# MACHINE LEARNING 2 - PROJECT

# 1. GROUP MEMBERS

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# 2. DATASET: RED WINE QUALITY

- A. Source:
  - Kaggle:

https://www.kaggle.com/datasets/uciml/red-wine-quality-cortez-et-al-2009

• UCI machine learning repository:

https://archive.ics.uci.edu/dataset/186/wine+quality

#### B. Synopsis:

The dataset contains physiochemical properties of red wine alongside with a quality score (target variable) based on sensory data. The dataset scores are not distributed equally, since there a lot more "normal" quality wines than "poor" or "excellent" quality wines.

C. Number of observations: 1599

# D. Variables:

Fixed acidity	Continuous
Volatile acidity	Continuous
Citric acid	Continuous
Residual sugar	Continuous
Chlorides	Continuous
Free sulfur dioxide	Continuous
Total sulfur dioxide	Continuous
Density	Continuous
рН	Continuous
Sulphates	Numeric
Alcohol	Numeric
Quality	Ordinal

# 3. CHOSEN ML-METHODS

- A. Non-linear models (Spline smoothing)
- B. Pursuit projection regression