Checkpoint IV: Second Prototype

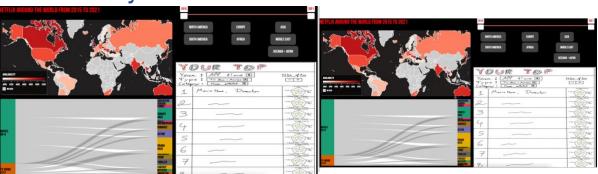**Group: G30**
Date: 12/10/2024

Code Architecture

We added a folder called `lib` for libraries called `topojson ` allowing us to draw the map. We then added the map.js file which contains all the code related to the drawing of the map, data handling and interactions. In the dataloader file we updated the files we loaded, since we are now loading other csv after the data pre-processing. We also updated the main.js file since we added eventListener on the selected countries to update the Sankey diagram (more in Chart Integration)/

Dashboard Layout

We implemented the map, it is completely working, we also implemented some buttons on the top right which allows us to zoom into some countries. We probably have some details with css to fix in the Sankey diagram to have some round corners for example

Data Processing

We two CSVs again for different usage, we added a file for the number of content per country per year which allows us to update the Sankey diagram clearly.

We also added a count by year csv

Year	TVShows_Count	Movies_Count	Overall_Count

Which allows me to draw the initial map. All the python scrips are available in `src/pre_processing`.

So in total our csv names are :

- count_by_year.csv
- count_by_country_and_year.csv
- all_content_country_genre_availability_by_year.csv
- tv_shows_country_genre_availability_by_year.csv
- movies_country_genre_availability_by_year.csv
- genre_percentages.csv

Chart Interaction

Here is are a few screenshots showing the interaction we can have as of now with our data.

So you can select a country, it will highlight the border and update the Sankey diagram too, you can click/hover on the buttons that zooms in the map. We can hover on the links it will display information regarding the number of movies / tvshows. If you hover a country we have a tooltip displaying the country's name.

How do we proceed here ? We are using multiple effects, for the animation around the border I coded `animateStroke` function which add on the current selection `stroke-dasharray` style.

For the tooltip in the 2 other idioms we use, `.on("mousemove")`, `.on("mouseout")`, `.on("mouseclick")`. For the interactions between the map and sankey we `document.addEventListener` to pass the event to other files, other idioms.

Chart Integration

Now let's talk about Integration, we currently have an event listener on the selected country, that allows us to know when a country is selected, once this value changes or is not null the idioms changes, for now, the Sankey changes, and the border of the country gets highlighted. We added events listener to the genres and type of shows if it is Movies or Series, but as of now the interaction is only one way only since we need to pre-process some other data but we need to find an efficient way of redrawing the map to be efficient.