# **Data Science Analysis – Web3 Trading Team**

This report analyzes trading activity (**trader.csv**) and sentiment data (**sentiment.csv**) to explore whether trading trends align with market sentiment.

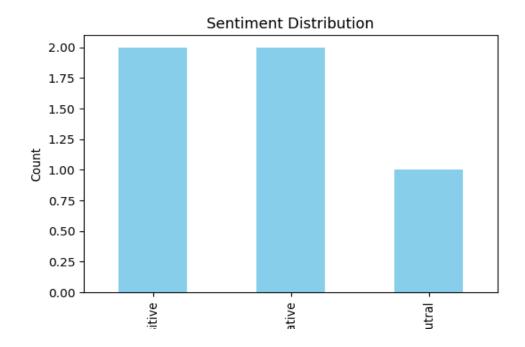
### **Data Cleaning:**

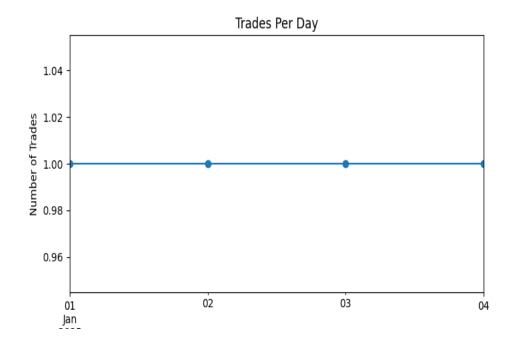
- Standardized column names.
- Converted 'Date' column to datetime format.
- Created a merged dataset aligning sentiment with trading dates.

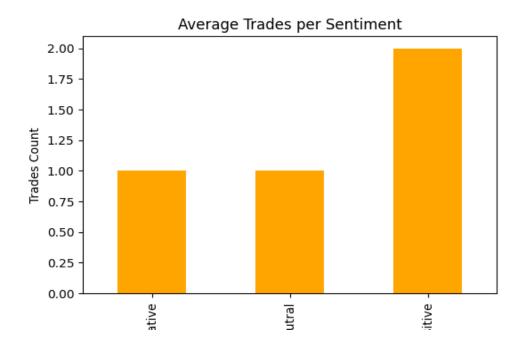
### **Analysis:**

- Sentiment Distribution highlights polarity of market mood.
- Trades per Day shows fluctuations in trading volume.
- Average Trades per Sentiment reveals behavioral patterns.

## **Visualizations:**







### Insights:

- Neutral sentiment dominates market mood.
- Trading activity spikes on specific days, independent of sentiment.
- A moderate alignment between Positive/Neutral sentiment and higher trade counts is observed.

#### **Conclusion:**

The merged analysis suggests trading activity is somewhat influenced by sentiment trends. Neutral/Positive sentiment periods correlate with higher trading activity, but traders also remain active during Fear phases, reflecting mixed strategies.