



# Pixel - Tweets Analyzer

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Twitter Data Analysis

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# Overview

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- ▶ Project description
  - ▶ Objective
  - ▶ Results
- ▶ Data Source
- ▶ UI
- ▶ Streaming and Static data Tweets
  - ▶ Processing
  - ▶ Charts
- ▶ Analysis of User pages
- ▶ My Twitter handle
- ▶ Conclusion





# Project Description

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## Objective

- ▶ Analyses the tweets to give insights about the Sentiment of the users based on the words by the tweets.
- ▶ Reach of a tweet sentiment by followers count and distribution of the source of tweets – both streaming and static data.
- ▶ Comparison charts, sentiment analysis for the comments posted for a tweet.





# Data Source

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- ▶ tweepy - The API class provides access to the entire twitter RESTful API methods.
- ▶ Streaming data extracted through 'tweepy.streaming' - StreamListener
- ▶ Static data extracted with 'api.search'
- ▶ User details extracted with help of 'api.get\_user'
- ▶ Data cleaning
  - ▶ Removal of non-BMP characters
  - ▶ Get only user tweets while extracting user tweets



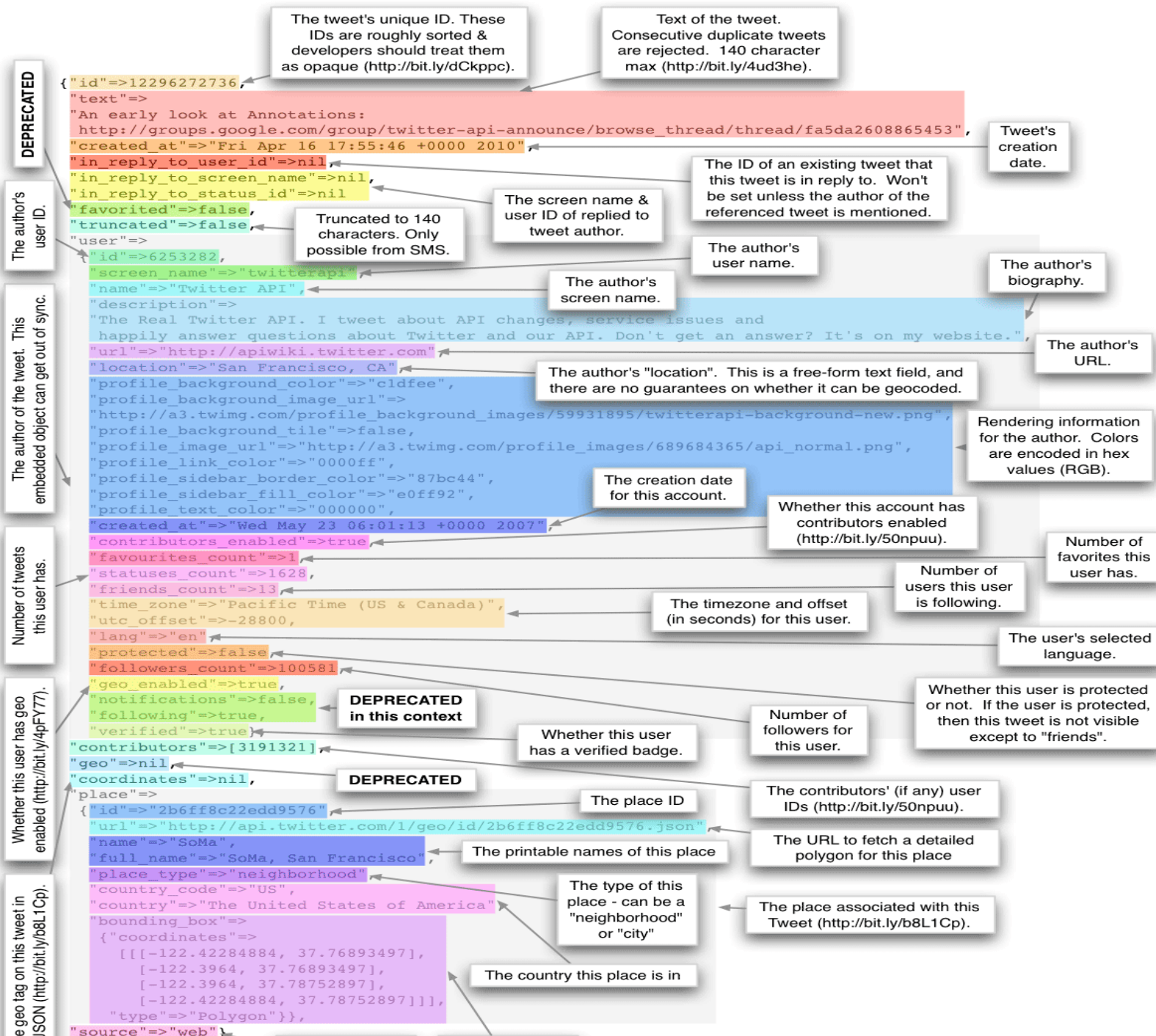


# Data Source

The data returned from tweepy is a JSON file.

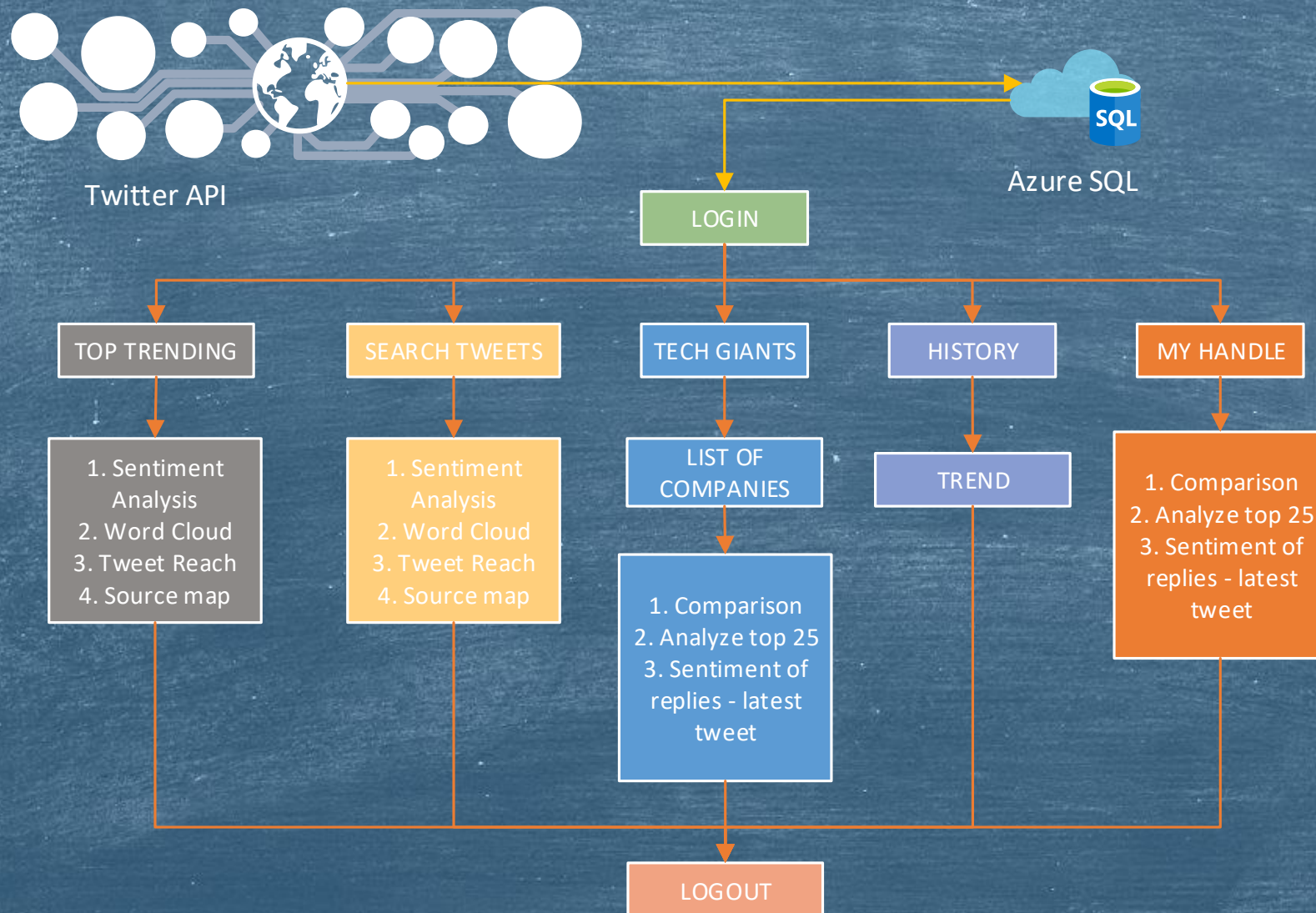
The fields necessary for analysis are taken and stored in the database.

