

# Web Based Dashboard For COVID-19 Twitter Sentiment Analysis

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# **INTRODUCTION**

## **OVERVIEW**

Corona Virus Disease or COVID 19 is a new virus disease that originated in 2019. The virus has now spread across the world and the almost all the countries are battling against this virus and are trying their best to curb the spread as much as possible. The World Health Organisation has declared it as a Pandemic and is leaving no stone unturned to control the pandemic and is awaiting a vaccine to cure it. There are not many academic studies that can guide researchers to study the impact this pandemic has on the mental health of the people and also on the economies of countries worldwide.

Looking at the statistics of COVID19 infected, recovered, and death cases of all countries, Everyone knew that drastic measures were needed to stop the numbers from rising exponentially. And people started expressing their views , opinions and expression through social media like Twitter. So this Project analyses these tweets and tells us how our citizens are. It helps us to know the mental state of the people where government officials can do their work.

## **PURPOSE**

As governments and organizations continue to work towards COVID-19 and stem the growing humanitarian toll it is exacting, the economic effects are also beginning to be felt. We can track sentiment to gauge how people's expectations, incomes, spending, and behaviors change throughout the crisis across the country over time and also predict their state if the lockdown is extended.

We chose Twitter as our target field. As one of the world's biggest social network platforms, Twitter hosts abundant user-generated posts, which closely reflect the public's reactions towards this pandemic with low latency.

# **LITERATURE SURVEY**

## **EXISTING PROBLEM**

The Corona Virus endangers our physical health indeed, but alongside, social distancing also poses a threat to our emotional stability. Thus, it is crucial to understand public sentiments under COVID-19. Emotional sharing is thought to be a driver of social movements on social media. Since Lockdown people started sharing their thoughts and via social medias, which sometimes can be very hard for us to predict their real emotions. Which may have created problems to many.

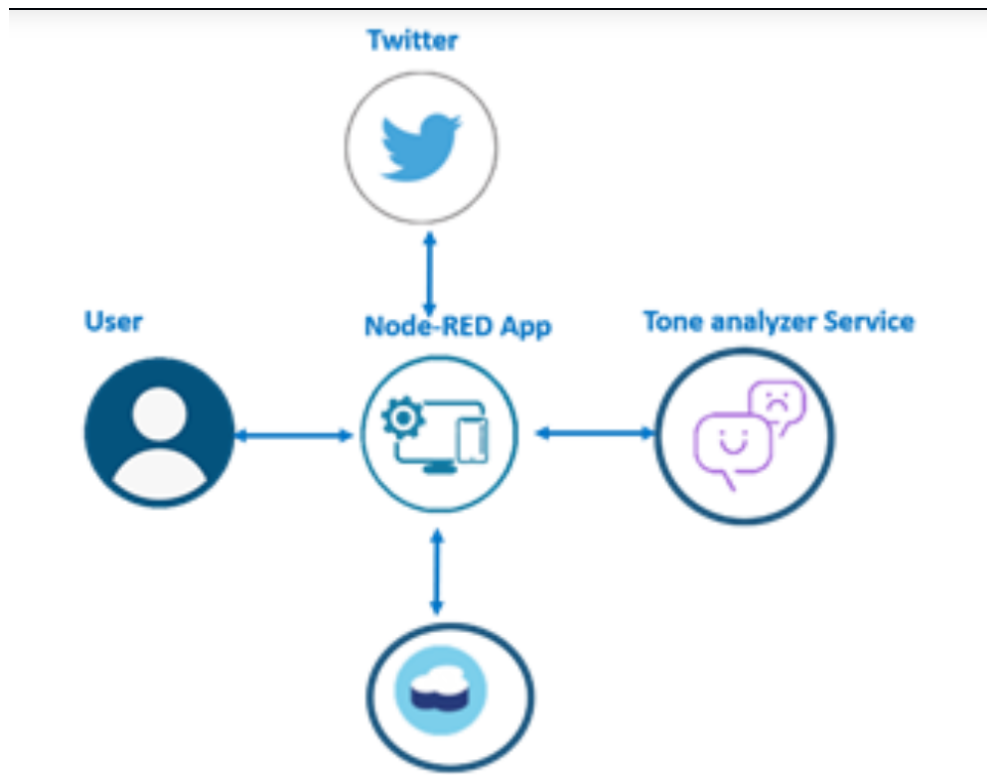
## **PROPOSED SOLUTION**

The project mainly focuses on people's sentiment towards the pandemic, understands the sentiments of people on government's decisions to extend the lockdown and possibility to predict riots against the government.

In this Project, our server application subscribes to a Twitter feed as configured by the user. Each tweet received will be analyzed for emotional tone and sentiment, all data is stored in a Cloudant database, with the opportunity to store historical data as well. The resulting analysis is presented in a Node-Red based Web UI as a series of graphs and charts.

- Tweets are pushed out by Twitter based on Hashtag.
- The Watson Tone Analyzer Service /Sentiment node performs an analysis of sentiment and emotional tone.
- Tweets and metadata are stored in Cloudant
- The Web UI displays charts and graphs.

## THE THEORITICAL ANALYSIS



This is basically the block diagram of my project.

## HARDWARE AND SOFTWARE REQUIREMENTS

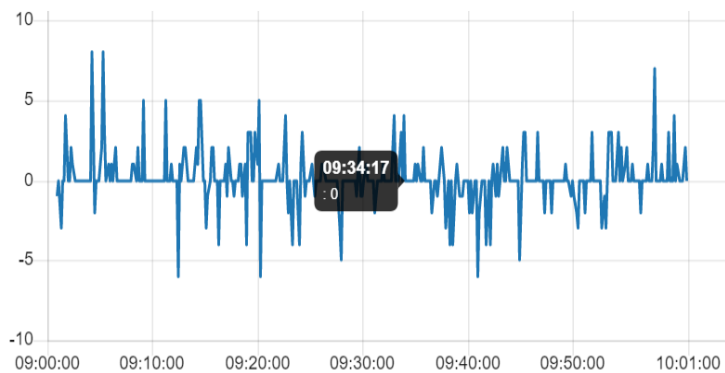
1. IBM Academic Initiative Account
2. Node-Red Starter Service
3. Cloudant db
4. Watson Studio Desktop
5. Twitter Developer Account
6. Node-Red Dashboard

# RESULT

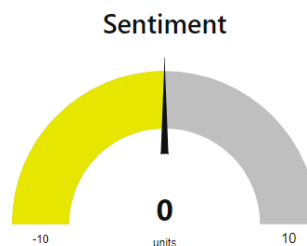
## Tweet Details

**RT @Mediavenir: us FLASH - Des milliers de personnes convergent vers le centre de dépistage de la #COVID19 du #Dodgers Stadium à Los Angele...**

### Tweet Sentiment History



## Tweet Scoreboard



## APPENDIX

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<https://stackoverflow.com/questions/1500260/detect-urls-in-text-with-java>

```
script\nmsg.payload = newtweet.replace(  
/((([a-z]+\:\/\/\w)?((([a-z0-9\-\]+\.\.))+([a-z]{2}|biz|com|co|edu|gov|info|net|org|ly  
)))(:[0-9]{1,5})?(\/\w[a-z0-9_\-\.\~]+)*(\w([a-z0-9_\-\.\~]+)(\?[a-z0-9+_\-\.\~%  
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);\nreturn
```

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