

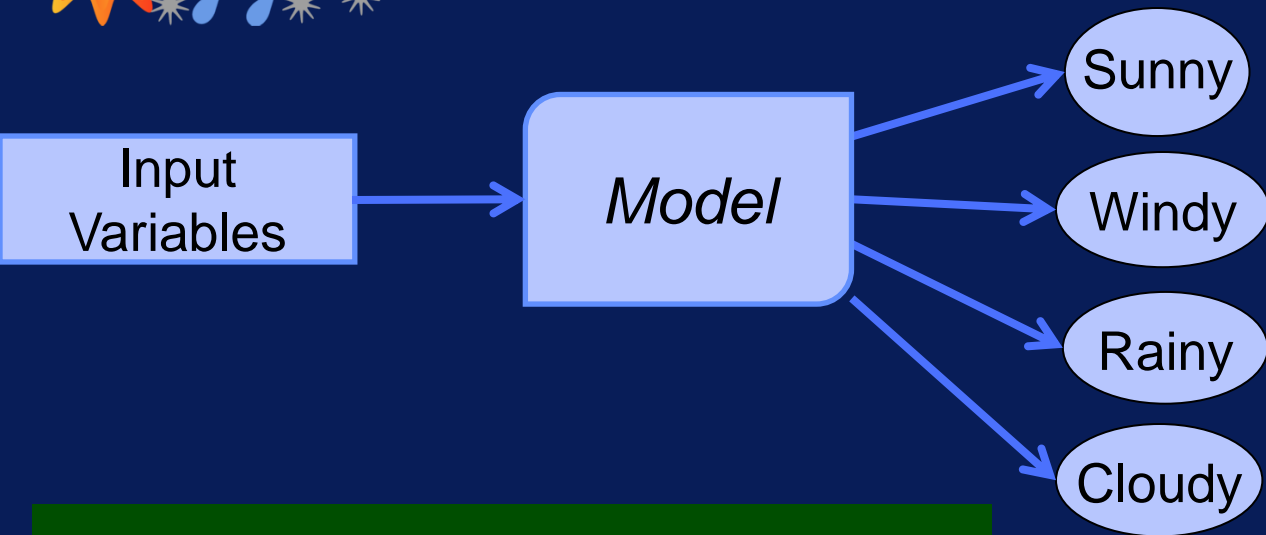
Classification Overview

After this video you will be able to..

- Define what classification is
- Discuss whether classification is supervised or unsupervised
- Describe how binomial classification differs from multinomial classification



Classification



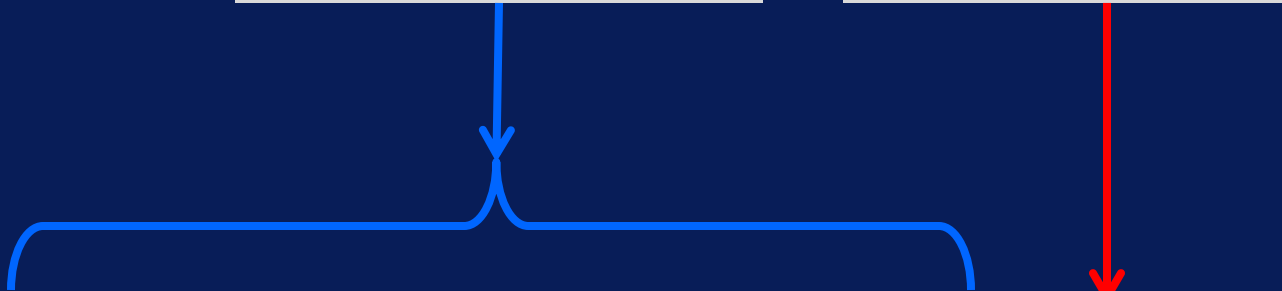
Target variable
is categorical

Goal:
Given input variables,
predict category

Data for Classification

Input Variables

Target Variable



Temperature	Humidity	Wind Speed	Weather
79	48	2.7	Sunny
60	80	3.8	Rainy
68	45	17.9	Windy
57	77	4.2	Cloudy

Classification is Supervised

Target


Label

Output

Class Variable

Class

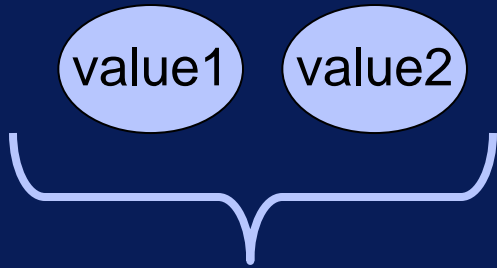
Category



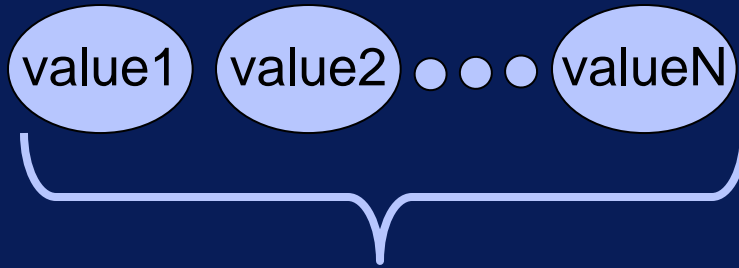
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Types of Classification

**Binary
Classification**



**Multi-class
Classification**



**Target has
two values**

**Target has > 2
values**

Classification Examples

Binary Classification

- Will it rain tomorrow or not?
- Is this transaction legitimate or fraudulent

Multi-Class Classification

- What type of product will this customer buy?
- Is this tweet positive, negative, or neutral

Classification Main Points

- Predict category from input variables
- Classification is a supervised task
- Target variable is categorical

