

Data Visualisation Project 2022

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08/01/2022

**STUDENT PLAGIARISM DISCLAIMER FORM**

**PLAGIARISM DISCLAIMER**

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PROGRAMME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Software Design for Cloud computing\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

YEAR: \_\_\_\_\_\_\_\_\_\_\_2021\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

MODULE: \_\_\_\_\_\_\_\_\_\_\_\_Data Visualisatioin\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

LECTURER: \_\_\_\_\_\_\_\_\_\_\_\_David Scott\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ASSIGNMENT TITLE: \_\_\_\_\_\_\_\_\_\_DATA VIS REPORT \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DUE DATE: \_\_\_\_\_\_\_\_\_\_5/01/2022\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DATE SUBMITTED: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_8/02/2022\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ADDITIONAL INFORMATION: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Dated: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_08/01/2022\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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# Introduction

This project is creating a system that gathers tweets from twitter and does a sentiment analysis on the tweets collected and determines whether the nature of the tweet is positive, negative, or neutral based on certain keywords in the tweet itself.

I used a Twitter API from the developers of Twitter which allowed for me to gather a certain amount of live tweets anytime the application was ran.

# System Overview

### Architecture

The system architecture is centred around the twitter API, once the API KEY and tokens are valid everything should work in the specific motion:

The user will open the app and be prompted to enter a topic of their choice, when this done the backend will begin to gather the tweets of the user input from twitter and display them on a csv file for the user to view, also the sentiment analysis will be used to make a pie chart that will summarise how many people where negative, positive or neutral on the topic.

### Design Decisions

# Topic Selection and Presupposition

For the topic selection, I used Arsenal as selection to see what people thought of them at the present time, my presumptions that there would be more negative tweets about them at the time due to their very poor run of form in the league and other domestic competitions.

# Post-process Analysis

When the analysis was completed and carried out, I was surprised that negative feedback wasn’t as much as most of the tweets were neutral, but I was not surprised by the lack of positive tweets.

# Conclusion

### What you would do differently

I would have tried to understand the use of drilldown charts better so I could’ve incorporated them into my visual representation of the sentiment analysis and probably looked for many other ways to do this for geo location and the age of the users making the tweets.

### Future work