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Graphical User Interfaces vs. Command-line Interfaces

There are several ways in which users are able to interact with the software on their computers and devices; however, the two most common interfaces to navigate softwares is the graphical user interface and the command-line interface.

Graphical user interfaces (GUIs) are systems in which users interact with their devices through the use of elements such as buttons, icons, and menus. The designers of these elements strive to make the user's experience more intuitive and natural. This system of interacting with a device has become the more common interface, and can be seen in Apple's Macintosh system as well as Microsoft's Windows operating system. An example of these intuitive elements is the trash can icon on the Macintosh system, where users can drag their files to the trash can for them to be deleted. Like a typical trash system, files are not immediately deleted, and users still have an opportunity to retrieve their files before they are permanently deleted, similarly to how you are still able to retrieve trash thrown away before the trash collector comes.

Alternatively, there is the Command-line Interface (also known as a command-line shell), which, unlike GUI elements, CLI users interact with their software through the use of commands, which are formatted as a line of text. The Command-line interface takes more time to learn, and isn't as intuitive as the Graphical user interface, but can be significantly faster and more streamlined, especially when commands can be stored in a script file that can be used repeatedly, and allows for contained commands to be executed as a group.

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