

LAB 3 PART 2 MINUTES OF MEETING

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Team Details

Team Name: SSK

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Meeting Notes for Day 1

Date: 2/2/2024

Agenda:

- Review of the assignment requirements.
- Discussion on algorithm options: Moving Average, Exponential Smoothing.
- Assignment distribution and responsibilities.
- Setting deadlines for algorithm development and implementation.

Minutes:

- Discussed the assignment requirements and clarified any uncertainties.
- Explored different algorithms, focusing on Moving Average as a starting point.
- Agreed on a deadline for each team member's preliminary findings.

Action Items:

- Research and provide information on the Moving Average algorithm.
- Explore more advanced algorithms like ARIMA and LSTM.

Meeting Notes for Day 2

Date: 2/3/2024

Agenda:

- Presentation and discussion of findings from Day 1 research.
- Selection of algorithms for stock price prediction.
- Planning for algorithm implementation.

Minutes:

- Presented information on the Moving Average algorithm and its application in stock price prediction.
- Shared insights into ARIMA and LSTM algorithms.
- Discussed the pros and cons of each algorithm and decided to start with a hybrid approach combining Moving Average and LSTM.
- Agreed on the implementation strategy, with each team member assigned specific tasks.

Action Items:

- Begin the implementation in Python.
- Regular check-ins for progress updates.

Meeting Notes for Day 3

Date: 2/4/2024

Agenda:

- Progress update on algorithm implementation.
- Discussion on challenges faced during implementation.
- Planning for the mock trading environment.

Minutes:

- Provided an update on the Moving Average and LSTM hybrid algorithm implementation progress.
- Discussed challenges faced, such as data preprocessing and parameter tuning.
- Collaboratively addressed challenges and decided to allocate more time for fine-tuning.

Action Items:

- Continue algorithm implementation with a focus on resolving challenges.
- Share code snippets for collaborative problem-solving.

Meeting Notes for Day 4

Date: 2/5/2024

Agenda:

- Review of progress on the algorithm implementation.
- Discussion on the mock trading environment setup.
- Planning for the portfolio value tracking script.

Minutes:

- The team shared updates on the algorithm implementation progress.
- Discussed the structure of the mock trading environment, including initial investment fund and stock portfolio selection.
- Agreed on roles for setting up the Python script to track the portfolio value based on buy/sell actions.

Action Items:

- Finalize algorithm implementation and ensure compatibility with the mock trading environment.
- Begin setting up the mock trading environment.

Meeting Notes for Day 5

Date: 2/6/2024

Agenda:

- Finalize the mock trading environment setup.
- Discussion on relevant performance metrics.
- Planning for the final report and presentation.

Minutes:

- Completed the implementation of the LSTM model with lag features identified after correlation analysis for AAPL stock
 - Used autocorrelation and partial correlation to identify the lags to be used
 - LSTM model had a decent performance when compared to ARIMA
 - Feature engineering the stock data
- Development of the mock trading environment setup, ensuring it reflects the chosen portfolio and investment fund.
- Discussed performance metrics such as total portfolio value, annualized returns, and Sharpe ratio.
- Agreed on the division of tasks for the final report and presentation.

Action Items:

- Complete the mock trading environment setup.
- Finalize and document performance metrics calculations.
- Begin working on the final readme file.