TECH-A-THONE

PROJECT
PROTOTYPE

PREDICTOR

Movie Prediction App

TEAM NAME
NKG Reactors

MACHINE LEARNING

TEAM
DETAILS

TEAM NAME

NKG Reactors

TEAM MEMBERS

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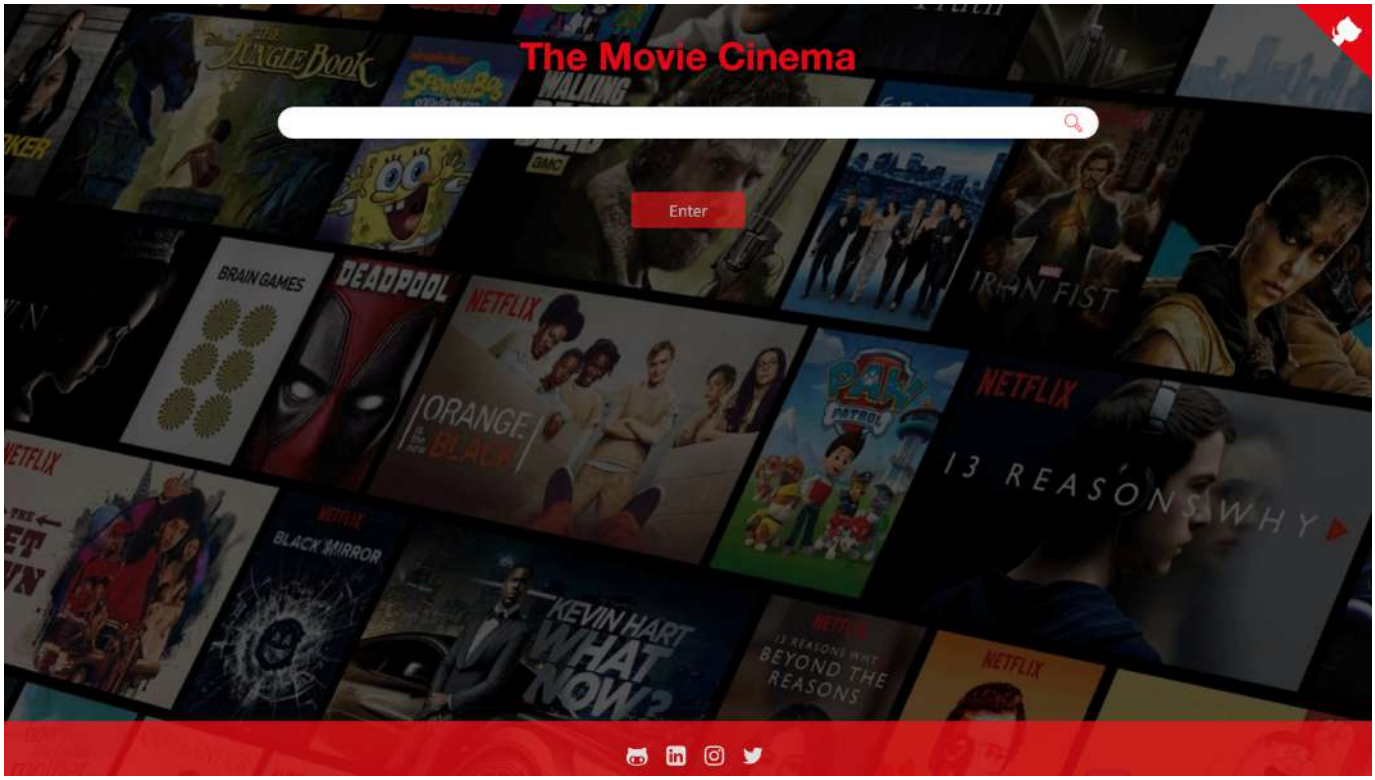

https://still-coast-69612.herokuapp.com

PROJECT
DETAILS

DOMAIN

Machine Learning

PROJECT NAME

Predictor - Movie prediction app

THEME

Movie recommendations based on interest

PROBLEM STATEMENT / OBJECTIVE

The project was made for the TECH-A-THON competition. The main objective behind creating this app was to make the life of people a little bit easier by providing an easier way to search for desired movies.

