

# Sentiment Analysis on Covid-19 tweets

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# TEAM-38

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# Introduction

The dataset is

- COVID-19 Vaccines Tweets

We try to understand how progress of vaccination programmes around the World (or in a specific country) is received by the public, as reflected in the tweets about all vaccines.

# Approach

## Tasks to be performed

- 1 Study the subjects of tweets about the vaccine.
- 2 Perform various NLP tasks on the data set.
- 3 To understand relation between public vaccination programs actions and public reception.
- 4 Bring useful insights.

# Progress

- Data Preprocessing
- Exploratory Data Analysis
- Cleaning the text
- Model evaluation

# Learnings

- Exploratory Data Analysis
- Natural Language Processing
- Transfer learning in NLP
- Support vector machine(SVM)
- CountVectoriser
- Hyperparameter tuning
- Naive bayes

# Challenges

- Finding best hyperparameters for the model.
- Preprocessing the text.

# Tech Stack

- Latex
- Google Colaboratory
- Git Lab
- **Libraries:** pandas, numpy, matplotlib, seaborn, nltk, Wordcloud, Sklearn, DateTime, re



# References

- Machine Learning — Text Processing
- <https://sklearn.org/>
- <https://www.nltk.org/>

# GIT Repo

The screenshot shows the GitLab interface for a repository named 'Covid-19 Vaccine Tweets'. The left sidebar contains navigation links: Project overview, Details, Activity, Releases, Repository, Issues (0), Merge requests (0), CI/CD, Security & Compliance, Operations, Packages & Registries, and a Collapse sidebar button. The main content area shows the repository details, including the project ID (25739765), commit count (6), branch count (1), tag count (0), file count (9 MB), and storage (9 MB). A description states: 'Study the relationship between the vaccination progress and the discussions in social media (from the tweets) about the vaccines.' Below this is a file browser showing the 'master' branch with a dropdown to create a new branch. A 'History' button and a 'Find file' input are also present. A recent commit is highlighted: 'Update README.md' by M Srinidhi, authored 5 days ago, with commit hash b292c356. Below the commit list, there is a table of files:

Name	Last commit	Last update
.ipynb_checkpoints	Add Jupyter Notebooks	5 days ago
Notes	Add documents in Notes folder	5 days ago
Covid-19 Vaccination.ipynb	Add Jupyter Notebooks	5 days ago

# Aim for the week

- Improve the accuracy of model.
- Data analysis

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*Thank  
you!*