

Netflix Portfolio Project

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2021

AP Computer Science A 2018-2019 Moffat

The Project

The goal of this project was to use our new knowledge of arraylists and scanners to create a list of movies resembling a netflix list. The program then allows you to display a certain number of movies, scroll forwards or backwards (shift the arraylist), remove or add a movie, select a movie to view its information, add a movie to favorites, and more.

Movie selection

The main method first made the user type in their name, similar to Netflix's "pick a user" option before displaying the user's movies. It then displayed options A-H, prompting the user to type in a letter to select what they wanted to do first. This was done by first adding the five movies to a list of Movie objects, each with a title, year released, rating, and description, and then creating if statements for each letter option.

```
What is your name?  
Komal  
Komal, how many movies would you like to display? (3, 4 or 5  
5  
1. Thor: Ragnarok  
2. Captain America: The Winter Soldier  
3. Iron Man  
4. Guardians of the Galaxy  
5. The Avengers  
-----  
Options:  
Press A to scroll Forward  
Press B to scroll back  
Press C to add another movie  
Press D to remove a movie  
Press E to select a movie  
Press F to display all your favorites  
Press G to display all your movies  
Press H to exit
```

Options A and B

If the user chose A, the arraylist would shuffle forward using a sublist from the number after the movie before it to the total number of movies. Option B would do the same, except it would create a sublist from the movie after it to the total number of movies. Both options would still only stay true to the number of movies the user chose to display at first. For example, if the user, after typing in their name, chose the number four, the program would only display four movies at a time.

```
Scanner option = new Scanner(System.in);
letter = option.nextLine();
for (int i = 0; i < thing.size(); i++) {
    if (letter.toUpperCase().equals("A")) {
        int count = movieNum;
        for( int show = 0; show < thing.size(); show++) {
            System.out.println(thing.subList(show, count));
            count++;
        }
    } else if (letter.toUpperCase().equals("B")) {
        int count = movieNum;
        for( int show = thing.size()-1; show > -1; show--) {
            System.out.println(thing.subList(count, show));
            count--;
        }
    } else if (letter.toUpperCase().equals("C")) {
```

Options A and B

Options:

Press A to scroll Forward

Press B to scroll back

Press C to add another movie

Press D to remove a movie

Press E to select a movie

Press F to display all your favorites

Press G to display all your movies

Press H to exit

A

[1. Thor: Ragnarok , 2. Captain America: The Winter Soldier , 3. Iron Man , 4. Guardians of the Galaxy]

[2. Captain America: The Winter Soldier , 3. Iron Man , 4. Guardians of the Galaxy , 5. The Avengers]

Options:

Press A to scroll Forward

Press B to scroll back

Press C to add another movie

Press D to remove a movie

Press E to select a movie

Press F to display all your favorites

Press G to display all your movies

Press H to exit

B

[5. The Avengers, 1. Thor: Ragnarok, 2. Captain America: The Winter Soldier, 3. Iron Man]

Options C and D

Option C allowed the user to add another movie to their list of movies. This was done with a fairly simple scanner object. It went through and collected the information needed for the new Movie object that the user inputted, and stored it as variables. It then created a new Movie object using those variables and added it to the list. Option D allowed the user to remove one of their movies, by utilizing the arraylist remove method, and then printing the new arraylist.

```
String addDescription = "";
addDescription = descriptiony.nextLine();
Movie newMovie = new Movie (addName, addYear, addRating, addGenre, addDescription);
movies.add(newMovie);
System.out.println("Movie Added!");
System.out.println(movies);
} else if (letter.toUpperCase().equals("D")) {
    Scanner remove1 = new Scanner(System.in);
    int removeNum = 0;
    System.out.println("Which number movie would you like to remove?");
    removeNum = remove1.nextInt();
    movies.remove(removeNum - 1);
    System.out.println(movies);
}
```


Options C and D

Options:

Press A to scroll Forward
Press B to scroll back
Press C to add another movie
Press D to remove a movie
Press E to select a movie
Press F to display all your favorites
Press G to display all your movies
Press H to exit

C

Movie Name:

Iron Man 2

Year Released:

2010

Rating:

PG-13

Genre:

Action/Sci-fi

Description:

Tony Stark feels pressure from the government to submit his tech to them

Movie Added!

