



Social Trend Analysis

PRESENTATION

• PROBLEM STATEMENT •

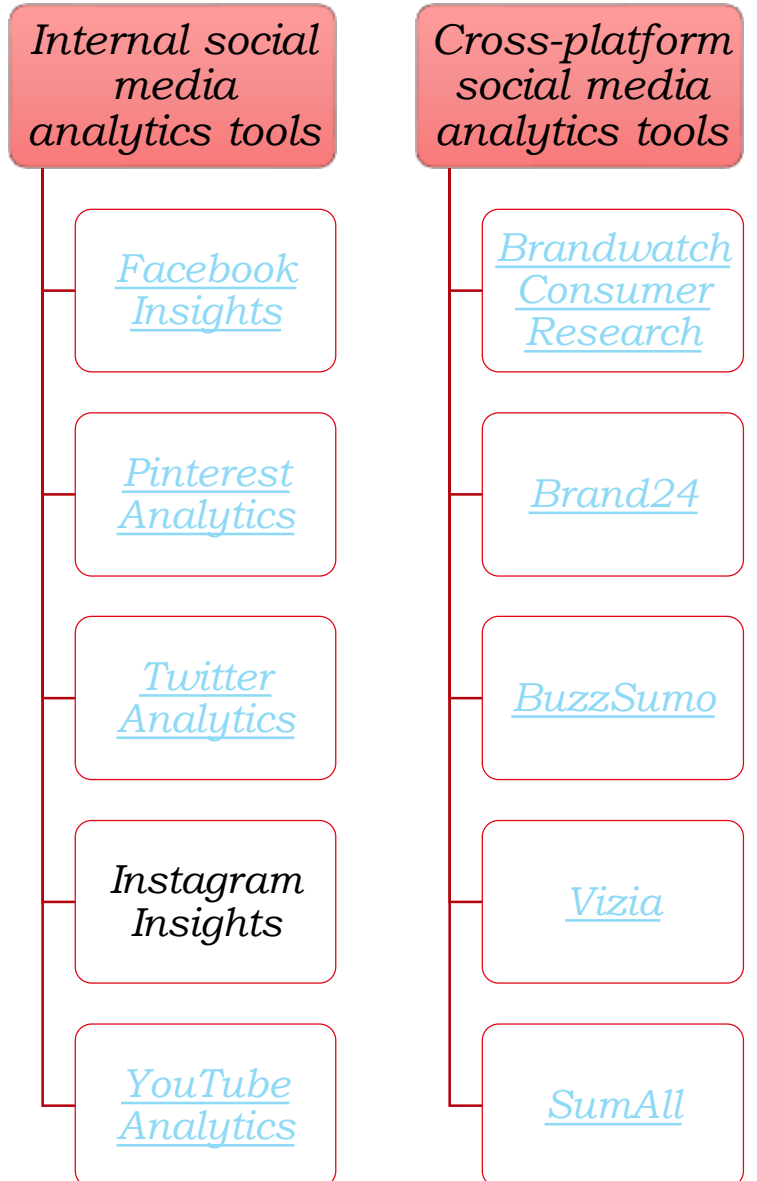
Social Trend Analyzer that will analyze the different keywords of twitter and give a descriptive analysis regarding statistics of the trend.

INTRODUCTION

This script can tell you the sentiments of people regarding to any events happening in the world by analyzing tweets related to that event. It will search for tweets about any topic and analyze each tweet to see how positive or negative it's emotion is. This script can tell you the sentiments of people regarding any events happening in the world by analyzing tweets related to that

Built With

- * Python 3.6
- * Tweepy
- * Textblob
- * Twitter Apps



• LITERATURE SURVEY •

Personality is a combination of all the attributes—behavioral, temperamental, emotional, and mental—that characterizes a unique individual. Ability to identify personalities of people has always been of great interest to the researchers due to its importance. It continues to find highly useful applications in many domains. Owing to the increasing popularity of online social networks, researchers have started looking into the possibility of predicting a user's personality from his online social networking profile, which serves as a rich source of textual as well as non-textual content published by users. In the process of creating social networking profiles, users reveal a lot about themselves both in what they share and how they say it. Studies suggest that the online social networking websites are, in fact, a relevant and valid means of communicating personality.

