Monologue on *OPERATING SYSTEMS (UNIT 3)*

Step 1. Introduction

- 1. Start with a hook sentence that will attract the listener's attention, a quote, a proverb, etc.
- 2. Lead your speech steadily to the main part of your talk.
- 3. The introduction may consist of 3-6 sentences.

Step 2. How do computers work?

- 2.1. What is an OS?
- 2.2. Types of OS (GUI, Multi-user, Multiprocessing, Multithreading, Multitasking). What are they?

Have you ever stopped to think about the invisible but crucial backbone of modern technology? Well, allow me to introduce you to the fascinating realm of operating systems. From the moment we power on our computers or smartphones, these intricate pieces of software orchestrate a symphony of processes, ensuring smooth operation and efficient utilization of resources. Today, I am excited to take you on a journey through the intricate world of operating systems, exploring their significance, evolution, and impact on our daily lives.

An operating system, often abbreviated as OS, serves as the backbone of any computer system. Essentially, it enables the computer hardware to communicate and operate with the computer software, ensuring smooth functionality and user experience.

Firstly, we have the GUI operating systems, which stands for Graphical User Interface. These systems utilize graphical user interfaces, allowing users to interact with their computers through graphics and icons rather than text-based commands.

Moving on, we have multi-user operating systems. As the name suggests, these systems allow for multiple users to use the same computer at the same time and at different times, making them ideal for environments where several individuals need access to the same resources.

Next, we have multiprocessing operating systems, multitasking operating systems, and multithreading operating systems. These types of operating systems support and utilize more than one computer processor, allowing for enhanced performance and efficiency. Additionally, they allow multiple software processes to run at the same time and different parts of a software program to run concurrently, thereby maximizing the utilization of available resources and improving overall system responsiveness.

Step 3. What do OS do?

- 3.1. Why is an OS one of the most important parts of a computer?
- 3.2. Speak about the tasks operating systems must accomplish.

The OS serves as the conductor of a symphony, controlling the computer's system resources with precision and finesse. Its adaptability towards different uses makes it indispensable in various computing environments.

Now, let's delve into the myriad tasks that operating systems must accomplish. Firstly, they must have/provide a consistent

application program interface (API), ensuring compatibility and ease of development across different software applications. Additionally, operating systems must efficiently allocate resources, ensuring that each process and application receives its fair share of the system's capabilities.

Furthermore, operating systems must allocate enough of the processor's time to each process and application, ensuring that they run efficiently. In a multitasking environment, where multiple applications and processes are running concurrently, the OS must manage memory usage judiciously. It ensures that each process has enough memory to execute while balancing the needs of each process with the different types of memory available.

Moreover, operating systems serve as translators, translating the electrical signals sent from the OS or application program to the hardware device.

Step 4. History of OS

4.1. Speak about the generations of operating systems.

4.2. Compare two modern OS.

Initially, computers relied on manual input, with programmers entering programs one bit at a time on rows of mechanical switches. The first-generation operating systems were single-stream batch processing systems, which allowed for the execution of one job at a time. These systems switched from job to job as needed, keeping peripheral devices in use.

With the advancement of technology, second-generation operating systems emerged, introducing the concept of multiprogramming. These systems could run several jobs at once, improving resource utilization and overall efficiency. Additionally, they developed time-sharing techniques, enabling multiple users to interact simultaneously with the system.

Moving forward, third-generation operating systems continued to evolve, focusing on compatibility and improved resource management. These systems multiprogrammed a large number of simultaneous interactive users, enhancing productivity and user experience.

Today, we witness the dominance of fourth-generation operating systems, characterized by their sophisticated graphical interfaces and multifunctionality. Let's compare two modern OS: Windows and macOS. Both operating systems take better advantage of the computer's resources, offering seamless integration with various software applications and peripherals. However, Windows is known for its wide compatibility with different hardware configurations and software, while macOS boasts a sleek interface and tight integration with Apple's ecosystem.

Step 5. CREATIVE THINKING

Introduce your own extra idea(s) on advertising that hasn't/haven't been mentioned before. Substantiate your

Innovative Interactive Ads: Imagine advertisements that not only promote products or services but also engage users in a meaningful way. These ads could utilize interactive elements such as quizzes, games, or augmented reality experiences to

choice.	captivate audiences and create memorable brand interactions. By incorporating creativity and interactivity, advertisers can forge deeper connections with consumers and differentiate their brands in a crowded marketplace.
Step 6. Conclusion	In conclusion, we've explored operating systems extensively,
	from types and functionalities to their historical evolution. We've
Summarise the ideas of steps 2,3,4,5.	learned about their vital role in resource management and task
	allocation, ensuring efficient computer operation. From early
	manual input systems to modern OS like Windows and macOS,
	each generation has brought innovation in user interaction and
	resource utilization. Lastly, we discussed creative advertising
	ideas, proposing interactive ads to engage consumers and
	enhance brand recognition in new ways. Overall, these insights
	highlight the dynamic nature of technology and creativity in our
	digital era.