

A high-contrast, artistic rendering of Earth from space. The image shows the curved horizon of the planet, with a bright, glowing yellow-orange line representing the sun's edge or a low sun position. The landmasses are depicted in dark, shadowed tones, while the oceans are a lighter, textured blue-grey. The background is a deep black space filled with numerous small, distant stars.

# Global Temperature

## INTRODUCTION ABOUT THE PROJECT

- The project aims to analyze the relationship and the trends between the international greenhouse gas emissions and records of Earth surface temperature in order to determine if there is any correlation supporting or refuting the claim that greenhouse gas emissions are warming the planet. We chose this direction because there are still people on both sides of the argument unwilling to listen to the other, and this analysis would help determine the correlation between greenhouse emissions and Earth surface temperature. In particular, the questions we need answered are:
  - Is there any correlation between the two to begin with?
  - If there is, is it positive or negative?
  - If there isn't, why isn't there a positive or negative correlation?



# DATA EXPLORATION

- Use multiple csv files from the Kaggle datasets
- Find some more information on the government website
- Find datasets that could show relation between greenhouse gas and the global temperature

# ANALYSIS PHASE

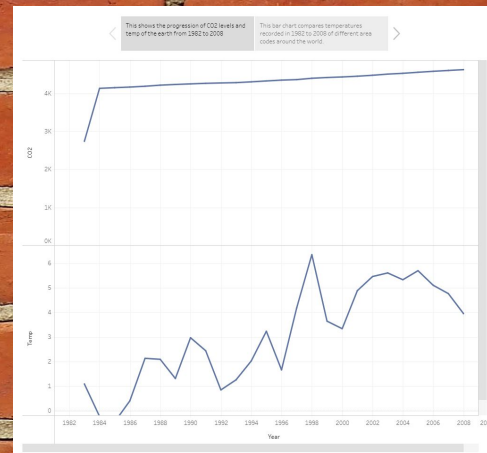
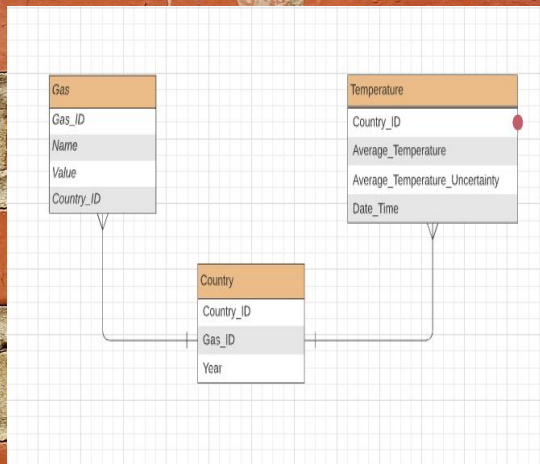
- GitHub:
  - Throughout this project, the group has been communicating via a group chat in Slack.
- Machine Learning Model:
  - The dataset is shown in jupyter notebook.
- Database:
  - Using multiple csv files from different sources, we hope to answer the question by trying to find a correlation between them. The first dataset shows the information of International Greenhouse Gas Emissions between 1990 and 2017, while the second one presents the Earth Surface Temperature from as early as 1743, spanning up to August of 2013.
- Get started by using Python's jupyter notebook to present the dataset. The ERD is also added to clarify the relation among entities. Might use unsupervised learning models. Statistics would be shown such as charts.
- Dashboard
  - Google Slide: [https://docs.google.com/presentation/d/1-Ytf0\\_jgAMNVzL9pkt7GMMhAFI3zb\\_KHhs7zXQTXqhs/edit#slide=id.p](https://docs.google.com/presentation/d/1-Ytf0_jgAMNVzL9pkt7GMMhAFI3zb_KHhs7zXQTXqhs/edit#slide=id.p)
  - Description of tools used to create final dashboard
    - VS Code: To edit HTML, Javascript, CSS files
    - Web browser: For visualization
    - Command-line interface: using GitBash
    - Github: Deploy final Data visualization
    - Tableau : for visualization and interaction
  - Interactive element:
    - Global temperature chart,greenhouse gas could be interacted.
  - About the dashboard:
    - The dashboard should have 4 sections: ERD Diagram, Global Temperature chart, Greenhouse Gas chart. Each section should looks like the example shown in the following slides. However, the ERD Diagram remains unchanged.

# STORYBOARD



This shows the progression of CO2 levels and temp of the earth from 1982 to 2008

This bar chart compares temperatures recorded in 1982 to 2008 of different area codes around the world.



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