Real time problem:

COVID-19 has turned the world upside down. Every aspect of our lives has an impact. A predictive analysis to know people’s sentiment towards the epidemic and also to understand the sentiments of people on government decision to extend the lockdown.

Overview:

Analysis on emotions and tones of people using Tone Analyser

Powerful Insight Extraction using Natural Language Understanding

Visualise the results in the form of graphs and wordclouds

Sentiment Analysis:

Twitter Sentiment Analysis allows a deeper understanding of people’s feelings and opinions. It adds an extra layer to the traditional metrics used to analyze the performance of brands on social media and provides powerful opportunities for improvement.

Significance of Twitter Sentiment Analysis:

Twitter sentiment analysis allows you to keep track of what’s being said on social media and can help you detect negative mentions before they turn into a major crisis.

Twitter sentiment analysis allows you to track and analyze all the interactions which is very useful to analyze different sentiments based on the type of feedback received.

Sentiment analysis for Government:

This paper describes a Sentiment Analysis (SA) method to analyze

tweets polarity and to enable government to describe quantitatively the opinion

of active users on social networks with respect to the topics of interest to the

Public Administration.

We propose an optimized approach employing a document-level and a

dataset-level supervised machine learning classifier to provide accurate results in

both individual and aggregated sentiment classification.

Vision:

Twitter sentiment analysis model which could give a deeper insight on the opinions and problems faced by the people due to covid 19.

Citizens’ reaction towards the various strategies and lockdown extensions initiated by the government.

Predictive analytics model to facilitate strong understanding between policy-makers, bureaucrats and citizens of the nation which could pave the way for adapting to the new way of life in the post covid world.

Strategy:

To improvise the existing covid 19 dashboards to give better accurate results and also reduce the resources, time consumption to build a new product

Technical details:

Dataset comprises of covid 19 related tweets collected from trusted sources and extracted using hydrator

Pre-processing of extracted tweets to infilter non-ascii characters and emojis

Analyse sentiment and emotions of people using Watson Tone Analyser

Categorize tweets based on targets and keywords to get a powerful insight using IBM Natural Language Understanding

Visualise the results in the form of graphs and wordclouds

Interactive webpage is designed to showcase the results and to collect valuable opinions and issues due to covid 19 directly from the users

Dynamically changing wordcloud is used to represent the major concerns of people based on the opinions collected

Technologies used:

Html,css,Javascript

MySQL DB

Pycharm IDE

IBM Tone analyser

Natural Language Understanding

Future works:

sarcasm detection

filter the the unrelated Tweets(Spam, junk, marketing, news and random)

to improve the service quality.

Automate media monitoring process and the accompanying alert system

Monitor mentions or reviews of the brand on different platforms (blogs, social media, review sites, forums, etc.)

Categorize urgency of mentions according to the relevancy scoring (i.e., which platform, type of user is vital to the brand)

sentiment analysis can transform the course of action from reacting to managing the perception.

Provide results in real-time

Voice of the Customer Analysis

brand monitoring

Identifying detractors and promoters