Dear students,

Please find attached the data to be used for the final group project. For more information on the data and related articles, please see the link below

1. Students performance: (Classification or Regression)

   https://archive.ics.uci.edu/dataset/320/student+performance

2. Online shoppers purchase intention (Classification or Clustering):

   https://archive.ics.uci.edu/dataset/468/online+shoppers+purchasing+intention+dataset

3. Individual household electric power consumption (Regression or Clustering): https://archive.ics.uci.edu/dataset/235/individual+household+electric+power+consumption

GROUPS

Each group will perform different learning tasks on the same dataset, for example, one group will work on regression and the other group will work on classification on the same dataset. The objective is to reconcile results and insight using different approaches.

Group 1: perform regression on the student performances dataset

Group 4: perform classification on the student performance dataset

Group 2: perform classification on the online shoppers purchase intention dataset

Group 6: perform clustering on the online shoppers purchase intention dataset

Group 3: perform clustering on the individual household electric power comsumption dataset

Group 5: perform regression on the individual household electric power comsumption dataset

INSTRUCTIONS

The Group working on clustering problem, here are the points to be performed:

1. Define the problem you will tackle in this study in explaining the data;
2. Pre-process the data;
3. Conduct a data analysis or exploratory (include visualization)

4. You are free to apply any unsupervised learning techniques, however K-Means is preferred,
5. Give recommendations/prescriptions.

The Group working on regression or classification problems, here are the points to consider:

1. Define the problem you will tackle in this study in explaining the data;
2. Conduct a data analysis or exploratory (include visualization)
3. Apply supervised techniques
4. What conclusions can you draw from your study;

Please submit the summary of your report. Here are the general points that should also be considered in your report:

- After reading data-related articles, clearly state the problem statement and main objective.
- Describe the method(s) and/or algorithm(s) used to solve the problem, and include all the steps leading to your results as well as visualization.
- Discuss your findings/results and if possible propose some future work.

INSTRUCTIONS FOR THE DATASET

1. Click on the link to open the webpage
2. On the webpage, to the right you have two options to access to the dataset; a) click on the button DOWNLOAD; or b) click on the button IMPORT IN PYTHON (follow the instructions on the pop-up window). Note if possible you should first consider option b).