Movie Rating System based on Sentimental Analysis

1. INTRODUCTION

Sentiment analysis refers to the use of natural language processing text analysis and computational linguistics to extract and identify subjective information in source materials. It aims to determine the attitude of a speaker or a writer with respect to some topic or the overall contextual polarity of a document. The attitude can be,

● His or her judgment or evaluation.

● Affective state (that is to say, the emotional state of the author when writing).

● The intended emotional communication (that is to say, the emotional effect the author).

1.1 PURPOSE

In last decade there is a rise of social media such as blogs and social networks, which has fueled the interest in sentiment analysis. Online opinion has turned into a kind of virtual currency with the proliferation of reviews, ratings, recommendations and other forms of online expression, for businesses that are looking to market their products, identify new opportunities and manage their reputations. In order to automate the process of filtering out the noise, understanding the conversations, identifying the relevant content and following appropriate actions, many are now looking to the field of sentiment analysis. The problem of most sentiment analysis algorithms is that they use simple terms to express sentiment about a product or service. However, cultural factors, sentence negation, sarcasm, terseness, language ambiguity and differing contexts make it extremely difficult to turn a string of written text into a simple pro or con sentiment.

1.2 SCOPE

* This project will be helpful to the companies, political parties as well as to the common people. It will be helpful to political party for reviewing about the program that they are going to do or the program that they have performed. Similarly also can get review about their new product on newly released hardware’s or software’s. Also the movie maker can take review on the currently running movie. By analyzing the tweet analyzer can get result on how positive or negative or neutral are peoples about it.

2. OVERALL DESCRIPTION

2.1 PRODUCT PERSPECTIVE

The proposed Movie rating System will provide movie rating and suggestions based on the inputted movie name.

2.2 SOFTWARE REQUIREMENT

Tools to be used

1. Use any IDE to develop the project. We are using anaconda .
2. Libraries- Tweepy ,text blob.

Front End and Back End

Front End: HTML, CSS, Servlet and Bootstrap.

Back End: Python.

2.3 Hardware requirements

1. Operating System : Windows XP/Windows 7 or above.

2. 40 GB hard disk and above.

3. 1 GB RAM and above.

4. Peripheral devices.

2.4.1 FUNCTIONAL REQUIREMENT

1- Input Movie Name

Output-Store movie name.

* Description : First the user will have to enter the movie name

2 - Subjectivity Classification.

*The task of classifying a sentence as opinionated or not opinionated is called****subjectivity classification****. The resulting opinionated sentences are also****classified****as expressing positive or negative opinions, which is called the sentence- level sentiment****classification***

Input:-movie name.

Output:-Boolean value(whether there is a public opinion about the movie or not).

3-Sentiment detection and classification.

***Sentiment analysis****is the automated process of analysing text data and****classifying****opinions as negative, positive or neutral. Usually, besides identifying the opinion, these systems extract attributes of the expression e.g.: Opinion holder: the person, or entity that expresses the opinion*

Input:- collect data from database.

Output:-run sentimental analysis on tokenised words.

4- Data Collection and Preparation.

Input-Tweets, Movie Name

Output-Tokenised Words.

5- Provide Movie Rating based on the interactions on various social media platforms.

Input:-sentimental analysed tweets.

Output:-movie rating based on sentimental analysis.

6- Provide user with Movie suggestions based on the input. (Cross referencing movies with same genre, actors, directors etc).

Input:-movie name.

Output:-movie suggestions .

* + 1. Non Functional Requirements

1. Usability Requirement

The system shall allow the users to access the system from the pc using web browser. The system uses windows application as an interface. Since all users are familiar with the general usage of computer, no special training is required. The system is user friendly which makes the system easy.

2- Availability Requirement

The system is available 100% for the user and is used 24 hrs a day and 365 days a year. The system shall be operational 24 hours a day and 7 days a week.

3- Tokenisation and Cleaning of data.

***Tokenization****is the process of replacing sensitive****data****with unique identification symbols that retain all the essential information about the****data****without compromising its security.*

***Clean****text often means a list of words or tokens that we can work with in our machine learning models. This means converting the raw text into a list of words and saving it again.*