Workshop 9: Lines, Scales, Labels, and Themes

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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	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 HTML

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