

Project Description:

We aim to provide solutions for advanced sentimental analysis on the data fetched by twitter, categorize them, and thus providing a range of applications on that data. Analyzing the hatred content of any location and thus predicting any state of tension or mob formation that might be developed in that particular location. Predicting information about where people find difficulties in the lockdown and post lockdown scenario region wise and thus predicting the sorts of problems they might be facing and informing the required authorities. Fetching information about any news or event happened locally by using locally and lesser-used tags and informing others about it. Featuring special tags and functions for tracing them which people can use for asking for emergency medical or miscellaneous facilities (volunteering, supplies, etc.) Analysis for crowd prediction based on specific tags region wise. Informing local authorities regarding anything particular happening over a region so as to get quick help. Tracing the highly used fake information surfacing over the internet which certainly creates tension, superstition or unwanted malpractices and activities, thus informing the concerned authorities to prevent them beforehand. Providing specific data to the Organisations and NGOs working for providing support to the people affected by the lockdown who require help for transportation, food, supplies and other facilities.

Features -

- We aim to provide features to detect and solve fake news and problems arising from them, apart from the sentimental analysis benefits that it provides.
- Availability of a fully functional dashboard kind structural interface from where we can visualise, plot graphical representation of statistics and trace the location of needs with severity levels as and when required.
- Analysis medium for analyzing the hatred content of any location and thus predicting any state of tension or mob formation that might be developed in that particular location.
- Tool for Predicting information about where people find difficulties in the lockdown and post lockdown scenario region wise and thus predicting the sorts of problems they might be facing and informing the required authorities.
- Analysis tool for crowd prediction based on specific tags region wise. Informing local authorities regarding anything particular happening over a region so as to get quick help.
- Tracing widget for tracking the highly used fake information surfacing over the internet which certainly creates tension, superstition or unwanted malpractices and activities, thus informing the concerned authorities to prevent them beforehand.

-Medium for providing specific data to the Organisations and NGOs working for providing support to the people affected by the lockdown who require help for transportation, food, supplies and other facilities.

Revenue Model-

- Four different type of coverage based subscription model can be elected for in our app to track the virus outbreak efficiently.
- Users can opt for one of the following plans, each of which has two different methods, one being the shallow search, which returns back the overall or a general gist of the information collected, the other being, the deep search, which makes the algorithms go search deeper and returns details with greater accuracy.
- The different plans available are a city based subscription, for generating news from within a borders of a particular city, a state-based subscription, a nation-wide and a world-wide subscription, which on their part returns the data as their name depict.
- These plans would help generate revenues for the functioning of the services related to the app.

Technology Stack-

1. DATA Collection and DATA Processing for tweets

Extracting Data and handling them from real life tweets and processing them to be used in further as the input data for our ML model. Basically this involves the both the collection and processing the data into a proper format for further usage.

2. Making Our ML Model and training

We plan to develop the analysis tool at first by using the necessary ML/DL algorithms and the tools provided by the IBM Watson studio thus creating appropriate and modern functionality. All those algorithms are to be designed and structured to get the maximum out of it. We aim to provide solutions for advanced sentimental analysis on the data fetched by twitter, categorize them, and thus providing a range of applications on that data.

3. Deployment in IBM Watson

For sentimental analysis of the data, we will be using modern and mostly used ML/DL algorithms along with the tools available in the IBM Watson studio. For deploying the entire application, we plan to deploy it in the IBM Cloud Deployment Infrastructure.

4. Development of the UI (Web Application)

For developing the interface for analysis purposes we plan to develop a web and mobile application based on the MERN stack infrastructure, also using the Django or Flask framework if required necessarily.

Novelty/ Uniqueness-

No other web-based app until yet, addresses solutions to problems arising in these pandemic situations from the tweets made on social media platforms. Our presented application provides solutions ranging from city level to that of the worldwide level. It provides solutions, taking into account information collected from different tweets made or provides mode of generating solutions by using tweets as a medium. Below are some points to show it's uniqueness-

- Bordering out the virus hit places on maps would help people take precautions before-hand.
- Proper location-based virus segmented map would help the general public in pre-planning of their movements or actions
- Fake news segmentation would look that false news do not get spread.
- Emergency help feature can be opted for by utilizing simple resources by just making use of certain hashtags.
- Crowd prediction features would help people plan their routes for travel thereby distancing themselves from a huge crowd.
- Tweet segmentation and classification would help people see information from certain categorized locations

Business/ Social Impact-

Our application addresses certain social as well as business impacts, as have been mentioned below-

- It has always been and would probably always have been a medium of spreading fake rumors, news, hatred, and other such feelings had an app to detect them would have not been developed.
- Our app fulfills the void by fitting into the right place for which it has been designed for.
- People can now verify the news, and other such information garnered publicly on our app before wholeheartedly getting on to believing them.
- Businesses impacted due to the unavailability of proper routes through safety, to people,

would be able to function unanimously all over again, due to the availability of a virus hit map onboard our app.

- The spread of the virus could be contained by using the crowd prediction system provided within the app diligently.
- Information can be gathered more quickly and efficiently verified by extracting data from hashtags used in tweets.
- People can avail help easily by making tweets containing specific hashtags.