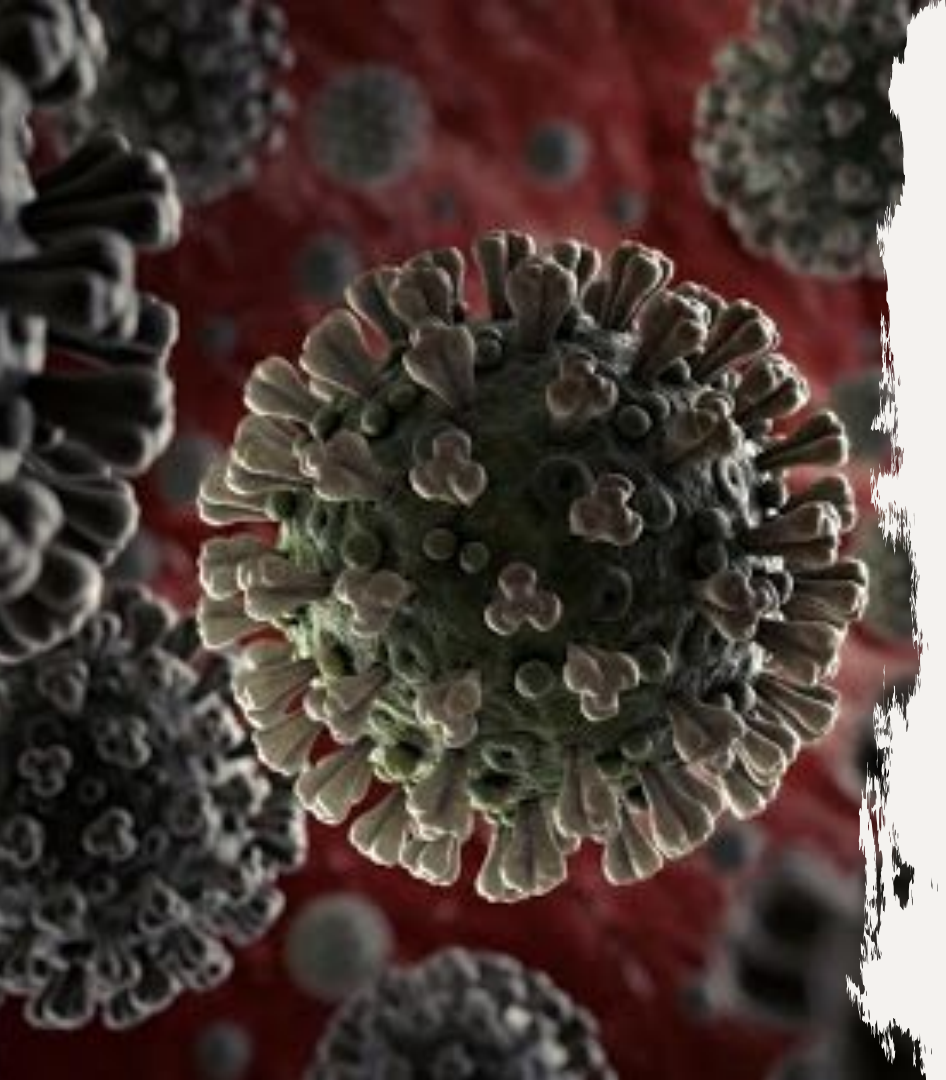


CORONA-COCOS

A comparative analysis of the evolution of coronavirus on countries

INITIAL PROBLEM: A LACK OF CORE FUNCTIONALITIES AMONG EXISTING ONLINE CORONAVIRUS WORLD MAPS...

EVOLUTION ACROSS TIME

No map allowed to easily see the evolution of the spread of the virus across time on a world scale

SCALING WITH POPULATION

Maps usually show absolute counts, without comparing the values to individual countries' population count

COMPARING METRICS

Contaminated cases are important but so are deaths, recoveries and active case

COMPARING COUNTRIES

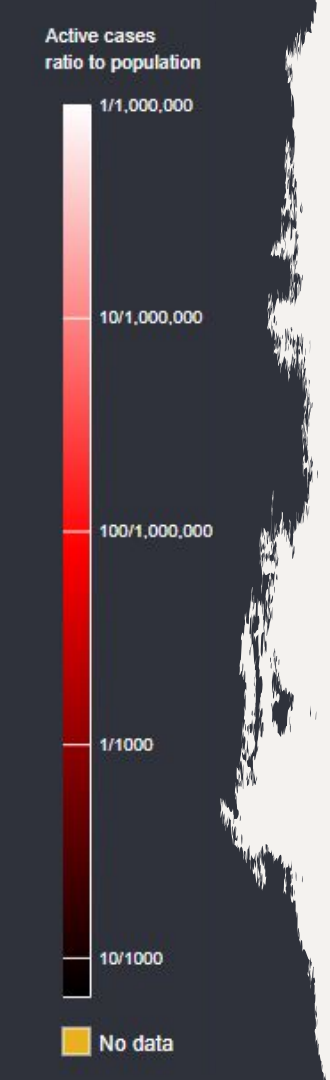
Comparing how two countries dealt with the epidemic is crucial to understand how handling can be improved in the future

SOCIAL POLICIES

Looking at social policies' impact during the crisis usually requires lots of work, crossing data sources

AGGREGATING ALL THAT

Data becomes exponentially more useful once aggregated and easily accessible from a unique source



HOW DID WE DO IT?

