Price Signals Forecast for Financial Assets

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Importance of Project

- Providing buy and sell signals so as to maximize the profit for a trader

- Showing how price movements of centralized and decentralized assets get influenced by a particular news and how is this influence correlated.

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Challenges and Proposed Solution

Existing Solution:

- Most predictive models work with only OHLCV (Open High Low Close and Volume) data.

Proposed Solution:

- Building a predictive model that works for both Crypto and Stocks assets based on news and public sentiment.

Challenges:

- Integrating multiple (6) data sources
- Incorporating news and public sentiment
- Building user-friendly dashboards that help novice traders
- Making predictions in real-time

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Completed Task - Data Collection

OHLC Financial Data (Hourly)

Asset - *Cryptocurrency*
Source - *CoinMarketCap.com*

Social Media Quantitative Metrics

Source - *Twitter and Reddit API*
Information - *Likes ,Views, Comments etc*

OHLC Financial Data (Hourly)

Asset - *Stocks*
Source - *Quandl*

Traditional Media Qualitative Data

Source - *News Articles and Forums*
Information - *Financial and General News*

The current work is on schedule. Most data from the six data sources has been collected.

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Detail Schedule

Week No.	Scheduled Task	Description	Status
Week 1	Project proposal, Planning, Feasibility test	Finding area of interest Dividing work	**Completed**
Week 2	Project update Data Exploration, Data collection	Analyze features Understand its importance	**Partially Completed**
Week 3	Data cleaning Data integration	Extracting words of importance Clean, combine and aggregate different sources of data	**In progress**
Week 4	Data analysis Product development	Create an input feature vector Build a predictive model	**Future work**
Week 5	Product development	Design an Interactive Web Application with dashboards	**Future work**
Week 6	Product testing, Product evaluation, Performance improvements	Evaluating trained model Testing application	**Future work**

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Thank you