

Mercylyn Wiemer (10749306), Data Processing 18-5-2018, D3 Linked Views

Design choices

Step 1: datasets

Choosing datasets of interest: environment, health, people.

Step 2: interactive visualizations

- data consists of different countries, so a map was logical
- how to present the different variables: indicators of environment and health (%)
- a barchart seemed suiting: re-use one visualization (D3 barchart assignment)

My first idea was to show the life expectancy in the map (hovering over the countries) and presenting environment indicators as water quality and air pollution in the bar chart. However, these variables differed in entity (percentage vs mg per cubic metre). So, I choose for the self-health report for the barchart, but I kept the indicator air pollution in mind.

Step 3: linked views

- link the map to the barchart
- user can select a country and the barchart shows the water quality and self-reported health of the citizen (%)

Map:

- friendly colors for the eyes (colorblind safe) - adjusted to color of barchart
- also, let the countries of which data is known and are part of Europe, stand out
- countries with no data available: keep it mundane
- zooming in on Europe
- Just a part of Russia, because about 77% of russia is located in Asia
<https://www.sporcle.com/blog/2017/10/is-russia-part-of-europe-or-asia/>
- a lot of trial-and-error to correctly get the datamap to set on Europe (hard to find coordinates on the internet)
- use legend for step 4 (additional variable)

Barchart:

- adjust color to map or visa versa of course
- add labels for the x and y axis to clearly state what the data means
- a y-axis from 0-100% seemed the best option to not manipulate the data; especially important when changing from dataset (country)
- a dynamic title with the country: gives more clarity to the data that is currently visible in the barchart

Step 4: bootstrap

- Jumbotron makes a nice header: choose an intriguing title (“A better life in Europe?”) to make the user curious
- Use grid to put the barchart and datamap next to each other on the webpage
- A navigation bar is more user-friendly
- adding a fourth variable: option for the user to select a different dataset in the datamap
- Next to the life expectancy data, air pollution can be viewed in the map of Europe (low - high)