Title: Trader Behaviour Insights

To: Primetrade.ai

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1. Executive Summary

This report analyzes the relationship between trader behaviour on the Hyperliquid platform and the broader market sentiment, as measured by the Fear & Greed Index. By merging historical trading data with daily sentiment classifications, we uncovered distinct patterns in profitability and trade sizing. The key finding is that traders, on average, achieve significantly **higher profits during periods of "Extreme Greed"**. Interestingly, this increased profitability occurs despite a tendency to use **smaller average trade sizes** during these same periods. Conversely, periods of "Fear" are associated with the largest average trade sizes but do not yield the highest profits, suggesting a potential divergence between trader confidence and market timing.

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2. Objective

The primary objective of this analysis is to explore how trading behaviour—specifically profitability, and trade volume—aligns or diverges from the prevailing market sentiment (Fear vs. Greed). The goal is to identify hidden trends that could inform smarter, more sentiment-aware trading strategies.

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3. Data & Methodology

Two primary datasets were used for this analysis:

1. **Historical Trader Data:** A detailed log of trades from Hyperliquid, including columns like Account, Closed PnL, and Size USD.
2. **Bitcoin Market Sentiment:** A daily record of the Fear & Greed Index, with Date and Classification (e.g., Fear, Greed, Neutral) columns.

The datasets were merged on a common date field. The core of the analysis involved grouping the combined data by the sentiment Classification and calculating key aggregate metrics.

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4. Analysis & Findings

The analysis reveals a clear relationship between market sentiment and trading outcomes. The aggregated statistics are presented below:

Classificati	Avg_PnL	Median_P	Avg_Size_	Median_Si	Unique_Traders
Extreme Fe	34.53786	0	5349.732	766.15	32
Extreme G	67.89286	0	3112.252	500.05	30
Fear	54.2904	0	7816.11	735.96	32
Greed	42.74356	0	5736.884	555	31
Neutral	34.30772	0	4782.733	547.655	31

