



Types of Software

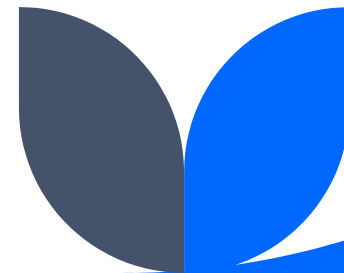
Lab7



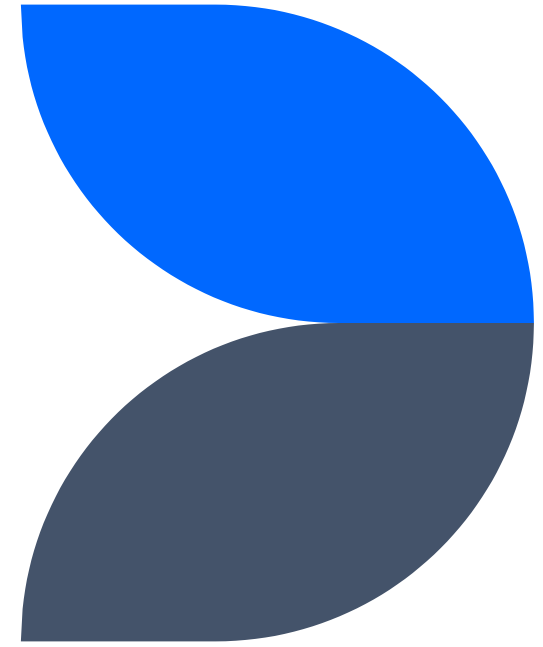
Types of Software (Classification 1)

System Software

Application Software



What is System Software?

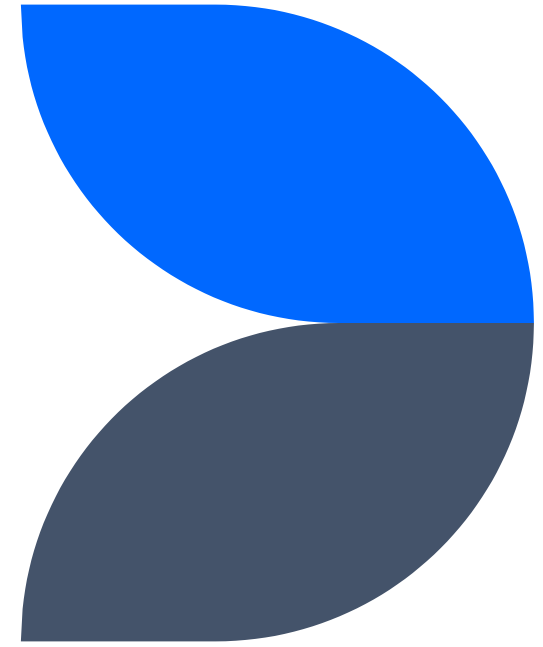


Definition

System software is a type of software that is designed to provide a platform for running and operating other software, namely application software. You need system software to run application software. It is written in low-level code.

An example of system software would be the Windows Operating System. Using the system software – Windows – you can operate application software, such as Microsoft Word.

What is Application Software?



Definition

Application software, on the other hand, is a type of software or program that is designed to complete a specific task. For example, Microsoft Word is an application software, and it allows you to write documents.

An internet browser like Google Chrome is also an application software because it allows you to complete a specific task – like conduct Google searches.

Examples of System Software

Windows

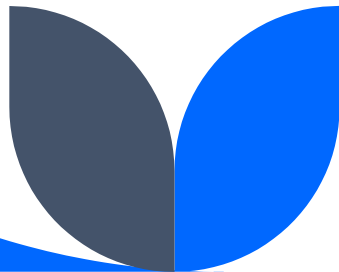
Using the Windows OS, you can install various application software. Since Windows interacts closely with your device's hardware to run applications on it, it is system software. If you don't have Windows, MAC, or another system software installed, you won't be able to do anything on your computer, let alone run application software.

Android

Using the Android system software, you can run application software like the Google Chrome app, the WhatsApp application software, the mobile Facebook app, the Instagram app, and many others.

Device Drivers

They are collection of files which enable hardware devices to communicate with the operating system of your computer. A motherboard chipset would need a driver, and so would an external printer.



Firmware

Firmware is software that is embedded in your computer and remains there forever, hence the name firmware. Without firmware, your device wouldn't work properly. Firmware is essentially a program containing a set of instructions that tell your device how to work.



Utility Programs

They help facilitate the system. An antivirus would be the perfect example of a utility program that provides diagnostic functions for the smooth operation of the operating system. Firewalls, data backup and restoration software, disk partition, disk defragmentation, and similar software can also fall under the category of system software, being that they are utility programs.

Programming Language Translators

Translate high-level code from application software to low-level code that system software can understand. Programming language translators are usually installed by the manufacturer.

