## Predicting the stock market

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### Summary of the Proposal

The stock market is one of the most popular and difficult problems to solve in machine learning. There are many factors that impact the growth and decline of stocks making it hard to predict with a high degree of accuracy.

The stock market is a great target for a machine learning project. It is packed with data that can be manipulated to predict the stock price of a certain company. Companies can be volatile, but even if you can predict the smallest increase or decrease in a company, that can make a big change on the decisions of an investor. Using historical prices and other data that can be gathered from the news, we can find the best method of learning to predict the next upcoming price.

### Background

The stock market is the equity or share market where buyers and sellers trade stocks that represent ownership claims on a business. Through out the years the stock market has made profit to millions of people in America. That said it has also lost many people everything. Being able to predict the price of stocks could make you millions of dollars when investing. For the stock market there is a lot of important data that can be used to predict the market. Through out years inflation, politics, exchanges, natural disasters and more has impacted the stock market greatly.

# Goal and Objectives

The goal of our project is to predict whether or not a stock price will go up or down on a particular day through the use of different machine learning methods and data.

#### Data and Methods

We will use historical prices from 5 years ago that can be found in nasdaq or yahoo finance. Through this information we can train our machine and test it with the price change of every upcoming day. We intend to use different methods to see which gives us a better result.