CSCM603127 System Programming

Week 2 – Logbook

Student ID / Name / Class: 1706074915 / Samuel Dimas Partogi / C

System Call Process

- To call a function in kernel mode, we have the wrapper function in user mode that initiates the function to be called, which memory that will be used, which register and stack that will be used, and the information will be given to the trap handler. Trap handler then switches the mode from user to kernel and request the function from the system call service routine. The function then gets executed in the register and stack.

System Call Error Handling

- There is a file that can provide a collection of error numbers that will be used to indicate errors while executing a system call, which is the errno.h. Full documentation may be accessed in https://man7.org/linux/man-pages/man3/errno.3.html

The GNU C Library (glibc)

- As previously method, we have the wrapper function in user mode that initiates the function to be called. The list of functions are available in the GNU C Library, often abbreviated glibc.
  - https://www.gnu.org/software/libc/manual/
  - https://www.kernel.org/doc/man-pages/

Reading Directories

- TLPI Dist source available here https://man7.org/tlpi/code/