

Write an expository essay comparing two operating systems: **MS-DOS, Windows XP, Windows 7, Windows 8.1, Windows 10, Mac OS X, Free BSD, Linux, Ubuntu, Fedora, Debian, CentOS, Android, IOS.** (400-600 words). Do not forget to indicate the references (*sources of inspiration* 😊).

OPERATING SYSTEM OVERVIEW

Operating system is the backbone of a computer, providing the necessary interface for users to interact with hardware and software. Linux and Windows 10 are two well-known and popular operating systems, each with its own strengths and weaknesses.

One of the most apparent differences between Linux and Windows 10 lies in their user interfaces.

In the blue corner of the ring is situated Windows 10, developed by Microsoft, and known for its user-friendly and visually appealing interface. The Start menu, taskbar, and desktop icons contribute to an intuitive user experience. Microsoft has put significant effort into creating an OS that caters to a wide range of users, from casual home users to professionals.

On the other side of the ring is Linux, that offers a diverse range of desktop environments, such as GNOME, KDE, and Xfce. The flexibility of Linux allows users to choose an environment that aligns with their preferences. While this diversity offers more customization options, it may also lead to a steeper learning curve for new users who must navigate between different desktop environments.

Windows 10 has a vast library of compatible software, with many popular applications and games developed specifically for the Windows platform. Microsoft has built strong relationships with software developers, ensuring a rich ecosystem for its users. However, the downside is that Windows users often need to deal with licensing fees for certain applications.

While Windows is strictly following the copyright rules, Linux, being an open-source platform, boasts a wide array of free and open-source software. Package managers like APT for Debian-based distributions and YUM for Red Hat-based distributions simplify software installation and updates. The Linux community emphasizes the use of open standards, fostering a collaborative environment that encourages the development of free software alternatives.

Security is a critical aspect of any operating system, and both Linux and Windows 10 have their approaches to safeguarding user data and system

integrity. Linux is famous for its security features, partially owing to its Unix-based architecture. The privilege separation model and robust permission system contribute to a more secure environment. Additionally, the open-source nature of Linux allows the community to promptly identify and address security vulnerabilities.

Windows 10, meanwhile, has made significant steps in enhancing security over previous Windows versions. Features like Windows Defender, BitLocker, and regular security updates aim to protect users from malware and other threats. Microsoft has also introduced security features like Windows Hello for biometric authentication and Device Guard for application control.

All in all, the choice between Linux and Windows 10 ultimately depends on the user's preferences, requirements, and technical expertise. Windows 10 stands out for its user-friendly interface, extensive software compatibility, and gaming support. Linux excels in customization, security, and the availability of free and open-source software. Both operating systems have their advantages, and the decision should be based on the user's specific needs and priorities. As technology continues to evolve, the competition between these two giants will likely drive further innovation and improvements in both Linux and Windows 10.

499 Words

References

<https://en.wikipedia.org/wiki/GNOME>

<https://en.wikipedia.org/wiki/KDE>

<https://en.wikipedia.org/wiki/Xfce>

[https://en.wikipedia.org/wiki/APT_\(software\)](https://en.wikipedia.org/wiki/APT_(software))

<https://en.wikipedia.org/wiki/Yum>

<https://en.wikipedia.org/wiki/BitLocker>

<https://www.mygreatlearning.com/blog/linux-vs-windows/#:~:text=Linux%20is%20an%20open%2Dsource%20operating%20system%2C%20whereas%20Microsoft%20is,don't%20have%20such%20privileges.>