SwansonLKM.c Documentation

Included files

1. linux/Init.h
   a. Used to make this a linux kernel module.
2. linux/module.h
   a. Used to make this a linux kernel module.
3. linux/kernel.h
   a. Used to make this a linux kernel module.
4. linux/sched.h
   a. used the task_struct structure defined within.
5. linux/sched/signal.h
   a. used the for_each_process macro definition.
6. linux/list.h
   a. used the list_head structure.
   b. used the list_for_each macro definition.

Globals

1. startPID
   a. Stores the user input value to denote the lower bound PID to list.
2. task
   a. The current task structure containing the process data.
3. iterateList
   a. A task structure that allows for iterating over the children elements.

Functions

1. Display_processes
   a. Summary:
      i. Displays all of the currently scheduled processes above the designated PID value passed to the module at insertion time. Displays each process, it's parent and associated children processes.
2. Init
   a. Summary:
      i. Used to initialize and combine functions within the module. Informs the user that the module has been properly loaded into the operating system.
   b. Returns:
      i. 0 when the module has finished running.
3. Exit
   a. Summary:
      i. Informs the user that the module has exited properly.