

# Bug Log ---- Flipitsystem

## Checkpoint 3.1:

- A. Andy/Nathan: Issue in the pic handler where we send EOI but we did not save the previous info. Fixed by RTDC again and save the proper information.
- B. Nodens: When ALT key is pressed a blank space appears instead. Fixed by adding a condition catching the alt key signal.
- C. Andy: Enabling and Disabling PIC didn't work properly because the interrupt masks on master and slave PICs were not up-to-date. Fixed by replacing global variable with an inb update.
- D. Nodens: Paging did not work properly because we set up CR0 register before CR4 register. Fixed by setting up CR4 before CR0.

## Checkpoint 3.2:

- A. Andrew: Bug in read\_dentry\_by\_name where we always truncate the filename read into 32 characters. Fixed by using a pointer input instead of a 32 character array.
- B. Andrew: RTC was not working properly because we did not save the interrupt flags properly. Fixed by adding cli\_save\_flags and restore\_flags.
- C. Nodens/Wayne: Filesystem structure was wrong. Fixed by RTDC again and include proper inode reading.
- D. Wayne: Read\_data inode searching was wrong. Fixed by checking the conditions properly.
- E. Wayne: Read\_data incorrectly finding the right file to read. Fixed by adding the conditions to check for edge cases.

## Checkpoint 3.3:

- A. Wayne: We did not have a wrapper function for the interrupt handlers. Fixed by adding a wrapper for system calls and interrupts.
- B. Nathan/Wayne/Nodens/Andy: We did not turn the paging on which caused the user programs to overwrite each other. Fixed by turning paging on.
- C. Nodens: Halt was not properly returning because in execute, we overwrite the current\_process before we store it as a parent. Fixed by storing the parent process into current process' PCB before overwriting.
- D. Sharon: PCB structure was not restored properly. Fixed by restoring the parent PCB to NULL if current process is shell.
- E. Wayne: Did not flush TLB in paging. Fixed by flush TLB when entry mapping changes.

## Checkpoint 3.4:

- A. Nathan: The jump table kept picking the incorrect operation because we returned 0 instead of the fd number from the open function.
- B. Wayne: Execute did not parse the argument correctly because we did not add the end of string character to the command buffer. Fixed by adding an end of string character after parsing.

C. Nodens: Fish system call was not printed out on screen because the virtual address was not mapped to the correct VGA physical address, and the user/supervisor flag was not set up correctly.

D. Mason: Getargs was not suppose to search empty filename. Fixed by returning failure at getarg system call.

### **Checkpoint 3.5:**

A. Andy/Nathan/Wayne/Nodens: Switching in paging for terminals failed because we did not switch the virtual mapping. Fixed by using another page that always points to the VGA memory and writes it.

B. Nathan: Keyboard input goes to multiple terminals, need the keyboard to always write to current visible terminal. Fixed by using another page that always points to the VGA memory and writes it.

C. Nathan/Wayne/Nodens: Commands weren't properly read by the active terminal, fixed by adding a command ready flag for each terminal.

D. Andy/Nathan/Wayne/Nodens: RTC was slowing down when we turn on multiple fish/pingpong programs in different terminals. Fixed by adding RTC flags to multiple terminals.