JLF Capstone 2 Project Proposal

* Problem Identification: What is the problem you want to solve?
  + I think ‘The Stock Market’ is particularly unhinged from tangible valuation factors of a company in the last 10 years or so. Can I prove, or disprove, this?
* Problem statement formation
  + Are the share prices and market capitalizations of the Fortune 100 still expressing some relationship between business valuation features such as sales and balance-sheet information, and stock valuation features such as P/E ratio?
  + If so, is such a correlation getting stronger or weaker over recent history?
  + Is any correlation similar over all the companies or different for specific companies?
* Context: what will your client do or decide based on your analysis?
  + Clients could potentially use this research to evaluate stock trading decisions.
  + If my idea is right, identifying when this trend started could offer insight into whether the market is likely to correct the condition or continue as is.
  + If my idea is incorrect, perhaps this research could be turned into a fundamentals-based method for predicting when a stock is over- or under-valued.
* Criteria for success: What are your deliverables?
  + A GitHub repo containing the work you complete for each step of the project
  + A slide deck
  + A project report
  + An answer to the question!
* Scope of solution space: Briefly outline how you’ll solve this problem. Your approach may change later.
  + I would like to run separate predictions of business valuation (ie market capitalization) using SEC filing information vs. P/E or other common fundamental analysis measures (in the stock-investing sense of fundamental analysis), and see whether they are closely correlated over recent history.
* Constraints
  + This is a school project! Limit consideration to Fortune 100 (most recent) and valuation to easily available information such as P/E ratio, balance sheet filings, etc
* Stakeholders: Who is your client and why do they care about this problem?
  + Anyone interested in the stock market could be interested in this research.
* Data sources: What data are you using? How will you acquire the data?
  + So far I have found four promising-looking Kaggle datasets:
  + SEC filings:
    - <https://www.kaggle.com/finnhub/reported-financials>
    - <https://www.kaggle.com/miguelaenlle/parsed-sec-10q-filings-since-2006>
  + Stock price historical data:
    - <https://www.kaggle.com/tsaustin/us-historical-stock-prices-with-earnings-data>
    - <https://www.kaggle.com/borismarjanovic/price-volume-data-for-all-us-stocks-etfs>