Whenever we watch a movie and like it we always want to see more movies like it and this is the step where we face problems. So we thought to solve this problem and came up with the idea of **"Predictor"** app.

SOLUTION TO THE PROBLEM / OBJECTIVE STATED:

With the help of machine learning and API from themoviedb.org we made our app Predictor. The main function of the app is to recommend movies based on our interest. We have made our UI very simple and user friendly so that people can get what they are looking for. After entering the name of the movie it will show all the details of the movie like its title, overview, rating, genre, cast and even user reviews along with the sentiments. And then there is the main part which is Recommended Movies. In this section list of all the recommended movies related to our given movie will show.

If we don't exactly know the spelling of the movie then also it will show the movie with the help of machine learning. And as we have used the API from themoviedb.org it has tons of movies in the list.

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DESCRIPTION OF THE PROJECT

This application provides all the details of the requested movie such as overview, genre, release date, rating, runtime, top cast, reviews, recommended movies, etc.

The details of the movies(title, genre, runtime, rating, poster, etc) are fetched using an API by TMDB, https://www.themoviedb.org/documentation/api, and using the IMDB id of the movie in the API, I did web scraping to get the reviews given by the user in the IMDB site using beautifulsoup4 and performed sentiment analysis on those reviews.

HOW TO GET THE API KEY

Create an account in https://www.themoviedb.org, click on the API link from the left hand sidebar in your account settings and fill all the details to apply for API key. If you are asked for the website URL, just give "NA" if you don't have one. You will see the API key in your API sidebar once your request is approved.

HOW TO RUN THE PROJECT

01 Clone this repository in your local system.

02 Install all the libraries mentioned in the requirements.txt file with the command pip install -r requirements.txt

03 Replace YOUR_API_KEY in both the places (line no. 23 and 43) of static/recommend.js file.

04 Open your terminal/command prompt from your project directory and run the main.py file by executing the command python main.py.

05 Go to your browser and type http://127.0.0.1:5000/ in the address bar.

Hurray! That's it.

PROJECT
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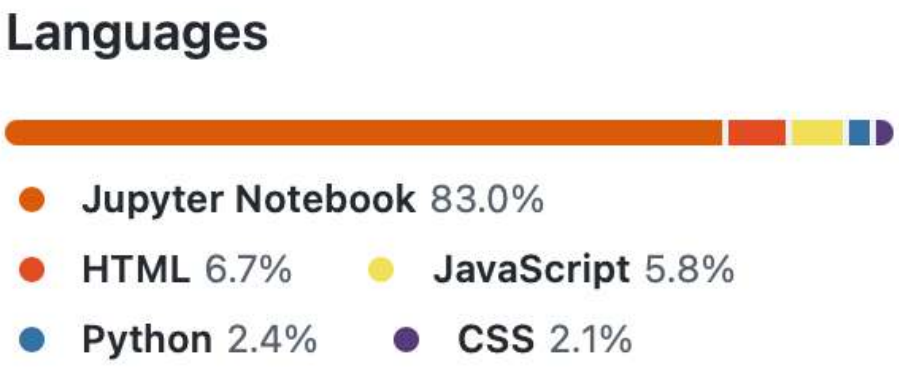
SOURCES OF THE DATASETS

- IMDB 5000 Movie Dataset
- The Movies Dataset
- List of movies in 2018
- List of movies in 2019
- List of movies in 2020

LINK TO THE CODE IN GITHUB REPOSITORY:

https://github.com/Abhi6722/Predictor



FEASIBILITY AND APPLICABILITY:

USABILITY:

- Search for a Movie and gain knowledge about the movie and its cast.
- Get recommendations for the movies.

SPECIFY FEATURES:

- The main feature of the app is that it shows all the movie recommendations related to our input given.

SCALABILITY:

- This project can actually be used at a product-level scale and can come in handy.
- We can include more filters options which can make searching more extensive.

HOW REALISTIC TO ACHIEVE/MAKE:

- Our app is not just a theoretical idea rather it a full scale app which can be put into production stage and everyone can use it.

ECONOMIC SUSTAINABILITY:

- We have made our app in such a way so that it could be as economical as possible.
- Till now the app is completely build without spending any money as we have used all free resources.

