

A.P. SHAH INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering

Data Science



Twitter Sentimental Analysis

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Project Guide Prof. Anagha Aher

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1. Introduction

• Problem Identified:

Twitter alone generates millions of tweets every day, making it nearly impossible for human analysts to manually shift through this vast amount of information to gauge sentiment effectively.

• Solution Proposed:

The system can efficiently analyze large volumes of tweets, categorizing them as positive, negative, or neutral based on the sentiment expressed in the text. This analysis can be instrumental in various applications, including brand monitoring, marketing strategy evaluation, and political sentiment tracking.

2. Objectives

- 1. To understand public opinion.
- 2. To Gauge Brand Reputation.
- 3. To predict Trends.
- 4. To improve customer services.
- 5. To Monitor Political Discourse.

3. Scope

- 1. Sentiment analysis can be applied in the entertainment and media industry to gauge audience reactions to movies, TV shows, and music.
- 2. In tourism and hospitality, sentiment analysis can be used to assess customer reviews and social media feedback.
- 3. It is useful in healthcare by analyzing patient feedback and online health forums to better understand public sentiment.
- 4. In academic research, sentiment analysis can be applied to analyze the sentiments expressed in academic papers.
- 5. It can be applied in online learning and e-learning platforms to assess student satisfaction, gather feedback on courses.

4. Feature /Functionality

1. Data Collection:

Twitter Sentiment Analysis gathers tweets from Twitter about a particular topic, brand, or event.

2. Text Processing:

It cleans up and prepares the tweets for analysis by removing irrelevant information and special characters.

3. Sentiment Classification:

It figures out if each tweet is expressing a positive, negative, or neutral opinion.

5. Project Outcomes

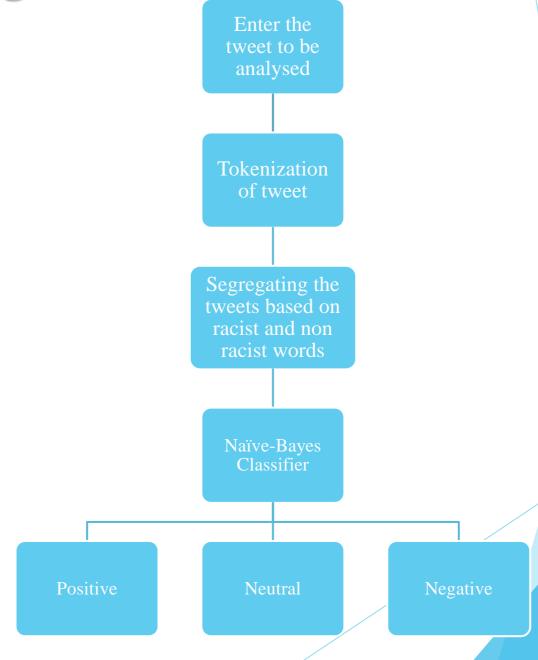
- 1. User can use sentiment analysis in business to gauge public opinion about their products, services, or brands.
- 2. User can monitor Twitter sentiment to assess the severity of the situation and take immediate action to mitigate damage.
- 3. User can use sentiment analysis to monitor what people are saying about specific topics, products, or events on Twitter.
- 4. User can use sentiment analysis for studying public sentiment about various educational policies, initiatives, or issues.

6. Technology Stack

Tools used for the our System.

- 1. Google Collab
- 2. Python 3.10
- 3. NLTK
- 4. Naive bayes classifier Algorithm
- 5. Train.csv (shape 31962, 3)
- 6. Test.csv (shape 17197, 2)

7. Block Diagram



Thank You...!!