

Prediction and Sentimental Analysis of TRP rating Using Artificial Intelligence Approach

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ABSTRACT: The number of TV shows are produced throughout a year and this rate of producing is increasing at an exponential rate, so its success rate matters a lot as lots of money is been invested in it. That's why prediction of such shows essential for the industry. We will be using the dataset from Kaggle.com which is of ratings of 1000 Netflix TV shows, all parameters are mentioned in that database will be helping us to predict the correct output and give sentimental comments about particular show. Algorithms of machine learning and Data mining. We will be using the apriori algorithm and collaborative filter (CF).

KEYWORDS: Sentimental Analysis, Natural language Processing, Apriori Algorithm

I. INTRODUCTION

As we know many shows are being published on the internet via various websites like Netflix, Amazon prime video these are some highly watched but also in India some publishing media like ALT Balaji, Voot are now being watched. So the TV channels like Star media group, Zee media group there TRP rating is somewhat affected. So if we provide the medium to the audience and there if they will give the honest comment about the particular show, so then it will be easier to the media to study the analysis report and work on it. Now we know that TRAI (Telecom Regulatory Authority of India) has put some restrictions we have to pay minimum Rs 160 for free to air channels. If we have to watch other than that then each channel cost is different. So as an audience I will choose those channels in which the shows are good and entertaining. The overall output of the project will be in graphical manner which will be easier to understand, study and manipulation. There are two logins will be available one for user and other is admin login, Where the rights of adding the new show deletion of show. Where user have rights to login and put comment on particular show.

II. RELATED WORK

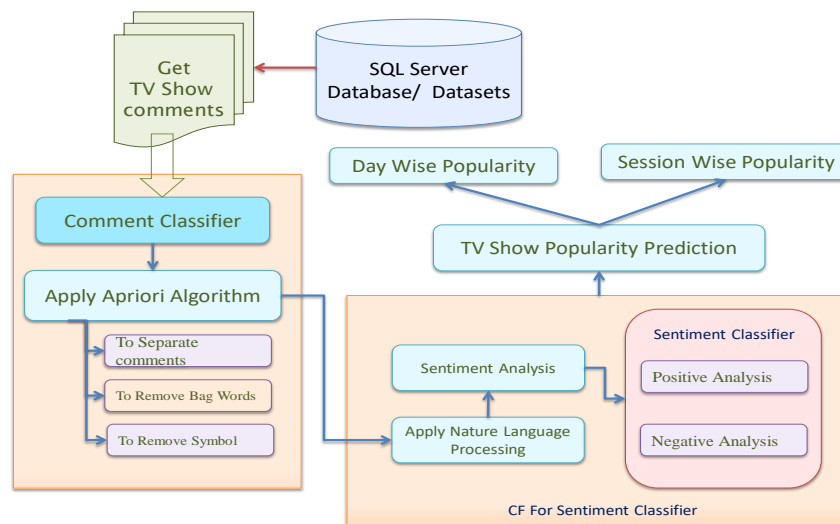
There are around 800+ channels are available now a day, because lots of option are available so audience has to choose the channels according to their need. Also, production team who are going to invest the money want to invest only on such projects which will give them most profit. So, this project will be helping both audience and production team using the previous data and predicting the output and in analysis it will tell us where the performance is lagging. Also, which type of shows are mostly watched using this data production team will able to take decision about which shows should they produced. Also based on the comments given by the user it will be easy to give the analysis of the particular show. Due to this other user also get the idea about that particular show. If analysis of the show is according to the user, then he can add particular channel and watch the show. On the basis of comments given by the people and

sentiments, the TV Show popularity will be rated. The system allows admin to add text views likes-dislikes and their sentimental comment. Based on the people's comment, a Visitors can view TV show popularity data Visitor can also view the popular show rating as well as the top show in a country

III. PROPOSED SYSTEM

The following architecture will describe the flow of the proposed system. The workflow will start from the dataset and working on the same architecture we will be getting output as Day wise Popularity and Session wise popularity.

