

Operating Systems

CMSC 422 and MSCS 515

iProject One

Review and come to intimately understand the initial project handed out in the first class. Then add some kernel-level functionality to it as specified below.

OS Functional Requirements

- Alter the “ver” command to display your own data. [required]
- Add some new kernel-level commands.
 - “date” - displays the current date and time [required]
 - “whereami” – displays the current location in space-time [required]
 - something interesting and creative of your own; surprise me [required]
- Enhance the keyboard device driver.
 - Accept and display punctuation characters. [required]
 - Handle backspace [optional]
- Enhance the Console display.
 - Add a graphic task bar that displays . . .
 - the date and time [required]
 - messages as specified by the user [required]
with a new kernel-level “status <string>” command
 - Implement scrolling [required]
 - Allow the user to set a graphic “wallpaper” for the console [very optional]
with a new kernel-level “wallpaper <url>” command

Source Code Requirements

- Add error checking to *krrnKbdDispatchKeyPress* [required]

Style, Art, and Science Requirements

- Write your own Javascript. We may eventually decide, as a class, to adopt one or more libraries (most likely jQuery, if any) in the future. Until then, we want to keep the dependencies to a minimum, so write your own code.
- Your code must . . .
 - separate structure from presentation.
 - be professionally formatted.
 - use and demonstrate best practices

Hints

- Read up on the Canvas before you mess with the Console. Do some Canvas experiments on your own. It’s really quite amazing what you can do with it.
- Remember the utility of comments and how much their presence and quality affect my grading.