DATA RETRIEVAL

Information retrieval technologies behind web search engines in the field of computer science were brought up in the year of 1950s. It is a process of retrieving the relevant documents based on the queries raised by the user. It deals with the representation, storage and access of information items. In this system, the generated outputs are ranked according to their relevance. The information retrieval (IR) uses data models that make a retrieval process easier when compared to the traditional IR database model. In this work, we analyse the most popular information retrieval models such as boolean, vector space, probabilistic and latent semantic analysis and evaluate the performance of the models by using the underlying parameters like concept, representation, word occurrence, information type, output, pros and cons of the models. This study aims to determine the appropriate model for different situations and additionally describes the indexing methods for decrementing search space and different probing (searching) techniques to retrieve the information.

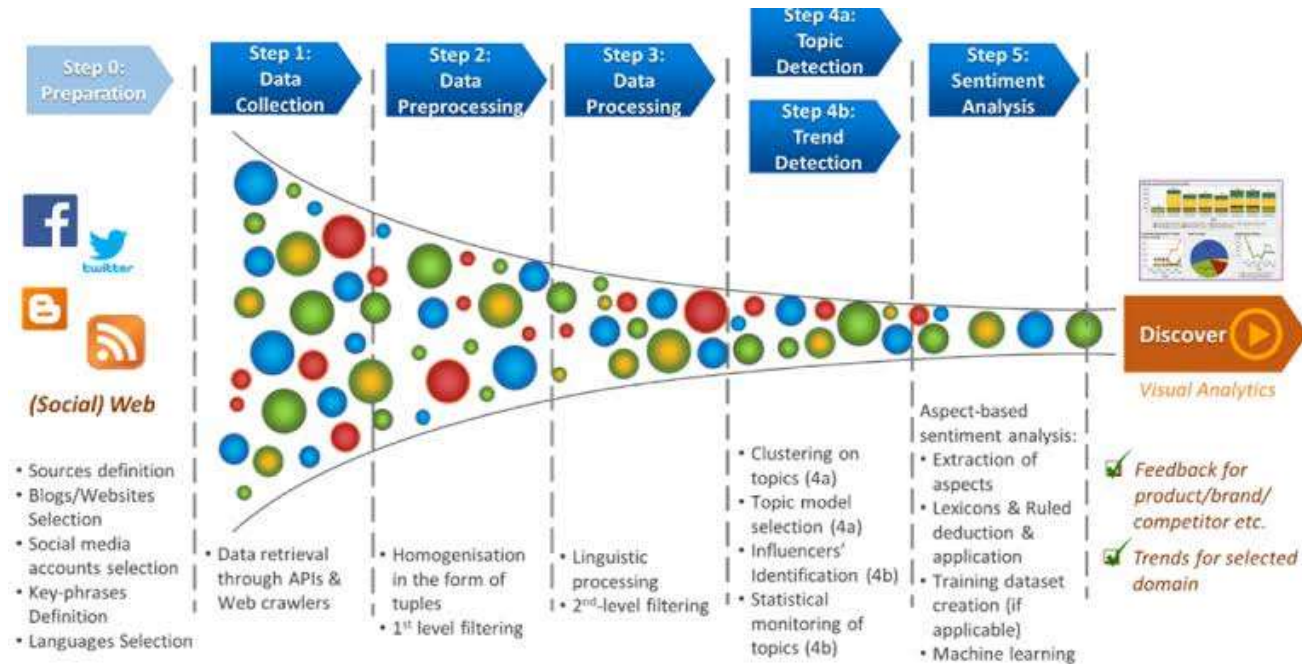
SOCIAL MEDIA TREND ANALYSIS



For brands that want to achieve and maintain their relevance on social channels—to lead and not follow markets—social media trend analysis is an essential practice. By leveraging real-time data from social networks, blogs, and forums, firms can collect primary market research data from billions of users around the world.

