OPERATING SYSTEMS

PintOS: Report Project 3

Group 12

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Report Instructions

- Please report all changes, even if minor, that you did to complete the project.
- You have to list all files that have been modified, and for each of them, list all functions/structs that have been modified or added (clearly stating "modified"/"added"). Then add a brief explanation or motivation for all those changes.
- A single report is required for each group. For the first individual project, each student submits a report together with the source code files that were changed.

1 Files Changed

- pintos/threads/thread.h
- pintos/threads/thread.c
- pintos/userprog/syscall.c
- pintos/userprog/process.c

2 CHANGES

pintos/threads/thread.h

• struct thread (*implemented*):

It has been added to the struct three new fields in the struct section USERPROG owned by the userprog/process.c: struct thread *parent (ln. 108) represents the reference to the

parent thread of the actual thread; bool is_parent_waiting (ln. 109) checks if the parent is waiting for this thread to exit or not; int exit_status (ln. 110) represents the exit status of the thread.

• struct thread *thread_get_by_tid (int tid) (added): (ln. 168) auxiliary function used to obtain the thread specified with the given identifier.

pintos/threads/thread.c

• struct thread *thread_get_by_tid (int tid) (*implemented*): (ln. 570) auxiliary function used to obtain the thread specified with the given identifier.

pintos/userprog/syscall.c

• static void syscall_handler (struct intr_frame *f) (*implemented*): (ln. 23) implements the syscall handler function so as it is able to handle the *exit* and *write* system calls.

pintos/userprog/process.c

- static void start_process (void *func) (*implemented*):
- static void start_process (void *func) (*implemented*):
- void push_stack(void ** top_of_stack, void * p_data, int len)
- void push_args (void** top_of_stack, char * cmd)
- int process_wait (tid_t child_tid)