# WolfGang-Project-1

**Project Charter:**

* Build a correlation of impact by sector on stock price vs increasing corona virus cases.
* Hypothesis: number of corona virus cases by industry are going to be most heavily impacted in non-enterprise service industries: Tech - no impact, Health Care - no impact, Travel - impacted, Retail - impacted, Finance - not impacted.

**Data source:**

* Stock Data:
  + <https://financialmodelingprep.com/developer/docs/>
  + <https://addisonlynch.github.io/iexfinance/stable/index.html>
  + <https://iexcloud.io/docs/api/>
* Corona Virus
  + <https://covid-193.p.rapidapi.com/>
  + <http://covid19api.xapix.io/v2/locations> (Key:<https://www.xapix.io/covid-19-initiative>)
  + <https://github.com/CSSEGISandData/COVID-19/tree/master/csse_covid_19_data>
* US unemployment
  + <https://api.bls.gov/publicAPI/v2/timeseries/data/> -(public)

**(Sector/Industry:** <https://eresearch.fidelity.com/eresearch/markets_sectors/sectors/sectors_in_market.jhtml>)

**Sectors:**

Either use S&P industry indexes or use the below defined sample sectors

Tech:

* Facebook
* Google
* Apple
* Microsoft
* Twitter

Health Care:

* United Health Care
* Humana
* Pfizer
* J&J
* HCA

Travel:

* Delta
* Boeing
* Carnival Corp
* United
* Starwood hotels

Retail:

* Amazon
* Walmart
* JCP
* Target
* Macys

Finance:

* JPMC
* Citi
* Berkshire Hathaway
* Wells Fargo
* Bank of America

**Charts:**

1. Bar: Time (weeks) vs average weekly stock price by sector
2. Bar/Line: number of new cases vs average weekly stock price by sector
3. Bar/Line: number of incremental deaths vs average weekly stock price by sector
4. Scatter/Quartile:
   * ??Industry vs Daily avg. closing price for each stock
5. Bar – volume traded – which indicates market sentiment

**Work:**

1. Ram: Data Frame
2. Nicky/David charts
3. Presentation – Nicky

**Checkin’s:**

* Sunday Evening – Dataframe done
* After class Tuesday – Charts done
* After class Thursday – enhancements/troubleshoot
* After class Friday – presentation and bring the story together/flow
* Saturday - Present