Operating Systems 600.318/418 Welcome!!!

Department of Computer Science
The Johns Hopkins University

Course Information

- Time: MTW 10am – 11am, Shaffer 301
- Jonathan Shapiro: (shap@cs.jhu.edu)
  - Office hour: Wed. 9am-10am, NEB 036
- TA: Xiaoqi Lu (Grace) (xiaoqilu@cs.jhu.edu)
  - Office hours: TBD
- Resource: Course web page at http://srl.cs.jhu.edu

Problems? E-mail (best), come to office (if needed), call (only if **really** important).

Lecture Plan

- Two Lectures per week (M, Tu)
  - Theory, Concepts
- One Tutorial per week (We)
  - Talk about real implementations

This is the usual pattern,
but there will be exceptions.

Mission of This Course

- Cement core CS concepts in concurrency, resource management, security.
- Give you significant software experience:
  - hardcore systems programming
  - “Software forensics” – learning on your own what an existing large program does
- The only way to do this is the hard way.
- So…

The Good/Bad News

- The Bad News:
  - If you had a date planned this semester… ☺
  - … now is a good time to cancel it. ☹
- The Good News:
  - I will grant a one day extension for your funeral! ☺
  - … *if* you bring a note from your undertaker afterwards. ☹

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Expectations

- The lecture *supplements* the text. It does not replace it.
- You *are* responsible for the reading assignments.
- You are also expected to do substantial progamming assignments.
  - In the past, incompletes have been very common
  - I expect that this will continue.

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Grading Policy

- A final exam (30-35%)
- A few written assignments (20-15%)
- One small programming assignment (10%)
- Two medium scale projects (20%+20%)
- The occasional online quiz.

The difference between 318 and 418:

Depth of the assignments and projects

There is no difference in grading

First Written Assignment

- Imagine that a program has performed the system calls:
```
fd = open("/dev/null", O_RDONLY)
read(fd, &mybuf, 10);
```
- Using the online Linux kernel source at http://lxr.linux.no/source/, for kernel version 2.2.16, list, in order, in outline style, every function called from kernel entry at `sys_read` (in fs/read_write.c) to the device read function for /dev/null (`read_null` in drivers/char/mem.c), assuming that the call is successful.
- Due: 2 February, 2001

Goals of This Assignment

- Get you familiar with the Linux kernel and a tool for browsing it
- Help you decide quickly if this is the right course for you.
- Requirements:
  - Ability to use a web browser
  - Reading knowledge of C