Using social listening and trend analysis tools together, organizations can monitor the conversations of real people about their brand, products, and services while obtaining actionable insights into the trends influencing their customers and their business.

METHODOLOGY



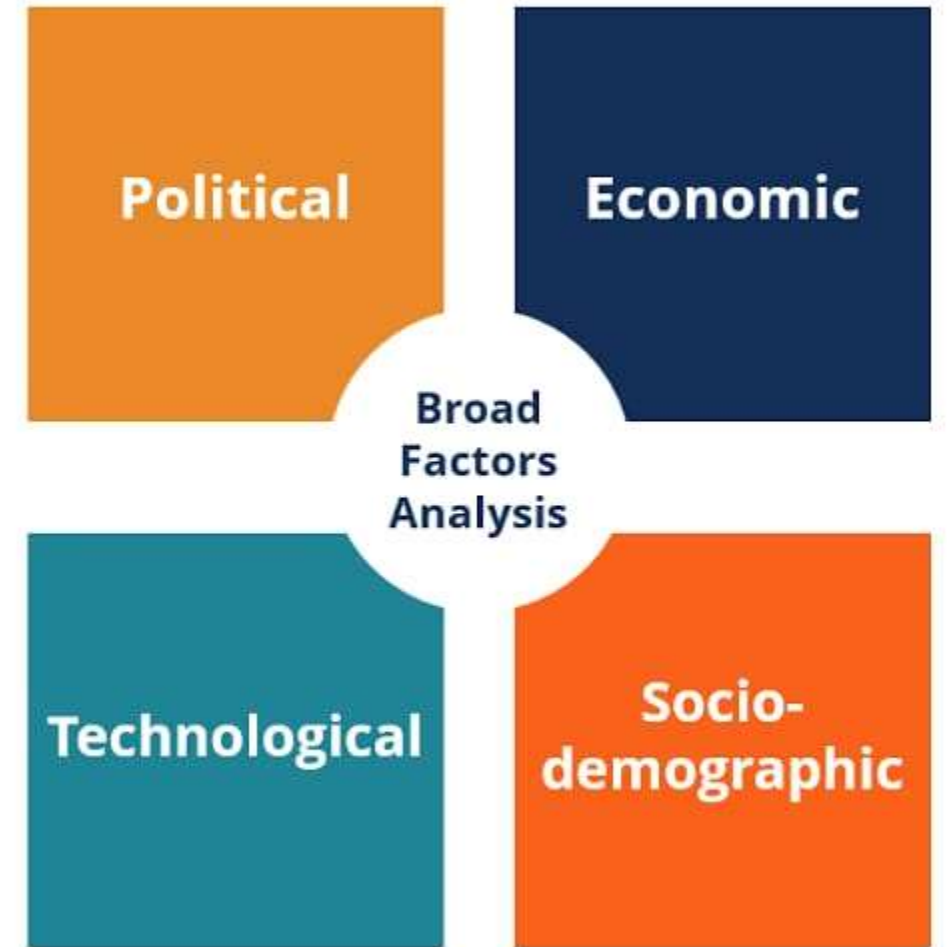
The methodology of this work consists of five steps: data gathering and trend analysis. The proposed approach can be applied to improve the accuracy of trend predictions that consider only the temporal behavior in scenarios where it is possible to recover the connection between the individuals who generate the data (e.g., trend identification of topics discussed in the blogosphere).

