

```
app.py X
app.py > ...
1 import pickle
2 import streamlit as st
3 import pandas as pd
4 import requests
5
6 def fetch_poster(movie_id):
7     url = "https://api.themoviedb.org/3/movie/{}?api_key=668ede36989ea08a712d31b6d421650e&language=en-US".f
8     data = requests.get(url)
9     data = data.json()
10    poster_path = data['poster_path']
11    full_path = "https://image.tmdb.org/t/p/w500/" + poster_path
12    return full_path
13
14 def recommend(movie):
15     index = movies[movies['title'] == movie].index[0]
16     distances = sorted(list(enumerate(similarity[index])), reverse=True, key=lambda x: x[1])
17     recommended_movie_names = []
18     recommended_movie_posters = []
19     for i in distances[1:6]:
20         # fetch the movie poster
21         movie_id = movies.iloc[i[0]].movie_id
22         recommended_movie_posters.append(fetch_poster(movie_id))
23         recommended_movie_names.append(movies.iloc[i[0]].title)
24
25     return recommended_movie_names,recommended_movie_posters
```

```
notebook86c26b4f17.ipynb X
notebook86c26b4f17.ipynb > # This Python 3 environment comes with many helpful analytics libraries installed
+ Code + Markdown | Run All | Clear All Outputs | Outline ...
[44] movies['cast'] = movies['cast'].apply(collapse)
     movies['crew'] = movies['crew'].apply(collapse)
     movies['genres'] = movies['genres'].apply(collapse)
     movies['keywords'] = movies['keywords'].apply(collapse)

[26] movies.head()

...
  movie_id  title  overview  genres  keywords  cast  crew
0    19995  Avatar  In the 22nd century, a paraplegic Marine is di...  [Action, Adventure, Fantasy, ScienceFiction]  [cultureclash, future, spacewar, spacecolony, ...  [SamWorthington, ZoeSaldana, SigourneyWeaver]  [JamesCameron]
1     285  Pirates of the Caribbean: At World's End  Captain Barbossa, long believed to be dead, ha...  [Adventure, Fantasy, Action]  [ocean, drugabuse, exoticisland, eastindiatrad...  [JohnnyDepp, OrlandoBloom, KeiraKnightley]  [GoreVerbinski]
2   206647  Spectre  A cryptic message from Bond's past sends him o...  [Action, Adventure, Crime]  [spy, basedonnovel, secretagent, sequel, mi6, ...  [DanielCraig, ChristophWaltz, LéaSeydoux]  [SamMendes]
3    49026  The Dark Knight Rises  Following the death of District Attorney Harve...  [Action, Crime, Drama, Thriller]  [dccomics, crimefighter, terrorist, secretiden...  [ChristianBale, MichaelCaine, GaryOldman]  [ChristopherNolan]
```

```
Procfile x
Procfile
1 web: sh setup.sh && streamlit run app.py
```

```
recommended_movie_posters.append(fetch_poster(movie_id))
recommended_movie_names.append(movies.iloc[i[0]].title)

return recommended_movie_names,recommended_movie_posters

st.header("The MOVIE-THEATRE (Recommender System)")
movies_dict = pickle.load(open('movie_dict.pkl','rb'))
movies= pd.DataFrame(movies_dict)
similarity = pickle.load(open('similarity.pkl','rb'))

movie_list = movies['title'].values
selected_movie = st.selectbox(
    "Type or select a movie from the dropdown",
    movies['title'].values
)

if st.button('Show Recommendation'):
    recommended_movie_names,recommended_movie_posters = recommend(selected_movie)
    col1, col2, col3, col4, col5 = st.columns(5)
    with col1:
        st.text(recommended_movie_names[0])
        st.image(recommended_movie_posters[0])
    with col2:
        st.text(recommended_movie_names[1])
        st.image(recommended_movie_posters[1])
```

```
terminal Help notebook86c26b4f17.ipynb - movie-theatre - Visual Studio Code

notebook86c26b4f17.ipynb X
notebook86c26b4f17.ipynb > # This Python 3 environment comes with many helpful analytics libraries installed
+ Code + Markdown | Run All Clear All Outputs | Outline ... Select Kernel

[47] Python

new['tags'] = new['tags'].apply(lambda x: " ".join(x))
new.head()

[48] Python

...


|   | movie_id | title                                    | tags                                              |
|---|----------|------------------------------------------|---------------------------------------------------|
| 0 | 19995    | Avatar                                   | In the 22nd century, a paraplegic Marine is di... |
| 1 | 285      | Pirates of the Caribbean: At World's End | Captain Barbossa, long believed to be dead, ha... |
| 2 | 206647   | Spectre                                  | A cryptic message from Bond's past sends him o... |
| 3 | 49026    | The Dark Knight Rises                    | Following the death of District Attorney Harve... |
| 4 | 49529    | John Carter                              | John Carter is a war-weary, former military ca... |



[49] Python

from sklearn.feature_extraction.text import CountVectorizer
cv = CountVectorizer(max_features=5000,stop_words='english')

[50] Python

vector = cv.fit_transform(new['tags']).toarray()
```

```
EXPLORER ... notebook86c26b4f17.ipynb X
notebook86c26b4f17.ipynb
+ Code + Markdown | Run All Clear All Outputs | Outline ... Select Kernel

MOVIE-THEATRE
> idea
> venv
> etc
> Lib
> Scripts
> share
> .gitignore
> pyvenv.cfg
> .gitignore
> app.py
> movie_dict.pkl
> movie_list.pkl
> notebook86c26b4f17.ipynb
> Profile
> README.md
> requirements.txt
> setup.sh
> similarity.pkl

[53] Python

for i in distances[1:6]:
    print(new.iloc[i[0]].title)

[54] Python

recommend('Gandhi')

...
Gandhi, My Father
The Wind That Shakes the Barley
A Passage to India
Guiana 1838
Ramanujan

[55] Python

import pickle

[56] Python

pickle.dump(new,open('movie_list.pkl','wb'))
pickle.dump(similarity,open('similarity.pkl','wb'))
```

The MOVIE-THEATRE (Recommender System)

Type or select a movie from the dropdown

Avatar

Show Recommendation

The MOVIE-THEATRE (Recommender System)

Type or select a movie from the dropdown

Harry Potter and the Goblet of Fire

Show Recommendation

The MOVIE-THEATRE (Recommender System)

Type or select a movie from the dropdown

Men in Black 3



Avatar

Pirates of the Caribbean: At World's End

Spectre

The Dark Knight Rises

John Carter

Spider-Man 3

Tangled

Avengers: Age of Ultron

The MOVIE-THEATRE (Recommender System)

Type or select a movie from the dropdown

Harry Potter and the Goblet of Fire



Show Recommendation

Harry Potter and the Chamber of Secrets Harry Potter and the Chamber of Secrets Harry Potter and the Chamber of Secrets Harry Potter and the Chamber of Secrets Harry Potter and the Chamber of Secrets

