CS 121 Bruce Bolden April 2, 2015 Lab Assignment #11
20 Points
Due: April 16, 2015

**Objective:** Write a program to hold information for a small TV show database using a binary search tree. Specifically, the show names, years, category, 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 TV show name or actor name (your choice).

## Requirements:

- 1. Write functions to:
  - Display all show in the tree (only the titles!).
  - Display all actors of a given show in the tree: The Saint, Newhart, Dexter's Laboratory, and two others of your choice.
  - Display all shows of a given actor: Nancy Cartwright, Markie Post, Hank Azaria, Bob Denver, and two others of your choice.
  - Display all shows released between 1960 and 1970 and one other decade range of your choice.
- 2. Test your program:
  - Read TV show 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.