CMSC 421

Final Project Design

[Your Name Goes Here]

[Date this document was last modified goes here]

1. Introduction
   1. System Description

Give a brief (one paragraph) description of the project as it was assigned. You should not be describing your individual implementation in this first paragraph.

* 1. Kernel Modifications

List the files (and functions within files) that you modified as part of your implementation. Be sure to include the list of files that you added to the kernel as part of this list as well. For modified files, include a very brief description (single sentence per function modified) of what was modified in the file. You will be describing your changes more in-depth in a future section of this document. This section should essentially be formatted as a list.

1. Design Considerations
   1. System Calls and Data Structures Used

In this section, describe at a high level what your approach was to implementing the system calls required for the system and the data structures that they use. Basically, describe your thought process here. This is not meant to be an in-depth description, but rather just laying the groundwork for what you did in implementing the system, and why you chose to do things in the way that you did. This section should be a few (two to four) paragraphs long.

* 1. User-space Programs

This section is to be of the same format as the previous section, but about three user-space programs. You may split this into two different sub-sections – one for the three simple programs and one for the sbx421\_run program. Once again, this section should be about two to four paragraphs long.

* 1. Extra Credit

This section is to be of the same format as the previous sections, but about any extra credit you attempted. If you didn’t attempt any of the extra credit, then you should leave this section out of your document

1. System Design
   1. System Calls and Data Structures Used

Describe your implementation of the kernel portion of the assignment in-depth. The goal here is to give the reader enough information that he or she could implement the same system without having looked at your code. Here, you should dive down deeper into how the code is implemented, going as far as to describe exactly what changes you made to functions within the kernel and where those changes were made (and why they were made at the location you made them. This section should be of significant length, as this is where you will be describing the bulk of your design. Essentially, we’re looking for at least a page or so (single-spaced) description of how everything works in this section of the document.

* 1. User-space Programs

This section is to be of the same format as the previous section, but about the user-space code. It will probably be somewhat shorter than the previous section, as the user-space code is relatively simple in comparison.

* 1. Extra Credit

This section is to be of the same format as the previous sections, but about any extra credit that you attempted. It should be of a relatively similar length to section 3.1.

1. References

List any references you used in your assignment here. You do not have to list the Linux kernel source code files here (or this template), but you should list any web references or any other such things that you used in developing your assignment here. Please use a standard citation format (MLA or APA are fine) for your list of references.