**The major types of operating system are as follows:**

**1. Batch OS**

The batch operating system does not have a direct link with the computer. A different system divides and allocates similar tasks into batches for easy processing and faster response.

The batch operating system is appropriate for lengthy and time-consuming tasks. To avoid slowing down a device, each user prepares their tasks offline and submits them to an operator.

**2. Time-sharing or multitasking OS**

The time-sharing operating system, also known as a multitasking OS, works by allocating time to a particular task and switching between tasks frequently. Unlike the batch system, the time-sharing system allows users to complete their work in the system simultaneously.

It allows many users to be distributed across various terminals to minimize response time

**3. Distributed OS**

This system is based on autonomous but interconnected computers communicating with each other via communication lines or a shared network. Each autonomous system has its own processor that may differ in size and function.

A distributed operating system serves multiple applications and multiple users in real time. The data processing function is then distributed across the processors

**4. Network OS**

Network operating systems are installed on a server providing users with the capability to manage data, user groups and applications. This operating system enables users to access and share files and devices such as printers, security software and other applications, mostly in a local area network. Potential advantages and disadvantages of network operating systems are:

**5. Real-time OS**

Real-time operating systems provide support to real-time systems that require observance of strict time requirements. The response time between input, processing and response is tiny, which is beneficial for processes that are highly sensitive and need high precision.

These processes include operating missile systems, medical systems or air traffic control systems, where delays may lead to loss of life and property. Real-time operating systems may either be hard real-time systems or soft real-time systems. Hard real-time systems are installed in applications with strict time constraints.

The system guarantees the completion of sensitive tasks on time. Hard real-time does not have virtual memory. Soft real-time systems do not have equally rigid time requirements. A critical task gets priority over other tasks.

They allow easy allocation of memory.

Real-time operating systems are used for tasks such as scientific experiments, medical imaging, robotics and air traffic control operations.

**6. Mobile OS**

Mobile operating systems run exclusively on small devices such as smartphones, tablets and wearables. The system combines the features of a personal computer with additional features useful for a handheld device.

Mobile operating systems start when a device is powered on to provide access to installed applications. Mobile operating systems also manage wireless network connectivity