WEROCK007 411
Project Name: FlixRecc

Members

abiswas7, kartikm3, nsharm40, yubink2

Project Summary

A relational database will be constructed based on the public IMDb dataset. This database will be queried in order to supply a web-based application which returns film suggestions based on the user's preferences of actors, genres, ratings, languages, and release date. The user will create an account, which will first ask for the user's preferences on the genres, favorite actors, etc. Based on the user's preferences we would provide the user with suggestions for more media to watch.

Description

On a Friday evening, an all too common dispute between family or friends is sparked by the following question: "What movie do we want to watch?" All too often, a movie is chosen at random which does not meet the viewers' expectations, thus ruining what should have been an enjoyable movie night. Therefore, we at the WEROCK007 team would like to develop a web application with the purpose of recommending films and television series to users based on their preferences. This will streamline the process of choosing a film that appeals to the most people, therefore ensuring a successful movie night and preventing any unnecessary conflict.

Users will first create an account, which will be used to store movies to watch, as well as to search for film and television recommendations based on their preferences as well as movies/TV shows that have already been viewed. Users will access dropdown menus containing different genres, languages, release year, ratings, and actors. Based on the preferences selected, the application will return results that may be of interest to the user. The user can then select films to put on their watchlist, which is linked to their account.

Usefulness

Although many people enjoy watching movies and tv programs, searching for new entertainment could be time-consuming. From reading the movie descriptions, searching for the ratings, to watching the movie trailers, many people often give up on making the decision for which movie to watch. This application will help the user to filter out the list of movies they would like to watch based on their preferences on elements such as genres, actors, languages, release date, and ratings. By doing so, the user will be able to scroll through the list of film and television recommendations and make a decision that matches their interests more easily.

A similar application to our project is PickAMovieForMe, which is a popular movie recommendation engine. The major difference between this website and our application is that PickAMovieForMe is a quiz-based movie picker, where it makes the user answer 6 different questions regarding their mood, occasion, and individual preferences and filter out the movies. Our application will provide a list of elements for each of the categories and let the user pick their preferences. Also, PickAMovieForMe is a one-time recommendation engine, where it doesn't take the registration form. Instead, the user must take the quiz every time they want a new list of recommendations. Our application will let the users create an account and store their preferences, as well as what they've already watched and what they want to watch in the future. This will provide a more personalized recommendation to each of the users. This will work as the user will have access to many filters which they can apply to add movies to their watchlist, and based on their preferences we will extrapolate more preferences by applying a certain subset of those filters to get more movies.

Realness

The two data sets we are looking at are IMDb and TMDb. The IMDb database has 7 tables and has a wide array of information amongst them from. They can all be connected with each other using the primary key 'titleId' and 'tconst' can be the foreign key in all tables referencing the primary key. This database is good as it allows us many aspects of a movie from year of creation, rating, actors. This allows users to give many categories which they prefer.

Another dataset we are interested in is the TMDb which also provides descriptions for the particular media which can be helpful to show on the homepage on the recommended media.

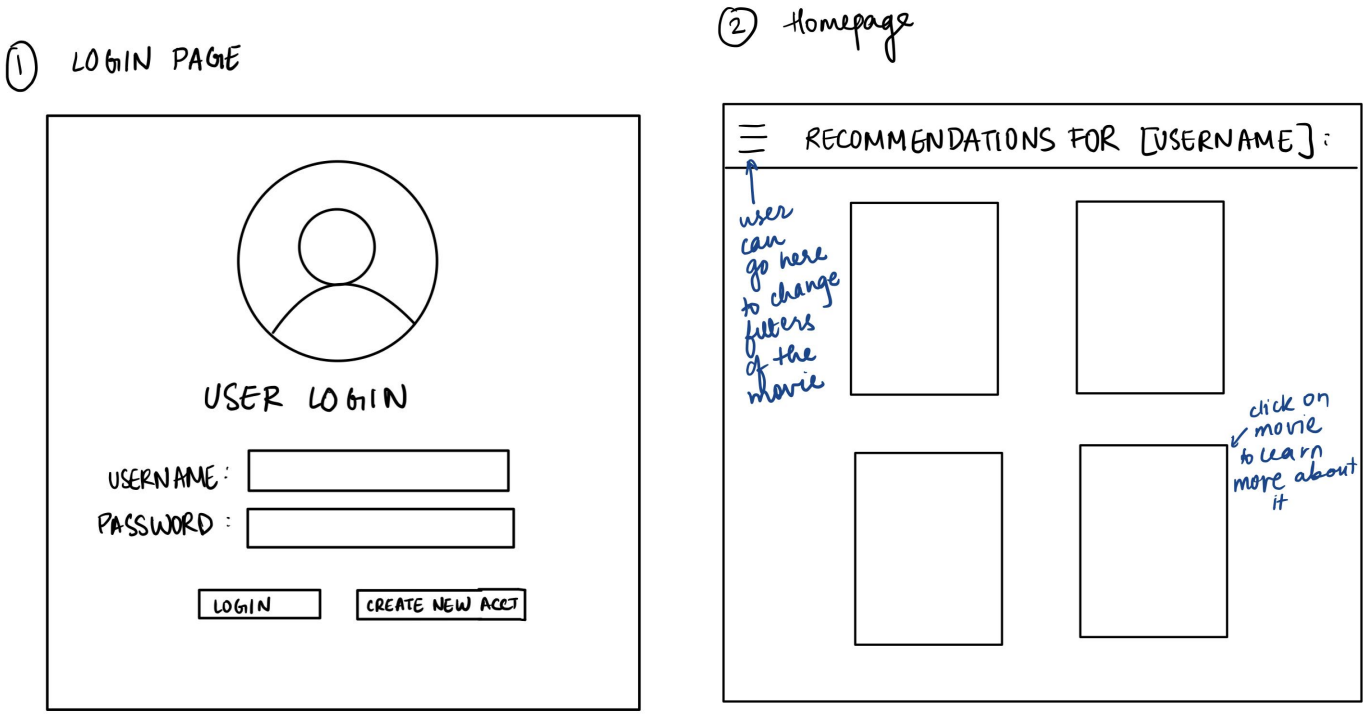
IMDb - https://datasets.imdbws.com/
TMDB - https://developers.themoviedb.org/3/getting-started

