1. https://finance.yahoo.com/quote/%5EGSPC/history/
    a) I will be using the 'close' and 'volume' data.
2. I will be using python's tensorflow for the project.
    a) The dataset is feasible. I would be using daily data starting at 1927. So it would be 34000~ datapoints. The most useful information is the volume, as well as the rising/falling of closing prices. I am planning on scaling the prices between 0-1 and possibly calculating a 200 day weighted moving average to add to the dataset.
    b) Using this dataset I would want to predict the direction in which the market will move in the future. I would likely be using an GRU model in this case as it would allow for me to predict more than 1 datapoint into the future. This is very important as it is the entire goal of my project. A potential alternative would be a LTSM model, but they generally train worse with less data. GRUs also tend to train faster than LTSMs.
    c) I will likely be mainly using MSE, as this is a regression problem. Alternatively, I might try to look at the correct prediction of the direction of the price.
    d) I will likely try to compile it into an app which will forecast market trajectory
3. Gotcha. I have done this before but am not sure where to get the computational power I would need if not making requests to my own PC.

Generally speaking, I am probably looking for an MSE of <10-15%