Having these objectives in mind, it came to implementing them, prioritizing by importance

THE MAP

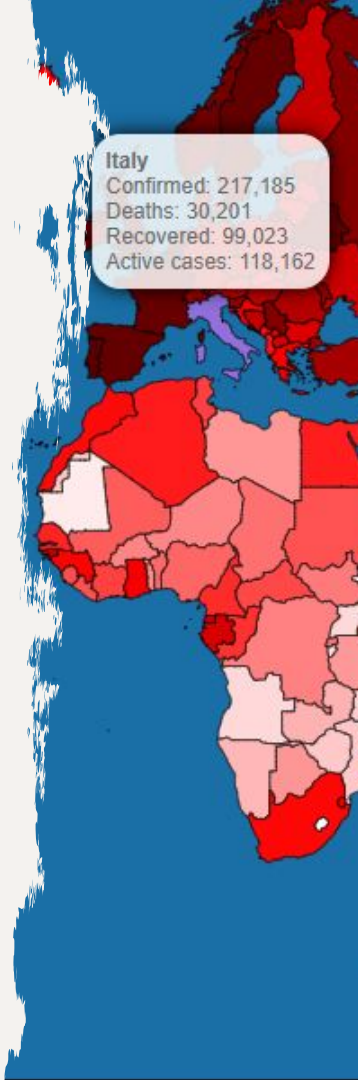
Core functionality being to show a world map with a time slider. Circles of different sizes are commonly used to represent the count but it does not work with ratios, we went for colors.

THE SCALE

The spread varying a lot between countries, we decided to use a logarithmic scale relative to each country's population

ZOOMING

Zooming anywhere seemed useless, instead we allow for automatically zooming on set locations; each continent or at the world level.



NAVIGATING IN TIME

A crucial feature after the map, changing the date and see the impact. The most intuitive way was to use a slider alongside an automatic play button and watch it like a movie

SELECTING THE DATA

There are four types of data you can switch between with a button, and the whole map will update. Deaths, recoveries, confirmed and active cases

COMPARING COUNTRIES

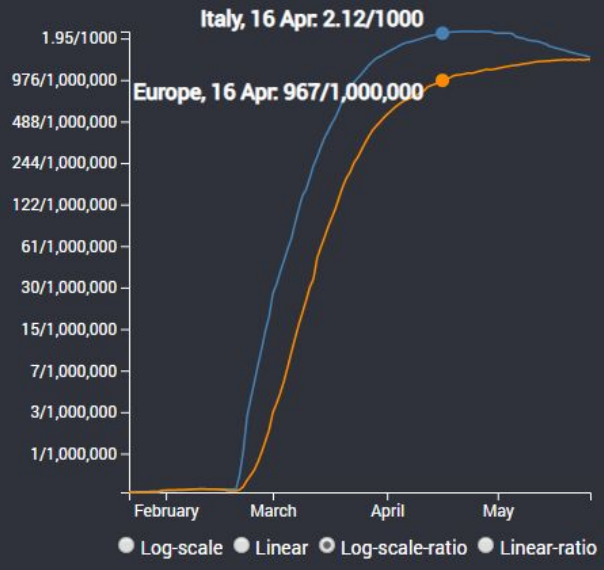
Once the core mechanics were in place, we had to get detailed information about a specific country and compare that with some other country, just by clicking on them on the map

A MEANINGFUL GRAPH

What best way to compare two data besides a graph? Showing the cases in time with different scales to make any comparison, and with precise values when hovering with the cursor!

COMPARING TWO COUNTRIES' NUMBERS

	Italy	Europe
Population	60,550,075	747,069,483
Active cases	128,777	722,592
Deaths	22,170	94,471
Recovered	40,164	274,637
Confirmed	168,941	997,229



SOCIAL POLICIES

We found a great data set with the social policies information for every country. This is a very nice addition, helping to have an overview how the country reacted given the cases in the country at a given date.

