

01



General Election

SENTIMENT ANALYSIS TO PREDICT ELECTIONS

02



Agenda

- Abstract
- Aim of the project
- Introduction
- Designs and Methodologies
- Architecture
- Existing System
- Proposed System
- Software and Hardware Requirements
- Advantages
- Disadvantages
- Applications
- Conclusion

ABSTRACT

03

Sentiment is the study of the speaker's, writer's, or other subject's opinion on a specific topic. The opinion of the public for a candidate will impact the potential leader of the country. This project is mainly divided into 3 parts: Dataset creation ,Data analysis, Data visualization. A large and diverse data set representing the current public perceptions of the candidates is collected via Twitter. The dataset is created with the help of twitter API's. For the collected tweets, we calculate the polarity and subjectivity measures to understand the user sentiment for a specific candidate. The collected tweets are analyzed using a lexicon based approach to determine the sentiments of the public . Moreover, the candidates are compared in terms of the sentiment type. Textblob package is used to perform simple text classification in either positive or negative on the basis of sentiment analysis. totally, a word cloud that represents the tweets and most frequently used words is generated.

04

AIM

The aim of this project is to analyse and predict the elections with the help of Twitter that assist in raising public knowledge of election results. Data visualisation is also used to represent the output in the form of images and charts.



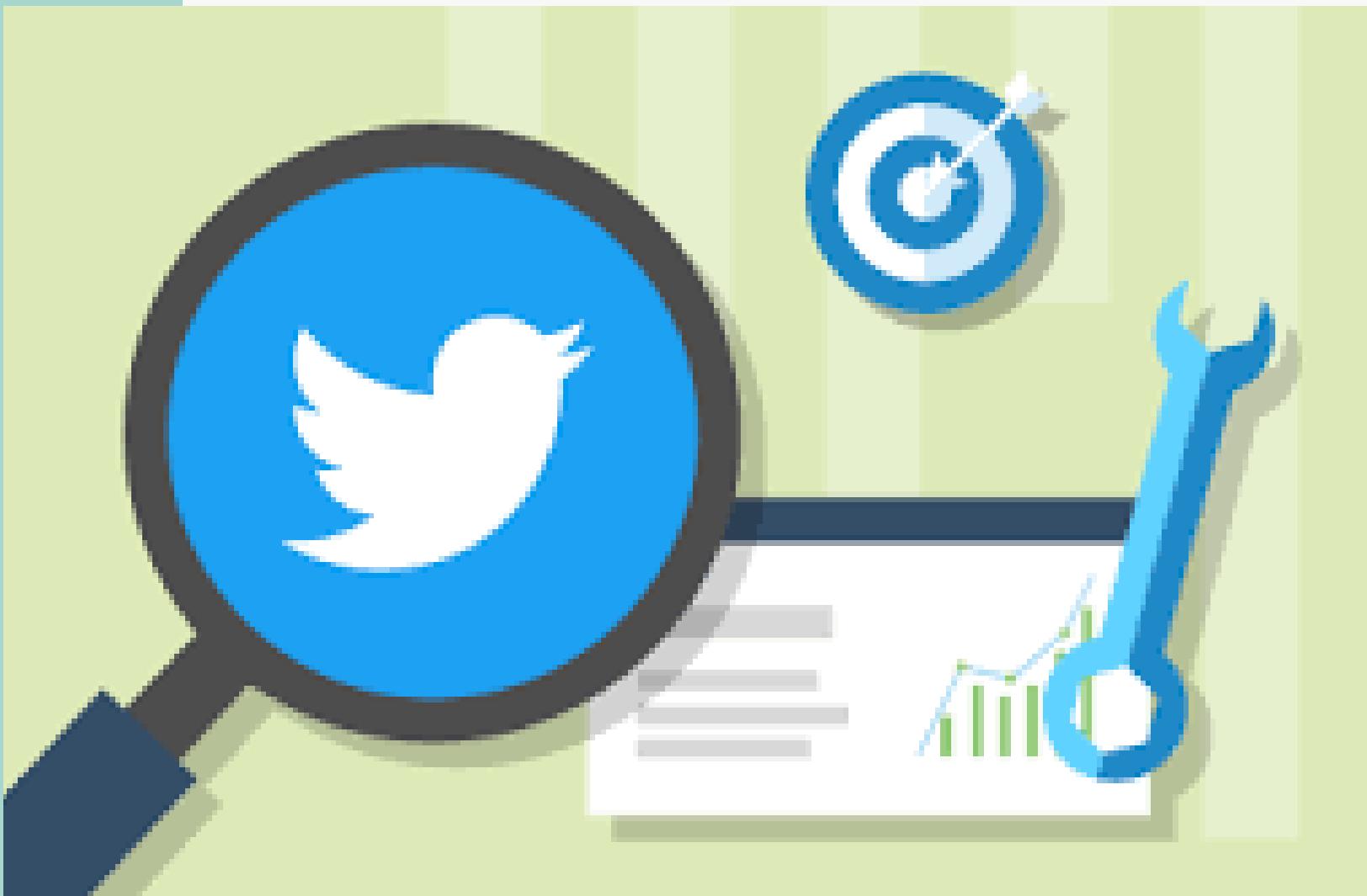
SCOPE

The scope of the project is to predict the Election .

