

Project proposal

Team member:

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Captain:

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Theme:

Free topic

Topic:

Web application with recommender system

Description:

Web applications that shows list of TV shows and movies from Netflix. User can click the item to see the detailed information including video name, description, genres, release year, cast, creators. When user select a item, recommended videos will also show in the page using content based filtering.

Motivation:

People always don't know what kind of movies or TV shows they may like to watch due to the large number of choices. I want to build a web application for users to first browse what they like to watch, and then recommend them with similar videos using content based filtering.

Task:

Scraper for Netflix to retrieve all the information and store them in csv file. Build web API using flask for GET operations. Build web page using HTML, JavaScript, CSS. Build recommender system based on the information of videos.

Expected outcome:

Web page showing the list of videos with clickable image and name to navigate to a new detail page of that video with recommended other videos.

Evaluation:

Compare the result of recommended videos with Netflix videos in "More Like This" section of a specific video to evaluate the recommender system.

Tools:

Flask, BeautifulSoup, pandas, react

Programming languages:

Python, HTML, JavaScript, CSS

Main tasks and estimated time:

Scraper 4hrs

API 4hrs

Web page structure 4hrs

Content render 4hrs

Recommender system 4hrs