Stock Prediction Capstone – Sprint 2

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Problem Statement

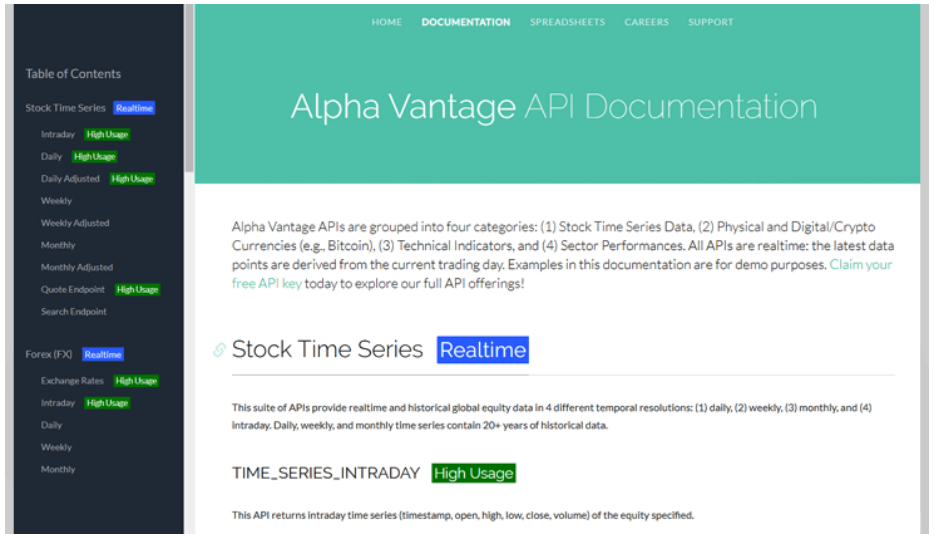
How can I use data science to predict future stock prices?

Solution:	
Use machine learning models that cater to regression problems.	Start off with baseline models and add two more complex models

Overview of Datasets

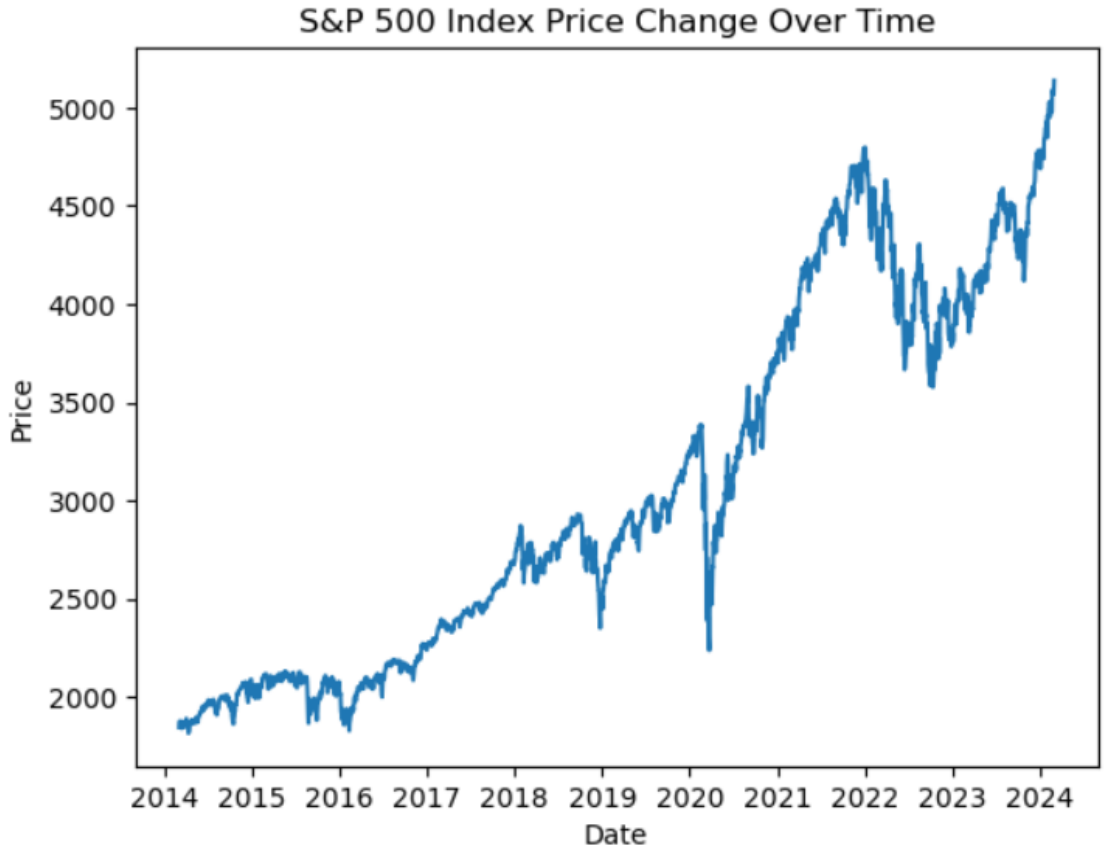
- Obtained premium access to a new API called Alpha Vantage
- Obtained the adjusted price datasets that accounts for price splits
- Able to pull Technical Indicators which I can add to potentially improve modelling

ALPHA VANTAGE



EDA

- Time is your friend in investing
- Over a long period of time, your money will grow



Baseline Models

- Linear Regression
- Random Forest Regressor

	Model	Metrics	Result
0	Linear Regression	MAE	1.691710
1	Linear Regression	MSE	5.481171
2	Random Forest Regressor	MAE	138.618410
3	Random Forest Regressor	MSE	19229.054351

Plan and Next Steps

- Identify Area of Interest and Problem Statement
- Acquire a dataset
- Basic EDA/Preprocessing
- Modelling
- Model Tuning & Adding features for better predictions