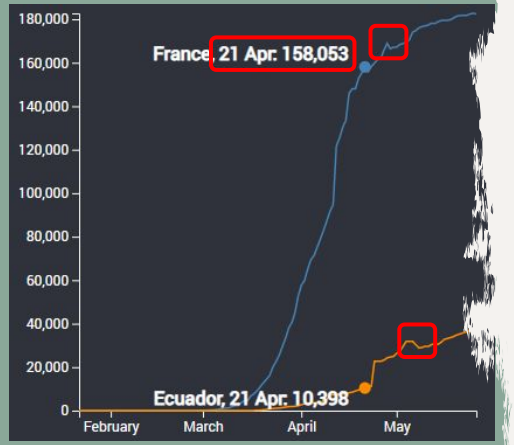
SHOWING THE INFORMATION

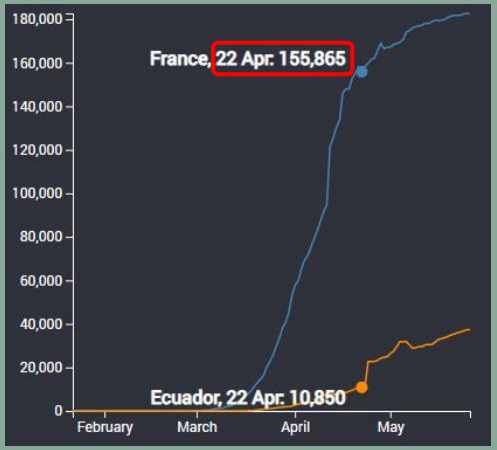
These information take a lot of room, so we limited them to the 5 most recent measures taken to show for each selected country. It is meant as an overview to help understanding the situation, not a detailed information feed.

Switzerland, 31 Mar, Governance and socio-economic measures: Federal Finance Administration (FFA) will increase the outstanding volume of short-term money market instruments from around CHF 6 billion to CHF 1
Switzerland, 31 Mar, Governance and socio-economic measures: Confederation appoints scientific advisory board to work with scientists to find the best approach to overcoming the pandemic.
Switzerland, 27 Mar, Movement restrictions: The federal government is using data from Swisscom to assess whether bans on gatherings are being followed
Switzerland, 27 Mar, Governance and socio-economic measures: Federal government implement regulations that the states can close down whole sectors, if public health requires (prior only individual companies coul
Switzerland, 27 Mar, Governance and socio-economic measures: Federal Council approved the proposal of the Swiss National Bank (SNB) to deactivate the countercyclical capital buffer with immediate effect, expandi

France, 04 Apr, Public health measures: Special provisions implemented to support people with disabilities, including special monitoring, continuity of care, hospital planning
France, 04 Apr, Public health measures: Ministry of Health allowed teleconsultations due to circumstances
France, 31 Mar, Governance and socio-economic measures: Food aid delivery is being strengthened across France
France, 31 Mar, Governance and socio-economic measures: Additional economic support for self-employed health professionals and those with employees
France, 30 Mar, Governance and socio-economic measures: Parental support, taking over their salary up to 80% if thye have a child at home to care for

TOTAL CASES SOMETIMES DECREASE: BAD DATA...





CHALLENGES

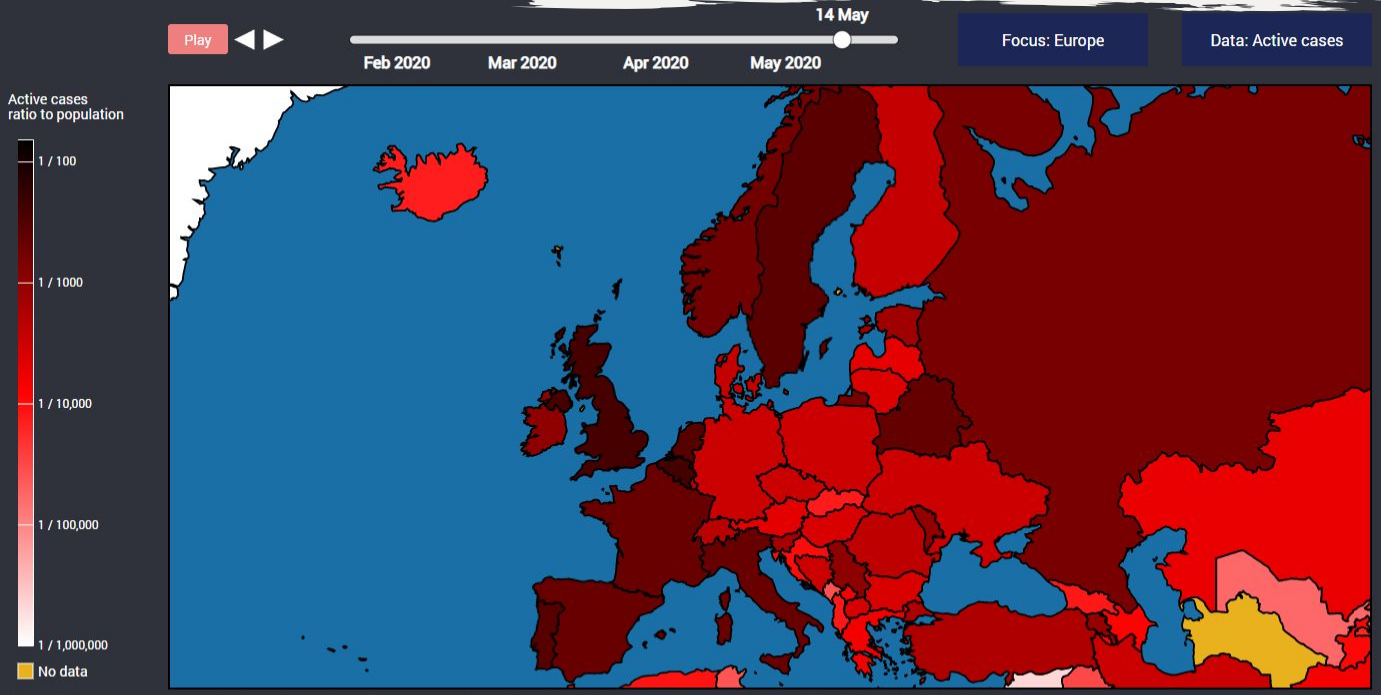
01. Finding good and clean data sources for contamination cases and social measures taken. Data showed negative values for contaminations on some days, we had to compromise with that (no graph/map on daily cases or virus rate of spread).

