# Information Visualization

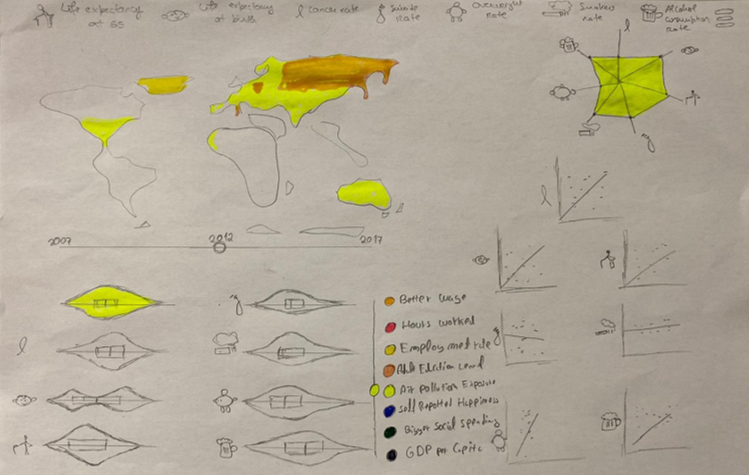
# CHECKPOINT IV: First Prototype

G22 - A

**1. Layout**

Description of the layout of your interface. Include at least one image.

In the last checkpoint we defined a high-level definition of what our interface would look like (Fig. 1).

In this interface we have 4 idioms and 2 slicing mechanisms.

For the idioms we have the choropleth map, a violin plot, a star plot and a scatter plot. For the slicing mechanisms we have a slider with the years, and a list with the potential health influencers.

The data being shown is all connected so a move in one of the slicers will change the data on the idioms.

Fig. 1

From this interface we implemented only 2 idioms. The **scatter plot** and the **star plot**. And the **time slider** slicing mechanism. How these are described in the next section.

We think this implementation gives a good idea how the visualization will work when it’s finished.

**2. Implemented Idioms**

Description of:

* The idiom(s) you have already implemented (with images);
* The interactivity supported by such idioms;

There are 2 idioms implemented.

1. Scatter Plot

Description:

There is 1 scatter plot per each variable of health being analysed. On the x axis we have the health factor and on the y axis we have the habit selected on the list slicer. Since we have not yet implemented this list slicer, for now the y axis only has the average wage as potential health influencer.

Interactivity:

If you mouse over a point in the scatter plot. All the points in the other scatter plots that correspond to the same country will also turn red. The same happens for the star plot.

1. Star Plot

Description:

In this plot we’ll have the correlation coefficient between each health variable and the variable selected on the list slicer.

Interactivity:

The interactivity in this idiom is very simple. Here, yet again, the user can hover offer a country point and highlight this same country points on the scatter plots

**3. Implementation of Linking Mechanism**

How are the views linked? How does that mechanism work/will work even when you have more idioms to link?

Right now, we have 2 views implemented. The interactivity between them is still limited. But in the final version we’ll have 4 views, each of them will be influenced by the 2 slicers, which we only have 1 implemented right now. One of the slicers will allow the user to choose the year which will be shown. And the other, the potential health influencer we want to analyse. All the views will change according to the year and potential health influencer selected by the user. On top of this the user can select or hover over a country in one of the graphs, which will result in the highlight of this country on all the other idioms. We already have a small implementation of this functionality in our prototype.

In the storyboard bellow we can have an idea of the level of interaction between the views we’ll have in the final version.

Uma imagem com texto, mapa

Descrição gerada automaticamenteUma imagem com texto, mapa

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Descrição gerada automaticamenteUma imagem com texto, mapa

Descrição gerada automaticamente

1

Select potential health influencer

2

Select year

Select country

3

4

Look at the data