Descriptive Statistics 1.

Data Types:

- Quantitative: Takes on numeric values that allow mathematical operations. (EX: number of dogs), it can be divided into:
  - Continuous: Values that can be split into smaller values.(EX: Age of a dog), can take on any numeric value (decimals, floats or negatives)
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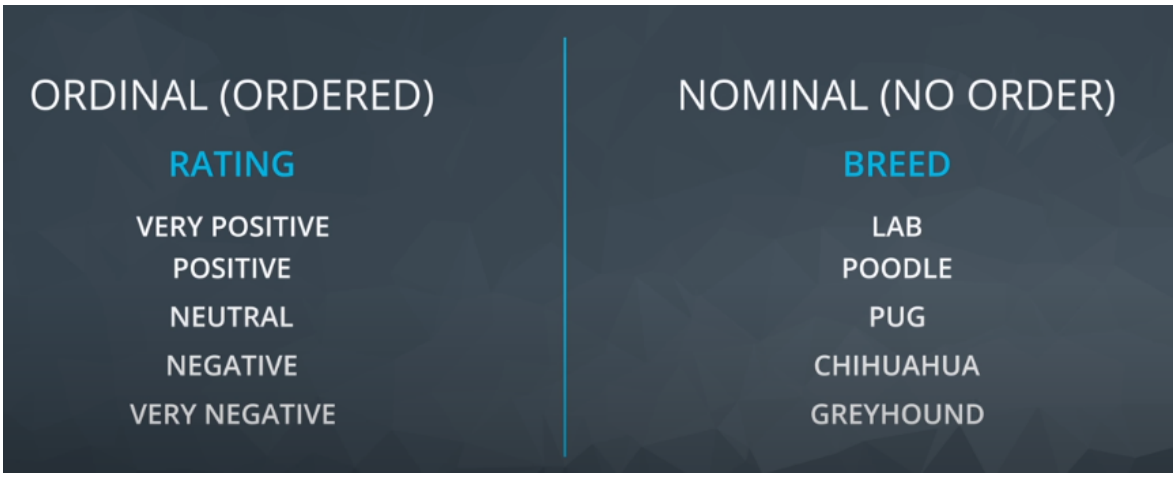
  - Discrete : Values That are countable. (EX: number of dogs)
- Categorical: Labels a group or a set of items (EX: breeds of dogs that pass), it can be divided into :
  - Ordinal (Ordered): Values That are ranked.
  - Nominal (Unordered): Values that don't have a ranked order.
    - 

RECAP:

Analysing quantitative data:

Has 4 main aspects: Center, Spread, Shape, Outliers.

Notation: Common math language used to communicate regardless of spoken language. (Essential to communicating ideas regarding data)

Variables:

- Random: Notated by a capital letter (They have many different values)
- Observed: Notated by a lowercase letter with a subscript (signify a specific value)

Measures:

- Measure of Centre: Gives an idea of the Average (EX: average completion time of a course.), there are 3 widely accepted measure of centre:
  - Mean: The Average of all Values. (Sum of all values / Number of values).
  - Median: The middle value of the data set. (Half of the data is larger, the other half is smaller):
    - first values are ordered then depending on whether the data size is even or odd, we calculate:
      - EVEN : we take the median of the middle 2 value (EX: 8 , we take the mean of 4th&5th / 2)
      - ODD : we take the middle value as the median (EX: 7, we take the 4th value)
  - Mode: The most frequent value in a data set.
- Measure of Spread: Gives an idea of how data is spread (EX: spread of completion of a course.)