**Projekteinreichung**

**für**

**Data Analytics**

**(09.12.24 – 10.01.25)**

**Projektersteller/Gruppe:**

**Hussaini, Sayedeh**

**Daten:**

Energy-consumption-prediction

https://www.kaggle.com/datasets/mrsimple07/energy-consumption-prediction

This dataset encapsulates a diverse array of features, including temperature, humidity, occupancy, HVAC and lighting usage, renewable energy contributions, and more. Each timestamp provides a snapshot of a hypothetical environment, allowing for in-depth analysis and modeling of energy consumption behaviors. Dive into the nuances of this synthetic dataset, designed to emulate real-world scenarios, and unravel the complexities that influence energy usage. Whether you are delving into predictive modeling or honing your data analysis skills, this dataset offers a dynamic playground for experimentation and discovery.

**Projektidee, Beschreibung:**

visualisation the correlatoin between the energy consumption and different variables such as: temperature, week days, holidays etc.

**Projektschritte, Aufgaben zum Projekt (falls schon vorhanden):**

1. exploratory view of the data
   1. using pandas functions
   2. finding the correlations using statistical graphics
      1. pair plot and/or joint plot (seaborn, matplotlib, pandas)
      2. heat maps
2. clean up the data if it’s necessary
3. calculating additional quantities e.g. normalized energy consumption to area or number of people etc.
4. interactive visualisation of the data using dash board