

When diving into the world of software, it's important to consider the ways one interacts with a computer and its programs. Two primary methods of communication with a computer's system are through a graphical user interface (GUI), and a command line interface (CLI). These interfaces have some key differences that help determine when and how they should be used.

The kind of interface that most people are probably more familiar with is the GUI. As the name implies, GUI involves the use of graphics as a means of interaction. This includes icons, buttons, menus, etc. This is a good method for beginners or casual users, as the graphics make many tasks intuitive, and overall navigation, easier. A consideration with this kind of interface however, is that one has to follow the general laid out path to perform tasks, so things that are more repetitive or complex may take a long time, or be more difficult in comparison to a CLI. This makes GUI more preferable for day-to-day or casual use.

A command-line interface is text based. Instead of clicking through different folders like in a GUI, the user simply puts in text commands of what they want. Although, this comes with the caveat of the user needing to know which command corresponds to which task, meaning one has to research or memorize what they need to type in before they can complete something. This mode of interface is popular among developers as it gives full control of the system, displays lots of information at once, and can speed up many tasks. Overall, although CLI can be very efficient, the prior knowledge required generally makes it suited for more specialized uses.