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Data Visualization in Tableau

Version 1:

<https://public.tableau.com/profile/flora.li6298#!/vizhome/Factorsaffectingthequalityofredwine/Story1?publish=yes>

Final Version:

Summary:

In order to answer the question: what makes wine great, I did a data visualization on red wine rating dataset. This dataset included 1599 observations and effects of 11 different chemical properties. In this dataset, red wines are ranked from 3 to 8. Red wine with quality in 7 and 8 level are considered as good red wine.

From the box plots, we can observe some interesting findings. Four factors (alcohol, citric acid, density and volatile acidity) are mainly affecting the quality of red wine. Alcohol is the percent alcohol content of the wine. With higher percent of alcohol, the red wine would have better quality. Density can measure the percent alcohol and sugar content in red wine. If the density is lower, the wine would be better. Citric acid provides freshness taste to wines. Thus, better red wine would contain higher citric acid rate. Volatile Acidity provides unpleasant and vinegar taste to wines so the lower the volatile acidity, the better the red wine is.

Design:

In this project, I used boxplot to show the relation between the wine quality and wine chemical properties. Boxplot can visualize the trend of the data. It shows a distribution consists of the smallest observation, the first quartile, the median, the third quartile, and the largest observation. The line in the box marks the median. I also tried correlation chart to exhibit the relation but it's not intuitive enough.

Feedback:

Resources:

<https://www.tableau.com/learn/tutorials/on-demand/box-plots>
<https://archive.ics.uci.edu/ml/datasets/wine+quality>
<https://www.kaggle.com/piyushgoyal443/red-wine-dataset>
<https://www.kaggle.com/jaghadish/redwine-analysis>