

CLI is a text-based interface where users interact with the system by typing commands into a terminal or console, providing precise control and efficiency. GUI is a graphical interface that allows users to interact with the system through visual elements such as icons, buttons, and windows, making it more intuitive and user-friendly. CLI requires knowledge of specific commands and syntax, which can present a steep learning curve for beginners. GUI is generally easier to use, catering to both beginners and experienced users due to its visual nature. CLI offers greater control over the system, allowing users to perform complex tasks efficiently and script sequences of commands. GUI provides limited control compared to CLI but allows users to observe and operate multiple elements simultaneously. CLI uses very little memory, making it lightweight and suitable for environments where resources are limited. GUI consumes more memory due to its graphical components and animations. In conclusion CLI and GUI serve different user needs and contexts, with CLI being more efficient and powerful for advanced users, while GUI is more accessible and user-friendly for everyday tasks.