Text Analysis Project Report

Project Overview:

The primary goal of this text analysis project was to gain insights from Twitter data related to a specific topic. The project involved several key steps, including data scraping from Twitter using the Scraper API, data wrangling in Python, the creation of a word cloud, and sentiment analysis.

Approach

1. Data Scraping from Twitter using XYZ API:

For the data collection phase, I utilized the Scraper API to scrape relevant tweets from Twitter using the key words BULLRUN. The API allowed me to access real-time Twitter data based on specified search queries, enabling me to gather a 50-dataset related to the chosen topic.

2. Data Wrangling Process with Python:

Upon obtaining the raw Twitter data, the next step involved data wrangling to prepare the dataset for analysis. Python, along with libraries such as pandas and NumPy, played a crucial role in this phase. The data wrangling process included handling missing values, removing duplicates, and organizing the data into a structured format conducive to further analysis.

3. Creation of Word Cloud:

To visually represent the most frequently occurring words in the dataset, I converted all the text data into a single string. The Python programming language, along with the WordCloud library, was employed to generate a visually appealing word cloud. This graphical representation allowed us to identify the most prominent terms within the Twitter data, offering valuable insights into the prevalent themes or topics. To add neatness to the cloud I had to make the axes invisible and changed the background to improve the look.

4. Sentiment Analysis using Python:

The final step of the project involved sentiment analysis to understand the overall sentiment expressed in the Twitter data. Python, with libraries such as TextBlob, facilitated the sentiment analysis process. By analyzing the sentiment of individual tweets, we gained an understanding of the general sentiment trends associated with the chosen topic on Twitter.

Conclusion:

This personalized text analysis project showcased the power of data science in tailoring insights to individual interests. Beyond the technical aspects, the journey allowed me to explore and understand a topic I'm passionate about, creating a unique narrative that speaks directly to my curiosity.