Capstone 2 Project Proposal

During the COVID-19 pandemic, many families and people were hit hard. Along with them, many industries were also disrupted, resulting in a volatile stock market. However, this is not the first or the last time that the stock market has experienced economic downturn. While it is not feasible to completely predict the future of prices, we can utilize historical stock prices in order to get a sense of the worst case price scenarios if and when news of the next "catastrophe" emerges.

Many companies are interested and have to be ready for the worst when it comes to investments. This is especially prevalent in the risk management department. Their platforms normally come with disaster scenarios they can run through to get a sense of the market during those times.

Utilizing end of day historical stock prices from Quandl, I plan to analyze the prices of select Fortune 500 companies during times of economic downturn (Great Depression, dot-com bubble, 9/11, COVID-19, etc.) and come up with a predictive model. First, I will forecast the data and compare the predictive prices to the actual prices during those times. Then, I plan on creating a classification model to group different scenarios based upon the price differences.

The project deliverables will include the GitHub repo of the project and a project report.