Project 3.

Stock Prices Prediction Using Machine Learning

Team => Bita & Parmis

Base on **Weak Form of the Efficient-Market Hypothesis**, we will work with historical data about the stock prices of a publicly listed company to find how the stock market will perform.

Based on Technical Analysis, we are trying to read the charts and using statistical figures to identify the trends in the stock market.

We will implement a mix of <u>machine learning algorithms</u> to predict the future stock price of the company, starting with simple algorithms like averaging and linear regression to predict closing price for each day. Instead of using the simple average, we will be using the moving average technique which uses the latest set of values for each prediction. In other words, for each subsequent step, the predicted values are taken into consideration while removing the oldest observed value from the set.

Technologies to use => Python & Pandas, Tableau

Machine learning Library => SciKit-Learn