

Operating System Assignment 1

By

Shagun Uppal 2016088

Niket Singh 2016060

sh_task_info.c

- We have made **sh_task_info.c** file which contains the main code for finding the process with the provided pid and then saving the various details of that process in a file also provided.
- Both the pid and the file name are passed as an argument to the code.

Working

- The function which is called initially is `sys_sh_task_info()`. It traverse through all the processes in the `task_struct` structure using the **`for_each_process()`** function which is a part of the **`linux/sched.h`** header file.
- It checks the pid of each process and if it matches with the provided pid it then calls another function which is **`save_info()`** which opens the file provided and then writes to it the various details. If file is not found it prints an error message.
- Also if pid of no process matches with the given pid, another error message is printed.

Tester function

- We then have a **`test.c`** file which calls the system call that we have just made through its system call number which was provided in the **`syscalls_64.tbl`** file.
- While using this `test.c` function, we need to enter the pid of the process and filename of the file

that needs to be written. The order is pid and then the filename.

- The output will be
- "System call returns x"
- Where x will depend on the working of the sh_task_info.c. We can also find the what is written to the file by using dmesg.