**GUI vs CLI**

What came first, the chicken or the egg? Well, in the world of computers and tech, neither. Hopefully it's no surprise chickens and eggs are uninvolved with computers. A better question here would be: What came first, the GUI (graphical user interface) or the CLI (command-line interface)? The question regarding the chicken and the egg may be unresolved, but this is not so for the GUI and CLI; the CLI came first. So what are GUIs and CLIs anyway and what are their differences?

To begin with, what is a CLI, or command-line interface? The CLI is a text based interface system that allows the user to interact with a computer through commands. Looking at the CLI, there is nothing to catch the eyes or anything that makes it easy for a beginner to navigate. Rather, it looks just like what it is, lines of code. This visual barrier, among other barriers, causes the command-line interface to be more difficult to pick up than the GUI. Another one of these barriers is a lack of knowledge. New users may not know where to go, or more importantly, what to type, to carry out their desired action.

Next, what is a GUI, or graphical user interface? This is likely a more widely known term to the average person, as well as a more familiar platform due to the visual simplicity and feedback. A GUI allows its user to work with their system through the use of visual components such as buttons, cursors, icons, menus, etc. The GUI is a very straightforward method of computer interaction with very little know-how needed. It is almost always what will be seen when entering programs such as websites or video games. The graphical user interface does however have less ability than the CLI. The GUI is unable to perform tasks not presented within the interface.

These interfaces are very different in a lot of ways, so is one better than the other? Not at all. They are both incredibly useful in their own manner. They each have pros and cons that cause one to be used over the other in certain circumstances. The CLI is less intuitive but it also comes with greater control and efficiency for the experienced user. It is “used for various tasks, including system administration, software development, and automation (Shardeum Content).” On the other hand, the GUI is very intuitive, but has drawbacks including higher “resource consumption,” “limited functionality,” and “speed (Shardeum Content).” The GUI is better suited for most people, but the CLI is still a much needed platform.

The CLI came first between the two different interface options, it laid the foundation for the creation of the GUI. In fact, “In the 1960s… this was the only way to interact with computers (W3schools).” The CLI was a necessity for the creation of the GUI, and yet both meet distinct, important roles, quite like both the chicken and the egg are needed because of their defining characteristics.

**Works Cited**

Juviler, Jamie. “What Is Gui? Graphical User Interfaces, Explained.” HubSpot Blog, HubSpot, 3 Apr. 2024, blog.hubspot.com/website/what-is-gui.

Team, Shardeum Content. “Gui vs. CLI: What Are the Differences?” Shardeum, 10 May 2024, shardeum.org/blog/gui-vs-cli/.

W3schools. “W3schools.Com.” *What Is CLI*, www.w3schools.com/whatis/whatis\_cli.asp. Accessed 26 Aug. 2024.