Decision Tree Classifier And Regressor

Interview Questions:

1. Decision Tree
2. Entropy, Information Gain, Gini Impurity
3. Decision Tree Working For Categorical and Numerical Features
4. What are the scenarios where Decision Tree works well
5. Decision Tree Low Bias And High Variance- Overfitting
6. Hyperparameter Techniques
7. Library used for constructing decision tree
8. Impact of Outliers Of Decision Tree
9. Impact of mising values on Decision Tree
10. Does Decision Tree require Feature Scaling

1. What Are the Basic Assumption?

There are no such assumptions

Missing Values

1. Adaboost can handle mising values
2. Xgboosst and GBoost cannot handle missing values

2. Advantages

Advantages of Adaboost

1. Doesn't Overfit
2. It has few parameters to tune

Advantages of Gradient Boost And Xgboost

1. It has a great performance
2. It can solve complex non linear functions
3. It is better in solve any kind of ML usecases.

3. Disadvantages

Disadvantages of Gradient Boosting And Xgboost

1.It requires some amount of parameter tuning

4. Whether Feature Scaling is required?

No

6. Impact of outliers?

Robust to Outliers in Gradient Boosting And Xgboost, Sensitive to outliers in Adaboost

Types of Problems it can solve(Supervised)

1. Classification
2. Regression

Performance Metrics

Classification

1. Confusion Matrix
2. Precision,Recall, F1 score

Regression

1. R2,Adjusted R2
2. MSE,RMSE,MAE