

Project 1 – Questions

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1 Lab 01

Q - What are the advantages and disadvantages of using the same system call interface for manipulating both Files and devices?

A - The disadvantage would be the difficulty of utilizing the functionality of certain devices with the file access API, which would result in a loss of either functionality or performance. The advantage would be that the program code would be the same for both types of calls, only the parameters would be changed.

Q - Would it be possible for the user to develop a new command interpreter using the system call interface provided by the operating system? How?

A - Yes, it would be possible to create a new command interpreter using the system call interface provided by the operating system. For Unix operating systems they provide multiple CLIs and you can even write your own. You would go about this similarly to our Project, where there is a Kernel, device drivers, controls, a shell, and shell commands. The shell is our cli, the commands we use in the shell send instructions to operate tasks. Those instructions are controlled by the kernel.

2 Lab 02

Q - How is your console like the ancient TTY subsystem in Unix as described in <https://www.linusakesson.net/programming/tty/> ?

A - The TTY subsystem in Unix has line editing capabilities like our Operating Systems. The TTY also can run multiple programs at once, and while our Operating Systems cannot do this yet, they will be able to soon.