Model Evaluation

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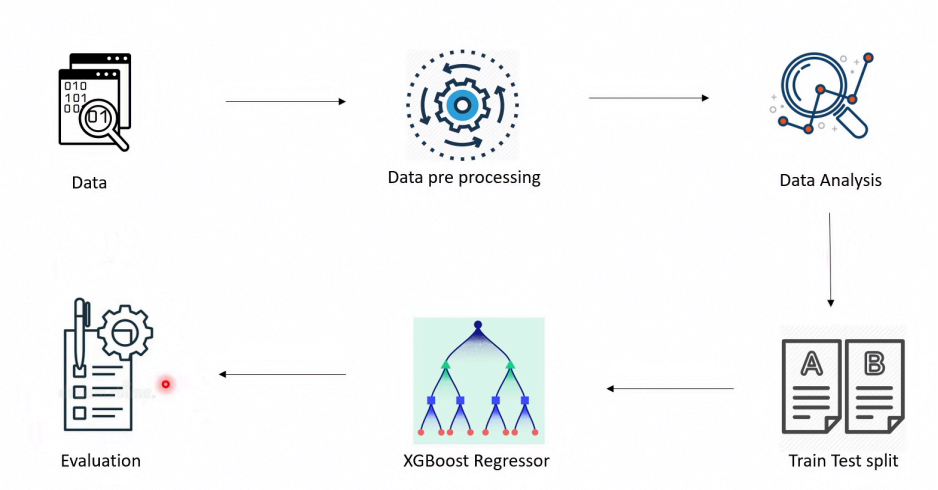
Workflow of a ML project:

Data ⟶ Data Pre-Processing ⟶>Data Analysis ⟶> Train Test Split ⟶ Feed Data to a Model ⟶ Evaluation



Accuracy Score:

In classification, Accuracy Score is the ratio of number of correct predictions to the total number of input data points

$$\text{Accuracy Score} = \frac{\text{Number of correct predictions}}{\text{Total Number of data points}} \times 100\ \%$$

lets say

Number of correct predictions = 128

Total number of data points = 150

Accuracy score = 85.3%

```
from sklearn.metrics import accuracy_score
```

Mean Squared Error:

It measures the averages of the squares of the errors, that is , the avg squared difference between estimated values and the actual value

$$\text{MSE} = \frac{1}{n}\sum_{i=1}^{n}(Y_i - \hat{Y}_i)^2$$

Lower MSE means that the model is performing better

```
from sklearn.metrics import mean_squared_error
```