CSED 226 Introduction to Data Analysis Competition: Clustering

Overview

- The goal is to improve your model's performance as much as possible.
- You can improve your model's performance through data preprocessing, model selection, and hyperparameter tuning.
- You can submit your model's results to Kaggle and view your scores in real-time on the le aderboards.
 - You can only submit a maximum of 20 per day.

Rules

■ In this competition, you can build a model using any clustering method.

You must participate as an individual team in this competition.

Evaluation

- Submissions are evaluated on the <u>Adjusted Rand Index</u> between the ground truth clust er labels of the data and your predicted cluster labels (assignment).
 - Please refer to the link.
- You are not given the number of ground truth clusters or any training labels.
 - This is a completely unsupervised problem.
 - We recommend cluster indices that start with 0. (e.g., 0, 1, 2, ...)

Dataset

Health Condition levels Dataset

• You are given data with features such as demographic features and lifestyle features to cluster people's health condition levels.

Dataset Description

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Feature Name	Feature Type
Lifestyle_feature1	Categorical
Lifestyle_feature2	Numerical
Lifestyle_feature3	Categorical
Liefstyle_feature4	Numerical
Height	Numerical
Smoker	Categorical
Medical_history	Categorical
Weight	Numerical
Age	Numerical
Sex	Categorical
DFC	Numerical
SC	Categorical
EF	Numerical
FI	Numerical
AC	Categorical
EDUT	Numerical
HSM	Categorical

Dataset Description

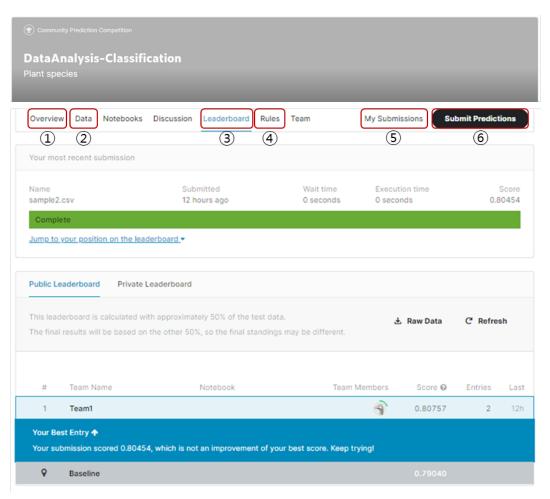
Abbreviations

- Dietary Fiber Consumption (<u>DFC</u>)
- Snack Consumption (SC)
- Exercise Frequency (<u>EF</u>)
- Fluid Intake (<u>FI</u>)
- Alcohol Consumption (<u>AC</u>)
- Electronic Device Usage Time (EDUT)
- Health Signal Monitoring (<u>HSM</u>)

Competition

- You will enter the competition individually through Kaggle.
- Kaggle Site: https://www.kaggle.com
- Competition URL: https://www.kaggle.com/t/1459d64d96ce491e9b7aa42c40b6fa66

Competition



Kaggle-site

- (1) Overview: Description of the task
- 2 Data: Files to be used in the competition
- 3 Leaderboard: Current score updated in real time
- 4 Rules: What you must follow in the competition
- 5 My submissions: Files you submitted
- (6) Submit Predictions: Submission