

CIS*2750
Assignment 0
Deadline: Friday, January 17, 9:00am
Weight: 1%

Description

For this assignment you must create a shared library for the doubly-linked list API that has been provided for you. You have been provided with all necessary source code. The purpose of this "assignment" (in scope, it's just a lab, and should take less than an hour to complete) is to get you familiar with creating shared libraries, and using them with an automated test harness executable - which is how your A1 and A2 will be graded.

Do not modify the code or the header in any way. Simply write a Makefile that will produce a shared library file called `liblist.so` and place it in the `bin/` directory. The target name will be `liblist`, and it must be the first target. This way if you type `make liblist` - or just `make` - the required target is created and placed in the `bin/` directory.

To make sure that your library was created correctly, run the executable `ListTest` in the same directory. You should see a long list of test cases. The executable was compiled on the SoCS Linux server, so that's where you must run it. Needless to say, the library must be compiled there as well.

Make sure that your `LD_LIBRARY_PATH` variable is configured correctly, as discussed at the end of Lecture 2a: `export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:.`

Submission structure

The submission must have the following directory structure:

<code>assign0/</code>	contains the <code>Makefile</code>
<code>assign0/bin</code>	contains the executable <code>ListTest</code> . This is where the <code>Makefile</code> will place the shared library file
<code>assign0/src</code>	contains all source files.
<code>assign0/include</code>	contains all headers. Keep in mind that if it contains <code>LinkedListAPI.h</code> , this file will be replaced with the standard <code>LinkedListAPI.h</code> provided to the class.

NOTE: Your Makefile will need to reference `bin/` and `src/` subdirectories. Since the location of the Makefile relative to these directories is always the same, this will be straightforward.

Do not hardcode any absolute paths or any account-specific details into your Makefile! This will most likely break the compilation when we grade your code, and result in a grade of zero on the assignment.

Evaluation

Your code must compile and run with the specified executable. We will grade it by compiling your code to create the shared library, and running `ListTest`. Make sure your Makefile places `liblist.so` into `bin/`

The grading scheme is simple - and binary:

- If your library runs with the executable, you get 100%.
- If your library fails to run with the executable, you get a 0.
- If your library fails to compile, you get a 0.

Make sure you compile and run your code in the lab or on the **linux.socs.uoguelph.ca** server.

Submission

Submit your source code in the specified structure

Late submissions: see course outline for late submission policies.

This assignment is individual work and is subject to the University Academic Misconduct Policy. See course outline for details.