

Class: VIII Subject: Computer

Topic: Operating System and Graphical User Interface - Role and Functions Teacher: Prabhdeepkaur

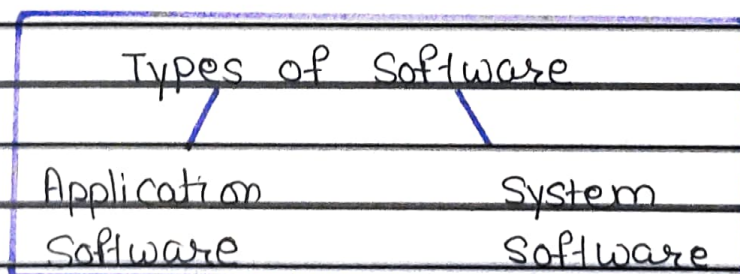
Good Morning Students,

This lesson is for Class VIII, for the Subject of Computers. Topic is 'Operating System and GUI - Role and Functions', which is covered in Chapter 1, starting on page no. 6 given in your textbook titled 'Logix 8'.

Students, today we will study about Operating System. But before learning about Operating System, let us discuss about Hardware and Software Components of computer. As we know that Computer works with an interaction of hardware and Software. Hardware and Software are interdependent, as hardware needs the Software to operate and Software cannot be utilized without hardware. Let us learn about these terms:

Hardware: All the physical components or parts of computer are known as hardware.

Software: The set of instructions or programs that tells the hardware what to do is known as Software. For example Mobile phone is a hardware device and all the applications in it are Software.



1. Application Software: These are used for specific purpose only. For example Ms word, Ms Paint, Ms excel etc.

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2. System Software: These software are designed to control and manage the working of computer system.

Students, let us further understand that what is an Operating System. As we know that we cannot talk to computer directly as computer understands only a particular type of language and that language is a set of instructions. For that an interface is required between user and hardware. So operating system acts as an interface. For example school principal has various responsibilities to perform such as managing the school, supervising teachers, students, workers and then analysing examination schedule, meeting parents and many more works. Similarly operating system manages so many works to operate the computer system. As a school cannot be run without an efficient principal, similarly a computer cannot be run without an operating system.

Need for an Operating System:- Operating system is needed to fill the communication gap between the hardware and the user. As when you play real time games, you must have noticed that when you press buttons of your remote to move your character or to make jump your character then your digital character seen on the screen moves or jumps. This is how operating system helps us to communicate with our machine.

Features and functions of an operating system:

1. Processor Management: The OS ensures

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that each process or application receives enough time from the processor to function properly.

2. Memory Storage and Management: As OS keeps track of information regarding files to store, create, transfer in an organised manner.

3. File Management: As OS has to make efficient utilisation of different types of memory within the system.

4. Device Management: As OS receives requests from input and output devices and performs a specific tasks and communicates back to the requesting devices.

5. Security and Protection: It protects the resources and information stored on a computer system against unauthorised access.

6. Provision of user Interface: It provide two types of interface that are character user interface and graphical user interface.

7. Job Control: Using a standard set of system commands called Job Control language, user can communicate with the operating system.

Students, I am ending the lesson here. kindly read the side boxes given on page no. 7 and 9.