

SENTIMENT ANALYSIS ON SOCIAL MEDIA REVIEWS USING MACHINE LEARNING

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ABSTRACT

Sentiment analysis and opinion mining have been acquiring a crucial role in both commercial and research applications because of their possible applicability to several different fields. Therefore a large number of companies have included the analysis of opinions and sentiments of customers as part of their mission. One of the most interesting applications of these approaches involves the automatic analysis of social network messages, on the basis of the feelings and emotions conveyed. And we have implemented the sentiment analysis binary classification to analyse the reviews on any topic and help customers in their decision making.

Keywords: Sentiment Analysis, Login, Register, Rate.

I. INTRODUCTION

The emergence in the last decade of social media platforms such as twitter, Facebook, and instagram, enabled people to engage in social activities to express their opinions, thoughts, and emotions on a variety of topics. on such platforms, large amounts of data are produced (e.g.: 6000 tweets per second), this representing an opportunity for companies to assess their social influence and people opinions towards their products. consequently, a computational framework is desirable to perform opinion mining and sentiment analysis which can adapt to the activity domain of the user. the project aims to produce real time sentiment analysis associated with a range of brands, products and topics.

PROBLEM STATEMENT

Today Large Amount Of Data Is Available On Internet As Well As Enormous Amount Of Data Is Added Every Day So It Will Be Impossible To Read All Of The Data To Thousand Lifetime And To Check Its Polarity. So We Have Implement The Sentiment Analysis System For Customers Review Classification That May Be Helpful To Analyse The Opinions And Reviews Of Customers Whether They Are Positive Or Negative. This Helps Customers Or User In Their Decision Making About Any Product.

II. LITERATURE REVIEW

A. Opinion mining for emotions determination

This paper presents a novel approach for emotion estimation from the text entered by user on social networking sites with direct word or indirect emotions like emoji or smiley faces.

B. A Survey of Opinion Mining and Sentiment Analysis

There has been a growing public interest and fascination increasing and sharing contents through social media.

C. Opinion Mining On Twitter Data Using Unsupervised Learning Technique

We Conclude That Social Network Based Analysis Parameters Can Increase The Prediction Accuracy Along With Sentiment Analysis

D. Opinion Mining On Social Media Data: Sentiment Analysis Of User Preferences

The Paper Intends To Emphasize That User Interactions With Companies Through SM Posts Bring A Relevant Contribution To Both Society And The Business Sector By Achieving A Social Good.

E. A Computational model of Trust and Reputation

This paper presented a model to show the difference between the trust and reputation in terms of the size of the network

F. Automatic Sentiment Analysis in Online Text

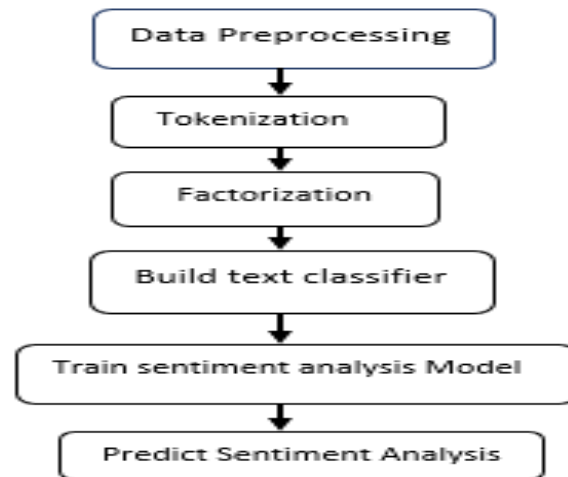
This paper shows the varying level of accuracy when symbolic and machine learning methods were applied to different social network dataset

G. Microblog sentiment analysis using social and topic context.

This paper proposes a new method to identify the polarity of the sentiment and shows the structure similarity has a better accuracy than user direct relations

