Welcome to the Stock Market Predictor.

Our main objective of this project was to utilize and apply machine learning in order to make stock predictions. To accomplish this goal we decided to find the top 10 stocks currently and collect a dataset for over 5 years from today. Using Yahoo API and NASDAQ.com to compile the data and then store it into a database. After some research and a little bit of tweaking we determined the predictive model to use was a Long short-term memory model (LSTM). What is LSTM? LSTM has a similar control flow as a recurrent neural network. It processes data passing on information as it propagates forward. There are slight differences within the operations in the LSTM's cells. These operations are used to allow the LSTM to keep or forget information.

The task of stock market prediction is not an easy task specifically because it is impossible to know if the future of the stock market will behave in the same manner as the market as it now. But, LSTM is a highly reliable model that considers long term dependencies as well as identifies the necessary information out of the entire available dataset. With the LSTM we were able to predict a potential trend for the top 10 stocks. Maybe this tool can help you make some decisions on whether to invest in these companies or not.