

## Modelling

1. Evaluate learning algorithms and frameworks to help solve the problem statement.

In this project I will be using Random Forest algorithm and Scikit-learn as framework.

2. Assess and select appropriate software tools to successfully work with the data and model(s).

I will use LabelEncoder, StandardScaler, train\_test\_split, classification\_report and RandomForestClassifier for this project to successfully build a model.

3. Discuss model(s) architecture and software pipeline needed to successfully create the proposed solution.

The software pipeline of my project is as follows:

Gather data -> Data preparation and feature engineering -> Choose algorithm -> Model training  
-> Training and testing -> Deployment

4. Assess dataset assumptions, limitations, and constraints in order to develop effective models.

There are no assumptions and constraints for this project but there are limitations which are mentioned below:

Limitations:

This project is limited to exploring the parameters related to the composition of white wine. The other two factors limiting the current research are time and cost. The data has been collected from the open-source which is freely available on the internet.