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Github: masam4/DSProject2

GoogleColab: DS Final Project 2.ipynb - Colab

Slides: 🟨 Ds Project 2

Paper: 📄 DS Final Paper

Selected Datasets:
Installed Power and Capacity by Year_Full Data_data.csv
Global Map_Full Data_data.cs

Source: Department Of Energy - Office of Electricity DOE Global Energy Storage Database

DF 1 (Global Map_Full Data_data.cs) = 600 rows, 8 columns
- includes the coordinates of different power projects, capacity, power, and storage.

DF 2 (Cumulative Sum by Year_Full Data_data.csv) = 1600 rows, 11 columns
- focuses on the year of start, country, decommissioning status, technology / battery type.

Initial Thoughts:
We picked these datasets because they provide interesting information as everything in our world revolves around consuming or producing energy. It provides a plethora of results on the global energy trends and their far-reaching impacts. Some of the information offered includes the location of the power plants, start date, decommissioning status, types of batteries used, and types of technologies used. These datasets include a section indicating whether the projects have been decommissioned or not, which is the process of closing the facility that provided the energy and provides adequate protection from radiation exposure and isolation from the human environment once the battery or energy source is retired.

Data Visualization: ∞ Project2_Visualization_Libraries.ipynb
In terms of the Global Map, we plan to plot longitude and latitude coordinates on a graph. We hypothesize that major urban areas will be associated with larger-scale projects. For instance, given California's strong emphasis on environmental initiatives, we anticipate significant projects in that state. Furthermore, we are examining the relationship between Year (x-axis) and storage capacity (y-axis). We predict that this combination of data will reveal a positive correlation, with storage capacity increasing over time.

Viz Workshops: DSProject2/Project2_Visualization_Libraries.ipynb at main · masam4/DSProject2