TOOLS AND TECHNIQUE

Brands can use social media trend analysis to anticipate changes in consumer demographics, attitudes, values, and needs and identify developing local and global consumer trends. They can also detect the emergence of disruptive technologies and new competitors in their industry as well as identify the people and events their customers are interested in and the brands they respect. Social media trend analysis is carried out easily using social media listening and analytics tools. These tools can be used to collect and analyze data from various social networks and other sources of publicly available user-generated content, transforming billions of mentions into practical insights that brands can use to inform their marketing, sales, customer support, and product development strategies.

CONCLUSION

Approaches that consider only the historical behavior of the analyzed object have been widely employed for trend prediction. However, the contents generated by people are clearly influenced by their connections. How information spreads is an important factor that can be considered in prediction. The sheer amount and the different types of data on twitter and the public nature of tweets have allowed exploiting twitter information in data analysis. The proposed approach achieved better results than the standard time series-based models. In addition to simple prediction techniques, such as linear regression, we applied more robust techniques that resulted in even more accurate models.



MODEL OUTPUT

```
C:\Users\mani\Desktop\minor\Twitter-Sentiment-Analysis-master\Twitter-Sentiment-Analysis-master>main.py
Enter Keyword/Tag to search about: bitcoin
Enter how many tweets to search: 1000
How people are reacting on bitcoin by analyzing
```

```
General Report:
Weakly Positive
```

```
Detailed Report:
30.00% people thought it was positive
20.00% people thought it was weakly positive
10.00% people thought it was strongly positive
0.00% people thought it was negative
10.00% people thought it was weakly negative
0.00% people thought it was strongly negative
30.00% people thought it was neutral
```

CASE STUDY

```
Enter Keyword/Tag to search about: #googledown
Enter how many tweets to search: 100
How people are reacting on #googledown by analyzing 100 tweets.
```

