

CSCI 235 – Software Design & Analysis II

Assignment 1

Introduction

Before starting this assignment, read the following programming rules:

http://www.compsci.hunter.cuny.edu/~sweiss/course_materials/csci235/programming_rules.pdf

This assignment tests your ability to design and implement functional modules in a working C++ program. The program must compile and run on the server eniac.geo.hunter.cuny.edu in G-Lab. You may work on this program by yourself or in a group. (If you choose to work in a group, each member receives the same grade. The maximum group size is 3 and must be composed of other students taking CSCI 235 this semester.)

Your grade will be based on the following:

50% = Correctness (conformance to the requirements below)

25% = Design

15% = Performance

10% = Documentation and style

Assignment

Your assignment is to design and implement a C++ program to query IMDB files. You should use the files attached to this assignment, which contains movies in 2010 with my best attempt to remove any potentially offensive movie titles. You may choose to work with either the actors or actresses file or both, as long as your program states which of them is being used. The comprehensive and (much) larger versions of the files are available from <http://www.imdb.com/interfaces>, as well as many more.

Each file lists the name of an actor or actress and a movie in which he or she acted, the year in which the movie was officially released and some optional information, including the character name. A blank line separates two actor or actress records.

Your program must support two queries:

List actors or actresses in a movie

The user will provide the name of a movie. Your program must print the name of any actors or actresses in that movie.

List co-starring actors or actresses

The user will provide the name of an actor or actress. Your program must print the name of any actors or actresses also starring in that movie.

Here is one example of a running program (with the user's response in italics):

```
2010 Movie DB. Find actresses or co-stars?  
actresses
```

Name of movie: *Nauseated*

The following actresses were in Nauseated:

- * Kineret Arieli
- * Mor Chen

2010 Movie DB. Find actresses or co-stars?

co-stars

Name of actress: *Mieke Dockley*

Mieke Dockley costarred with the following actresses:

- * Jo Dyson
- * Joanne Gale
- * Lydia Hourihan
- * Jae Dee Scott
- * Jordon Stevens
- * Chloe Watkinson

Your program must not read the entire file into memory (array, vector, etc.) to perform any of the above queries.

Submission

Submit your UML design and source code on Blackboard. In the submission comments, list all people who worked on the code. If you work in a group, only one team member needs to submit for the group.