MOVIE RECOMMENDER SYSTEM

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ABSTRACT

The recommendation system plays an essential role in the modern era and used by many prestigious applications. A movie recommendation plays a crucial role in our social life. A recommendation system provides a set of movies to the users based on the movie's popularity or depending on the users' interests. A recommendation system is also used to propose goods to buy or view.

So our recommender system recommends movies for a user on the basis of Cast, Genre, Directors, Language, Year of Release and etc.

Our whole back-end will be supported by python and for the front end we will use stream-lit (which is based on python as well). It will be locally hosted on VIT-AP college wifi later after completion of the project.

The system will also show the posters of the recommended movies to the users on our local host website. And we are going to access the images from TMDB(The Movie Database)as well using API key.

We will use Movie data and Credit data from TMDB (The Movie Database)as well.

We are going to use Panda, Numpy, Pickle, Ast, NLTK, lemmatization, Stemming.

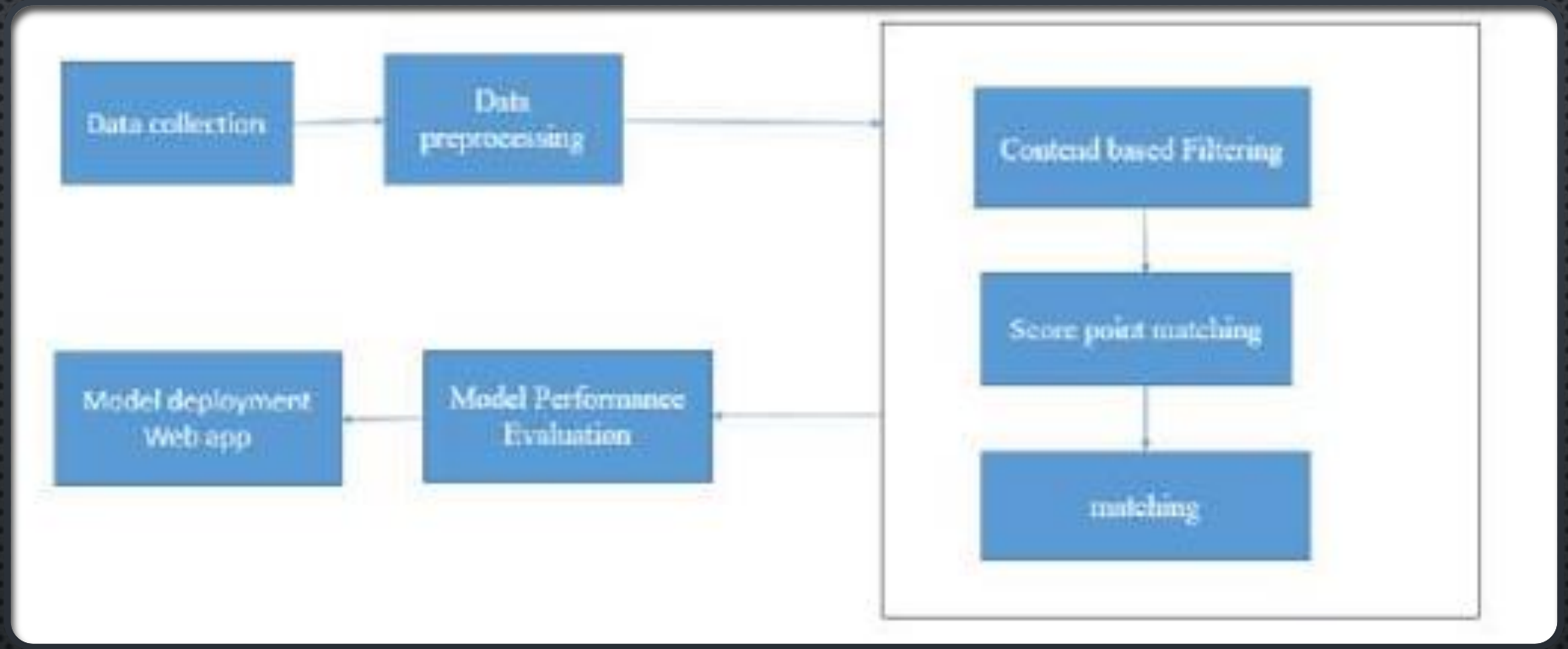
We will add more features such as Watch options, Reviews, Ratings and add webseries/serials later is time permits.

NEED OF PROPOSED WORK(RELATED TO SOCIETY)

- NOWADAYS, THE CURRENT GENERATION AND GEN-Z ARE STRUGGLING FOR THE CONTENT THEY NEED TO WATCH, AS THERE ARE TONS OF MOVIES OLD/NEW, IN DIFFERENT LANGUAGES ETC.
- SO, HERE IS OUR MOVIE RECOMMENDER SYSTEM WHICH WILL RECOMMEND THEM THE MOST PRECISE MOVIE BASED ON THE GENRE, CAST, TIME OF RELEASE AND ALL THE MAJOR FACTORS THAT AFFECTS A MOVIE'S RATING.
- IN THE UPDATED VERSIONS WE WILL ADD RECOMMENDATION FOR WEBSERIES, ANIME, SERIALS, CARTOONS WHICH WILL MOSTLY COVER ALL THE AGE RANGES AND THERE WILL NOT BE ANY AGE BARRIER.

