Assignment Two

Nicholas Longo

nicholas.longo2@marist.edu

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1 Lab 2

1.1 QUESTION 1: HOW IS YOUR CONSOLE LIKE THE ANCIENT TTY SUBSYSTEM IN UNIX AS DESCRIBED IN HTTPS://www.linusakesson.net/programming/tty/?

My console is similar to the ancient TTY subsystem in Unix in multiple ways. The first and most obvious is how they both display text. While this is a feature many of us take for granted in this modern age of computing, back then text display was revolutionary. The way that my console and the TTY subsystem display text is similar; they read it from a buffer. This text buffer is responsible for not only printing the text to screen, but also letting users edit their text. The backspace is another example of how these technologies are similar. When backspace is pressed, a specific command is activated in order to tell the computer to erase a character in the buffer instead of adding to it. Once this character is "erased" the new buffer will be displayed without the character, making it seem as if the character was not typed in the first place. Both my console and the TTY subsystem also parse input before handling it. This makes sense because even if input is readable to a human, it does not mean it is to the computer. Therefore, there has to be a process in place that allows the computer to decipher exactly what it is supposed to do. Lastly, both the console and the TTY subsystem have specific commands they understand. In my console, there are commands such as ver or shutdown. In the TTY one, there are numerous commands, an example being the 'kill' command. By understanding commands, both of these technologies have yet another similarity even though they were created decades apart.