Examples of Application Software

Microsoft Word

It allows you to write, read, and edit documents.

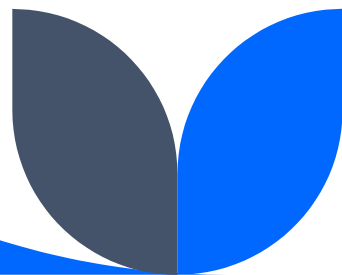
You don't need Microsoft Word for the smooth operation of your operating system. However, you do need your operating system to run Microsoft Word, and it serves an end purpose for the user.

Google Chrome

Whether you are installing it on a Windows operating system or an Android operating system, it is an application that allows you to browse the web and read articles on the web.

Skype

It can be installed on devices like Windows, Android, and iOS machines. Using Skype, you can communicate with other people over the internet using voice calls, video chats, and text messaging.



VLC Media Player

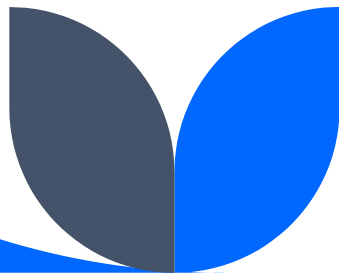
It falls under the category of media players, like Windows Media Player. It is free and open-source and allows you to play most types of media files.

WhatsApp

You can download it on various devices to chat with friends and make video and voice calls. The desktop app and mobile app are application software.

Netflix

Netflix is a very popular application software that allows you to stream movies and films from your desktop or phone. Along with Hulu and Amazon Prime Video, it is one of the most popular streaming-on-demand application software.



SYSTEM SOFTWARE VERSUS APPLICATION SOFTWARE

SYSTEM SOFTWARE

Computer software designed to provide a platform to other software

Manages resources and helps to run hardware and application software

Runs when the system starts and runs till the end

Developed using languages like C, C++, Assembly

Essential for the proper functioning of a system

Ex: operating system, language processors and device drivers

APPLICATION SOFTWARE

Software designed to perform a group of coordinated functions, tasks or activities for the benefit of the user

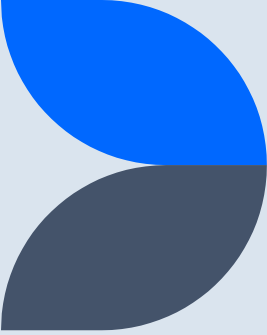
Performs a specific task according to their type

Runs when the user requires

Developed using languages like Java, C, C++, Visual Basic

Not extremely important for the functioning of the system

Ex: Word processor, Spreadsheet, Presentation software, web browsers, graphics software



Types Of Software (Classification2)

Freeware

Open Source

Propriety Software

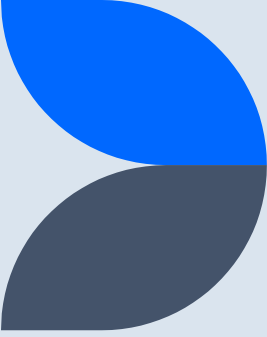
Shareware

Malware, Spyware, and Adware

Freeware

Freeware is software that is free to download and use. Usually, it includes application software, but some system software may be free as well. Freeware does not provide any liberty for modifying the software or charging a fee for its distribution.

Skype, for example, is freeware, because you can download it for free and use it without paying. The same goes for WhatsApp, Telegram, Windows Media Player, Google Chrome, Firefox, and many others.



Open Source

The owners of open source software make the source code of the software open and available to everyone, hence the name open source. Since the source code is freely available, everyone is welcome to view or alter it.

Many application software are open source, but system software can be open source as well. For example, Ubuntu is open source.

Open Source software can either be free or chargeable.

Not all freeware is open source.

Propriety Software

Proprietary software is the opposite of open source software. It is owned by a company and individual, and you may or may not have to pay to use it.

You definitely can not access the source code.

Some examples are Microsoft Windows, iTunes and Adobe Flash Player.

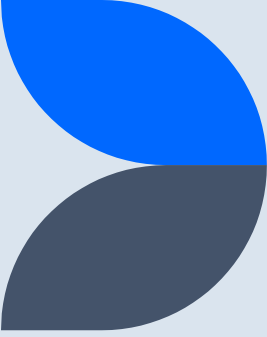


Shareware

Shareware is like freeware but it is not entirely free. Instead, it is being “shared” with you for a specific amount of time.

Usually, shareware will have a free trial, after which it will stop being shared with you.

Some examples of shareware are Adobe Acrobat, Getright, PHP Debugger and WinZip.



Malware, Spyware, and Adware

Malware, spyware, and adware are examples of software that you don't want to have. They are distributed, usually without consent, via download links and sketchy websites, and they infect your computer to show you ads, spy on your activities and location, and steal your information.



Thank you