Congratulations! You passed!

Grade received 100% **Latest Submission Grade** 100% **To pass** 80% or higher

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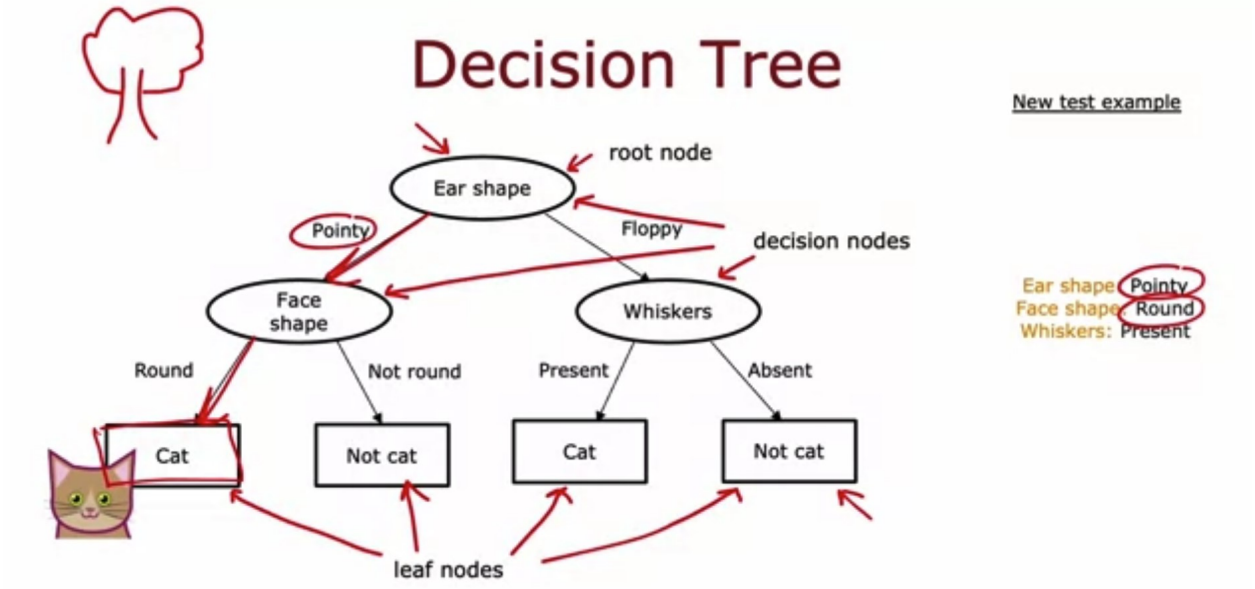
Quiz

Practice quiz: Decision trees

Submit your assignment

1. 1 / 1 point

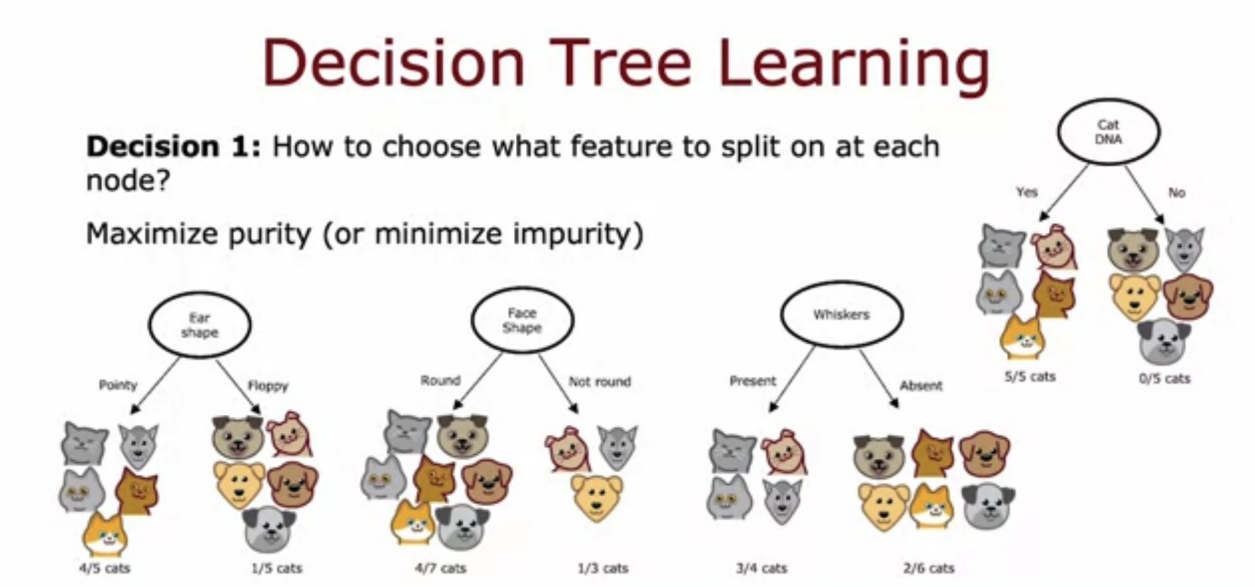


Based on the decision tree shown in the lecture, if an animal has floppy ears, a round face shape and has whiskers, does the model predict that it's a cat or not a cat?

- ○ Not a cat
- ◉ cat

Correct
Correct. If you follow the floppy ears to the right, and then from the whiskers decision node, go left because whiskers are present, you reach a leaf node for "cat", so the model would predict that this is a cat.

2. 1 / 1 point



Take a decision tree learning to classify between spam and non-spam email. There are 20 training examples at the root note, comprising 10 spam and 10 non-spam emails. If the algorithm can choose from among four features, resulting in four corresponding splits, which would it choose (i.e., which has highest purity)?

- ◉ Left split: 10 of 10 emails are spam. Right split: 0 of 10 emails are spam.
- ○ Left split: 2 of 2 emails are spam. Right split: 8 of 18 emails are spam.
- ○ Left split: 7 of 8 emails are spam. Right split: 3 of 12 emails are spam.
- ○ Left split: 5 of 10 emails are spam. Right split: 5 of 10 emails are spam.

Correct
Yes!