# **Project D: Twitter Data Analysis**

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\* Did Task 1

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\* Did Task 3

## Introduction:

This project consists of cleaning tweet data for training and test data for the building of a machine learning model that assigns a particular topic to a tweet. Precision and recall is then computed to determine the efficacy of the model.

**For Task 1**, **Spark Dataframe** was used to facilitate the use of multiple SQL queries, as well as Spark's built-in explode function, which reduced the code needed to count the top 20 hashtags.

For Task 2, Spark Dataframe was used because the array\_intersect method belongs to it, which simplifies the process of filtering out hashtags immensely. For Task 3, Spark Dataframe was chosen because it has a machine learning library that is simple and efficient to use.

#### QUESTIONS:

#### Task 1:

In the report, include the top 20 keywords you found for the 10k dataset.

#### **ANSWER:**

"ALDUBxEBLoveis", "FurkanPalalı", "no309", "LalOn", "chien", "job ", "Hiring", "sbhawks", "Top3Apps", "perdu", "trouvé", "CareerArc", "Job", "trumprussia", "trndnl", "Jobs", "ShowtimeLetsCelebr8", "hiring", "impeachtrumppence", "music"

## Task 2:

In the report, include the total number of records in the tweets\_topic dataset for the 10k dataset.

## ANSWER:

269

#### Task 3:

Compute the precision and recall of the result you found and include them in the report for the 10k dataset.

### **ANSWER:**

0.9023458896417154