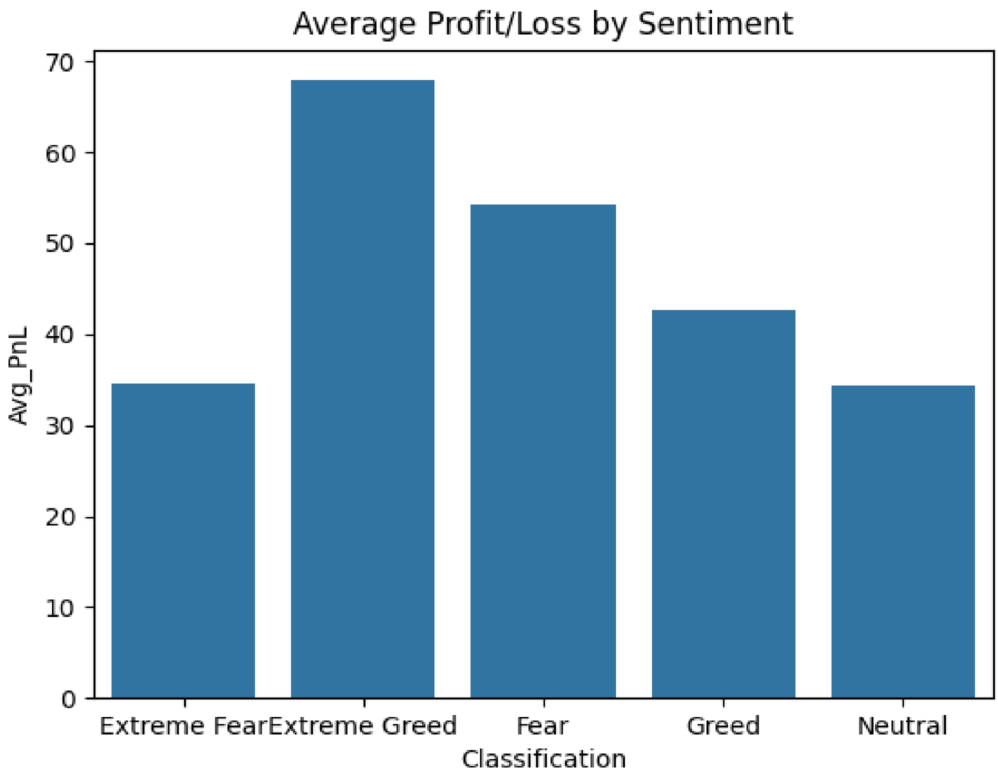

Chart 1: Average Profit/Loss by Market Sentiment

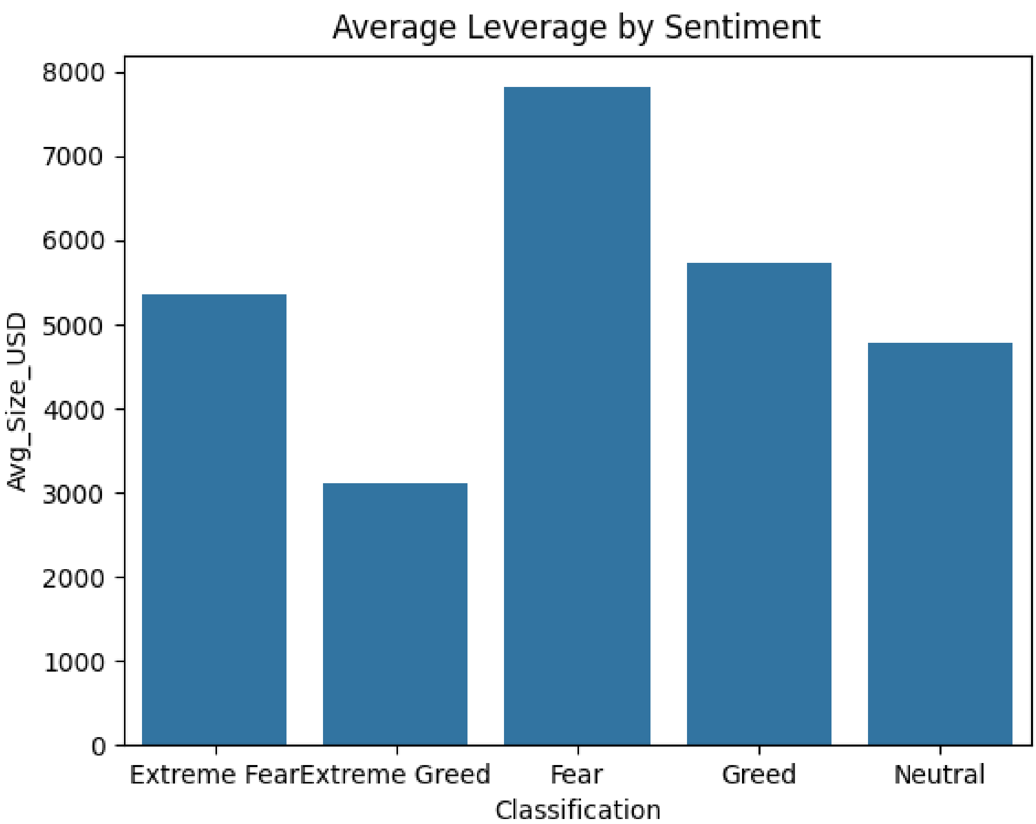

Chart 2: Average Trade Size by Market Sentiment

Key Observations:

1. **Profitability vs. Sentiment:**
    - As shown in Chart 1, traders achieved the **highest average profit ($67.89)** during periods of **"Extreme Greed"**. This suggests that traders were most successful when market optimism was at its peak.
    - The second most profitable period was during times of **"Fear" ($54.29)**, indicating that opportunities for profit exist in volatile markets as well.
2. **Trade Size vs. Sentiment:**
    - Chart 2 shows that, contrary to what might be expected, traders placed the **largest average trades ($7,816.11)** during periods of **"Fear"**.
    - Crucially, the most profitable period, **"Extreme Greed"**, saw the **smallest average trade sizes ($3,112.25)**. Traders were more cautious with their sizing during peak euphoria yet managed to capture higher returns.

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5. Strategic Insights & Recommendations

- **Divergence of Confidence and Performance:** The data shows a clear divergence. The largest trade sizes (a proxy for confidence) occur during "Fear," but the best results occur during "Extreme Greed." This suggests that conviction during fearful times does not necessarily translate to higher profits.
- **The "Smart Money" Signal:** The combination of **smaller trade sizes** and **higher profitability** during "Extreme Greed" could be a "smart money" signal. A potential strategy would be to mirror this behaviour: reduce position sizes when sentiment becomes extremely greedy.
- **Inefficiency in Fearful Markets:** While profitable, the large trade sizes during "Fear" did not yield the best returns. This could signal inefficiency. A recommended strategy would be to trade with caution during fearful periods, as the data suggests that large bets do not guarantee superior outcomes.

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6. Conclusion

The analysis successfully demonstrates a tangible link between market sentiment and trader behaviour. The most significant finding is the inverse correlation between average trade size and profitability during periods of "Extreme Greed." These insights can be leveraged to develop trading strategies that are not only reactive to price action but also attuned to the prevailing psychological state of the market.