ENVIRONMENT SUSTAINABILITY:

- Our project does not harm environment in any aspect and it totally user friendly as we don't take any information from our user or store their information.

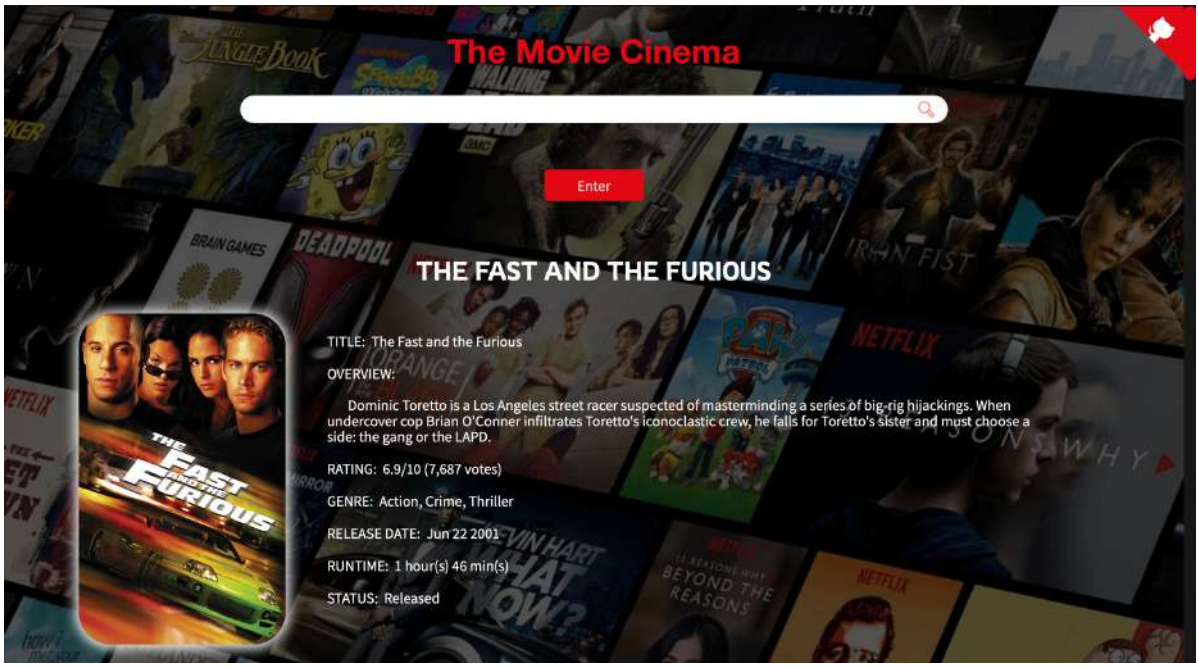
ANY THREAT/RISK/PROBLEM THAT YOU CAN FORESEE?:

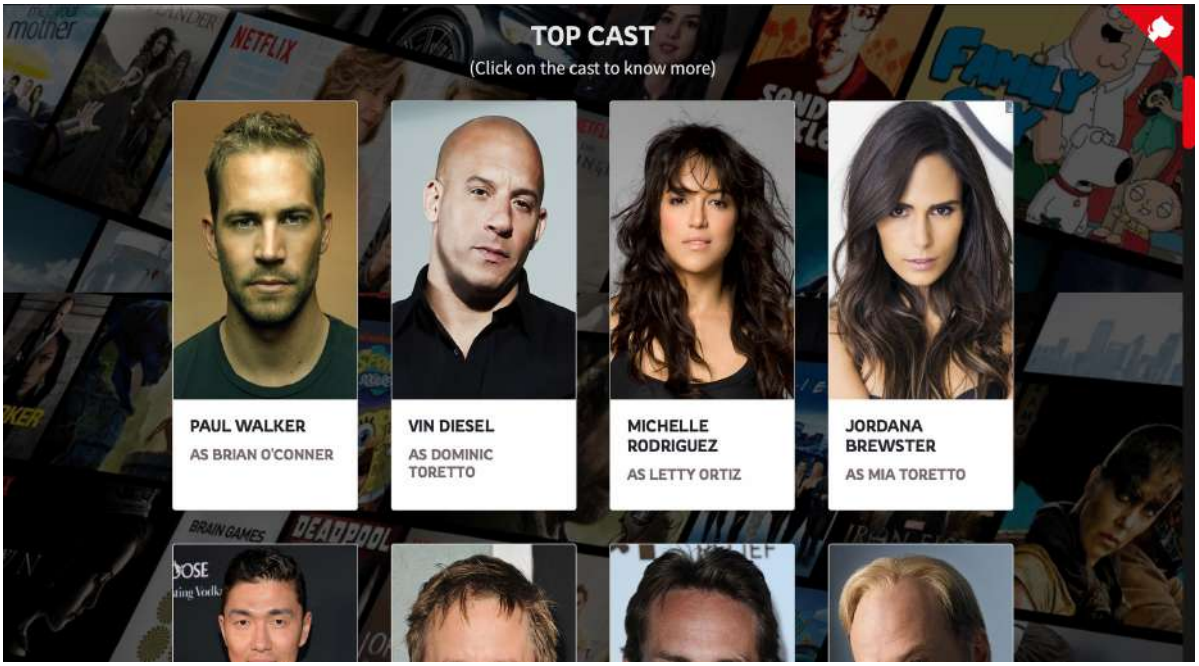
- There are always controversies regarding the movie app but this app should not include any risk as we are just using information which are provided in an open to use API source. (https://www.themoviedb.org)

