The goal of my project will be to predict stock prices using a neural network.

The data set I will be using will be from the website quandl.com, more specifically, the NASDAQ OMX Global Index Data. https://www.quandl.com/data/NASDAQOMX-NASDAQ-OMX-Global-Index-Data. I've decided to use this data set because there is almost 50 years of data, which will be very useful when training the model. Also, it is updated daily which will ensure that it stays up to date with any recent changes.

From what I understand, the website uses an API to access the data, and it is very well formatted already. However, I have not yet taking a deep look into it so I am not certain.

Because there are so many factors and the relationship between all of them is unknown, I believe a neural network is the best model. The problem, however, is that it will take a lot of time to train the model. I'm also not sure how to tell if it is overfit to the data set.

Since this kind of prediction is incredibly popular, one of the challenges I will certainly face is differentiating my model with others. I will try to include personalize this project and make it unique relative to other projects.

The final objective of the project is to be able to predict the rise and drop daily. Currently, I am hoping to put this on a website, and continuously track the predictions over time to see the accuracy of the model. If it is feasible, I would also like to incorporate some NLP into it, by getting recent news and feeding it in the model to see the relationship between news and the indexes, if there is any relationship.