

## Machina Doctrinas

## EPOCH

*The Castle of Valenrow is being attacked by an army of wizards and witches from all the countries (again). Ankit from “House Epoch” is the army commander who has the responsibility of defending the castle. As Ankit is fighting since years, he has collected enough data about each army of last 15 years.” House Epoch” is known for their well-trained analysts. However, the house members are on a strike due to being underpaid from the authorities. Can you help Ankit to predict the power level of each country this year so that he can defend the castle yet again?*

You are given a training dataset containing information about different countries of each year. The dataset also contains the overall power level of each country given by the column name “Power level”. Your task is to use this training dataset and build a model which can predict the power level of each country for the year 2023. Your output will be tested on a hidden test dataset which contains the actual power level.

### **Deliverables:**

1. Participants are required to submit a Python notebook that was used to train and fine-tune the model using the given dataset.
2. Participants are also required to submit a csv file containing the predictions which will be tested against a private test dataset.

### **Goal**

Your goal is to predict power level of each country in the year 2023. The output should be a positive real value representing the power level.

### **Evaluation metric**

The output file will be evaluated using mean squared loss against the hidden test dataset. Final score will be scaled according to the total loss.

### **Submission File Format**

You are required to submit a csv file containing two columns representing “country ID” and “predicted power level”. The order of prediction for each country should be in the same order as given in the dataset.

For example- Afghanistan has country id 0 , Albania has country id 1 and so on.

The submissions exceeding the columns or predicted entries will not be evaluated and no marks will be awarded.

### **Late submission Policy**

Late submission up to 1 hour will be accepted with the following penalties:

0-15 minutes – 10 percent deduction

15-30 minutes- 30 percent deduction

30- 60 minutes- 50 percent deduction