Data retrieval is done and data visualization charts are made for analyzing the data



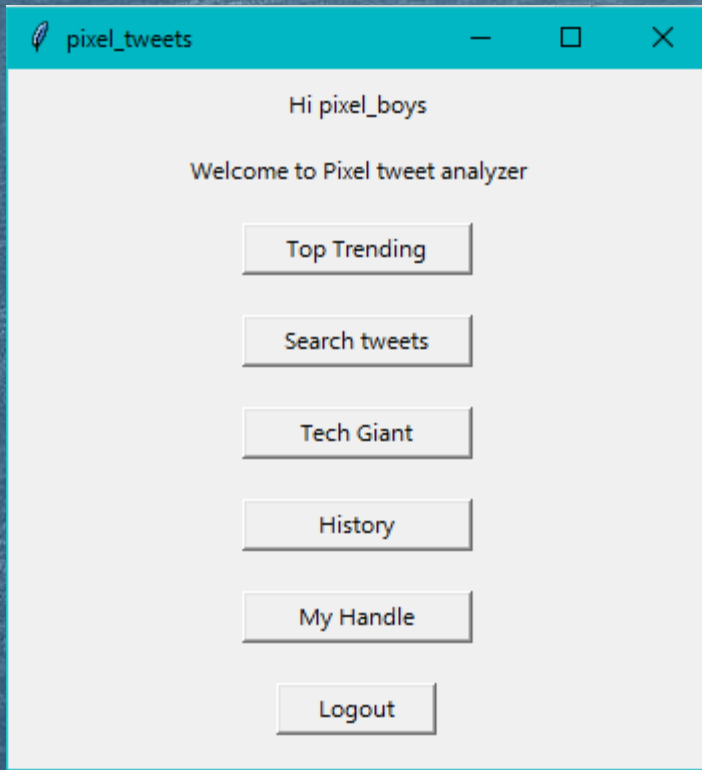


# High Level Architecture





# The UI

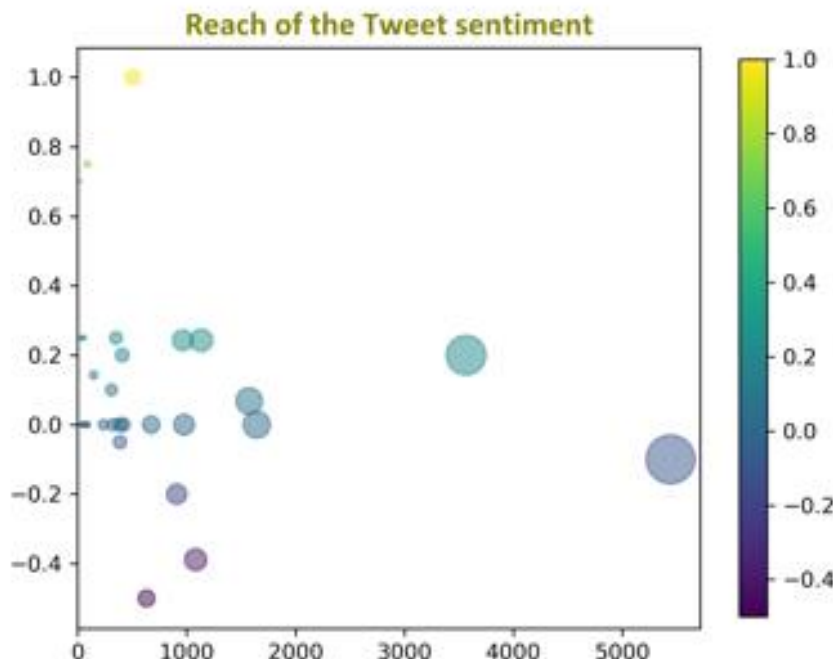
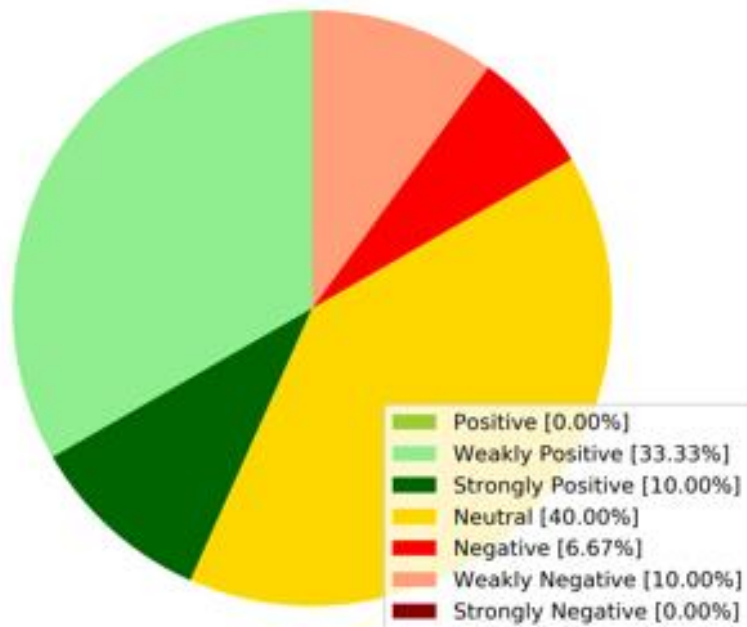


