Reading Between the Lines

Mathilde Davan

Summary

This project started with the goal of elevating books and reading through the use of data visualisation. Another goal of this project is to critique the power we give to data when we think of numbers as true and objective. Therefore, my goal in this project is to "make the data say" that books are making people happy, healthy, protected, or anything that I can. I hope to push my project to such an absurd scale that anyone would question the "truth" I am showing them. Another aspect of the project is to display the information in different ways. The starting point would be to display the data in a more scientific way, trying to make it seem like a credible source of information, but I also want to slowly distort the visualisation until it is no longer readable. I want to take away the logic in the visualization and push it in a more abstract direction. The more abstract visualisation is in a sense a way of saying "this isn't actually a scientist's work at all, I'm just having fun messing with you and your perception of data." It is also a way to try and get the viewer to understand that the same data can be shaped in any way by the person giving it to them.

Progression

For this prototype, I mostly focused on the visualisations of the data using only two datasets. The datasets that I have so far are one of Canadian public libraries and one of Canadian forest fires.

For my visualisations, I have a map as the more serious-looking visualisation, a second step of abstraction where I removed the background of the map to only have the points on a grey background, and a third abstract visualisation where I use the longitude and population of the libraries dataset to create a visual reminiscent of a sound graph.

From now on, I want to add more datasets that will work towards the goal of the project and add a legend on the map with a space to give the user the ability to toggle through the different datasets. I also want to look at my last abstract visualisation and see how I can transform it into a real sound file so the user can listen to the data.

If I still have time left after that, I would like to create one or two more visualisations, and perhaps reorganise the page's layout.

Components

Datasets: Another component of the project are the datasets. I currently have two datasets as mentioned earlier in this documentation. They are connected to

the webpage through client-side JavaScript that sends requests to a server that queries the required information from the dataset situated in mongodb. These datasets contain information required to get the project to work like the location of Canadian public libraries or their population. By storing them in mongodb, they are easy to access and read as JSON files.

Buttons: So far there are three buttons called “Map”, “No Map” and “Abstract 1.” They are the elements that allow the user to interact with the project and explore the different visualisations of the data. The way I placed them also mattered as a sort of guide when it comes to the order of the visualisation while still leaving the freedom to choose what to look at to the viewer.

Leaflet Maps: Another component of the project are two leaflet maps used for the first two (when looking at the buttons) visualisations. The first map is a real map of the earth using OpenStreetMap. It is zoomed and placed so that when the first visualisation loads, it shows Canada. The second visualisation also uses leaflet but the background tileLayer is a grey image. It doesn’t have an image of Earth or Canada as the goal of this second visualisation is to be more abstract than the first one.

Konva Canvas: I used the Konva library to create a canvas to contain my last visualisation. This canvas takes up the same amount of space as the maps and it is filled with ellipses representing the public libraries based on their location and the population they serve.

Working/ Not Working

I am quite happy with how functional my prototype is. Everything works together as intended. I do like the buttons, but I am thinking of maybe finding a way to “force” an order of viewing for the first time the page is loaded. I like this idea as it would work with the message I am trying to get across: even though it looks real doesn’t mean it makes sense. One of the options would be to make the next button only appear once the user has clicked on the previous one so they cannot bypass a step in the visualisation. After a page has been explored, the viewer can then go anywhere they want in whatever order they want. In that sense, I think I would like to rework how the buttons are displayed and work.

Diagram