- A. **Get TV Show Comments:** As there are users in the system which will be able to give honest comments about the shows. Each user has its own login with which he can login and give comment about the show. This will be first stage of our processing.
- B. **Comment Classifier:** We have to classify the comment which will be done by apriori algorithm.
 - a. To separate comments
 - b. To remove Bag words
 - c. To remove symbol
- C. **Apply Natural Language Processing:** As human learns the language in the same manner we are giving the ability to computer to learn human language. Reading the text on a webpage, evaluating its meaning and translating it into another language are all done by algorithms using NLP. Machine learning algorithms consist of NLP.
- D. **Sentimental Analysis:** The next step is sentimental analysis which is based on sentimental classifier which classifies and give the result in two types as the output
 - 1. Positive Analysis
 - 2. Negative Analysis
- E. **TV Show Prediction:** We can predict its prediction in two ways
 - 1. Day Wise Popularity
 - 2. Session Wise Popularity



IV. PROPOSED ALGORITHM

Apriori Algorithm: The Apriori Algorithm is the algorithm which uses frequent item sets to generate association rules for mining frequent item sets for Boolean association rules. Bottom up searching is the technique used by apriori where frequent subsets as one at a time are extended which tested against the data. Apriori is designed to operate on database containing transactions.



Steps:

Input Data: Get All value from Review.

Output Data: Summarize Group of Text Value with Review Data.

Step 1: Get Review Value.

Step 2: Read End of file data.

Step 3: Split the sentences on the basis of (.,?,!)

Step 4: Find the world to match keyword for sentence matching.

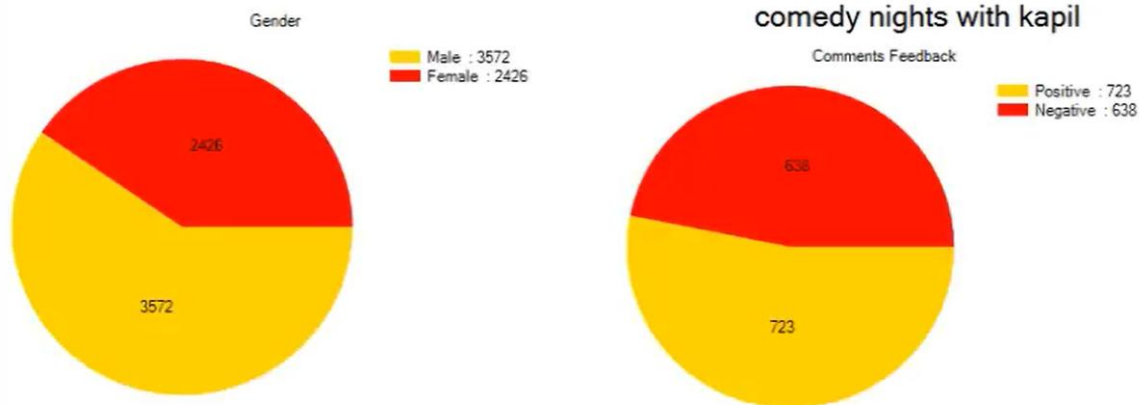
Step 5: Get each sentence until sentences satisfy the condition of matching.

Step 6: Repeat the step 5 until the condition is true.

Step 7: Show the Search data analysis

V. RESULT

As, shown in architecture the result of the system is shown in graph. The Graph will contain the pie chart and the bar chart. The show's popularity will be shown. As in the screen shot the prediction of the comedy nights with kapil is shown. The graph shows the male and female percentages with liking and disliking in pie chart, also here the total number of counts will be displayed as number of comments will be used to give analysis of the particular TV show.



VI. CONCLUSION

Here we present the Prediction and analysis of TRP rating based on the comments given by the users. As it will be beneficial for both the audience and industry. So, for the industry purpose by this result they will get to know about the expectations of the audience and also helps them to produce the shows which will be helpful for them for getting more profit. It will be beneficial to the society and industry and growth and success rate will be higher and TV shows which are not liked by the people are reduced or not get produced. So time also is not wasted nor the money.

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