

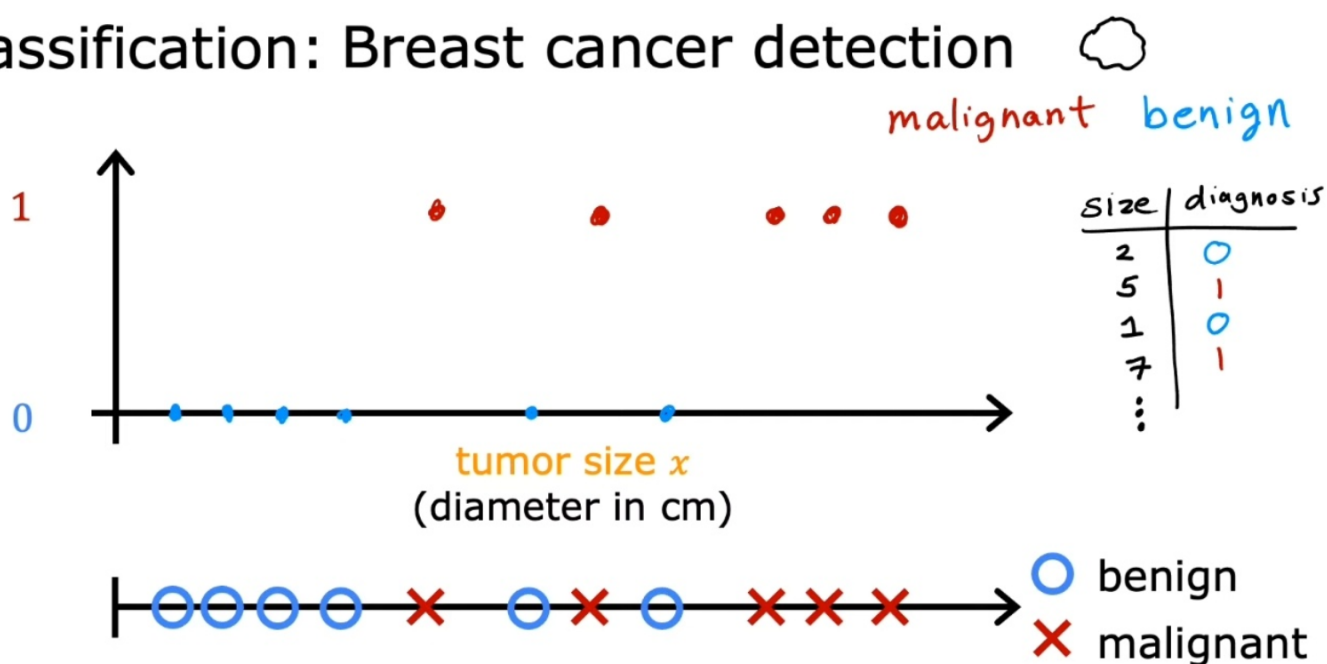
# Classification Algorithm.

We have already learned about regression where the output could be anything: 0.1 or 0.1, 0.5 etc.

→ In classification algorithm there is no in between result.

→ specific output e.g. 1, 2 or cat, dog.

## Classification: Breast cancer detection



In this example,

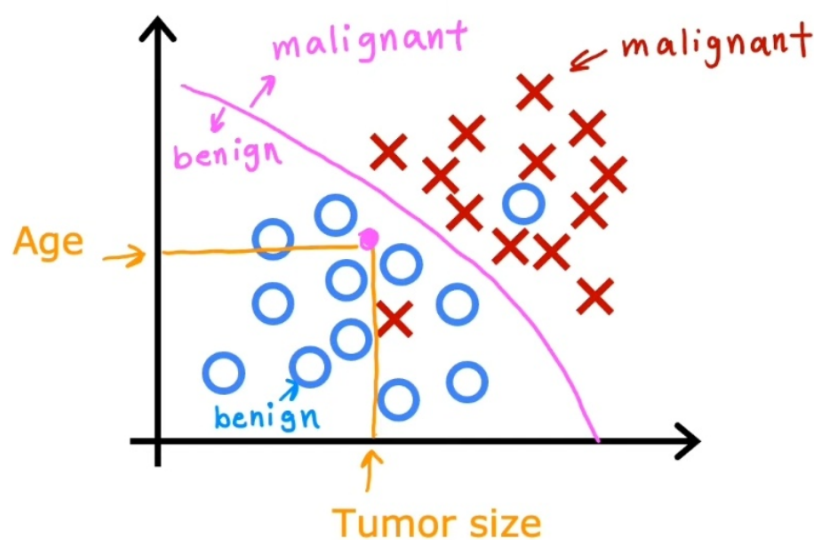
→ There is two output

- Malignant and benign.
- The input is tumor size

So, Classification predict categories

- From a picture it might predict the picture is a dog or a cat
- The input and output can be more than 2

Two or more inputs



In summary:

Supervised learning

# Supervised learning

Learns from being given “right answers”

## Regression

Predict a **number**

**infinitely** many possible outputs

## Classification

predict **categories**

**small number** of possible outputs