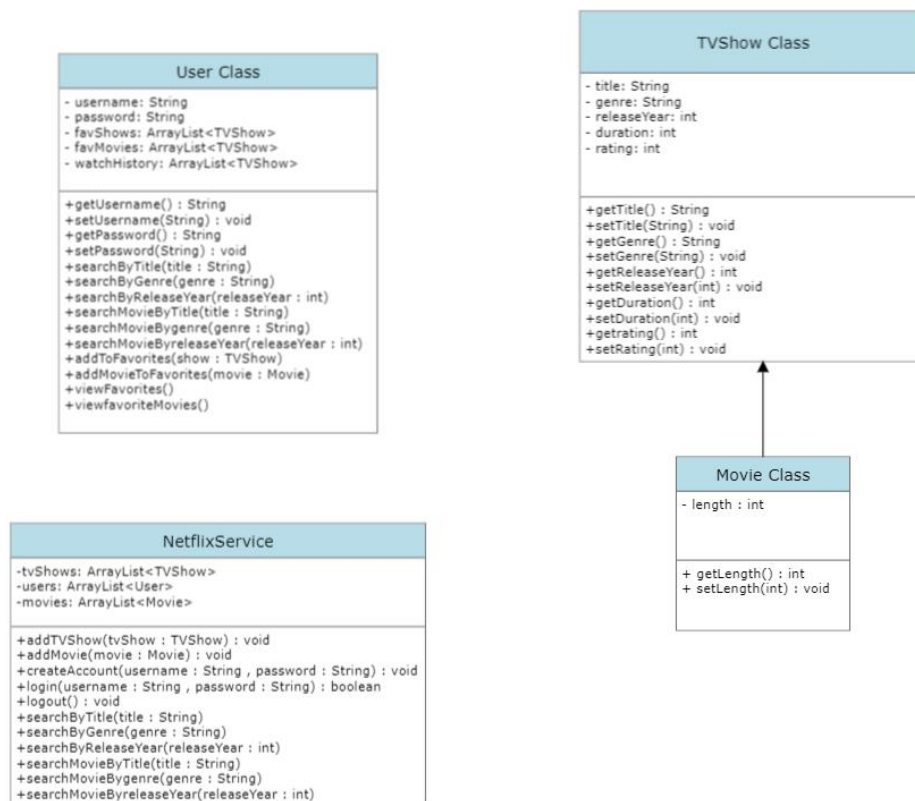# Netflix

Introduction

In this assignment, we built a simple simulation of Netflix which allows users to manage their accounts, search among TV shows and movies.

Design And Implementation

This program has five classes; User, TVShow, Movie, NetflixService, Main.

Here are the UML of the classes that are used:

User Class

- username: String
- password: String
- favShows: ArrayList<TVShow>
- favMovies: ArrayList<TVShow>
- watchHistory: ArrayList<TVShow>

+getUsername() : String
+setUsername(String) : void
+getPassword() : String
+setPassword(String) : void
+searchByTitle(title : String)
+searchByGenre(genre : String)
+searchByReleaseYear(releaseYear : int)
+searchMovieByTitle(title : String)
+searchMovieBygenre(genre : String)
+searchMovieByreleaseYear(releaseYear : int)
+addToFavorites(show : TVShow)
+addMovieToFavorites(movie : Movie)
+viewFavorites()
+viewfavoriteMovies()

TVShow Class

- title: String
- genre: String
- releaseYear: int
- duration: int
- rating: int

+getTitle() : String
+setTitle(String) : void
+getGenre() : String
+setGenre(String) : void
+getReleaseYear() : int
+setReleaseYear(int) : void
+getDuration() : int
+setDuration(int) : void
+getrating() : int
+setRating(int) : void

Movie Class

- length : int

+ getLength() : int
+ setLength(int) : void

NetflixService

-tvShows: ArrayList<TVShow>
-users: ArrayList<User>
-movies: ArrayList<Movie>

+addTVShow(tvShow : TVShow) : void
+addMovie(movie : Movie) : void
+createAccount(username : String , password : String) : void
+login(username : String , password : String) : boolean
+logout() : void
+searchByTitle(title : String)
+searchByGenre(genre : String)
+searchByReleaseYear(releaseYear : int)
+searchMovieByTitle(title : String)
+searchMovieBygenre(genre : String)
+searchMovieByreleaseYear(releaseYear : int)

In the Main class, there is a runMenu method which shows the menu and allows users to use the features of the program.

Testing And Evaluation

I tried to test as many cases as I could to see if the program works properly and fixed the related problems.

Conclusion

This assignment helped to learn how to use OOP *better!*