

Predict Movie Licensing

Watch-It is a media services company whose primary business is its subscription-based streaming service offering access to a library of films and television programs.

Watch-It has a state-of-the-art content team which actively scouts and recommends content that will attract viewers. The more people watch a particular title, the more revenue is generated for Watch-It from advertisements and brand integrations. Management wants to know which titles will generate more revenue so that they can license them.

Data files

- train.csv
- test.csv
- sample_submission.csv

Name	Description
title	Title of the movie
country	Countries in which movie was released
genres	Movie Genres (Action ,Adventure, Comedy etc.)
language	Languages in which movie was released
writer_count	Number of writers of the movie
title_adaption	Is movie original screenplay or adapted
censor_rating	Release rating given to the movie (R /PG-13/PG/NR/UR/G)
release_date	Date when movie was released
runtime	Movie runtime
dvd_release_date	Date of release of DVD for sale
users_votes	Number of users who voted for this movie to be included in Watch-It library
comments	Number of comments on movie trailer
likes	Number of likes on movie trailer
overall_views	Number of views on movie trailer
dislikes	Number of dislikes on movie trailer
ratings_imdb	Rating given to movie on IMDB
ratings_tomatoes	Rating given to movie on Rotten tomatoes.
ratings_metacritic	Rating given to movie on Metacritic etc.
special_award	Number of awards nominations/winnings in BAFTA, Oscar or Golden Globe.
awards_win	Awards won by the movie
awards_nomination	Number of awards nominations
revenue_category	Revenue Category (High/Low)

Problem

Perform an analysis of the given data to determine how different features are related to revenue. Build a machine learning model that can predict the revenue_ category, this will help management know what titles would be suitable for licensing.

For each record in the test set (test.csv), predict the value of the revenue_ category variable (Low or High). Submit a CSV file with a header row plus each of the test entries, each on its own line. The file (submissions.csv) should have exactly 2 columns:

- title
- revenue_category(contains Low or High)

Deliverables

- Well commented Jupyter notebook
- submissions.csv

Explore the data, make visualizations, and generate new features if required. Make appropriate plots, annotate the notebook with markdowns and explain necessary inferences. A person should be able to read the notebook and understand the steps you took as well as the reasoning behind them.

Evaluation Metric

- a) Accuracy metric will be used for evaluating the model performance.
- b) Make use of another metric to evaluate model performance with the reason for using it.