

Netflix project

Amirhossein fazeli

Introduction:

This assignment is meant to simulate a program like Netflix which you can use to (as an admin) add or remove tv shows and movies, (and as a user) search and watch a movie, get recommendation and etc.

In this assignment we will learn about inheritance.

Design and Implementation:

Because of the similarity of this project and the library one, I tried to code more organized and comment on every method so that the code would be easy to understand.

A user will have to signup in order to log in, the process will take place in the methods `login` and `createAccount`. As an admin you don't have a password or username.

Netflix archive consists of a list of tv shows and movies and users, and a user have their personal lists of favorite tv shows, likes, dislikes and watched.

A user can search a movie or tv show both in their favorites or in the Netflix archive. They can search by four attributes of year, genre, cast and title and to keep the search organized, I created two methods (`searchMovie` and `searchShow`) in my main class.

I added director as a new attribute in movies to be able to use it as a way of recommendations so I distinguished movies and tv shows a little bit and wrote some methods separately for each of them.

The recommendations work by both genre and director (second one only for movies), I will make a list of all the genres and directors that appeared in users favorite shows, and I will search in Netflix archive for similar genres of directors.

Bonus:

1. valid email checker and strong password filter are used by regex.
2. recommendations have reasons, for example if you get lord of the rings on recommendation, the program will tell you that this was recommended because you

liked harry potter (and therefore the genre), or if you get recommended by director, you will be informed that this movie is in this list because you added a movie by the director to your favorites.

3. Exceptions are handled well, for example if you add a movie to your favorites without watching it, the program will ask you if you want to watch it or not.
4. The user has the option to like and dislike.
5. One of search methods is search by cast.

Testing and Evaluation:

The main obstacle in this project was how recommend other tv shows, I used the users favorites as the source to get the users taste.

I used `.nextLine` command even for inputting an integer because if I used `nextInt`, the next string I wanted to input would be blank string.

Conclusion:

I learned a lot about inheritance in this project and how It helps to make code effectively with less lines.

I saw how uml can be useful for coding because it gives you an overview of classes you want to use.