Review Question 1

(1/1 point)
Classification is the process of...

- Looking for groups of samples based only on their features
- Labeling samples depending based on their neighbors
- Identifying the group membership of samples ✔
- Grouping similar samples, and then assigning a label or class to them

EXPLANATION

Looking for groups of samples based on their features is called *clustering*.

Labeling samples based on their neighbors is a *type* of classification, called K-Means classification. But there are other types of clustering as well that behave differently.

Lab

Classification really is the process of assigning groups to samples.

You have used 1 of 2 submissions

Review Question 2

(1/1 point)

The main similarity between K-Neighbors and K-Means are...

- [x] They both use distance functions to tackle the problem of group assignment
- [ ] They both have the same, non-linear, decision boundary
- [ ] They both have a K in their names
- [ ] They both are classification algorithms that aim to assign a label to your samples

EXPLANATION

The correct answer is that they both use distance functions to tackle the problem of group assignment.

They do not have the same decision boundary because K-Means handles cluster assignment by nearest centroid, where K-Neighbors is based on the classification of the nearest K samples. One is a clustering algorithm that groups samples, the other is a classification algorithm that separates samples into classes.

And while they do both have a "K" in their name, that is only a casual similarity and not a primary one.

You have used 1 of 2 submissions