

PROGRAM 1 / CSC1310

MOVIE LIBRARY – CONVERT FROM STRUCTURES TO CLASSES



IMPORTANT DATES

Assignment Date: Tuesday, January 16, 2018

Due Date: Monday, January 29, 2018

LAB DATES TO WORK ON PROGRAM 1

- CSC1310-101 – Tuesday, January 16 & Tuesday, January 23
- CSC1310-102 & 103 – Thursday, January 18 & Thursday, January 25

DESCRIPTION OF PROGRAM – WHAT DOES THIS PROGRAM DO?

This is a program for people who love movies and who own many of them. You are helping these people by organizing their movies in a movie database. Users should be able to read movie data from a file, save movies to a file, add a movie, delete a movie, edit a movie, print all movies, and delete all movies.

THIS PROGRAM HAS MULTIPLE FILES

This program contains multiple files as described below

- **Text.h** – header file for a structure version of the C++ String Class
- **Text.cpp** – source file containing function definitions required for the structure version of the C++ String Class
- **Movie.h** – header file for a Movie structure and functions that can be performed with the Movie structure.
- **Movie.cpp** – source file containing the function definitions required for the Movie structure.
- **Movies.h** – header file for a Movies structure and functions that can be performed with the Movies structure.
- **Movies.cpp** – source file containing the function definitions required for the Movies structure.
- **Makefile** – compiles your code – can only work on Windows operating system
- **runProgram.bat** – runs the makefile and then runs the code using a testing text file – can only work on Windows operating system
- **crockett_movie_data.txt** – text file containing data on several movies that you can use to test your program
- **TEST_CASE.txt** – text file used by runProgram.bat to test your code.

WHAT DO I HAVE TO DO?

STEP ONE – READ & UNDERSTAND THE CODE PROVIDED

You will need to read the comments and code provided for you. I placed a comment above most function prototypes describing what should be sent to the function, what the function returns, and what the purpose of the function is.

STEP TWO – CHANGE THE STRUCTURES TO CLASSES

Take the code that I give you and convert the three given structures to classes.

STEP THREE – CHANGE, ADD, & DELETE ALL OTHER RELEVANT CODE

Then, you will modify all the other code so that it works using the given batch file (runProgram.bat).

- Remove create & delete functions and instead create constructors and destructors for each class.
- Create additional member functions for each class
 - **Text** – create an editText function. This function should delete the current array and then create a new array with the parameter sent to this function.
 - **Movie** – create accessor & mutator functions for all Movie attributes.
 - **Movies** –
 - Create three accessor functions for the three attributes in this class.
 - Create a function that will get a single movie from the movies array. This function should accept the index number as a parameter so it knows which movie to return.
 - If there are any functions that are only called from functions within the Movies class, then make it a private function instead of public.
- Modify the **driver.cpp** code to use the classes instead of structures. The driver should still perform the same operations as it did with the structure code.

