Take Home Assignment: Prediction Deployment Solution

For this assessment, you will design and implement a solution that predicts the next value of the "**active_power**" column. There are no limitations as to which approach or aspect of the data you can use to present your solution. We expect candidates to spend a maximum of 5 hours on this assignment.

Data

You will find attached, a dataset in regards to household energy consumption that has been enriched with weather data, from a single residence in Mexico over a span of 14 months. The granularity of the data is one-minute.
It is advised to drop the **"temp_t+1"** and **"feels_like_t+1"** columns, in order to avoid introducing separate model bias in your own model.

Ref: https://data.mendeley.com/datasets/tvhygj8rgg/1

Task

- Showcase the steps and logic you took in order to create your model. (EDA, feature engineering, etc.)
- Containerize the solution.
- Serve the model via a web framework of your choice; given the rest of the input data, your solution should return the predicted 'active_power'.
- A schema to describe your given / or proposed cloud infra solution.
- Any considerations you might have in regards to operationalization of your solution (scalability, orchestration, maintenance, drift).

Details & Requirements

- You can use Python and any Python package you desire to deliver your solution.
- Attach adequate instructions in order to run your provided solution.

Evaluation

Your evaluation will be divided into two sections:
- asserting your skills in model building, MLOps understanding, and software development
- your ability to adequately present your solution in a separate discussion

For any questions, feel free to reach out to alki@ve2max.com .