



# The Technological Horizon

## INTRODUCTION

An operating system is software that manages computer hardware. The hardware must provide appropriate mechanisms to ensure the correct operation of the computer system and to prevent user programs from interfering with the proper operation of the system. The purpose of an operating system is to provide an environment in which a user can execute programs in a convenient and efficient manner. Every computer must have an operating system to run other programs. The operating system coordinates the use of the hardware among the various system programs and application programs for various users. It simply provides an environment within which other programs can do useful work

# OVERVIEW

## Types of Operation System

There are two different types of operating system

1. Single User System. It can run only one program at a time for example Disk Operating System DOS.
2. Multi User System. It can run more than one program at a time for example UNIX system.

## What are the three main purpose of an operating system?

An operating system has three main functions: (1) manage the computer's resources, such as the central processing unit, memory, disk drives, and printers, (2) establish a user interface, and (3) execute and provide services for applications software.

## What are the commonly used operating system?

Most popular operating system by computer

1. Windows 7 is the most popular operating system for desktop and laptop computers.
2. Android is the most popular smartphone operating system.
3. iOS is the most popular tablet operating system.
4. Variants of Linux are most widely used in the Internet of things and smart devices.

Following are some of important functions of an operating System.

- Memory Management
- Processor Management
- Device Management
- File Management
- Security
- Control over system performance
- Job accounting
- Error detecting aids
- Coordination between other software and users



# JOB ROLES

- SYSTEM ENGINEER
- DESKTOP SUPPORT ENGINEER
- TECHNICAL SUPPORT ENGINEER
- ROBERT OPERATING SYSTEM DESIGNER
- INFRASTRUCTURE SERVICE MANAGEMENT
- LINUX SOFTWARE ENGINEER
- SYSTEM ADMINISTRATOR



Operating system behaves as a resource manager. It utilizes the computer in a cost effective manner. It keeps account of different jobs and the where about of their results and locations in the memory. It schedules jobs according to their priority passing control from one program to the next. The overall function of job control is especially important where there are several users (a multi user environment). Operating system makes a communication link between user and the system and helps the user to run application programs properly and get the required output. Operating system has the ability to fetch the programs in the memory when required and not all the operating system to be loaded in the memory at the same time. Thus giving the user the space to work in the required package more conveniently and easily. Operating system helps the user in file management, making of directions, and saving files in them, is a very good feature provided by the operating system to organize data according to the needs of the user. Multiprogramming is a very important feature of operating system. It schedules and controls the running of several programs at once.

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