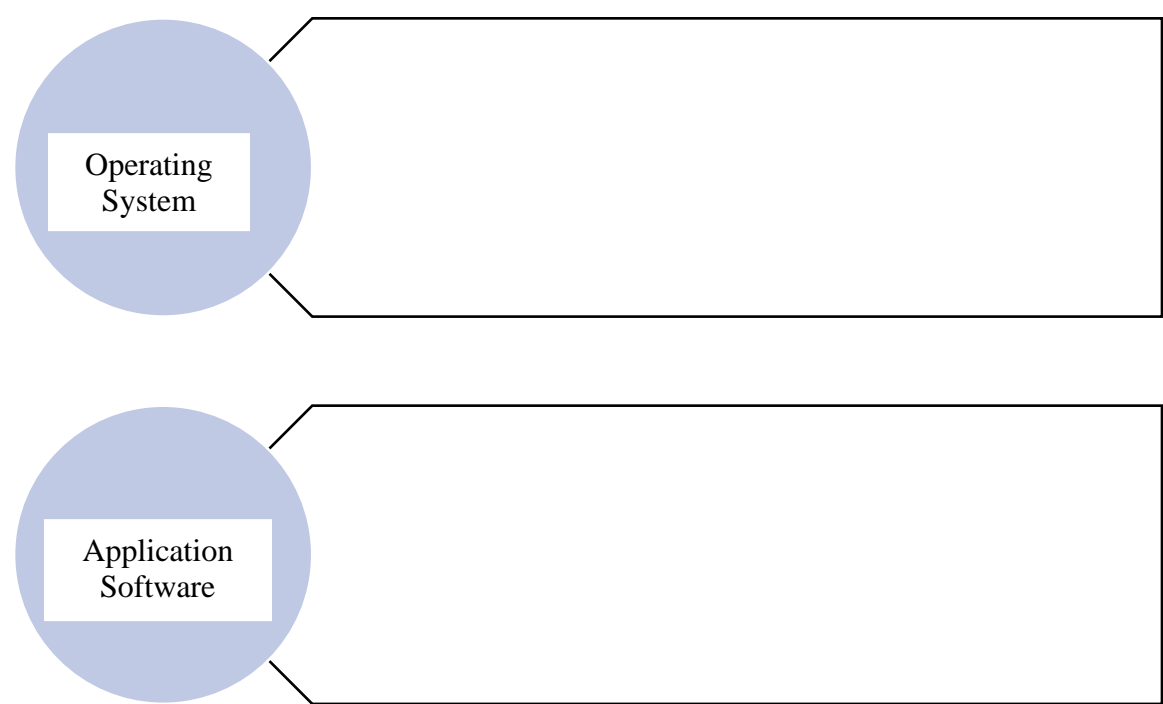
B	A	B	U	L	L	G	U	A	R	D	B	C	D	E	S	G	F	Q	W	E
M	R	T	Y	I	U	O	P	O	U	S	E	U	A	N	P	D	L	O	T	S
A	T	I	M	E	S	E	H	A	R	I	N	N	G	A	R	H	A	E	R	L
C	M	U	F	L	T	I	P	R	O	G	R	I	A	M	E	M	I	N	I	G
O	S	T	T	A	S	A	F	G	N	H	D	X	D	D	A	X	Z	N	P	R
S	K	E	Y	B	C	O	A	R	D	P	R	I	N	T	D	E	U	R	S	C
P	O	U	S	E	U	E	C	H	A	R	L	E	S	B	S	X	A	B	B	A
L	A	D	Y	A	D	A	B	Y	R	O	N	H	O	L	H	L	E	R	I	N
W	Y	S	I	W	Y	G	E	O	B	O	O	L	L	P	E	I	N	D	E	X
T	E	C	H	N	O	L	O	G	O	Y	G	R	A	C	E	H	O	P	P	N
M	A	R	K	Z	U	C	K	E	R	K	B	E	R	G	T	H	I	S	I	T
Q	U	I	C	K	T	I	M	E	M	O	V	I	E	T	H	S	P	U	N	E
C	H	P	O	U	S	E	U	P	R	O	G	R	I	A	M	E	C	A	R	E
P	R	O	G	R	I	A	M	E	D	M	A	C	H	I	N	E	A	B	A	C
C	E	W	A	R	P	C	U	R	S	W	O	R	D	P	E	R	F	E	C	T
H	A	R	D	W	A	R	E	S	P	R	O	G	R	I	A	M	E	O	F	P
W	I	N	D	O	W	S	T	W	A	R	E	U	T	I	L	I	Y	T	Y	U

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

ACTIVITY 2

Directions: After finding the different computer software, group them according to their type.

COMPUTER SOFTWARE



REFLECTION

How important is computer software to keep computer applications running accordingly?

REFERENCES FOR LEARNERS

<https://www.computerhope.com/jargon/s/software.htm>

https://www.tutorialspoint.com/computer_fundamentals/computer_software.htm

Prepared by: **LEILANI A. LEONCIO**
MILDRED M. DUMLAO
Name of Writers

Noted by: **LABERNE A. LADIGNON, JR**
Division ICT Coordinator/ OIC EPS

KEY TO CORRECTIONS

[illegible]