- ▶ Login
- ▶ Main Menu
  - ▶ Top Trending
  - ▶ Search Tweets
  - ▶ Tech Giants
  - ▶ History
  - ▶ My Handle
- ▶ Data visualization options

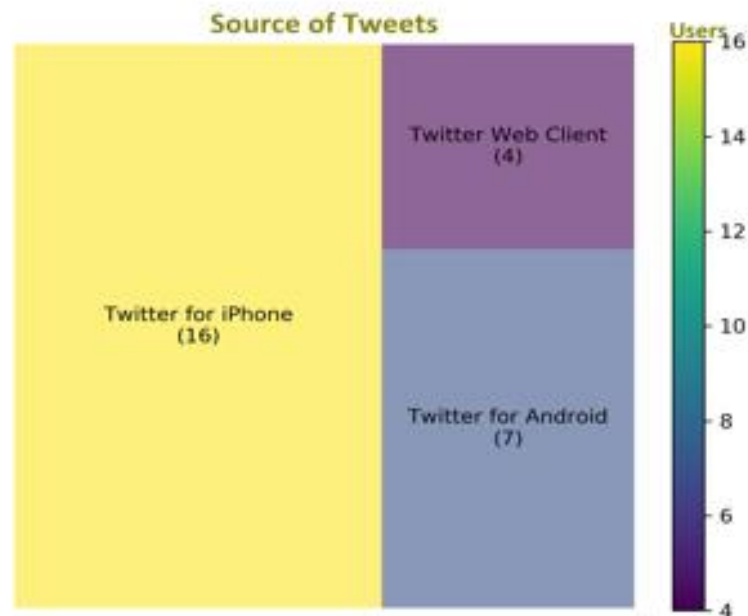




How people are reacting on #NFLDraft by analyzing 30 Tweets.



Most used words from the analyzed tweets



# Charts

1. Sentiment Analysis  
Pie chart
2. Source of the tweets
3. Reach of the sentiment based on followers
4. Word Cloud – Most used words for the tweet topics





# Tech Giants



**Tweets** 2,707  
**Following** 437  
**Followers** 7,235  
**Likes** 132  
**Lists** 1

## Illinois Tech

@illinoistech

Illinois Institute of Technology is Chicago's premier engineering, science, and technology based university.

Chicago IL

[iit.edu](http://iit.edu)

Joined October 2008

[Tweet to Illinois Tech](#)

