Objectives

- Create a user interface view stock market data
- Develop machine learning models to predict the price of a stock several days in advance
- Present stock price predictions to users in an easy to read and intelligent manner
- Allow users to make more financially intelligent decisions about their assets

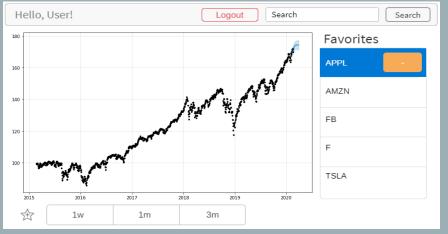
Challenges

- Training a self-learning data model to accurately predict stock trends
- Establishing secure and private connection for users to log in
- Developing a REST API



MLStockSite

Financial Forecasting App



Background

In the world of financial planning it's important to have a good grasp on how stock prices might change. How can you make smart financial decisions in such a volatile market? We want to bring machine learning technology to users in order to predict if a stock in their portfolio is going to be going up or down in the next few days. There are lots of apps out there for users to buy and sell stocks, but our app will bring them built in machine learning to help them make the best decisions about their financial assets.

Broader Impacts

This application lowers the difficulty threshold for novice investors to enter the market with confidence and security while also granting small businesses access to the latest financial forecasting technology to keep up with large-scale corporations. This product tears down the wall between the individual and investment firms, bringing machine learning technology into the public domain and leveling the playing field with firms with their own proprietary models.

Milestones

- Implemented financial modeling API
- Set-up configuration for server connection
- Established database for user information
- Developed front end to display queried results
- Trained default machine learning model to predict stock trends

Future Work

- Polish front-end design to be more intuitive and visually appealing
- Create an ensemble of models to predict stock prices
- Implement way for users to use their own pre-trained data model

The Team









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