Related work (details regarding existing work)

- Currently we have accessed the data sets (i.e movies.csv , credits.csv) from TMDB.
- We have merged our data sets on the basics of movie_id.
- Data pre-processing is in progress.



PROPOSED ARCHITECTURE

SYSTEM REQUIREMENTS(MENTION HARDWARE REQUIREMENTS AND SOFTWARE LIBRARIES)

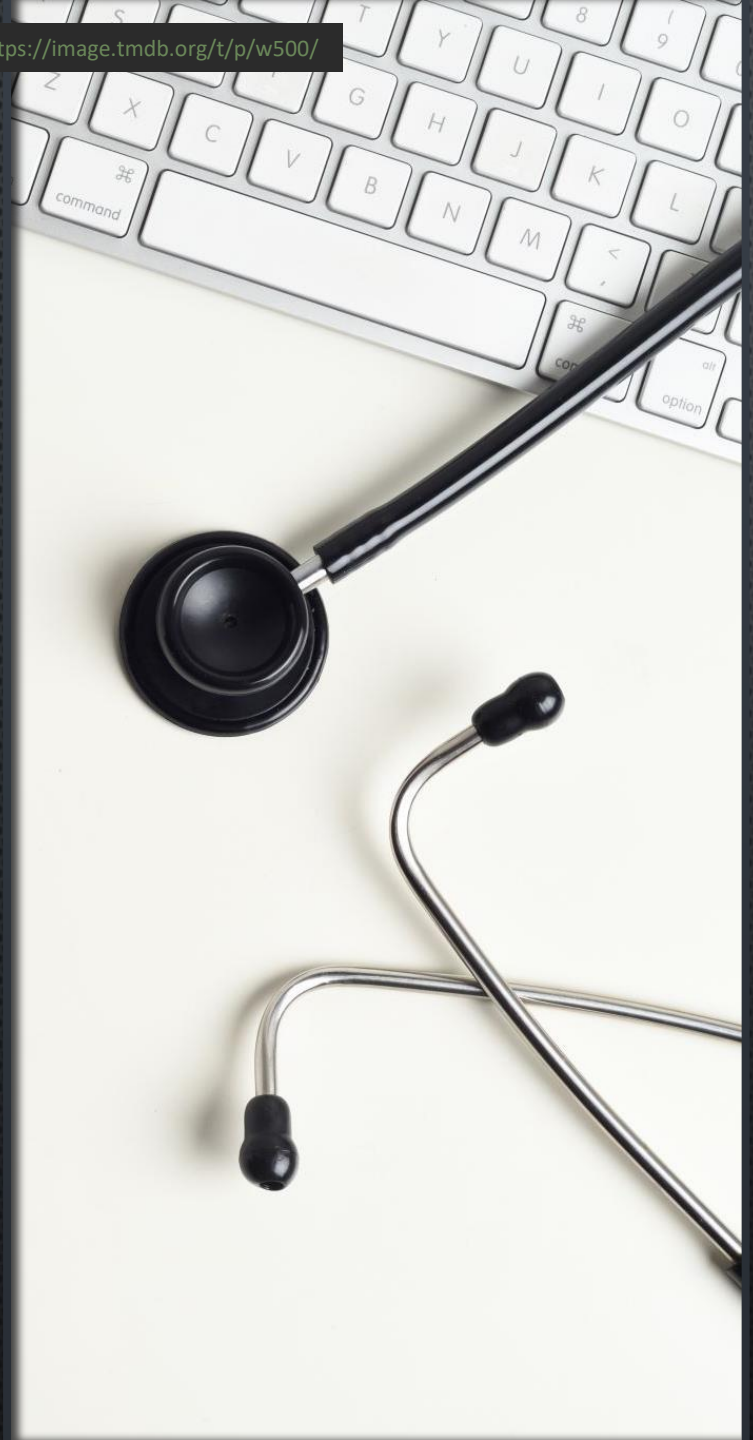
- System requirement :- Win 7 or higher/ OS X Mountain Lion(10.0.5)

  Chrome(107.0.5412.100)

  Ram:- 8GB or higher

- Softwares:
- Compiler: Jupyter Notebook
- For web deployment : Streamlit
- Language : Python
- Libraries recommender : Panda, Numpy, Ast, NLTK
- Libraries for deployment : Requests, gc, sys, threading, types.

TIMELINE OF PROPOSED WORK(WITH GANTT CHART)



REFERENCES(JOURNAL, WEB SITE REFERENCES)

- RESEARCH PAPER:

  RECOMMENDER SYSTEM'S BY P. RESNICK, H.R. VARIAN

  A COLLABORATIVE FILTERING METHOD BASED ON ARTIFICIAL IMMUNE NETWORK BY A.M. ACILAR

- WEBSITES:
- HTTPS://API.THEMOVIEDB.ORG/3/MOVIE/
- HTTPS://IMAGE.TMDB.ORG/T/P/W500/