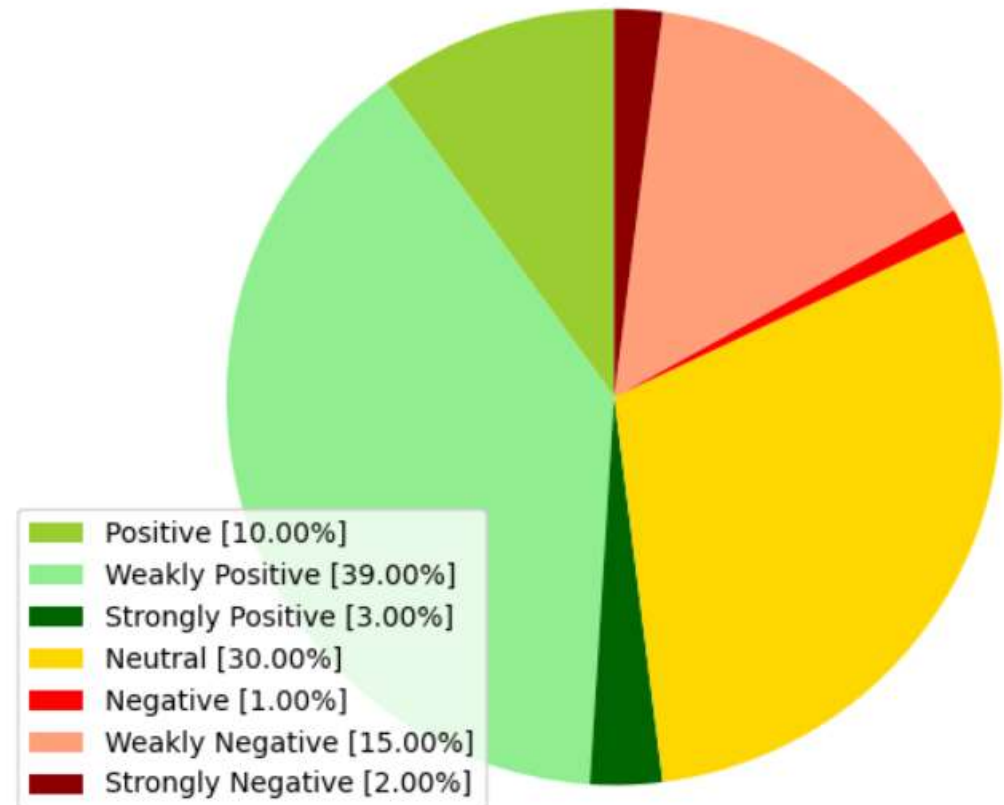
General Report:
Weakly Positive

Detailed Report:

```
10.00% people thought it was positive
39.00% people thought it was weakly positive
3.00% people thought it was strongly positive
1.00% people thought it was negative
15.00% people thought it was weakly negative
2.00% people thought it was strongly negative
30.00% people thought it was neutral
```

Figure 1

How people are reacting on #googledown by analyzing 100 Tweets.



CASE STUDY

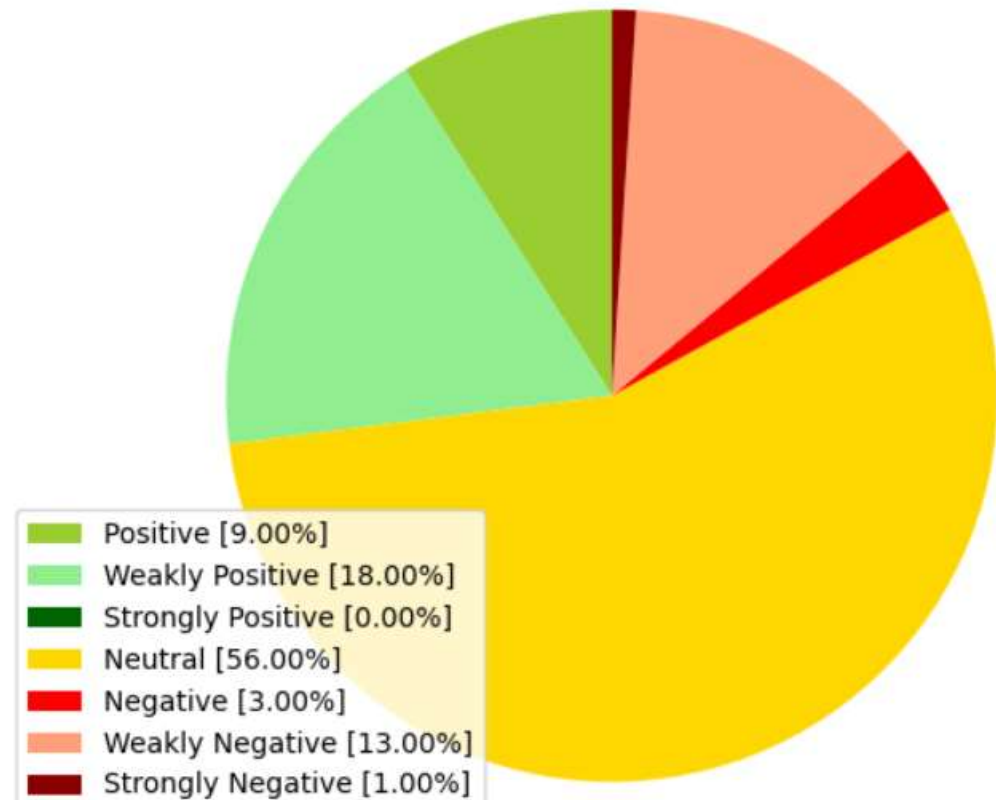
```
Enter Keyword/Tag to search about: COVID
Enter how many tweets to search: 100
How people are reacting on COVID by analyzing 100 tweets.
```

```
General Report:
Weakly Positive
```

```
Detailed Report:
9.00% people thought it was positive
18.00% people thought it was weakly positive
0.00% people thought it was strongly positive
3.00% people thought it was negative
13.00% people thought it was weakly negative
1.00% people thought it was strongly negative
56.00% people thought it was neutral
```

Figure 1

How people are reacting on COVID by analyzing 100 Tweets.

