CSCI 2270

Data Structures & Algorithms

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Lecture 4 Jan 23, 2013

Linked Lists II

Lecture Goals

1. Announcements
2. RetroGrade
3. Using Git to clone/pull code
4. First few LL functions, and more on pointers (node**)
5. String processing, briefly

Upcoming Homework Assignment

HW #1 **Due: Friday, Jan 25**

Linked Lists

Implement Linked Lists that conform to the linked_list.h header file given in GitHub. You **must** use this header file, including the *node* data structure, and implement as many of the functions as you can.

Remember it is due at 6pm on Friday!

Announcements

1. **Extra Credit**: more than enough to go around by completing the assignments in Java and Python after you've done it in C++.

2. **Using Libraries**: Yes, I know languages have libraries that do this stuff. Don't use them. We'll spot-check code to make sure you're actually coding your own stuff. Also, if you don't learn this, you'll wash out later on in your CS life.

Announcements II

3. **RetroGrade:** The grading system is up at retrograde.cs.colorado.edu.

4. **Grading Scripts:** learn from the unit tests at github.com/johnsogg/grading-scripts.

5. **Help Session:** Anybody down for a C++ (and probably linked lists) help session Wednesday night? (tonight, 8pm maybe?)

Announcements III

6. **Office Hours!** All take place in the same room. Different names, same place: ECCS 128, CSEL, The Fishbowl. It is keycard access only, which *sucks* but fortunately you can register your BuffOne card for this room by going to

csel.cs.colorado.edu

... and clicking ‘CSEL account activation’.

M	Tu	W	Th	F
10 – 11 Shang		10 – 11 Shang		10 – 11 Shang
11 – 12p Class	11 – 2p Gabe	11 – 12p Class	11 – 2p Gabe	11 – 12p Class
12p – 1p Nathaniel		12p – 1p Nathaniel		12p – 1p Nathaniel
		1p – 3p Yogesh		1p – 3p Yogesh
2p – 4p Xin	2p – 3p Xin			
		4p – 6p Nathaniel	4p – 5p Shang	
	5p – 7p Nathaniel		5p – 7p Nathaniel	

Calendar Link in Syllabus

There is a link to the Google Calendar for Office Hours in the syllabus (that's the top-level README.md file in the course GitHub). Click 'Week' at the top right to make it easier to read.

Using Git (optional, but nice)

Some of you are having trouble saving files from GitHub. Here's an easy solution! I'll show you in my browser, but the steps are:

1. Go to the course GitHub and copy the HTTP descriptor URL that says "https://github.com/johnsogg/cs2270.git"

2. Go to your command line and type/paste:
git clone https://github.com/johnsogg/cs2270.git

Using Git (optional, but nice)

3. You just downloaded the course git repository into a directory called ‘cs2270’. You may cd into it and look around. The homework and lecture slides are all there!

4. When I change or add things to the git repository, you can ‘pull’ down those changes by going into the cs2270 directory and typing:

git pull

Today: Linked List coding

I'll flip over to writing code and drawing on the board. We'll implement:

- init_node
- report
- append_data
- append

I will put the file I write today up in today's folder in lectures/ on GitHub.