Project 4: Concurrency

Due: Friday, August 4th before 11:59 pm

You may optionally work with a project partner for this project.

Questions?

Please post your questions on Piazza so that your classmates with similar problems can benefit from it. However, if the question is about your code, visiting during **office hours** is the most efficient way of getting help. You should **not** post your code on Piazza.

Overview

There are two parts to this project:

- Scalable Web Server: to be done on the linux lab, so you can learn more about programming in C on a typical UNIX-based platform. Before you begin, we highly recommend that you watch this video from a previous discussion section. As was the case in the past, the project details will be slightly different, but the main ideas will be the same.

- Kernel Threads: to be done in our xv6 hacking environment. This is the previous video video and video from the discussion section video to watch for this part.

Click on the above links to learn more about what you should do. READ EACH CAREFULLY!

Notes

Copying code is considered cheating. Read this for more info on what is OK and what is not!

Handing It In

The handin directory is `~cs537-1/handin/$USER/p4`

For the C/Linux part of this project, you should copy `server_cond.c` and `server_sema.c` into the `linux/` subdirectory.

For the xv6 part of the project, copy all of your source files (but not .o files, please, or binaries!) into the `xv6/` subdirectory of your p4 directory. A simple way to do this is to copy everything into the destination directory directory, then type `make` to make sure it builds, and then type `make clean` to remove unneeded files.

Into your p4 directory, put a `README` file. Describe a little bit about what you did for this project in this file.

Finally, also most importantly, if you are working with a partner, create another file called `partner.txt` in your p3 directory, where you should **only write your partner's CS login**. Both of

you should create this file to be graded, and again, only one of you need to submit the source files. If there is no such file, we are assuming you are working alone.

For example, if Xiangjin works with Zhewen and let's assume Xiangjin is submitting the source files, then Xiangin will be turning in the source + the `partner.txt` file and Zhewen will be turning in only the `partner.txt` file. Xiangjin's `partner.txt` will contain a single line of Zhewen's CS login and Zhewen's `partner.txt` will contain only a single line of Xiangjin's CS login.