368 Photos and videos

Select one to Analyze

Microsoft

Google

Twitter

IBM

IIT Chicago

pixel\_tweets



@illinoistech

Tweets  
2707

Followers  
7235

Likes  
132

List  
248

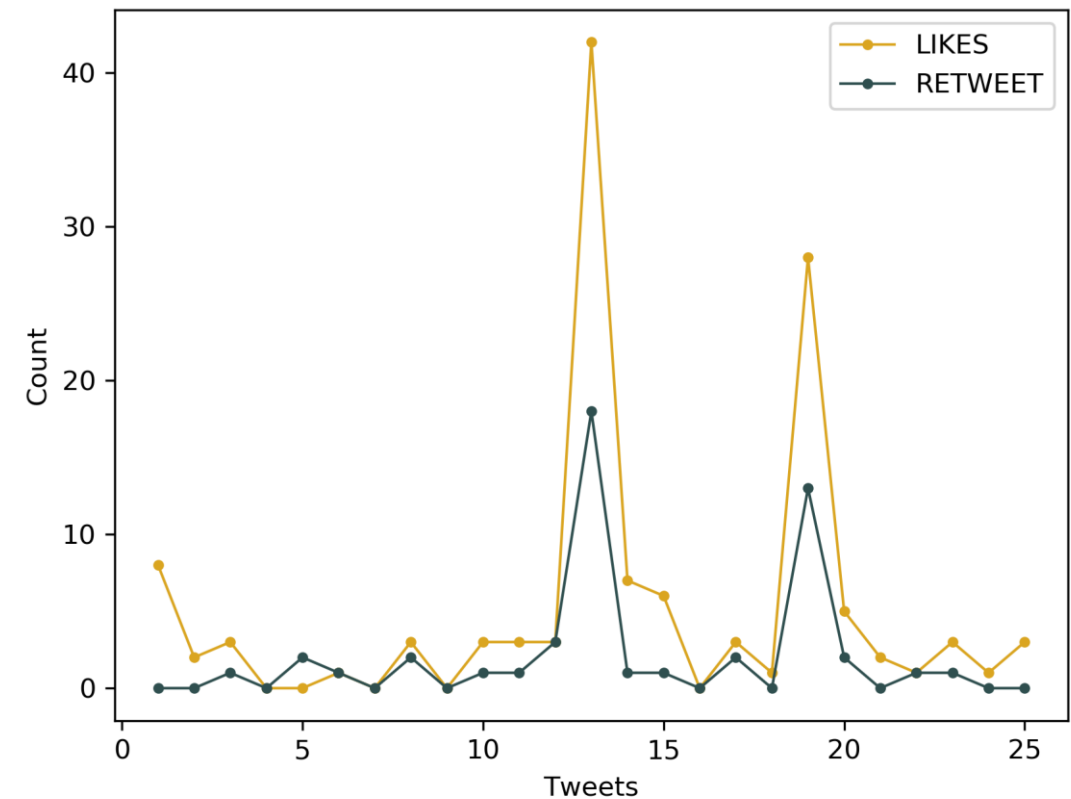
Official Twitter Handle

Comparison

Latest 25 tweets

Latest tweet sentiment

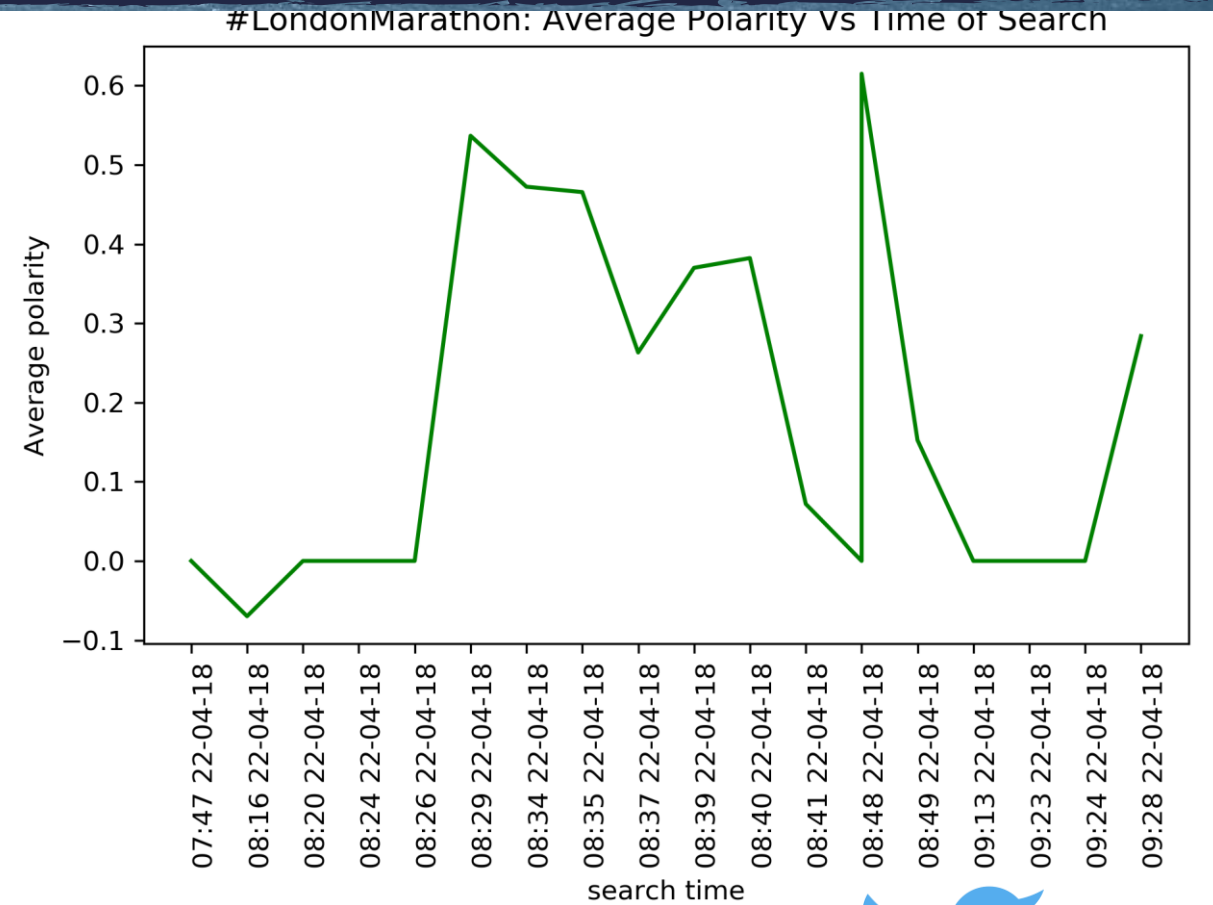
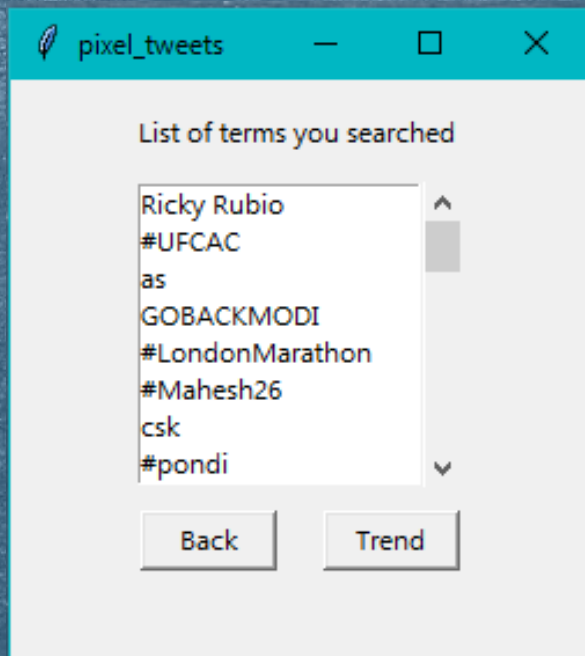
Favourites and Retweets for the latest 25 tweets





# History

History of searches to get insights about how the crowd response has changed over a period of time






# My Twitter Handle

Get the trends of the latest 25 tweets

Analyze the crowd sentiment for my latest tweet

pixel\_tweets



Tweets

51

Followers

33

Likes

2

List

0

Pixel Tweets

Official Twitter Handle

New Tweet: #AvengersInfinityWar yayy or naay

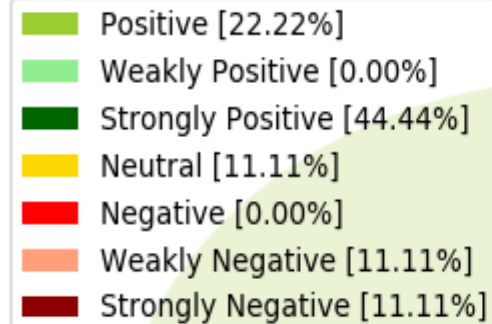
Post

Latest 25 tweets

Latest tweet sentiment

Back

How people are reacting on the recent tweet





# Demo

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# Conclusion & Recommendations

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- ▶ The Application provides insights about the crowd reaction of topics.
- ▶ Understand the trend analysis of a tweet.
- ▶ Future Scope
  - ▶ Performance improvement
  - ▶ More data charts





# Questions

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