Workshop 9: Lines, Scales, Labels, and Themes

Author's name here

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1 Intro

Welcome!

For this workshop, we have two activities. You will be completing Activity 1 in this Rmd.

The assignment should be submitted individually, but you are encouraged to brainstorm with partners.

The final due date for Activity 1 is Tuesday, December 6th at 23:59 PM UTC+2.

2 Instructions

Your assignment for Activity 1 is to recreate a plot from the EpiGraphHub COVID-19 Switzerland dashboard in R using {ggplot2}.

1. First choose one of the four line graphs shown on the dashboard. This is the one you will recreate.
2. Download the data associated with your chosen plot by clicking the three dots on the top right on the plot and selecting "Export CSV"
3. Once downloaded, move the CSV to the "data" folder of this R project.

3 Prepare the data

Now, **read the dataset into R**. Remember to use the `here()` function to allow your Rmd to use project-relative paths.

This data needs some cleaning before we can plot it.

This is what it looks like now:

	Time	AG	BS	FR	GE	ZG
1	2020-02-24	0	0	0	0	0
2	2020-02-25	1	0	0	0	0
3	2020-02-26	0	1	0	1	0
4	2020-02-27	0	0	0	3	0
5	2020-02-28	0	2	0	5	0
6	2020-02-29	2	0	2	0	0
7	2020-03-01	2	1	0	1	1
8	2020-03-02	1	1	0	2	2
9	2020-03-03	1	1	3	0	3
10	2020-03-04	3	6	2	1	1
11	2020-03-05	2	10	1	4	0
12	2020-03-06	2	5	1	17	0
13	2020-03-07	0	5	0	6	0
14	2020-03-08	1	7	4	8	0
15	2020-03-09	3	13	3	29	0
16	2020-03-10	3	18	10	17	0
17	2020-03-11	7	40	8	33	1
18	2020-03-12	7	23	6	49	4
19	2020-03-13	6	23	5	71	1

Showing 1 to 19 of 1,010 entries, 6 total columns

And this is what we want it to look like:

	date	canton	cases
1	2020-02-24	AG	0
2	2020-02-24	BS	0
3	2020-02-24	FR	0
4	2020-02-24	GE	0
5	2020-02-24	ZG	0
6	2020-02-25	AG	1
7	2020-02-25	BS	0
8	2020-02-25	FR	0
9	2020-02-25	GE	0
10	2020-02-25	ZG	0
11	2020-02-26	AG	0
12	2020-02-26	BS	1
13	2020-02-26	FR	0
14	2020-02-26	GE	1
15	2020-02-26	ZG	0
16	2020-02-27	AG	0
17	2020-02-27	BS	0
18	2020-02-27	FR	0
19	2020-02-27	GE	3

Showing 1 to 19 of 5,050 entries, 3 total columns

3.1 Step 1: Pivot from wide to long

Think about which columns need to be pivoted and give these to the `cols` argument of `pivot_longer()`

3.2 Step 2: Rename variables

Use `rename()` to change the column names to match the image above.

Now it's ready for plotting!

4 Recreate desired plot

We want a plot that looks like the one on the website!

This can be done in several steps. See the demo Rmd for more :)

```
## [1] "PLOT!"
```

5 Submission: Upload Rmd and HTML

Once you have finished the tasks above, you should **knit this Rmd into an HTML** and **upload both files** on the assignment page in a ZIP folder.