[1. Thor: Ragnarok , 2. Captain America: The Winter Soldier , 3. Iron Man , 4. Guardians of the Galaxy , 5. The Avengers , 6. Iron Man 2]

Options:

Press A to scroll Forward
Press B to scroll back
Press C to add another movie
Press D to remove a movie
Press E to select a movie
Press F to display all your favorites
Press G to display all your movies
Press H to exit

D

Which number movie would you like to remove?

2

[1. Thor: Ragnarok , 3. Iron Man , 4. Guardians of the Galaxy , 5. The Avengers]

Options E and F

Option letter E asked the user which number movie they chose to select. By selecting it, it would display the information about the Movie object, including its title, year released, rating, and description. The program would then have the user choose what to do with the movie, such as watch it, return to the list, or add it to favorites. This was done with the Movie's toString method. Option F would display the user's movies that they had marked as favorites by checking if the boolean variable of the Movie object was true or false.

```
} else if (letter.toUpperCase().equals("F")) {  
    System.out.println("Here are your favorites:");  
    if (isFavoriteMovie(m1) == true) {  
        System.out.println(m1);  
    }  
    if (isFavoriteMovie(m2) == true) {  
        System.out.println(m2);  
    }  
    if (isFavoriteMovie(m3) == true) {  
        System.out.println(m3);  
    }  
    if (isFavoriteMovie(m4) == true) {  
        System.out.println(m4);  
    }  
    if (isFavoriteMovie(m5) == true) {  
        System.out.println(m5);  
    }  
} else if (letter.toUpperCase().equals("G")) {
```


Options E and F

```
Press A to scroll forward
Press B to scroll back
Press C to add another movie
Press D to remove a movie
Press E to select a movie
Press F to display all your favorites
Press G to display all your movies
Press H to exit
E
Enter the movie number you want to select:
1
Thor: Ragnarok (2017) - PG-13 - Fantasy/Science Fiction
Imprisoned on the other side of the universe, Thor finds himself in a deadly gladiatorial contest that pits him against the Hulk, his former ally and fellow Avenger.
To add to favorites, press 'i'
To watch, press 'w'
To return to the list, press 'r'
i
Added to favorites!
-----
Options:
Press A to scroll Forward
Press B to scroll back
Press C to add another movie
Press D to remove a movie
Press E to select a movie
Press F to display all your favorites
Press G to display all your movies
Press H to exit
F
Here are your favorites:
1. Thor: Raganarok|
```

Options G and H

The final two options were very simple. Option G would display the entire movie list, not just the certain number the user chose to display, and option H would exit the Netflix program, bidding the user goodbye. If any other letter was typed in, the program would put out "That's not a option," and reprint the option letters.

```
    }  
    } else if (letter.toUpperCase().equals("G")) {  
        System.out.println(movies);  
    } else if (letter.toUpperCase().equals("H")) {  
        System.out.print("Bye!");  
        System.exit(0);  
    } else {  
        System.out.println("That's not an option");  
    }  
    options();  
    letter = option.nextLine();  
}
```

Options G and H

Options:

Press A to scroll Forward

Press B to scroll back

Press C to add another movie

Press D to remove a movie

Press E to select a movie

Press F to display all your favorites

Press G to display all your movies

Press H to exit

G

[1. Thor: Ragnarok , 2. Captain America: The Winter Soldier , 3. Iron Man , 4. Guardians of the Galaxy , 5. The Avengers]

Options:

Press A to scroll Forward

Press B to scroll back

Press C to add another movie

Press D to remove a movie

Press E to select a movie

Press F to display all your favorites

Press G to display all your movies

Press H to exit

I

[That's not an option

Options:

Press A to scroll Forward

Press B to scroll back

Press C to add another movie

Press D to remove a movie

Press E to select a movie

Press F to display all your favorites

Press G to display all your movies

Press H to exit

Options:

Press A to scroll Forward

Press B to scroll back

Press C to add another movie

Press D to remove a movie

Press E to select a movie

Press F to display all your favorites

Press G to display all your movies

Press H to exit

H

Bye!

Lessons Learned

This project really taught me the proper way of using a scanner class and reinforced the arraylist methods as well. It also reviewed complex looping, as well as nested loops, because every time something would go wrong, I would find it easier to trace the loop by hand to solve the problem. What surprised me was how much previous knowledge was required to complete this project, because everything builds off everything else, and one small error would crash the whole program.