CS111: OperatingSystemsPrinciples

Teaching Assistant: Mike Welch

Office: 4805 BH Email: welch@seas.ucla.edu Office Hours : MW 2:30-3:30 PM or by appointment. Lab Location: 4405 BH Book - Gary Nutt, Kernel Projects for Linux.

Linux distribution

Version: Redhat Fedora Core 2, kernel 2.6.8.1. Download server: <u>http://fedora.redhat.com/download/#download</u> Issues to be aware of:

- Download ISO images for the correct architecture (you probably want the x86 version)
- Can be installed on computers that have Windows installed on it.
- Create a partition from Windows using "fdisk". Let the partition be at least be somewhere between 600MB 1GB
- Be sure to install the Custom packages -> "Development version" packages.
- Create the following partitions on the Linux partition:
 - /boot around 100Mb 200 Mb
 - / most of the space (will have the /home and most of the data) /swap 60Mb - 100 MB

Linux Users Group (LUG)

http://linux.ucla.edu/ Installfest: Saturday, April 16th, from 10am to 4pm, BH 4760

Linux command references

http://www.er.uqam.ca/nobel/r10735/unixcomm.html http://www.die.net/doc/

C language references

http://www.acm.uiuc.edu/webmonkeys/book/c_guide/ http://www-ccs.ucsd.edu/c/

Labs

- You must work in teams of two. You may choose to work with a partner from the other lecture section. If you do so, please sign up for interviews with the Section 1 TA and submit your code to them.
- Four projects, two weeks will be given for each:
 - Assigned weeks 2, 4, 6, and 8
 - Due dates will be Friday at 5AM.
- You will be given three late days to use for the labs throughout the quarter.
- Design interviews are held one week after the project has been assigned.

Grading

Total: 100 points per lab

1. Design interviews

Design interviews will be held with each team on the weeks between new projects. In design interviews, you will be expected to present your overall code design, submit pseudocode and other design documentation, and answer questions with the TA. Interviews will last roughly 10-15 minutes, and will meet in 4428 BH. A sign up sheet will be available in discussion section.

2. Labs

Labs will be graded on correctness, overall quality, and efficiency. Labs will be a different format than previous quarters. You will be supplied with some frame code that you will be expected to expand upon to build up a complete project. Labs will contain requirements which everyone must implement, and some challenge problems, which you must choose from and implement one or more of. Parts of the lab will build upon your previous work, so start labs EARLY and make sure you TEST YOUR CODE thoroughly.

Along with your code, you will be expected to submit a README containing information about your implementation, build instructions, etc. You should also submit a lab writeup to answer any questions that are asked in the lab. For each lab, ONE team member should submit a single gzipped tarball file containing all of your code and documentation through CourseWeb by the due date. Remember, you have only three late days for the entire quarter, so use them wisely.

Miscellaneous

- Academic dishonesty will NOT be tolerated. Make sure you do not leave your code lying around on lab machines.
- Please use the CourseWeb forums for posting general questions about the labs. Feel free to answer your fellow student's questions posted here, but do not post code or information too specific to the answer.
- For any command on Linux, if you need more info, execute "man commandname" in a shell.
- We would like to encourage creativity. If you have ideas of additional features you would like to implement for a lab, please discuss the idea with your TA. We may use the last discussion section of the quarter as a forum for you to present some of your work on challenge problems to your classmates.