← Go Back to Machine Learning 2

:≡ Course Content

Quiz 2: KNN ,Decision Tree

Type	:	Graded Quiz
Attempts	:	1/1
Questions	:	10
Due Date	:	Oct 13, 11:59 PM IST
Your Marks	:	9/10

Attempt History

Attempt #1

Oct 02, 11:16 PM   Marks: 9   ⌄

Q No: 1   (Correct Answer)

Marks: 1/1

The accuracy increases with larger values of k,

◉ False   (You Selected)

○ True

Q No: 2   (Correct Answer)

Marks: 1/1

Higher value of entropy indicates _____.

◉ Higher impurity at the node   (You Selected)

○ Lower impurity at the node

○ None of the above

Q No: 3   (Correct Answer)

Marks: 1/1

Which of the following is a tree based learner?

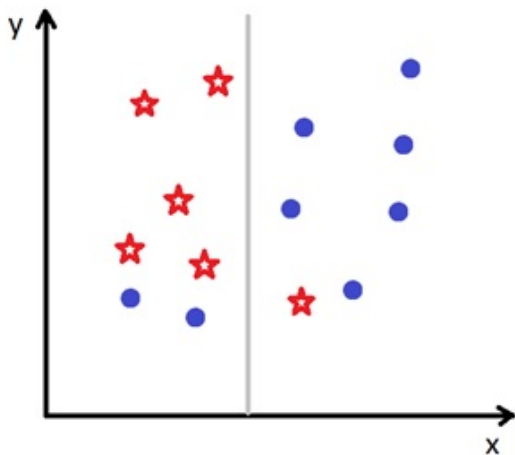| ⦿ All of the above	You Selected

○ ID3

○ CART

○ Random Forest

Q No: 4   (Correct Answer)

Marks: 1/1

If we consider only the feature 'y' for splitting, then can we perfectly separate the star class from the dot class for any one split on 'y'?

In the figure, x and y are the features and the data points are represented by the colored dots (stars for class1 and dots for class . The data is split on feature 'x' let's say at x4 which is shown in the figure using the vertical line. Every value less than x4 will be predicted as star class and greater than x4 will be predicted as dot class.

⦿ No	You Selected

○ Yes

Q No: 5   (Correct Answer)

Marks: 1/1

Decision trees can only be used for classification not for regression.

⦿ False   (You Selected)

◯ True

Q No: 6   (Incorrect Answer)

Marks: 0/1

In the worst-case scenario, the computational complexity for classifying new samples increases linearly with the number of samples in the training data.

◯ True   (Correct Option)

⦿ False   (You Selected)

Q No: 7   (Correct Answer)

Marks: 1/1

Knn takes more time on fitting the model on train data than predicting the result for test data.

◯ False

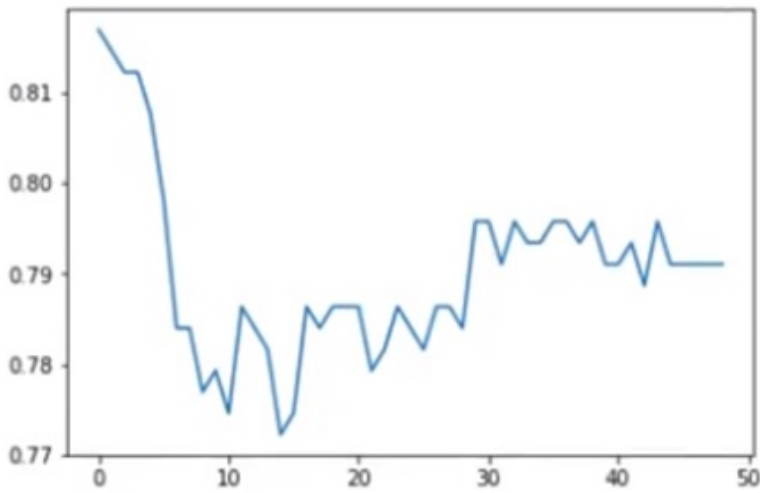⦿ True   (You Selected)

Q No: 8   (Correct Answer)

Marks: 1/1

From the given figure, which can be considered as an optimal/best value of k for KNN?

From the given figure, which can be considered as an optimal/best value of k for KNN?

Plot is between the k value and the accuracy.

⦿ 31	You Selected

○ 13

○ 0

○ 2

Q No: 9   (Correct Answer)

Marks: 1/1

You are a data scientist and you developed a kNN model that gave 100% accuracy on your training data. But when you deployed your model on the client side, the predictions on their data were not at all accurate. What could be the issue?

⦿ It is probably an overfitted model	You Selected

○ It is probably an underfitted model

○ Can't say

○ None of these

Q No: 10   (Correct Answer)

Marks: 1/1

Which of the two methods is time consuming as compared to the other?

Entropy You Selected

Gini Index

Previous Next

Privacy · Terms