ETL PROJECT PROPOSAL

ELT: because will Extract, load the data to db , then we will transform and clean

Group Members: Sherry, Grace, and Hiam
November 9th, 2021

Hypothesis: Is there a trend with gas prices and CO_2 emissions for British Columbia, Alberta, Ontario, and Quebec between 1991 and 2019?

Questions:

1. What are the average monthly to yearly gas prices for each province stated?
2. What are the greenhouse gas emissions for these years?
3. Are CO_2 emissions relative to gas prices?

Methods Used:

- CSV files
- **Bonus:** Web Scraping

Resources:

1. *Greenhouse Gas Emissions:* https://ourworldindata.org/co2-emissions

2. *Monthly Average Retail Price for Gasoline and Fuel Oil, by Geography:* https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1810000101

Tasks Timeline:

Saturday,* 06/11/21*:

- Draft #1 of Proposal:
    - Hypothesis
    - Questions
    - Resources
- Create Github Repository and add collaborators

Sunday, Monday,* 07/11/21 - 08/11/21*:

- Breakdown the charts/images

    - Source for each (All)

- Prices CSV file (Hiam)
    - Import as DataFrame
    - Transform Data
    - Load clean Data locally

- CO2 Emissions CSV file (Grace)
    - Import as DataFrame
    - Transform Data
    - Load clean Data locally

- Create the database (MongoDB) (Sherry)
- Query the data from MongoDB to create the visualizations (Sherry and Hiam)
    - Line or Bar Graphs/Charts for Gas Prices Data
    - Scatter Plot for the CO2 Emissions Data

- Written Analysis Report (All)
- ReadMe.md File (All)
- Final Proposal Complete (All)

***Wednesday,* 09/11/21:**
- Review
- Present Findings
