👤 Binh Nguyen 🔻 v1.20.4 CS-E4002 Python for Engineers ▼

Course materials

Exercises »

< Course

CS-E4002 Course materials

H Code Vault C

« What to plot

Your points

CS-E4002 / Writing and Plotting / What NOT to plot

What NOT to plot

This course has already ended.

As happens way too often in life, we can learn better from bad examples than from good ones. Some of the priorities with plotting are that they should be easily readable and according to academic principle. Even though it can be tempting to twist a plot to make your findings more exciting, refrain from creating misleading presentations of your data.

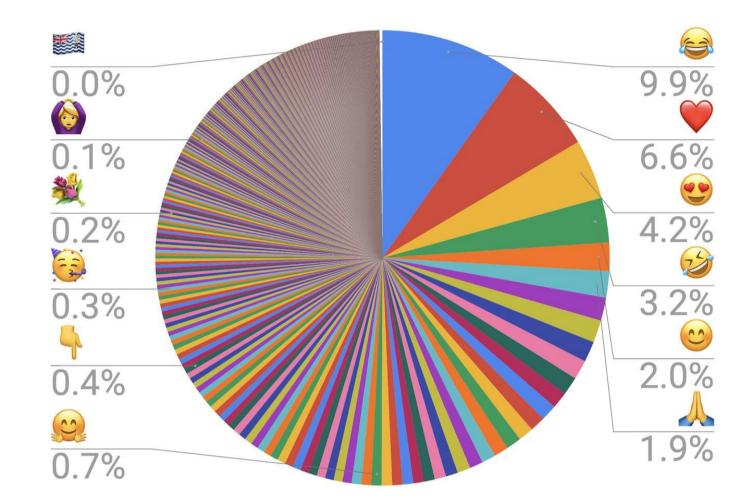
There are a lot of examples where you can learn how not to do plots here: https://viz.wtf/

Here are some (deliberately) poorly chosen plots:

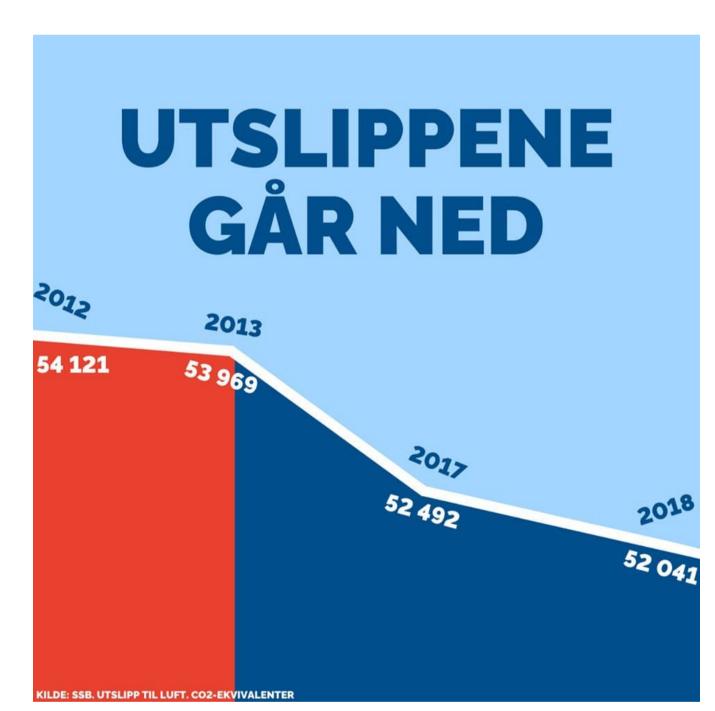
SVP campaign poster (stacked area plot): Misleading difference in the y-axis (the origin of the y-axis is not 0):



Emoji distribution (pie chart): Poorly chosen plot style. Pie charts should not have more than a few pieces – if there is more data, consider summarizing smaller parts as "other":



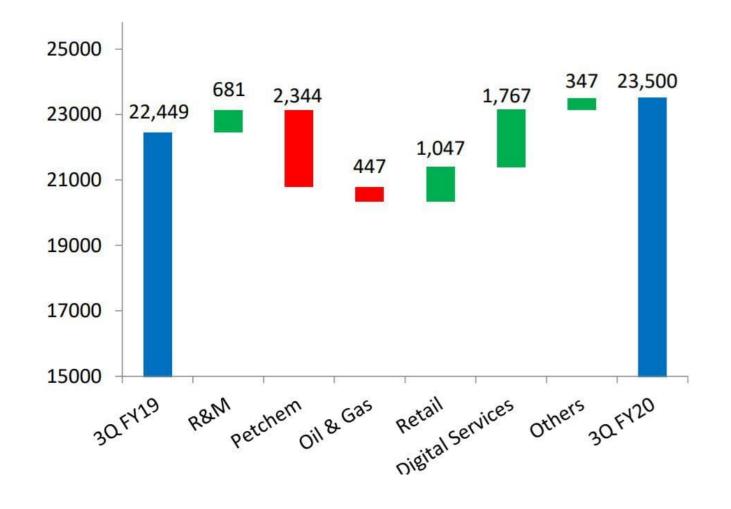
Norwegian emissions data (line plot): This is a very misleading visualization, as years not fitting the narrative are just left out. This also makes the scale of the x-axis inconsistent:



Shoe colour frequency (bar plot): Questionable color choice:



Financial analysis (waterfall chart): Out of context, this chart is very unclear. Presumably, it tries to break down the performance of an investment portfolio into several sectors. Readability is severely hurt by the lack of titles, units, and (negative) signs:



« What to plot Course materials Exercises »