CS4375-13948 Fall 2023 Homework Report
Edmundo Pariente Submitted on **10/20/2023**
eipariente@miners.utep.edu

HW 3: Priority-based Scheduler for xv6

Task 1. Modify the provided ps command to print the priority of each process.

I added the sys_getpriority and sys_getpriority system calls to the syscalls array, basically following the same process for the other system calls in previous homeworks. Also added them with their respective call number on syscall.h and incorporated the signatures with their return types on user.h. The priority field was an integer value added to the proc struct inside proc.h

Sys_getpriority() is simply a return statement to retrieve the priority field of the process and set_priority() just assigns the value specified by method itself.

Task 2. Add a readytime field to struct proc, initialize it correctly, and modify ps to print a process's age.

Inside the proc struct that's located in proc.h I included the readytime variable as an unsigned 64 bit integer. Consequently, I included a variable for the readytime field inside the pstat struct in pstat.h

In order to be able to use this readytime field I included the variable inside the wakeup process and assigned the value with the system call uptime().