INTRODUCTION

05

- An election is a critical part of democracy. It is a democratic tool that allows voters to interact with authorities.
- Predicting election results has earned huge interest because of its importance in politics.
- Traditional polls are excessively expensive and still won't produce accurate results. Social media has been utilized as a solution because to its accessibility and its ease of use.
- Every day, millions of messages are posted on well-known social media platforms like Twitter, Instagram, and Facebook.
- Users can classify Tweets and make them easier to find in Twitter Search by adding hashtags to their short messages before relevant keywords or phrases. The difficulty of text classification is made somewhat easier by the introduction of hash tags because a hash tag itself can express an idea or feeling.



DESIGN AND METHODOLOGIES

06

TWITTER WEB SCRAPING

User profile details, tweets and retweets, as well as answers, conversations, and favorites, can all be scraped. If you want to scrape tweets with certain hashtags,

We used the Apify Hashtag Scraper, which is designed to scrape tweets with your defined hashtags.

DATA VISUALIZATION

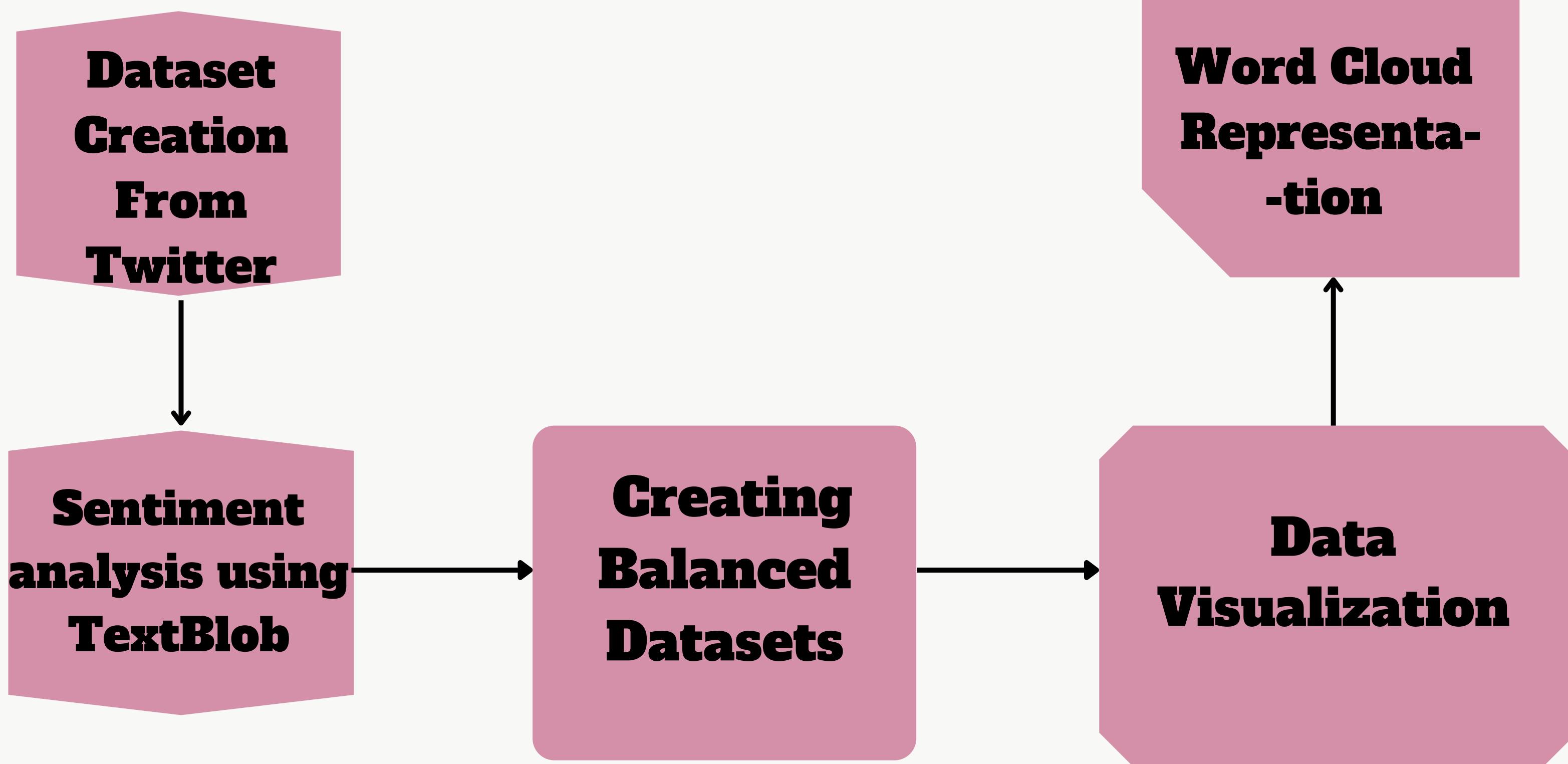
Data visualisation is the act of producing visual representations to represent data, making it easier to visualise and interpret the information. Data visualisation techniques commonly used include bars, charts, and graphs. Icons, graphics, and infographics .

