Stock Price Prediction Project

HARNESSING DATA TO OPTIMIZE INVESTMENTS

Introduction

- **Project Objective:** Forecasting stock prices for informed investment decisions.

- **Importance:** Explain why this project is valuable for investors.

Project Phases

- Data Collection
- Data Preprocessing
- Feature Engineering
- Model Selection
- Model Training
- Model Evaluation

Data Collection

- **Data sources:** Where and how you gathered historical market data.

- **Data types:** Mention the types of data collected (e.g., stock prices, volume, news sentiment).

Data Preprocessing

- **Data Cleaning:** Describe steps to handle missing or erroneous data.

- **Data Transformation:** Explain any data normalization or scaling performed.

Feature Engineering

- **Feature Selection:** Discuss which features were chosen and why.

- **Feature Creation:** Highlight any novel features you engineered.

Model Selection

- **Algorithms:** Mention the machine learning algorithms considered.
- **Justification:** Explain why you chose specific algorithms over others.

Model Training

- **Data Splitting:** Explain how you divided the data into training and testing sets.

- **Training Process:** Describe how the models were trained.

Model Evaluation

- **Metrics:** Present evaluation metrics (e.g., RMSE, MAE, accuracy).

- **Visualizations:** Include charts or graphs to showcase model performance.

Results

- Present the results of your stock price prediction model.

- Highlight successful predictions and any challenges faced.

Future Enhancements

- Discuss potential improvements or extensions to the project.

- Mention additional data sources or advanced techniques.

Conclusion

- Summarize key takeaways from the project.
- Reiterate the value of the predictive model for investors.