

D.Y. PATIL COLLEGE OF ENGINEERING &TECHNOLOGY,

KASABA BAWADA, KOLHAPUR

**A**

**Domain Specific Mini Project Synopsis On**

**“Twitter Sentiment Analysis”**

Presented By:

Sr. No. Roll No. Name

1. 31 Pournima Hiremath

2. 28 Sanika Bhosale

3. 29 Madhura Patil

Class : SY

Division: B

Batch : B-2

**Under the guidance of**

**Mr. S. A. Patil Sir**

**INDEX**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No** | **Title** | **Page No.** | |
| 1. | Problem Statement | 3 | |
| 2. | Introduction | 3 | |
| 3. | Existing System | 3 | |
| 4. | Objectives | 4 | |
| 5. | Proposed System | 4 | |
| 6. | Advantages / Limitations | 5 | |
| 7. | System Requirements | 5 | |
| 8. | Future Enhancement | 5 | |
| 9. | Conclusion &  References | | 6 |

**Problem Statement:**

* The problem in sentiment analysis classifying the polarity of a given text at the document, sentence or feature/aspect level.
* Whether the expressed opinion in a document, a sentence or an entity features /aspect is positive, negative or neutral.

**Introduction:**

**Sentiment Analysis** is the process of ‘computationally’ determining whether a piece of writing is positive, negative or neutral. It’s also known as opinion or attitude of a speaker.

Twitter sentiment analysis allows you to keep track of what’s being said about your product or service on social media, and can help you detect angry customers or negative mentions before they escalate.

Twitter allows businesses to engage personally with consumers. However, there’s so much data on twitter that it can be hard for brands to prioritize which tweets or mentions to respond to first.

That’s why sentiment analysis has become a key instrument in social media marketing strategies. Sentiment is a tool that automatically monitors emotions in conversation on social media platforms.

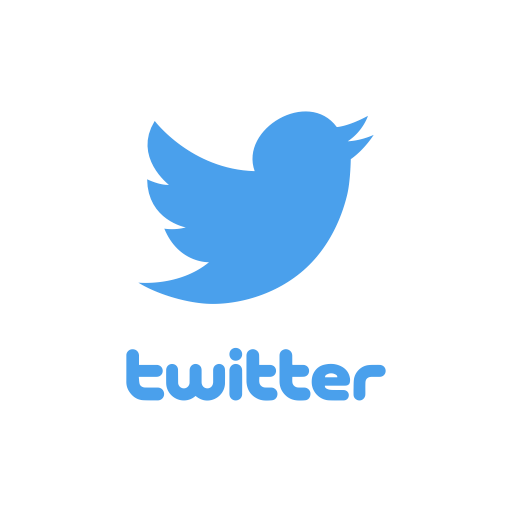
**Existing System:**

The existing system, uses knowledge base approach to classify the tweets into either positive, negative or neutral. But, employing this method results in less accuracy of the classification. Sentiment analysis, takes the static data which is already extracted from social media platform.

**Objectives:**

* To implement an algorithm for automatic classification of text into positive, negative or neutral.
* Sentiment Analysis to determine the attitude of the mass is positive, negative or neutral towards the subject of interest.

**Proposed System Architecture:**



Tokenization

Preprocessed Data

Extracted tweets

Search Hashtag/Keyword

Feature Extraction

Polarity Detection and Polarity Score Assignment

Subjectivity Identification

TextBlob Library

Classified Tweets

Results

Polarity Classification

Aggregate Score

**Advantages:**

* **Business**: In marketing field companies use it to develop their strategies, to understand customer’s feelings towards products or brand, hoe people respond to their campaigns or product launches and why consumers don’t buy some products.
* **Politics**: In politics field, it is used to keep track of political view, to detect consistency and inconsistency between statements and actions at the government level. It can be used to predict election results as well!
* **Public Actions**: Sentiment analysis also is used to monitor and analyse social phenomena, for the spotting of potentially dangerous situations and determining the general mood of the blogosphere.

**System Requirements:**

* Windows Operating System
* Python Platform
* NLTK package
* Twitter API

**Future Enhancement:**

In the future, sentiment analysis will delve deeper, beyond the concept of the number of likes, comments, and shares in a post, to reach and comprehend the significance of social media conversations and what they reveal about consumers.

For future work, we would like to make bigger the domain of our experiments and run the classifiers on multiple dataset considering number of different languages so as will have more representative inputs and thus better generalizable results.

For future enhancement, we can improve our system that can deal with sentences of multiple meanings. We can also increase the classification categories so that we can get better results. We can start work on multi languages like Hindi, Marathi, Kannada, Spanish, Arabic and many more to provide sentiment analysis to more local.

**Conclusion:**

In this project we try to show the basic way of classifying tweets into positive, negative and neutral category using python. We are still far to detect sentiments of texts very accurately because of the complexity in the English language. Commonly, parts of speech are used as feature to extract the sentiment of the text. An adjective plays a crucial role in identifying sentiment from part of speech.

By the help of this sentiment analyser, we are able to understand and extract human feelings out of the data.

**References:**

* <https://www.geeksforgeeks.org/twitter-sentiment-analysis-using-python/>
* <https://www.analyticsvidhya.com/blog/2021/06/twitter-sentiment-analysis-a-nlp-use-case-for-beginners/>
* https://github.com/topics/twitter-sentiment-analysis
* https://monkeylearn.com/blog/sentiment-analysis-of-twitter/

Batch: B2

|  |  |  |
| --- | --- | --- |
| Roll no | Name | Sign |
| 31 | Pournima Nagayya Hiremath |  |
| 28 | Sanika Sanjay Bhosale |  |
| 29 | Madhura Vilas Patil |  |

Date:

Place: Kolhapur

Mr. S. A. Patil Mr. J. B. Metkari Dr. Mrs. J. N. Jadhav

(Project guide) (Project Coordinator) (H.O.D)