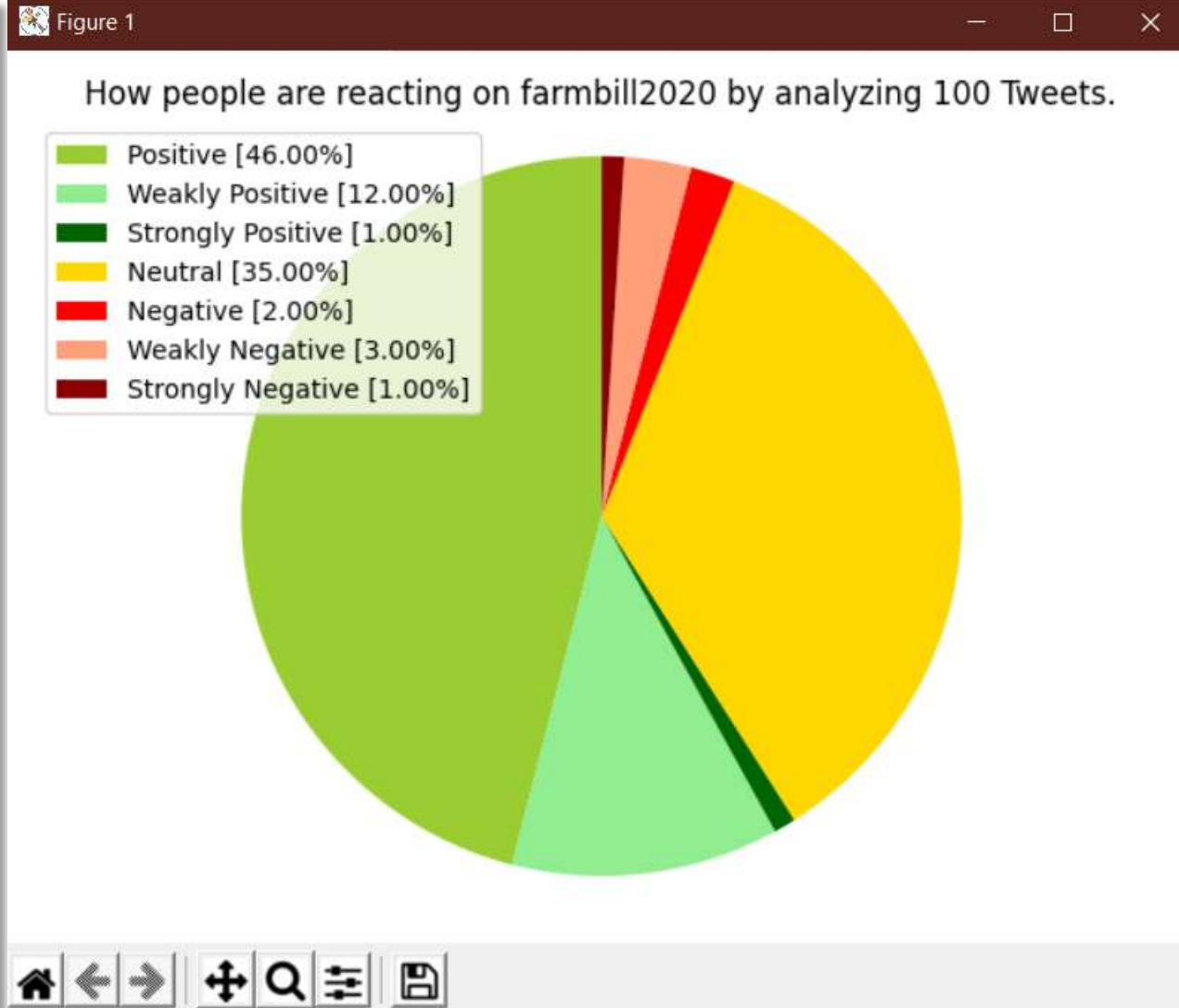


CASE STUDY

```
Enter Keyword/Tag to search about: farmbill2020
Enter how many tweets to search: 100
How people are reacting on farmbill2020 by analyzing 100 tweets.
```

