CS 241 Section Week #2

September 1, 2011

Topics This Section

- MP1 overview (due Tuesday night)
- What's a lab report?
- Tools to help with memory
- Practice program

- Two Separate Parts:
 - [Part 1]:
 - Call ten separate functions with the correct parameters to print out a line.

- [Part 2]:
 - Build a simple dictionary to store key/value pairs of strings.

- Dictionary API
 - dictionary init()
 - dictionary add()
 - dictionary_parse()
 - dictionary get()
 - dictionary_remove()
 - dictionary_destroy()

- All dictionary functions take in the SAME dictionary_t object.
 - dictionary_XYZ(dictionary_t *d, ...) is equivalent to d->XYZ(...) from OOP

```
dictionary_XYZ(dictionary_t *d, ...)
```

Since a pointer is passed in by value, you can't change what **d** points to.

```
This won't work:

d = malloc(sizeof(dictionary_t));

You can only do this:

d->field = ...;
```

Lab Report

- Less is More
- Focus on design decisions not implementation specifics
- For example: Dictionary based on linked list for quick implementation

Lab Report

- Needs to be in PDF form
- mv textfile.txt textfile.pdf... BAD!
- OpenOffice Export as PDF... GOOD!
- Windows Print, Choose pdf creator GOOD
- Latex You are 1337 |-|4X0|2

How do you add a new file to svn repo?

Fixing Memory Issues

\$> valgrind ./program args

Try it on ds/ds2/memory.c