02. General lack of space to show everything. A lot of thinking goes to it. It's challenging to come with ways of showing a lot of information with clarity.

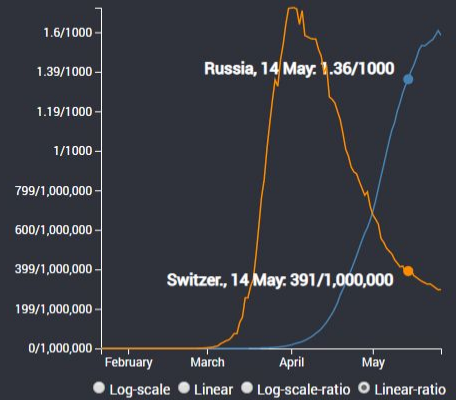
03. Avoiding lag. As many elements need to be constantly update when changing the date, we had to do backend optimizations to only update the strict necessary at a not too high rate.

04. Dealing with D3. Used for showing svg like maps, graphs, sliders, etc. The library is lacking any documentation so we had to find examples of implementations and adapt them to our need, this was what took us the most time in this project.

STATIC OVERVIEW



	Russia	Switzerland
Population	145,872,256	8,591,365
Active cases	198,715	3,363
Deaths	2,305	1,872
Recovered	53,530	27,100
Confirmed	252,245	30,463



Russia, 04 May, Movement restrictions: The region will also suspend its road, rail, and air transport links with the rest of Russia starting on Sunday, April 5
Russia, 03 May, Public health measures: Visitors should self-isolate for 14 days if they are arriving from China, South Korea, Italy, Iran, France, Germany, and Spain.
Russia, 27 Apr, Movement restrictions: Russia will allow its nationals who hold second passports to leave the country amid the coronavirus outbreak, according to a government decree
Russia, 22 Apr, Governance and socio-economic measures: Russia's April 22 public vote on a package of constitutional amendments will be postponed until after the coronavirus outbreak is under control, President Vladimir Putin said in an address to the nation
Russia, 21 Apr, Public health measures: A black market has emerged in Russia for an antiviral HIV drug being explored as a possible treatment for Covid-19, Reuters reported.

Switzerland, 30 Apr, Governance and socio-economic measures: Sunday driving ban for trucks still suspended
Switzerland, 30 Apr, Governance and socio-economic measures: Military support suspended
Switzerland, 30 Apr, Public health measures: Method for testing COVID-19 in grey water system finalised, further verified
Switzerland, 29 Apr, Governance and socio-economic measures: Contribution payments of AHV/IV/EO- und ALV- are temporarily suspended until 30th June
Switzerland, 29 Apr, Governance and socio-economic measures: Capacities at customs increased, with green lines for important goods sustained to ensure good flow with expected increase in volume

THE CORONA-COCOS

NICOLAS ZIMMERMANN

Main contributions:

- Right menu & Graph to compare countries
- Map legend and countries' color
- Slider
- ~~Our stupid team name~~

LUCIEN ISELI

Main contributions:

- Data processing and generation of cases
- Social policies apparition
- Floating info box
- Population scraping

JULES

Main contributions:

- Milestones' reports
- Map zooming
- Coordination of the site aspect
- Social policies finding and processing