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User Interface for Desktop and Laptop:

The User Interface (UI) is the point of human-computer interaction and communication in a device. An interface is a set of commands or menus, icons etc. through which a user communicates with a program. Thus, user interface provides the features of a computer system which allows the user to interact with it.

Types of user interfaces: There are different ways of interacting with computer systems on the basis of which there are five main types of user interface:

1) **Command Line Interface (CLI):** Command line interfaces are the oldest of the all interfaces. It involves the computer responding to commands typed by the operator/ users. This type of interface has the drawback that it requires the user to remember a range of different commands and is not ideal for novice users.

2) **Graphical User Interface (GUI):** Graphical user interfaces (GUI) are sometimes also referred to as WIMP because they use *Windows*, *Icons*, *Menus* and *Pointers*. Operators use a pointing device (such as a mouse, touchpad or trackball) to control a pointer on the screen which then interacts with other on-screen elements. It allows the user to interact with devices through graphical icons and visual indicators. Today nearly all digital interfaces are GUIs.

3) **Menu Driven Interface (MDI):** A menu driven interface is commonly used on cash machines (also known as automated teller machines (ATM's), ticket machines and information kiosks (for example in a museum). They provide a simple and easy to use interface consists of a series of menus and sub-menus which the user accesses by pressing buttons, like on a touch-screen device.

4) **Form Based Interface (FBI):** A form-based interface uses text-boxes, drop-down menus, text areas, check boxes, radio boxes and buttons to create an electronic form which a user completes in order to enter data into a system. This is commonly used on websites to collect data from a user, or in call centres to allow operators to quickly enter information gathered over the phone.

5) **Natural Language Interface (NLI):** A natural language interface is a spoken interface where the user interacts with the computer by talking to it. It is also referred to as a 'conversational interface', this interface simulates having a conversation with a computer. An Example of this type of interface is Voice Recognition.

Assignments:

1. What do you understand by User Interface (UI)? What is the role of operating system to provide user friendly UI?

2. Which User Interface is most popular in today's scenario? Write some advantages of GUI over CLI.