Scientific Visualization: Visualization Lab project:

Global health/education exploration

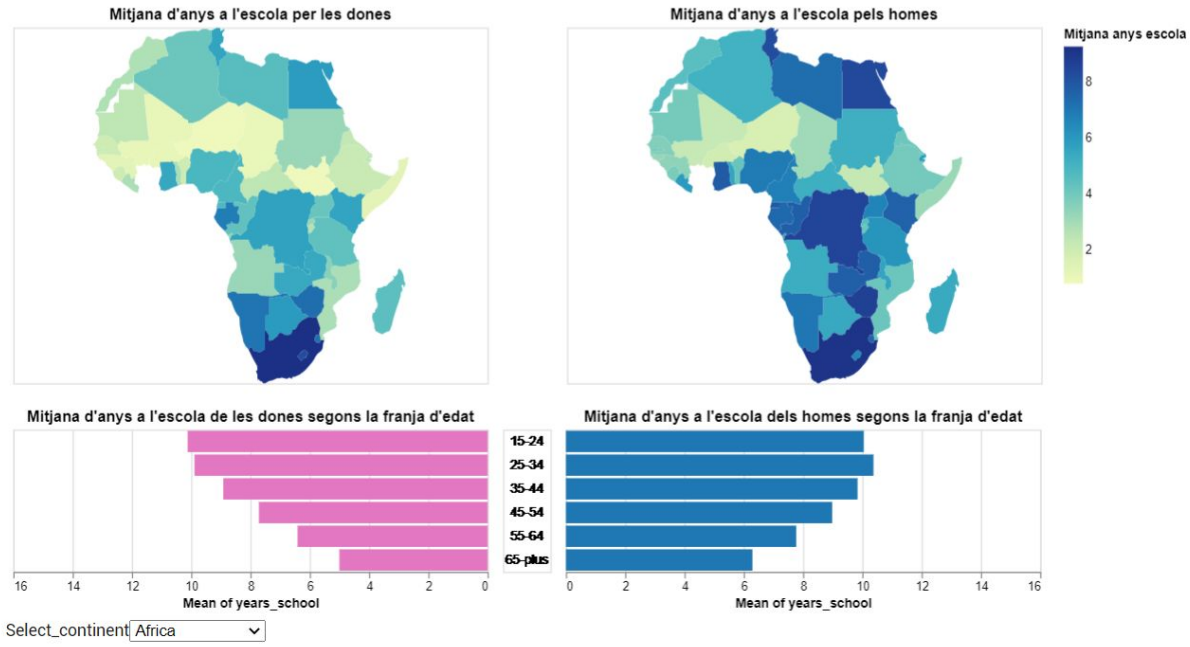
Create a visualization to interactively explore whether there is a gender gap in some health or education indicator(s) between two different countries. Features to include:

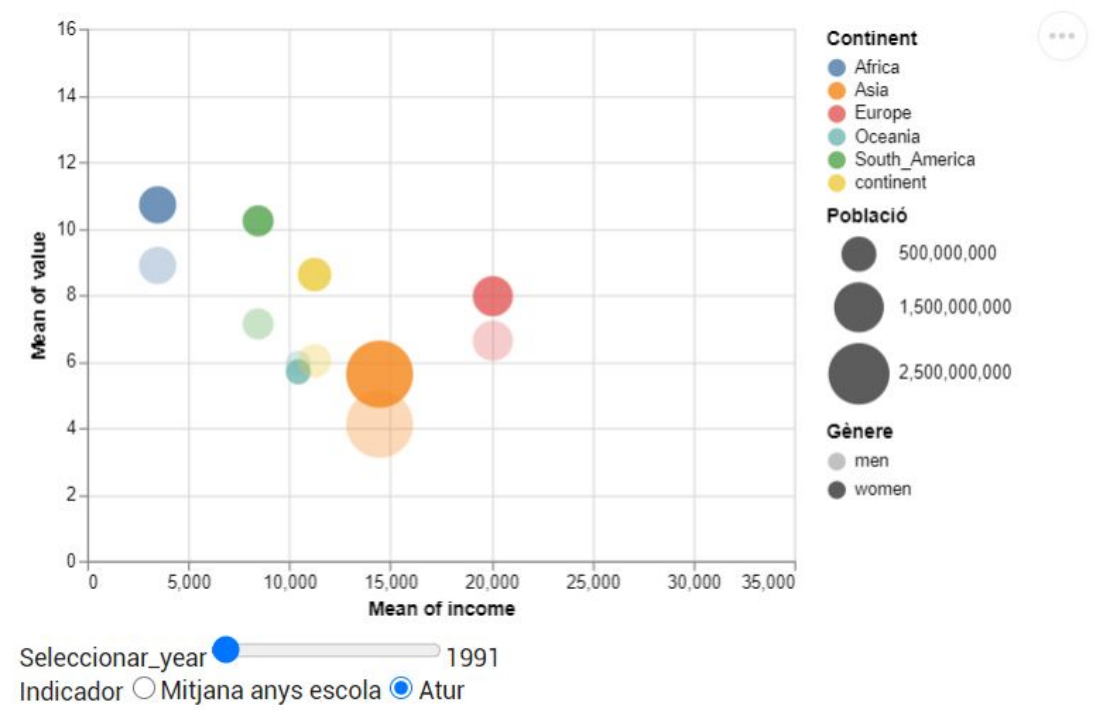
- Choropleth map to illustrate indicator(s) (e.g. world map with highlighted values for the countries of interest)
- Bubble chart(s) for the countries of interest
- Interactive year selection for the bubble chart
- Multiple selection (of individual countries) that highlights/shows the data of all the included years.
- Changing indicator of the bubble map through radio button(s)
- Provide cross highlighting when suitable

Search your data. Some interesting sources can be gapminder.org, World Data Bank, World Bank Group…

As stated previously, think of the tasks the users need to solve, and customize your visualization and the interaction so that they are easy to solve. Put a special emphasis on tasks that require interaction to be solved.

You can be inspired by these charts:





Delivery conditions

The work must be implemented individually.

You have to provide the raw data as well as the clean data, and the source of the data (this can be included in a comment into the Colab notebook).

You have to describe the cleaning procedure, so that we can generate the clean data from the raw data following your steps. This description must go in the Colab document.

You must include a step-by-step description on how to solve tasks. These can go in the Colab document. For example, we might have:

- Q1: Visually exploring gender gaps in education in Botswana and UK..
- A1: First, the countries are selected (or they are previously loaded this way). Then, the indicators can be selected by ⋯ (Or we show by default the indicators⋯). To check whether there is a gender gap, we can activate option X or Y⋯

The delivery must consist of a single ZIP file with a name that includes the author name, that contains the datasets (raw and clean), the Colab file(s) (*ipnyb*) and optional extra documents if required.

The deadline for the delivery of this lab project is the 9th of November.

Remarks

The final grade will take into account the number of variables included and additionally, the number of non-trivial tasks (adequately described in the documentation) that can be properly solved with your visualization tool.

Don’t leave the project for the last day or do the minimum amount of work. In case of doubt, ask me if the current work is enough or needs more effort.