

CPSC 327

Project 3

Model a library

Teams: None, please work individually on this project.

Note: This project requires C++11 support. The eclipse starter project has this configured correctly.

Assignment

As described in class you are going to model a public library using the starter project located on the course projects page. Please import into eclipse as per instructions given on the Projects page.

Target Platform

Linux 16.04 with the GNU toolchain. Eclipse CDT- Oxygen.

fileIO.cpp and library.cpp

fileIO.h and library.h define and describe multiple functions. Please provide definitions for these functions in fileIO.cpp and library.cpp.

Please note, you are required to use vectors to hold the book and patron objects described in datastructures.h. These vectors should be declared and used in library.cpp.

Model_A_Library.cpp

You will find file Model_A_Library.cpp in the src folder. This file serves as a tester for fileIO.cpp and library.cpp. Notice that I have provided a function that tests fileIO.cpp. I will use this function to test your fileIO.cpp implementation.

I have provided no other test cases but I have given you functions in which you can implement your own. (See //TODO notations in code). You are not required to implement this file or use it in any way, it is only provided as a framework for testing.

constants.h

Note the BOOKFILE and PATRONFILE constants. These are the names of the files where you should serialize books and patrons. BOOKFILE_EMPTY and

PATRONFILE_EMPTY are empty files. Initial versions of these files can be found in the dont_alter_these_files directory. The function reset_books_patrons() in Model_A_Library.cpp uses these initial versions to reset the files used for fileIO testing in testfileIO() to a known state for each run of the program.

Grading

34 points – correct implementation of fileIO.cpp

66 points – correct implementation of library.cpp

To Turn In

Please turn in only the following files.

fileIO.cpp

library.cpp

I will embed them in my project for testing. This also means that I will not see any changes you make to any files except for those 2.