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Homework 1

Before the friendly user interface seen on many of our favorite apps, phones, and computers, there was what is called command line interface, or CLI. CLI prompts users to type commands into a terminal or consol window. A certain degree of knowledge and expertise came with navigating and operating these lines of code. It wasn’t until the graphic user interface, or GUI, was invented that users were offered a more visual friendly mode of navigation on technology such as computers. GUI allowed for a more general audience to be able to interact in the same way as more learned computer users.

GUI focuses, as the name infers, on graphical elements rather than just code for users to be able to create, save and load data. Things like folders and documents have unique icons that allow for users to memorize and easily access data – the world of the computer is navigable within a visualized 2-D (or sometimes 3-D) interface. This visualization made for a more forgiving, easily accessible interface which audiences could quickly and easily “surf” the web.

CLI, invented in the mid-1960s, was actually a massive improvement from the systems invented during World War II. Although not considered nearly as visually engaging as GUI’s today, CLI does include visual lines of code which can be interacted with. These lines of code, usually in a terminal or consol window, allow the user to directly interact with the operating system of the computer via scripts or instructions typed out by the user. It’s typically faster than GUI, more precise, and conserves more memory within the computer. However, these upsides come at a cost. CLI is harder to understand and interact with. Visually, CLI cannot be customized to the user’s liking. Any mistakes within commands by the user are not automatically corrected making CLI unforgiving. There is an undisputed directness with CLI that GUI does not offer, and more experienced coders theoretically have more control over the system they’re using.

In conclusion, the difference between CLI and GUI comes down to visual friendly language. CLI is not catered towards a general audience, is hard to understand at first yet clear and concise with its controls. GUI is more forgiving, allows for customization and is visually much friendlier that CLI, however, GUI is slower and consumes more memory. Overall, choosing between the two comes down to flat preference, and whether or not one is comfortable with CLI’s rigorous language.