

Machine Learning - Readme file

This project is done by:

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This folder consists of 2 things:

- 1) The project report under the name of "ML_Project.pdf"
- 2) The code concerning the project.

To run the code you should:

- 1) The csv files: *winequality-red.csv* and *winequality-white.csv* which are the datasets used for this project.
- 2) The "**ML_WineQuality.R**" undergoes the pre-processing of the data (using *winequality-red.csv* and *winequality-white.csv* datasets). It results in a new csv file named "**AllWineDataPreProcessed.csv**" which is used throughout the rest of the R files.
- 3) The "**Clustering.R**" which performs the visualization and HCPC clustering.
- 4) The "**Predict.R**" contains all the prediction methods we used for this research:
 - a) Random Forest
 - b) Multinomial Logistic Regression
 - c) Neural Network
 - d) Support Vector Machine