Description of the Functionality

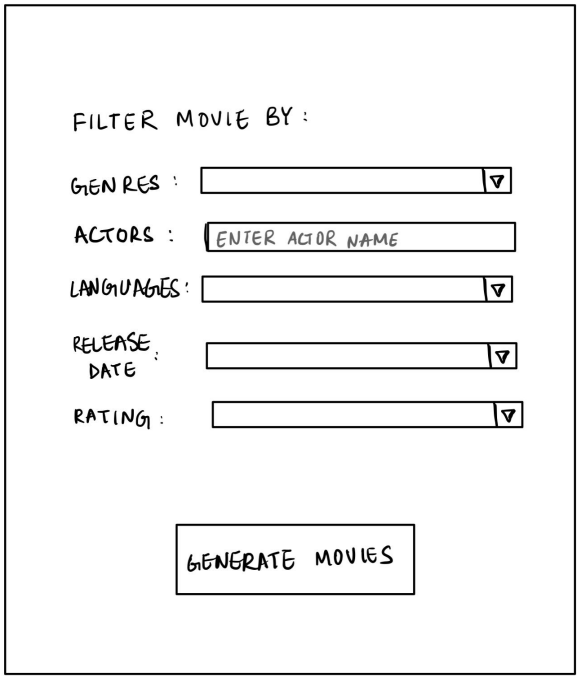
In order for users to access the application, they must first create an account. Their username and respective password will be stored in a table, where the username would be the primary key to our table. When a user finds something they would like to save to their watchlist, a row is created in a watchlist table which links the saved film/show to their username. A table will be created to store all the films and their searchable attributes (actors, etc.) based on the contents of the dataset we choose. For our movie dataset, we will have 5 attributes: genres, actors, languages, release date, and ratings. In order to find recommendations, the user must select a genre of film they feel interested in viewing, which will then be used to guide the search as a filter. Selecting the language from the dropdown menu will also aid in filtering, as well as the rest of search attributes. Once all the filters have been determined, a query will go into the main table of films and filter based on the preferences selected. If however there are no films or TV programs which fulfill the user's requirements, attributes will be removed from the filters in order to broaden the search.

The user will also be able to search for the name of an actor/actress to get a list of movies or tv shows they were featured in. As the user types in the name to the search bar, we will provide a drop down list with the possible names filtered by the characters that the user has typed. This will be implemented by performing a query on a table containing the names of actors after each keystroke to fetch suggestions of the names of actors. Also, we plan to provide a clean and organized UI functionality so that the user can interact with our application website more easily.

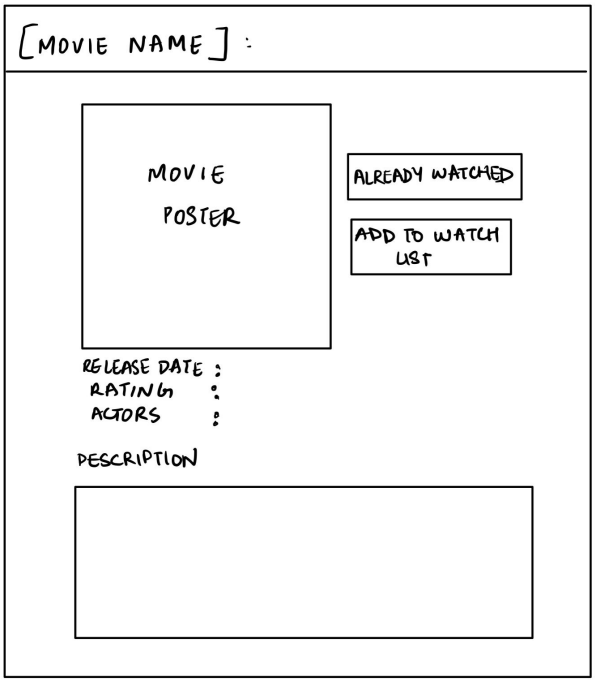
Low Fidelity UI Mockup



(3) Filter page



(4) MOVIE INFORMATION



Work Distribution

We are dividing the project into four parts as seen in the UI Mockup. For each part of the project, we will assign two people for the frontend and two people for the backend and database management, making sure that each person gets equal frontend and backend work. For the login page, Aarushi and Yubin will work on the frontend and Nikhil and Kartik will work on the backend and in storing the user information in the database. For the homepage, Aarushi and Kartik will work on the backend whereas Nikhil and Yubin will work on the frontend. For the filter page, Yubin and Kartik will work

on the frontend whereas Aarushi and Nikhil will work on the backend and database management in storing the preferences of the user. Lastly, Nikhil and Yubin will work on the frontend of the movie information page whereas Aarushi and Kartik will work on the backend and database management.