Assignment 3 Data analytics & communication

Massimiliano Falzari(s3459101), Philip Gast (s3149951)

December 4, 2020

Contents

1	Improving a figure	1
2	Making a shiny graph	2
3	Reflection	2

1 Improving a figure

This figure has some potential flaws that can be improved:

- Borders: in this case the borders, can create some confusion in the viewer because usually the tick on the axis are outside the graph. To improve it, we can remove the borders and therefore there will not be anymore ambiguity.
- Background grid: for this kind of graph, it is probably more on point to use the complete grid as background instead of only the horizontal lines. This will help to get a faster look at the xaxis.
- Legend: the legend should be avoid if possible. Therefore instead of the legend, we can place the name of the algorithms above the lines in the graph.
- Naming: If we want to use a legend anyway, then we should at least not use the variable names in the legend. Instead, we should use something more explict.

2 Making a shiny graph

The idea for this shinyapp, is to give to the user an inspectable overview of the causes of delays in all the dutch station, To do so, we are usign plotly because it gives a lot of possible way to interact with the graph. Furthermore, it also allow to easily download the current graph as an image.

In order to be able to inspect the causes more specificily than the general groups , we added a selector which can be used to specify a group of causes to focus only on that group. Lastly,we added the possibility also to select multiple cities to give another potential view on the causes.

3 Reflection

Shiny adds a lot functionality and reactivity to the graph however, it has some downsites. The main point of shiny is reactivity, allowing therefore to fs