

==== EXERCISE 02, FIRST YEAR PROJECT 2022, PROJECT 1

Doing this exercise is doing work for your submission. You do not have to finish all the points listed below within the exercise time of 2 hours! Use the exercise time to start (with help from TAs), and then finish everything within 2 days together with your group. The next exercise will build on that.

GETTING USED TO PLOT GEOJSON

- Initialize a folium map centered on your country of study
- Load with folium the geoJSON of your country (in the data/raw/shapefiles folder). Use folium's GeoJson function.

GEODATA WRANGLING

- Import the corona data, the country metadata, and the geojson
- Make sure to use the country metadata so that you can connect the corona data with the geojson
- Specifically, by creating a new column with the iso3166-2 code of each region
- Calculate the total number of cases per region
- Incorporate the population size of each region in the dataframe

GEODATA VISUALIZATION

- Make choropeth maps describing the corona cases in the country
- Use the folium.Choropleth function to connect the geoJSON with your dataframe
- To do so, you need to identify, in the geoJSON, which attribute contains the iso3166-2 code (note: if it is a sub-attribute of an attribute, you can refer to it as "attribute.sub_attribute").
- Visualize the cases variable with an appropriate fill_color scale (check folium's documentation to know the allowed values)
- Visualize the population variable
- Create a cases per population variable and visualize that as well