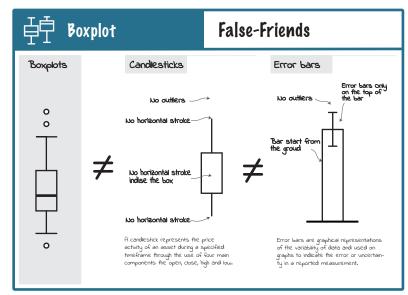# Instruction of making False-friends

Description: False-friendslists visualization techniques that are visually similar but functionally different. For example, boxplots share visualsimilarities with candlestick charts and error bars in bar chars; parallel coordinates can look similar to line charts, time curvescan look similar to connected scatter plots.
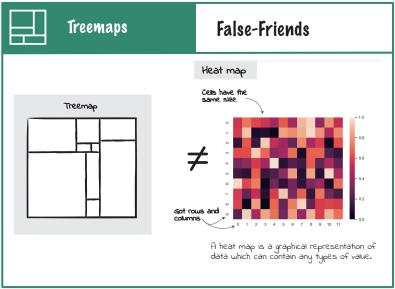
Examples:

Boxplot — False-Friends

Boxplots

Candlesticks
- No outliers
- No horizontal stroke
- No horizontal stroke indise the box
- No horizontal stroke

A candlestick represents the price activity of an asset during a specified timeframe through the use of four main components the open, close, high and low.

Error bars
- No outliers
- Error bars only on the top of the bar
- Bar start from the groud

Error bars are graphical representations of the variability of data and used on graphs to indicate the error or uncertainty in a reported measurement.

Treemaps — False-Friends

Treemap

Heat map
- Cells have the same size
- Got rows and columns

A heat map is a graphical representation of data which can contain any types of value.

Design Guidlines:

the original visualization is shown on the left on a grey background to separate it from the rest, separated by a '≠' sign.

original visualization ≠ False-friend A ≠ False-friend B

Use arrows to highlight the difference compared to the major chart

- No outliers
- Error bars only on the top of the bar
- Bar start from the groud