MICROSOFT WINDOWS OPERATING SYSTEM

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Анотація У статті дано визначення поняття операційної системи, наведено її переваги та недоліки. **Ключові слова:** операційна система, програмне забезпечення, Віндоуз, Майкрософт.

Abstract The article defines the concept of operating system, its advantages and disadvantages. **Keywords:** operating system, software, Windows, Microsoft.

The computer can do nothing until it is given instructions called software. Software is a set of instructions that tells the computer what to do.

There are two types of software:

- Operating System Software
- Application Software

Windows is a graphical operating system developed by Microsoft. It allows users to view and store files, run the software, play games, watch videos, and provides a way to connect to the internet. It was released for both home computing and professional works.

Microsoft Windows operating system was developed by Microsoft to overcome the limitation of its own MS-DOS Operating System. First successful version were Windows 3.0, in 1990. Subsequently released version were Windows 98, Windows 2000, Windows XP, Windows Vista, Windows 7, Windows 8 and latest Windows 10.

Windows provides an easy way to start programs and runs more than one program at a time (called Multitasking). It provides an easy way to switch between open programs (the taskbar does it). It also provides access to the Internet (Internet Explorer does it).

Advantages of Windows operation system are:

- Support for all hardware: As windows OS is used by 95% of users so most of the hardware vendors make drivers for windows.
- Ease of use: All versions of Microsoft Windows have something common in it which makes users easy to shift from one version to another. Windows 7 users have no difficulty in migrating to Windows 10 because most of the features of Windows 10 are the same as windows 7. The user interface of windows is also easy to use than UNIX and MAC.
- Software support: Windows platform is best suited for game and software developers. Windows have large number audience so developers prefer to make utilities, games and software for windows OS. Linux users cannot make windows apps so it is better to use windows for developing apps.
- Plug and play feature: Most hardware can be detected automatically by plug and play feature. You do not need to manually install the hardware but it is ready to use when attached webcam, keyboard, mouse, mobile device etc.
- Desktop and touch screen: Windows 10 is made for both touch screen devices and desktop computers. The user interface of Windows 10 is made in such a way that it works better for any type of windows device.

Disadvantages of Windows operating system are:

• Virus attacks: Windows have a high amount of hacker attacks. The hackers can easily break windows security. So windows users are dependent on anti-virus software and have to pay monthly charges to companies to protect their data. Also, windows users have to update OS to keep up-to-date with security patches.

- Most of the software is paid: Most windows programs are paid games, graphics software (Photoshop), download manager (IDM) and other popular software are paid. You have to buy these software or pay a monthly free to use them.
- Rebooting a system: If your system becomes slow in performance then you have to reboot it. If you load many programs at the same time then your system slows down and hangs up. The only solution for this is to reboot.
- High price: Linux OS is open source and is free to use for everyone but windows OS has paid license and you cannot use windows OS legally free. The cost of buying a copy of windows OS is high as well. You also need to buy other Microsoft software e.g. MS Office to do regular office work on the computer.
- High computer resources: If you are installing windows, OS then your computer should have high ram capacity, a lot of hard drive space and good graphics card. This is because of features that are used in windows. If you want to install graphics software Photoshop then 16 GB of ram is recommended.

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