Wine Quality Data

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# presentation

Order:

1. To be filled out later before presentation for order and who is saying what

**description**

Let’s talk about wine quality! What makes a good wine? What are the max and min acceptable ranges for different measures to still have a good wine? What measures are more important for the overall quality score?

# questions to answer

The fundamental questions this study will explore (and hopefully answer) are:

1. Which of these measurements correlate to good wine quality?
   * Fixed acidity
   * Volatile acidity
   * Citric acid
   * Residual sugar
   * Chlorides
   * Free sulfur dioxide
   * Total sulfur dioxide
   * Density
   * pH
   * Sulphates
   * Alcohol
   * Output variable (based on sensory data):
     + Quality (score between 0 and 10)
2. BONUS: which additional

# data sources

The key datasets that will be used are the following:

1. [Wine Quality Data Set](https://archive.ics.uci.edu/ml/datasets/wine+quality)
   * Red wine and white wine
   * Time Range: 2009 - Portugese wines
2. Any other data sets we want to include?

# rough task breakdown

## Data Exploration & Cleanup

How are we joining the data?

What else do we need to map our data:

* Run machine learning to figure out which measures are the most important to the quality score
* Items to make sure to include because of project requirements:
  + Use ML in the context of technologies learned
  + Must use Scikit-Learn and/or another machine learning library
  + Must use two of the following:
    - Python Pandas
    - Python Matplotlib
    - HTML/CSS/Bootstrap
    - Javascript Plotly
    - Javascript D3.js
    - Javascript Leaflet
    - SQL Database
    - MongoDB Database
    - Google Cloud SQL
    - Amazon AWS
    - Tableau

## Visualizations

* First graph:
* Second graph:

## team composition & assignments

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| --- | --- | --- | --- |
| Team Member | Data Exploration & Cleanup | Step 1 | Step 2 |
| Isabel Dicely |  |  |  |
| Anne LaFramboise |  |  |  |
| Carolina Diaz |  |  |  |
| Edgar Cortes |  |  |  |
| Toni Trieu |  |  |  |