Assignment #6 Design/Testing

Understanding the Problem

This problem is asking me to create a program that will create a structure that hold Netflix data provided by the user, and then outputs that data back to the user. The program will continually ask the user if they want to enter another entry which they will be allowed to do until the user decides not to anymore.

Devising a Plan/Design

Create a structure declaring the title, the star rating, an array of names of cast members, and the overall rating of the movie

Create a main function

Declare all variable types

Prompt the user if they would like to enter a movie into the database

Create an if statement checking if their input is valid

Create a while loop for when the user inputs a yes answer

Prompt the user for the title of the movie

Prompt the user for how many stars the movie received

Create an if statement checking if their input is valid

Prompt the user for how many cast members are in the movie

Create an if statement checking if their input is valid

Set array created in the structure to a list on the heap

Create a for statement prompting the user for the names for each of the number of cast members stated are in the movie

Prompt the user for the overall rating of the movie

Print out the information inputted for the movie entry back to the user

Prompt the user if they would like to enter another movie into the database

Create an if statement checking if their input is valid

Testing

While putting this program together, used prior knowledge, information learned from lectures, further research on the internet, and additional help from the TAs. For example, I had trouble storing strings into variables, so I went for help from the TAs in my lab, who all helped me solve my issue.

Values Inputted	Expected	Actual Meet Expected
answer = 0 ("No" Input)	To end the program.	Yes
answer = 1 ("Yes" Input)	To prompt the user for the name of their movie.	Yes

answer = 6 (Invalid Integer Input)	To print out an error message and then end the program.	Yes
answer = I (Non-Integer Input)	To print out an error message and then end the program.	Yes
movie.name = Movie	To prompt the user for the star-rating of the movie.	Yes
movie.stars = 3 (Integer Input)	To prompt the user for the number of cast members in the movie.	Yes
n = 3 (Number of Cast Members Integer Input)	To prompt the user to enter each of the cast members' names.	Yes
n = three (Number of Cast Members Non-Integer Input)	To print out an error message and then end the program.	Yes
mem = Name (Cast Member Name(s))	To continue prompting user for each of the cast members' names, and the prompt the user for the rating of the movie.	Yes
movie.stars = i (Non-Integer Input)	To print out an error message and then end the program.	Yes
movie.rating = PG (String Input)	To print back the inputted information for the movie entry, and then re-prompt the user if they would like to enter another movie to the database.	Yes