

What 2Watch 2Nite



Here is where
the fun begins

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O1 TEAM INTRODUCTION



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02

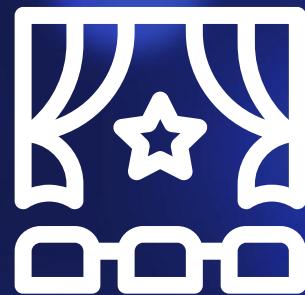
PROJECT OVERVIEW

THE PROBLEM

With so many viewing options available, it's hard to decide what to watch next. We wanted to build a recommendation engine to aid users in selecting viewing options that they would most likely enjoy.

In our research, we found most recommendation engines were built for movies, with few built for TV series.

OUR SOLUTION: Build 2 Engines in 1 App



+



MOVIES

TV SERIES

03

DATA DESCRIPTION



DATA OVERVIEW

23,000+
Movie Records

- Kaggle original dataset = 700,000 records
- Scrapped from TMDB and updated daily

Original Movie Dataset

8,000+
TV Show Records

- Kaggle original dataset = 150,000 records
- Scrapped from TMDB and updated weekly

Original TV Series Dataset

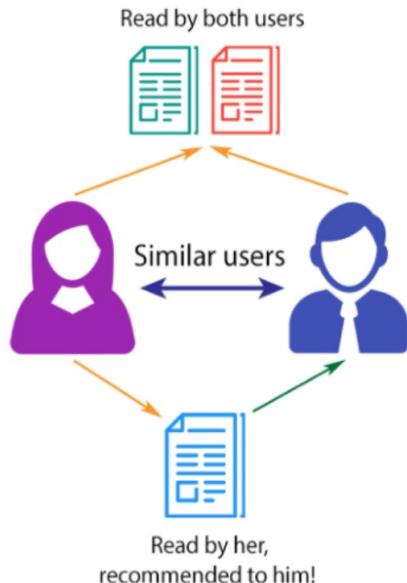


04

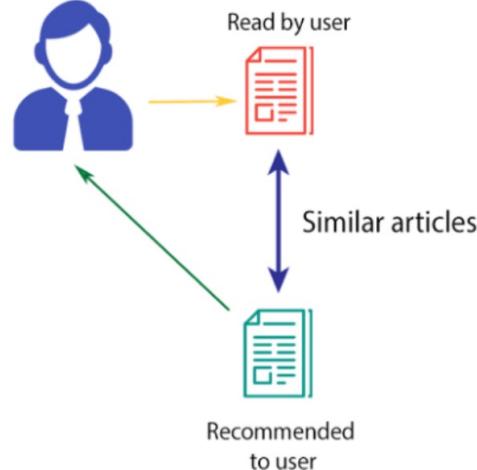
APPROACH

Types of Recommendation Systems

COLLABORATIVE FILTERING

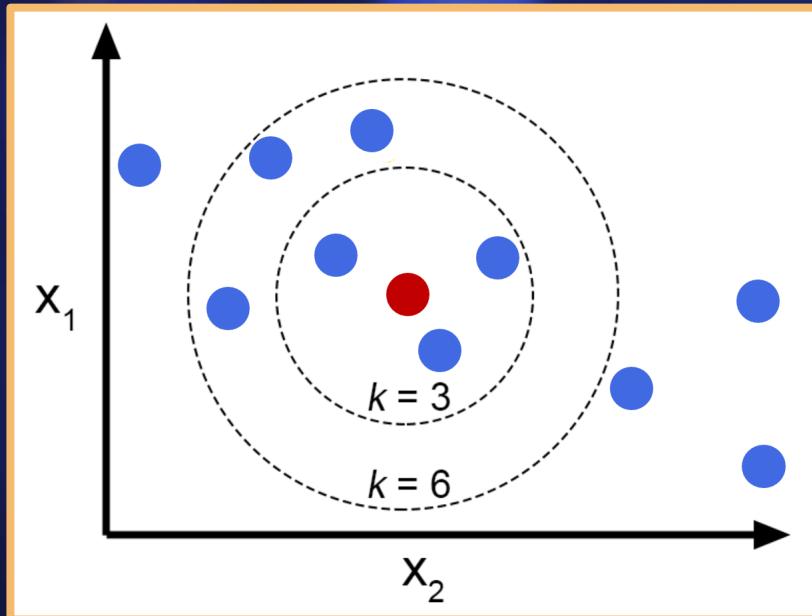


CONTENT-BASED FILTERING



- Collaborative Filtering
- Content-Based Filtering
- Hybrid Approach

K-Nearest Neighbors (KNN)

