# Design explained - Dataprocessing, Week 6

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#### The data

This week design concerns two interactive linked graphs. The focus of these graphs is on how connected African nations are to the rest of the world. This is measured by two variables. First, the amount of main telephone lines per 1000 people. Second, the number of internet users per 100 people. The third variable that was added to the graph was time. This final variable is particularly important, since it allows us to see how the other two variables have developed over the years. Each of these three variables was then gathered per nation from the Socio-economic database of the African Development Bank.

### The Design

- 1. On the left, there is a slider by which the user can change the years. Which year is being depicted on the map can be seen on the linegraph, and in the title.
- 2. Underneath the slider is the legend. The colours of this legend range from dark red to lime green. I specifically chose a dark and light colour to be on the outer ends to reflect good and bad values through the legend. An additional block was added to showcase when there was no data available for a country at a specific year.
- 3. The linegraph then. The title of the linegraph tells the user which variable and nation they are looking at. The crosshairs can be changed using the slider. This, as said before, helps the user identify which year is being depicted on the map. It contains all the standard elements of a linegraph.
- 4. The map has several attributes. First, one can see the name of each country with a tooltip. Second, if one clicks on a country on the map, the linegraph will show this country over time for the variable that is picked with the dropdown menu. Finally, if one clicks on a country where there is no data available for any of the years, the page will give an alert to tell the user he needs to pick a different country.
- 5. Using the button, one can switch between the two variables. I decided to give the button a distinct colour to direct the user's attention towards it.
- 6. After putting my HTML and CSS through the respective W3 schools validators, the validator gave several errors for some parts of my CSS code. For example, class line was not allowed to have the property of "fill". However, the changes to remove these errors would significantly worsen the visualisation.