Programming Mini-Assignment: Linked Lists

Assigned: Monday, September 14, 1:30PM

Due: Monday, September 21, 1:30PM (Hard Deadline)

The purpose of this assignment is to act as a quick refresher on how to work with simple linked lists. This assignment is primarily for your benefit as you'll need these concepts later in the semester. It should not take more than an hour at the most.

Grading

- 20 points – Everything works.

- 10 points – You put effort in but it doesn't quite work.

- 0 points – Little to no effort / nothing works / nothing submitted.

Honor Code Reminder: In the interest of making this easy for you to implement, test, and submit this is probably one of the easiest assignments to cheat on ever. Please don't. Resist the temptation to "glance" at another solution for help because you got stuck. My solution is only about 30 lines long. There just isn't enough code that a "glance" will do anything but give you the solution. This assignment is deliberately worth very few points; if you didn't do it, just don't submit anything [why risk cheating?]. The point of this assignment is to make your life easier later this semester, don't cheat yourself.

Assignment: Implement basic linked list functionality

Grab a copy of the code from http://github.com/eecs373-f15/373-f15-linked-list. I recommend forking this repository to do your work.

You need to implement the two stub functions, `insert_sorted` and `reverse`, in `list.c`. You should only need to edit `list.c`. Do not edit any other files.

Typing `make` will build a simple program that uses your linked list, runs it, and checks the output.

If you are working on a mac, you will need the checkout the mac branch so that you can use the pre-compiled object files (`git checkout mac`).

I have tested this on my (Linux) desktop, the CAEN Linux machines, and my personal mac. If you have any issues building / running the initial code, please file an issue on GitHub (the "Issues" button at the right side of the page).

Submission

Your `list.c` implementation will be automatically graded. To submit, go to https://docs.google.com/spreadsheets/d/18F8ICthJunY5VFhktLD6Rgyquf8mcMl-8s80Vr1LNvQ/edit?usp=sharing and add your uniqname and a link to download your `list.c`. If you forked the original repository, this is very easy. Click on the `list.c` file in your GitHub and then click on the "Raw" button. For example, this is a direct link to download the template `list.c`: https://raw.githubusercontent.com/eecs373-f15/373-f15-linked-list/master/list.c

A script will automatically download, compile, and grade your `list.c` implementation. This script will run automatically at 1:35PM on Monday, September 21st (to account for clock differences, don't rely on this). **No late submissions will be accepted.** A test run of the script will run at 1:35PM on Sunday, September 20th. In both cases, the script will immediately email the results.