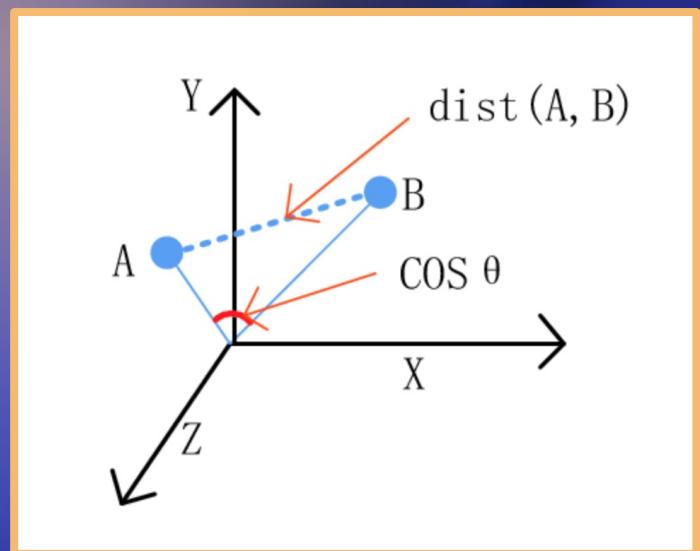


Measures of Distance:

- Euclidean
- Manhattan
- **Cosine Similarity**
- Pearson Correlation Coefficient
- Jaccard Similarity
- Hamming Similarity

Cosine-Similarity

- **Each Item** is represented as a feature vector. This vector represents various attributes or features of the item.
- **Feature Vectors** are numerical representations. Text data can be converted into numerical vectors using NLP word embedding techniques.
- **Cosine Similarity** is calculated using the cosine of the angle between the vectors. It measures the “distance” between the vectors to determine how similar or dissimilar the vector items are to one another.



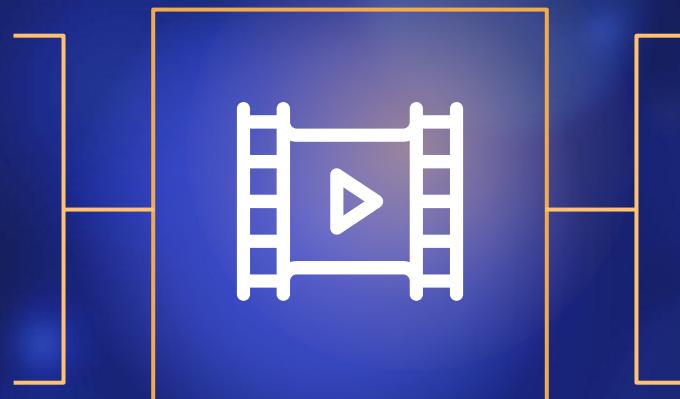
Machine Learning Model

Features

genre, plot overview,
keywords, director /
creator

Text Vectorization

TfidfVectorization



Cosine Similarity Calculations

Recommend 6 Most Similar

05 WEB APP DEMO

The screenshot shows a web application titled "What2Watch2Nite". The top navigation bar includes links for "PROJECT OVERVIEW", "MOVIES", "TV SHOWS", "OUR TEAM", and "TABLEAU", along with a Twitter icon. A large, semi-transparent blue speech bubble icon is positioned on the left side of the page. The main content area features a collage of movie and TV show posters from platforms like Netflix, Disney, and Amazon Prime. Overlaid on this collage is the text "What2Watch2Nite" in a large, white, sans-serif font. Below it is the text "Recommendation Engine" in a smaller, blue, sans-serif font. At the bottom of the page is a search bar with a magnifying glass icon.

THANK YOU!