natural gas forecasting demand Project

### Group

Collaborators: Patricia Mayer, Wilson Aliaga

Objective: The purpose of this project is to visualize and identify the natural gas consumption trends in the US market. To achieve this, we will develop an application showing the natural gas demand in the country and the trends experienced in the last 20 years for different sectors (industrial, residential, electric power, etc). Finally, we will use econometric methods and machine learning for consumption forecasting.

Github repository: <https://github.com/jwaliaga/NatGasDemandForcast>

Data and Source

1. Natural Gas Consumption
   1. Source <https://www.eia.gov/>
   2. Method: API
   3. File type: API call.
   4. Range: daily value for 15 years from 01/01/2001 – 01/07/2019
2. S&P Information:
   1. Source: <https://finance.yahoo.com>
   2. Method: API call using module fix\_yahoo\_finance
   3. File type: API call.
   4. S&P ticker
   5. Range: daily value for 15 years from 01/01/2001 – 01/07/2019.
   6. Data include: Ticker, Date, Close, and Volume.
3. Economics Stats:
   1. Source: Federal Reserve Economic Data <https://fred.stlouisfed.org/>
   2. Method: direct download.
   3. File type: flat file: CSV.
   4. Range: quarterly value for 20 years from 01/03/2004 – 01/07/2019.
   5. Data include: CPI, GDP, GDP\_Change, and Household income
   6. All values are for USA only.