Data Story Proposal Template

(Last updated: May 18, 2023)

Fill out the information below and submit the completed document to canvas. Additional information about the proposal can be found in the data story project description.

Team information

Find your team members (3-4 people in a team) in your study group. Notice that you also need to register your project team on Canvas.

All student names and student numbers of your team:

Sem IJsendijk, Lev Hulsbergen

Group number of your team that is registered on Canvas:

54

Project information

Fill out your project information here. Notice that you need to have at least two perspectives for your chosen topic.

Temporary title for your project:

"Global Energy Consumption And Its Relation To Global Warming"

Topic description in your own words (50-100 words):

In this project, our aim is to visualize global energy usage and its potential correlation with global warming. By conducting experiments and analyzing the results, we hope to uncover any possible relationship between these two factors. Through compelling visual representations, we aim to provide valuable insights into the impact of energy consumption on global climate change.

Perspectives of your topic with arguments (50-100 words for each perspective):

Perspective 1: There is a strong relationship between global energy usage and global warming. As energy consumption continues to rise, predominantly fueled by fossil fuels, greenhouse gas emissions increase, contributing to the warming of the planet. Visualizing the data can highlight the alarming trends and emphasize the urgent need for sustainable energy alternatives to mitigate the impacts of global warming.

Perspective 2: While there may be a correlation between global energy usage and global warming, it is essential to consider other factors influencing climate change. Visualizing the data can help identify the complex dynamics involved, such as natural climate variability and other human activities. Additionally, exploring energy-efficient technologies and policies can provide a more comprehensive approach to addressing climate change rather than solely focusing on energy usage as the sole cause.

Dataset information

If you have only one dataset, just fill out the form in the "Dataset 1" section and delete the "Dataset 2" section. If you have a second dataset, you also need to fill out the "Dataset 2" section. If you have more datasets, duplicate the form to create another "Dataset 3" section and fill out the form, and so on.

Dataset 1

Dataset that you will use:

This dataset contains 5 files of the 5 files we are going to use the land temperatures by country.

Dataset source URL(s):

https://www.kaggle.com/datasets/berkeleyearth/climate-change-earth-surface-temperature-data?resource=download

Dataset description in your own words (50-100 words):

This dataset contains 4 variables. Date, AverageTemperature, AverageTemperatureUncertainty, Country. The dates start in some countries as early as the 1700's, until in some cases 2019. Because we want to maintain accuracy in the datasets as much as possible, the data we use will be from 1950 upwards

Screenshot of the result of running pandas.DataFrame.head() on your dataset:

```
 [5 rows x 122 columns]
● PS D:\datavis> & C:/Users/levhu/AppData/Local/Programs/Python/Python310/python
           dt  AverageTemperature  AverageTemperatureUncertainty Country
 0  1743-11-01                4.384                          2.294   Åland
 1  1743-12-01                  NaN                            NaN   Åland
 2  1744-01-01                  NaN                            NaN   Åland
 3  1744-02-01                  NaN                            NaN   Åland
 4  1744-03-01                  NaN                            NaN   Åland
○ PS D:\datavis> 
```

Dataset 2

Dataset that you will use:

World energy consumption (per year, per country)

Dataset source URL(s):

https://www.kaggle.com/datasets/pralabhpoudel/world-energy-consumption/code

Dataset description in your own words (50-100 words):

This dataset contains all the energy usage per country per year, from each country in the world. For most countries the data dates back to the early 1900's. In the dataset there are tables for each major form of energy consumption(fossil, wind etc.)

Screenshot of the result of running pandas.DataFrame.head() on your dataset:

```
PS D:\datavis> & C:/Users/levhu/AppData/Local/Programs/Python/Python310/python.exe d:/datavis/code.py
   iso_code      country  year  coal_prod_change_pct  ...  wind_cons_change_twh  wind_consumption  wind_elec_per_capita  wind_energy_per_capita
0       AFG  Afghanistan  1900                   NaN  ...                   NaN               NaN                   NaN                     NaN
1       AFG  Afghanistan  1901                   NaN  ...                   NaN               NaN                   NaN                     NaN
2       AFG  Afghanistan  1902                   NaN  ...                   NaN               NaN                   NaN                     NaN
3       AFG  Afghanistan  1903                   NaN  ...                   NaN               NaN                   NaN                     NaN
4       AFG  Afghanistan  1904                   NaN  ...                   NaN               NaN                   NaN                     NaN

[5 rows x 122 columns]
```