DATA ANALYSIS

Data analysis is the act of analysing, cleansing, manipulating, and modelling data in order to identify usable information, inform conclusions, and help decision-making.

ARCHITECTURE

07



EXISTING SYSTEM

Twitter is a microblogging site that allows users to post fast and real-time updates on various activities and events. The required data can be readily generated and used with the aid of hashtags. We used the Python module "Tweepy" to contact the Twitter API and retrieve real-time data from Twitter. Keywords are used to retrieve 350 tweets for each political party. Using Python's "TextBlob" package, feelings are applied to each tweet, and the winning party is determined based on the number of positive tweets.



PROPOSED SYSTEM

The basic principle of this project is collecting responses to recent tweets about elections and analyzing how people feel about them. This project is divided into three sections dataset creation, data analysis, and data visualization. In first step, we are scraping replies to tweets by Python. In the second step, we will analyze the data, clean up any text that isn't returning any meanings, and apply our algorithm to classify text into positive or negative sentiments by using Textblob. In the last step, data visualisation takes place, which is the most important step to include in projects to make them as simple and easy to understand as possible in your presentations. And also, it frames a clear picture in front of you of which attribute is contributing better to your output. It is an important step before applying any analysis or modeling.

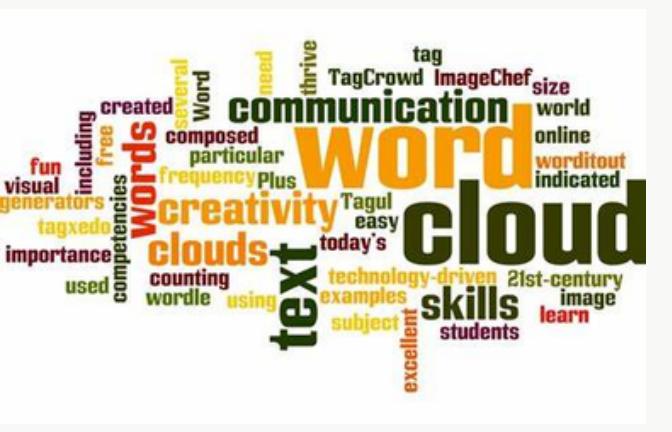
HARDWARE REQUIREMENTS

10

- RAM : 4 GB
- Storage : 500 GB
- CPU : 2 GHz or faster
- Architecture : 32-bit or 64-bit

SOFTWARE REQUIREMENTS

- >**ANACONDA JUPYTER** is used for data pre-processing, model training and prediction.
- >**Operating System:** windows 10 and above.



FUNCTIONAL REQUIREMENTS

11

Python — A programming language

Tweepy — A type of RESTFUL API specifically for Twitter

Textblob — Processed textual data library tool (already trained on numerous text)

Pandas — Data manipulation and analysis library

NumPy — Scientific computing library

Matplotlib — Plotting library

Plotly — Plotting library

Seaborn — Data visualization library based on Matplotlib

Wordcloud — Library for a visual representation of textual data



12

DISADVANTAGES

- Not everyone has access to social media, where they could vent against one party and show open support for the other.
- Affecting other parties.
- Information security issues.
- Misuse of the platform.
- Fake accounts.

ADVANTAGES

- Optimize process and performance.
- Less expensive
- The losing party gets a reality check, and a chance to fight harder and prove the predictions wrong.
- In most of the cases, the prediction is accurate.



13

APPLICATIONS



CUSTOMER EXPERIENCE

It offers us unfiltered and invaluable information on customer sentiment. However, you can also put this analysis on customer support interactions and surveys.

Social media monitoring

With the help of sentiment analysis software, you can wade through all that data in minutes, to analyze individual emotions and overall public sentiment on every social platform.

Business Intelligence Buildup

Sentiment analysis enables you to determine how your product performs in the market and what else is needed to improve your sales.

CONCLUSION AND FUTURE SCOPE



People's interactions and expressions on social media have changed dramatically. Sentiment analysis is developing into an effective, quick, and reasonably priced technique that is incredibly helpful for analyzing a wide variety of events and forecasting future outcomes due to this changing reality and the vast amount of data that is available. Furthermore, although there have been many studies about the influence of social media on elections, there are no approaches that use sentiment analysis to identify voters' emotions and predict future election results while taking the results of previous studies into account. The future of sentiment analysis is going to continue to dig deeper, far past the surface of the number of likes, comments and shares, and aim to reach, and truly understand, the significance of social media interactions and what they tell us about the consumers behind the screens. Present Sentiments hold a key to the future events.



Thank you!

LET US KNOW IF YOU HAVE
QUESTIONS OR CLARIFICATIONS.