

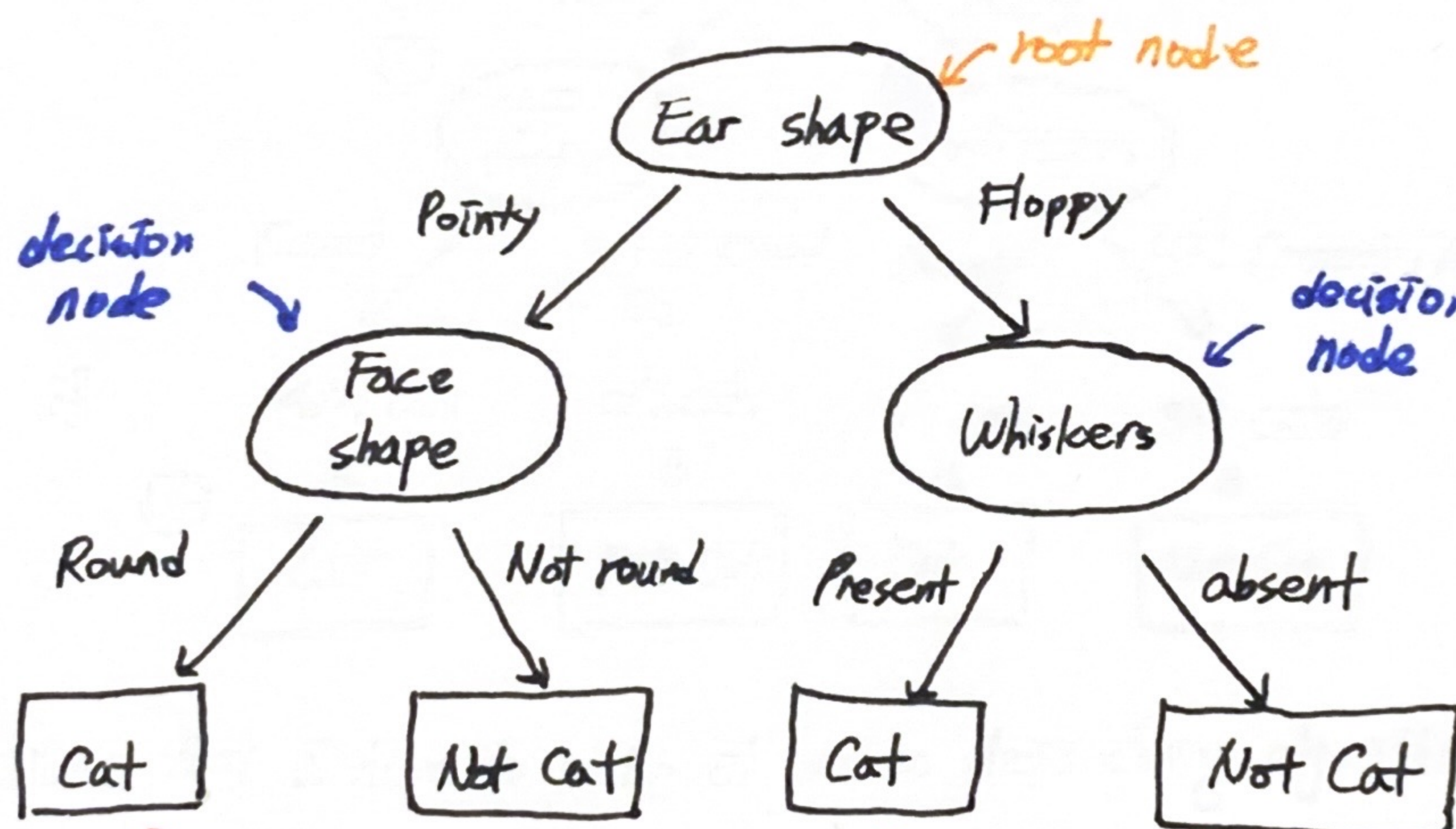
< Decision Tree Model >

ex) Cat classification (data set includes 5 cats & 5 dogs)

	Ear shape	Face shape	Whiskers	Cat
①	Pointy	Round	Present	1
②	Floppy	Not round	Present	1
③	Floppy	Round	Absent	0
⋮	⋮	⋮	⋮	⋮
⑩	Floppy	Round	Absent	0

x
(features)
Categorical values (discrete values)

y
(target)



○, □ : node

look at a particular feature and then based on the value of the feature causes the design whether to go left or right

* Job of the decision tree learning algorithm

- training set에 가장 잘 맞는 decision tree를 선택하는 것 (among all possible decision trees)
- 새로운 데이터 (training set에 없는 ex. validation and test set)에 ideally generalize