Data visualization • Milestone 2

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Project goals

Main goals

- The main goal of this project is to design a website that allows you to search for the results of every federal vote dating back 40 years. With our website, we also want to be able to answer the following questions for any vote:
  - How did the country vote?
    - Once a vote is selected, a map will be displayed with the results per canton (or commune depending on zoom) as well as the overall result.
  - What where the party recommendations?
    - The recommendations for the major parties will be given alongside the map
- **Page 1: list of votes**
  - On Page 1, we have on the left a list of notable votes. These are some of the most important votes over the past 40 years.
  - We also want to implement a search bar that can search for a specific vote. The results would show under the search bar, ranked by relevance. By default, votes are shown in chronological order, starting from the most recent.
  - Under the search bar, we want lists of the votes that can either be sorted by date or by theme.
- **Page 2: details of a particular vote**
  - Once a vote is selected, as shown in Page 2, we want to show the total results (the bar with the percentage of yes/no among the popular vote and among cantons, as well as the colored map), the results per canton and per commune. One can simply click on a canton to see the detailed results of the canton (per commune). Then one can also click on a commune to see the detailed results of the commune.
  - We would also like to have a list of all the party recommendations for a given vote on the right side.
  - We would like to show what the main parties are in a given canton/commune, and have a toggle to show the theoretical results of the vote (how the results would have been if the vote outcome was perfectly aligned with party recommendations and how cantons/communes voted in the previous federal elections.

Extra ideas

- We would like to implement an “I’m feeling lucky” that shows the user the information about a randomly drawn vote.
- We would like to have a second version of the map (changeable by toggle), that would be a **heatmap** instead of the default 2-colored map.
- If possible, we want to implement the “Blurb” and “Click for party position details” shown in Page 2. However, this would require us to scrap the information from somewhere.
- We would like to implement a way to show how “faithful” each canton/commune is to the parties that they vote for. We are not sure how that would be done yet, probably a shade of color that shows the deviation of the actual result of a vote, compared with the theoretical result had party recommendations been followed closely. The colors could then help visualize which cantons/communes are the most/least “faithful”. This

can be done for individual votes, but it can also be done for an aggregation of votes that are related by being close in time or in theme.

Tools

To implement the project, we plan to use D3.js (for the map and charts) and Tailwind CSS (for styling our website without writting CSS by ourselves).

Relevant lectures

The lectures we will need for this project are mostly those about D3.js (week 4), Maps (week 8), Tabular DataViz (week 11), and more generally, Do's and Don'ts (week 7).

Minimal Viable Product

The minimal viable product will consist of the features listed in **Main goals**, that is to say: a search feature and a list of recommended votes on the first page, and once a vote is selected, a bar displaying the total result, as well as a zoomable map giving the results per canton/commune and the main party recomendations.

Sketches

Our sketchbook detailing the intended design of our website is shown in Figure 1. Each row represents a page of the website. Within each page, the different clickable elements as well as the detailed zooms and sorting layouts are presented. For more detailed vue of each page, please refer to our **`sketchbook`** folder on our github which contains each page in `.svg` format.

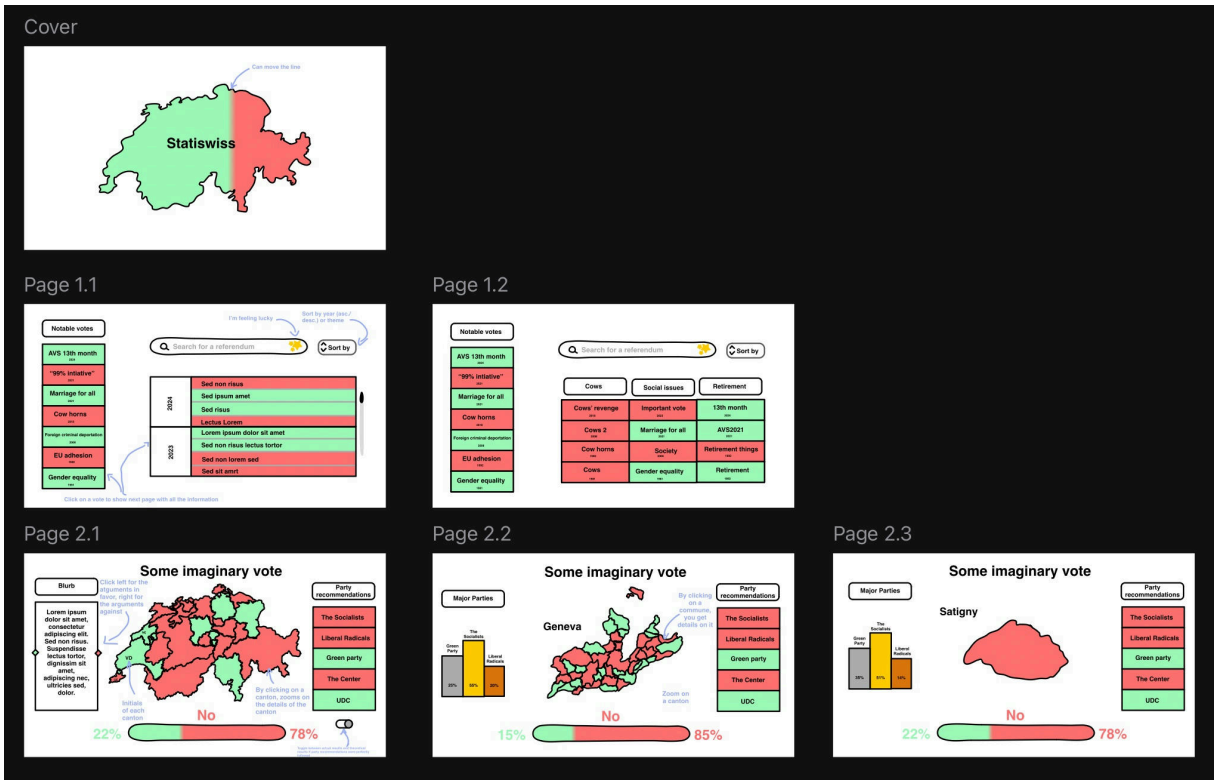

Figure 1: The sketchbook