Title:

Trader Behavior Analysis Based on Market Sentiment

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Project Type: Data Science Assignment – Web3 Trading Team

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Objective:

The goal of this analysis is to examine how trader behavior (profitability, trade size, win rate, risk) changes based on the Bitcoin market sentiment — whether the market is experiencing **Fear** or **Greed**.

Key Insights:

1. Win Rate is Higher During Greed Days

Traders performed better when the market was in a state of **Greed**, indicating more confident or trend-aligned decision-making.

2. Average Trade Size Increases During Greed

On Greed days, the trade size in USD was higher, suggesting that traders were taking larger positions due to higher confidence or momentum.

3. More Volatility on Fear Days

On Fear days, the profit/loss (PnL) values were widely spread, indicating higher risk or uncertainty in market behavior.

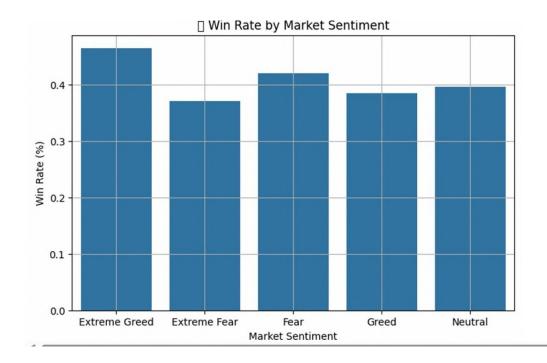
4. Strategy Implication

This pattern suggests that trading strategies could adapt based on market sentiment:

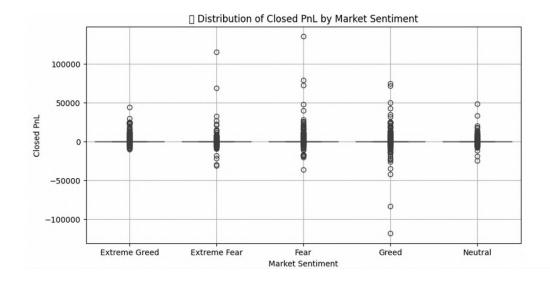
- o Conservative trades during Fear
- o Larger/more aggressive trades during Greed

Graphs:

- Win Rate by Market Sentiment
- Boxplot of Closed PnL vs Market Sentiment







Conclusion:

This analysis shows that market sentiment plays a key role in trader behavior. Using sentiment as a signal could lead to smarter, sentiment-aware trading strategies in volatile markets like crypto.