General Report:
Weakly Positive

Detailed Report:
46.00% people thought it was positive
12.00% people thought it was weakly positive
1.00% people thought it was strongly positive
2.00% people thought it was negative
3.00% people thought it was weakly negative
1.00% people thought it was strongly negative
35.00% people thought it was neutral



WORK PROGRESS REPORT

Summary					
Date	TARGETS SET FOR THE WEEK	ACHIEVEMENTS FOR THE WEEK	Marks	Signature of Students	Remark
20/09/20	Review research papers and get rough idea of prototype of project.	5 research papers thoroughly analyzed and made a vague prototype of out project.		1)Anshul Gupta (296507218) 2) Mansi Jindal (35496502717) 3) Shivam Singhal (40596502717) 4) Tejsi Sharma (01996502717)	
27/09/20	Trying to get access to twitter data and initiate with <u>tweepy</u> library.	Got permission to access twitter data, started working with <u>tweepy</u> library.		1)Anshul Gupta (296507218) 2) Mansi Jindal (35496502717) 3) Shivam Singhal (40596502717) 4) <u>Tejsi</u> Sharma (01996502717)	

04/10/20	To complete research paper topics	3 topics of research papers completed after extensive research		1)Anshul Gupta (296507218) 2) Mansi Jindal (35496502717) 3) Shivam Singhal (40596502717) 4) <u>Tejsi</u> Sharma (01996502717)	
----------	-----------------------------------	--	--	--	--

11/10/20	Work with <u>tweepy</u> and <u>textblob</u>	Worked with <u>tweepy</u> and <u>textblob</u> in progress.		1)Anshul Gupta (296507218) 2) Mansi Jindal (35496502717) 3) Shivam Singhal (40596502717) 4) <u>Tejsi</u> Sharma (01996502717)	
18/10/20	Encountered issues while scraping twitter data.	Facing some difficulty with scrapping twitter data and working to resolve the issue. Worked on research paper.		1)Anshul Gupta (296507218) 2) Mansi Jindal (35496502717) 3) Shivam Singhal (40596502717) 4) <u>Tejsi</u> Sharma (01996502717)	
25/10/20	To make python script	Python script successfully made, it's showing basic data and inferences		1)Anshul Gupta (296507218) 2) Mansi Jindal (35496502717) 3) Shivam Singhal (40596502717) 4) <u>Tejsi</u> Sharma (01996502717)	

WORK PROGRESS REPORT

01/11/20	Working on <u>Tweepy</u> Library	<u>Tweepy</u> Library ran successfully	1)Anshul Gupta (296507218) 2) Mansi Jindal (35496502717) 3) Shivam Singhal (40596502717) 4) <u>Tejsi Sharma</u> (01996502717)	
08/11/20	Working on <u>Matplot</u> Library	<u>Matplot</u> Library ran successfully	1)Anshul Gupta (296507218) 2) Mansi Jindal (35496502717) 3) Shivam Singhal (40596502717) 4) <u>Tejsi Sharma</u> (01996502717)	
15/11/20	Setup project's path and environment	Path and environment setup ran successfully	1)Anshul Gupta (296507218) 2) Mansi Jindal (35496502717) 3) Shivam Singhal (40596502717) 4) <u>Tejsi Sharma</u> (01996502717)	
22/11/20	Setup web scrapping tools and algorithms	Web scrapping tools and algorithms were used successfully	1)Anshul Gupta (296507218) 2) Mansi Jindal (35496502717) 3) Shivam Singhal (40596502717) 4) <u>Tejsi Sharma</u> (01996502717)	

