CS 121   **Programming Assignment #4**
Bruce Bolden   **20 Points**
October 23, 2017   **Due:** November 1, 2017

Objective: Write a program to hold information for a small movie database using a binary search tree. Specifically, the movie names, year, and the actor/actress names.

Program Description: One method of storing this information is to hold the information in a tree structure. Another method of storing this information is in a hash table. Your program is to store information in a binary search tree based upon the movie name or actor name (your choice).

Requirements:

1. Write functions to:

   - Display all movies in the tree (only the titles!).

   - Display all actors of a given movie in the tree: *Blade Runner*, *The Bourne Ultimatum*, *Logan's Run*, and two others of your choice.

   - Display all movies of a given actor: Matt Damon, Carrie Fisher, Steve McQueen and two others of your choice.

   - Display all movies released in 1977 and one other year of your choice.

2. Test your program:

   - Read movie information from an external file (on the web).

   - Display all output in a useful manner.

Deliverables:

- Program—fully documented.

- A program design sheet. Describe all classes and methods needed to implement your program.

- Programming Log:

  - Record the time required to design and implement your program.

  - Record of things you encountered/learned while implementing your program.

- Output—proof that your program worked.

If you have any questions regarding this assignment, do not hesitate to contact me. Start working on this assignment as soon as possible.