System Software

System Software is the type of software which is the interface between application software and system. Low level languages are used to write the system software. System Software maintains the system resources and gives the path for application software to run. An important thing is that without system software, system cannot run. It is general purpose software.

Example of some system software are : Operating system, Programming language translators, Communication Software, **Utility programs etc.**

Features of System Software

- System Software is closer to the system.
- Generally written in a low-level language.
- The system software is difficult to design and understand.
- Fast in speed
- Less interactive
- Smaller in size
- Hard to manipulate

Application Software

- Application Software is a program that does real work for the user. It is mostly created to perform a specific task for a user.
- Application Software acts as a mediator between the end-user and System Software. It is also known as an application package. This type of software is written using a high-level language like C, Java, VB. Net, etc. It is a user-specific and is designed to meet the requirements of the user**.**

  Example of some application software are: Word-processing software, Spreadsheet software, Database software, Education software etc.

Features of Application Software

- Perform more specialized tasks like word processing, spreadsheets, email, photo editing, etc.
- It needs more storage space as it is bigger in size
- Easy to design and more interactive for the user

- Generally written in a high-level language

Differences between System and Application software:

System Software	Application Software
They are designed to manage the resources of the system, like memory and process management, security, etc.	They are designed to fulfill the requirements of the user for performing specific tasks.
It is written in a low-level language like a machine or assembly language.	A high-level language is used to write Application Software.
The System Software starts running when the system is powered on and runs until the system is powered off.	The Application Software starts when the user begins, and it ends when the user stops it.
The System Software is a general-purpose software	Application Software is specific purpose software.
It is classified as a package program or customized program.	It is classified as time-sharing, resource sharing, client-server.
Installed on the computer system at the time when the operating system is installed.	Installed as per user's requirements.
Capable of running independently.	Can't run independently.
Users never interact with system software as it functions in the background.	Users interact with application software while using specific applications.
System software are independent of the application software	Application software needs system software to run.
System software is crucial for the effective functioning of a system.	Application software is not extremely important for the functioning of the system.

Utility Software

These software analyze and maintain a computer. These software are focused on how OS works on that basis it perform task to enable smooth functioning of computer. These software may come along with OS like windows defender, windows disk cleanup tool. Antivirus, backup software, file manager, disk compression tool all are utility software.
Some of popular utility software are described below:

Antivirus:
It is used to protect a computer from the virus. It detects a virus and notifies the user and take action to secure the computer. The virus is kept in different location called vault where it has different file system due to which virus effect it. User can itself instruct antivirus to delete malicious program, put it in vault or even ignore it.
Examples: AVG, AVAST, MCAFEE etc.

File Management Tool:
The software is used to manage files stored in a file system. It can be used to create, group file.
Like Windows File Explorer is a file management tool.

Compression Tool:
These tool are used to reduce the size of a file based on the selected algorithm.
Most operating systems include tools for compressing and uncompressing files..
Some Examples are: WinAce, WinZip, WinRAR, 7-Zip, PKZIP etc.

DISK MANAGEMENT TOOL:
Disk Management is utility first introduced in Window XP as a replacement of the fdisk command. It enables us to view or managed the disk drives installed in their computer and the partition associated with those drives.
Disk Management is used to manage the drives installed in a computer- like hard disk drives, and flash drives. It can be used to partition drives, assign drive letters and much more.

DISK CLEANUP TOOL :
Disk Cleanup tool can delete temporary internet files, old check disk files, compress old files and offline WebPages. Disk cleanup also allows we to empty the Recycle Bin, delete temporary files, and delete Thumbnails. . Running Disk Cleanup at least once a month is an excellent maintenance task.

DISK DEFRAGMENTER:

It is a utility in Microsoft Windows designed to increase access speed by rearranging file stored on a disk to occupy contiguous storage locations, a technique is called Defragmentation.
The defragmenter will search your hard drive partition and move data from one location to other location, so that the files stored there are one contiguous piece, instead of being throughout multiple locations on the hard drives partition..

Exercise:
1. Write the difference between system software and application software.
2. Define utility software.