29/11/20	Study of various graphs, datasets and case studies according to latest trends	Graphs, datasets and case studies were used successfully	1)Anshul Gupta (296507218) 2) Mansi Jindal (35496502717) 3) Shivam Singhal (40596502717) 4) <u>Tejsi Sharma</u> (01996502717)	
----------	---	--	--	--

06/12/20	Data collection and feature extraction	Data collection and feature extraction is studied and implemented throughout the project	1)Anshul Gupta (296507218) 2) Mansi Jindal (35496502717) 3) Shivam Singhal (40596502717) 4) <u>Tejsi Sharma</u> (01996502717)	
----------	--	--	--	--

RESEARCH PAPER REFERRED

1. Opinion Mining and Trend Analysis on Twitter Data. (2020). *International Journal of Recent Technology and Engineering Regular Issue*, 9(1), 1650-1653. doi:10.35940/ijrte.a1547.059120
2. Aghababaei, S., & Makrehchi, M. (2018). Mining Twitter data for crime trend prediction. *Intelligent Data Analysis*, 22(1), 117-141. doi:10.3233/ida-163183
3. Lambrecht, A., Tucker, C., & Wiertz, C. (2014). Should You Target Early Trend Propagators? Evidence from Twitter. *SSRN Electronic Journal*. doi:10.2139/ssrn.2419743
4. Sharma, P., Agarwal, A., & Sardana, N. (2018). Extraction of Influencers Across Twitter Using Credibility and Trend Analysis. *2018 Eleventh International Conference on Contemporary Computing (IC3)*. doi:10.1109/ic3.2018.8530462
5. Bizhanova, A., & Uchida, O. (2014). Product Reputation Trend Extraction from Twitter. *Social Networking*, 03(04), 196-202. doi:10.4236/sn.2014.34024
6. Rathod, T., & Barot, M. (2018). Trend Analysis on Twitter for Predicting Public Opinion on Ongoing Events. *International Journal of Computer Applications*, 180(26), 13-17. doi:10.5120/ijca2018916596
7. Pawar, M. P. (2019). Real Time Twitter Trend Mining System. *International Journal for Research in Applied Science and Engineering Technology*, 7(11), 70-71. doi:10.22214/ijraset.2019.11012
8. Lu, R., & Yang, Q. (2012). Trend Analysis of News Topics on Twitter. *International Journal of Machine Learning and Computing*, 327-332. doi:10.7763/ijmlc.2012.v2.139
9. Song, M., & Kim, M. C. (2013). RT^2M: Real-Time Twitter Trend Mining System. *2013 International Conference on Social Intelligence and Technology*. doi:10.1109/society.2013.19
10. Doshi, Z., Nadkarni, S., Ajmera, K., & Shah, N. (2017). TweerAnalyzer: Twitter Trend Detection and Visualization. *2017 International Conference on Computing, Communication, Control and Automation (ICCUBEA)*. doi:10.1109/iccubea.2017.8463951
11. Doshi, Z., Nadkarni, S., Ajmera, K., & Shah, N. (2017). TweerAnalyzer: Twitter Trend Detection and Visualization. *2017 International Conference on Computing, Communication, Control and Automation (ICCUBEA)*. doi:10.1109/iccubea.2017.8463951
12. Mathioudakis, M., & Koudas, N. (2010). TwitterMonitor. *Proceedings of the 2010 International Conference on Management of Data - SIGMOD '10*. doi:10.1145/1807167.1807306
13. Gukanesh, A. V., Kumar, G. K., & K. Karthik Raja Kumar | N. Saranya. (2018). Twitter Data Analytics – Sentiment Analysis of An Election. *International Journal of Trend in Scientific Research and Development, Volume-2(Issue-3)*, 1600-1603. doi:10.31142/ijtsrd11457



Thank You