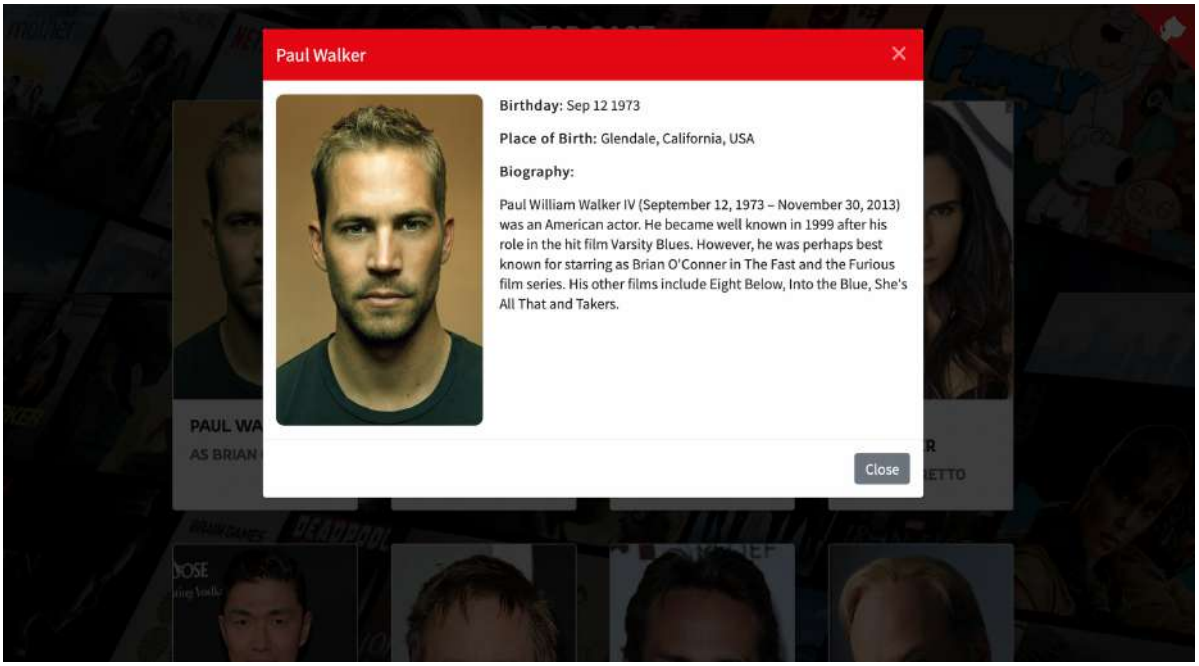
ANY IMPROVEMENT IN YOUR PROJECT YOU FORESEE TO IMPLEMENT IN FUTURE:

- We are planning to add some additional features and make it more appealing in terms of UI.
- We are planning to use dialouge flow as a chat bot which will be trained to help users.

APPLICATION SCREENSHOTS







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