# Data Science Assignment Instructions – Web3 Trading Team

## Standardized Submission Format

All candidate submissions must strictly follow this structure. Non-compliance will result in rejection of the application.

2 Create a root directory with the following format:

```
`ds_<candidate_name>`
```

Inside this directory, maintain the following structure:

```
ds_<candidate_name>/
- notebook_1.ipynb # All work should be done in Google Colab
notebooks.
--- notebook_2.ipynb
                           # (Optional) Additional Colab notebook if
needed.
 — csv_files/
                    # Store all CSVs or data outputs here.
  — *.csv
                    # Any intermediate or processed data files.
                    # Store all visual outputs, graphs, or charts here.
  — outputs/
  — *.png / *.jpg
                      # Image results of EDA, charts, etc.
  — ds_report.pdf
                        # Final summarized insights and explanations.
  – README.md
                         # (Optional but encouraged) Setup
instructions, notes.
```

② All code must be shared as \*\*Google Colab links\*\* with access set to 'Anyone with the link can view'.

2 The exact same structure must be updated in the GitHub repository as well.

2 Failing to comply with any of the above instructions will result in immediate rejection.

# Assignment Overview

You are expected to explore and analyze the relationship between trader behavior and market sentiment using two key datasets.

#### ② Datasets

- 1. \*\*Bitcoin Market Sentiment Dataset\*\*
- Columns: `Date`, `Classification` (Fear / Greed)
- 2. \*\*Historical Trader Data from Hyperliquid\*\*
- Columns include: `account`, `symbol`, `execution price`, `size`, `side`, `time`, `start position`, `event`, `closedPnL`, `leverage`, etc.

## Objective

Analyze how trading behavior (profitability, risk, volume, leverage) aligns or diverges from overall market sentiment (fear vs greed). Identify hidden trends or signals that could influence smarter trading strategies.

### ② Dataset Links

1. Historical Trader Data:

https://drive.google.com/file/d/1IAfLZwu6rJzyWKgBToqwSmmVYU6VbjV s/view?usp=sharing

2. Fear & Greed Index:

https://drive.google.com/file/d/1PgQC0tO8XN-wqkNyghWc\_-mnrYv\_nhSf/view?usp=sharing

# 2 Apply Now!

This assignment is the first step in our hiring process. Top-performing candidates will be shortlisted for an interview.

Apply now and take the next step in your data science career with one of the most innovative

teams in Web3 trading!