III. IMPLEMENTATION

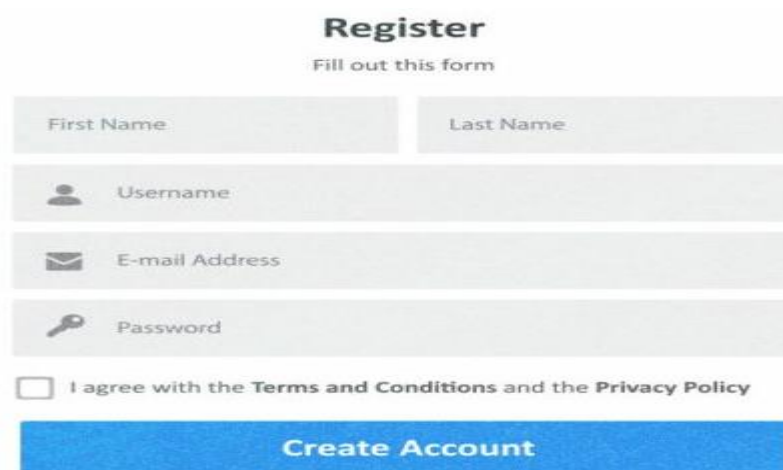
Python Sentiment Analysis Is A Methodology For Analysing A Piece Of Text To Discover The Sentiment Hidden Within It. It Accomplishes This By Combining Machine Learning And Natural Language Processing (NLP). Sentiment Analysis Allows You To Examine The Feelings Expressed In A Piece Of Text.



In This Machine Learning Project, We Build A Binary Text Classifier To Classify The Sentiment Behind The Text. Use The Various NLP Pre-processing Techniques To Clean The Data And Utilize The LSTM Layers To Build The Text Classifier.

IV. RESULTS

1)Registration : User Can Register Here



Register
Fill out this form

First Name Last Name

Username

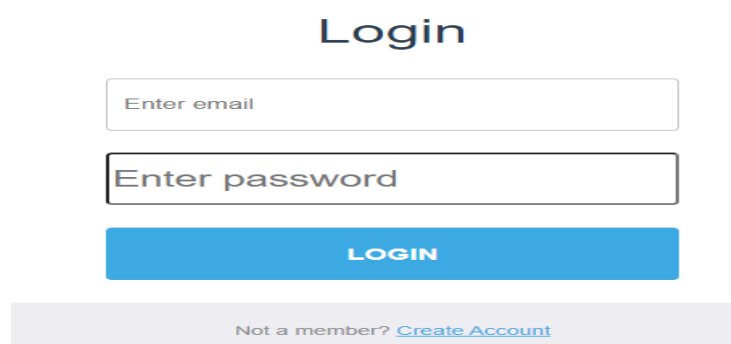
E-mail Address

Password

I agree with the Terms and Conditions and the Privacy Policy

Create Account

2) Login: User Can login Here



Login

Enter email

Enter password

LOGIN

Not a member? [Create Account](#)

3) Rating page: here user comment on any topic and according that sentiment appears.

Comment on posts

Submit

back

Name	Comment	Date	Time	Sentiment
priya adate	very inspiring movie	01-04-2022	11:40	positive
priya adate	bad movie	01-04-2022	11:40	negative

V. CONCLUSION

We Have Successfully Developed Python Sentiment Analysis Model. In This Machine Learning Project, We Built A Binary Text Classifier That Classifies The Sentiment Of The Tweets Into Positive And Negative. We Obtained More Than 94% Accuracy On Validation. This Is An Interesting Project Which Helps Businesses Across The Domains To Understand Customers Sentiment / Feeling Towards Their Brands. Future Work To Enhance The Capabilities Of The Engine Produced Includes The Development Of A More Complex Graphical Interface. By Doing So, When The User Inputs A Topic, The Interface Will Also Display The Sentiment Classification Performed On Past Data, As A Second Metric.

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VI. REFERENCE

- [1] <https://Datadojo.Co.In/2021/07/23/Step-By-Step-Sentiment-Analytics-Using-Vader-Sentiment-Analyzer/>
- [2] [https://Www.Geeksforgeeks.Org/Python-Sentiment-Analysis-UsingVader/#:~:Text=VADER%20\(Valence%20Aware%20Dictionary%20and,Sentiments%20expressed%20in%2](https://Www.Geeksforgeeks.Org/Python-Sentiment-Analysis-UsingVader/#:~:Text=VADER%20(Valence%20Aware%20Dictionary%20and,Sentiments%20expressed%20in%2)
- [3] <https://Towardsdatascience.Com/Sentimental-Analysis-Using-Vader-A3415fef7664>
- [4] <https://www.analyticsvidhya.com/blog/2021/06/vader-for-sentiment-analysis/>.
- [5] <https://techvidvan.com/tutorials/python-sentiment-analysis/>