

Final Project
Due Date: November 27, 2019
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CPS842 | Information Retrieval

Final Project Report | Movie Recommender

test.html

This file contains the HTML code for the websites where user can input the films they watched and rate it. It exports the completed table into a excel file (.xlsx).

project.ipynb

This file contains the python code that analyses the movie database and the user rated excel file to recommend.

The first part of the program gets the movie database and formats it by removing unnecessary columns and formatting the empty rows. It also gets the excel sheet of the user rated films as well.

The second one gets the cosine score for the most similar users. After getting the cosine score, we sort it in descending order and get the top 6 users. After that we analyse what movies they watched and get the utility score and recommend the highest rated movie for that. And then we output the table with the top 10 recommended movies.

How To Run The Program

test.html

Open up test.html first and input the movies and their rates, then click the add movies to add the values into the table. Then click export to excel to get the excel file. Move the file into the project folder.

CPS842: PROJECT MOVIE RECOMMENDER

Movie: Thor: The Dark World (Rating: 5

Movie: We're the Millers (2013) Rating: 5

Movie: This is the End (2013) Rating: 4

Movie: The Mist (2007) Rating: 3

Movie: Frozen(2013) Rating: 2

Add Movies

MOVIES	RATINGS
Thor: The Dark World (2013)	5
We're the Millers (2013)	5
This is the End (2013)	4
The Mist (2007)	3
Frozen(2013)	2

Export to excel

UserRate (1).xls

Show All

project.ipynb

Now open project.ipynp and run each part. The final result should look like this.

	UserId	345	386	73	131	390	155	Mean_Review
title								
One Flew Over the Cuckoo's Nest (1975)		0.0	0.0	5.0	3.5	5.0	0.0	2.7
Memento (2000)		0.0	0.0	4.0	4.0	4.5	0.0	2.5
Saving Private Ryan (1998)		0.0	0.0	5.0	2.5	0.0	4.0	2.3
Dark Knight, The (2008)		0.0	0.0	4.5	4.0	2.5	0.0	2.2
Finding Nemo (2003)		0.0	0.0	4.5	0.0	5.0	0.0	1.9
Braveheart (1995)		0.0	3.0	0.0	2.5	4.0	0.0	1.9
X-Men (2000)		0.0	0.0	5.0	0.0	0.0	4.0	1.8
Dark Knight Rises, The (2012)		0.0	0.0	5.0	4.0	0.0	0.0	1.8
Pulp Fiction (1994)		0.0	5.0	0.0	4.0	0.0	0.0	1.8
Fight Club (1999)		0.0	0.0	0.0	0.0	5.0	4.0	1.8