

Milestone 2

1. Core visualisation

1.1. Main structure

The main structure of our website and our sketches in a bigger size can be found [here](#).

1.2. General tools and lectures

Overall we will use the D3 tool and its corresponding lectures: *D3.js* and *interactive D3*. To have a website with a great visualization, we will pay attention to the lectures:

- *Perception, color, and Mark and channels*: for the right visuals
- *Do's and don'ts*: which provides tips for an impactful visualization
- *Storytelling*: for a clear structure of our website

For the design of the website we used:

- *fullPage.js*, a library that creates fullscreen scrolling websites
- Some text animations from *codepen.io*, that will be credited in our website if we keep them for the final version

1.3. Extra

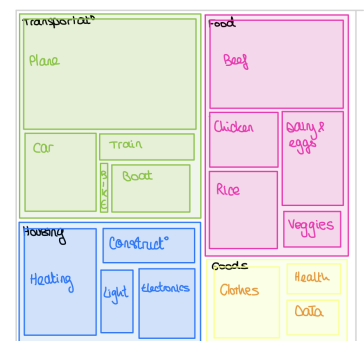
When the user opens the website, a counter appears in the corner. Throughout the user visit, it increases to show the amount of textile that has been thrown out since the user opened the webpage.

2. Individual sketches

2.1. Pollution by a Swiss person

Description: It shows the average CO2 emission by a Swiss in a year. It aims to highlight the impact of fashion by comparison to other emission sources.

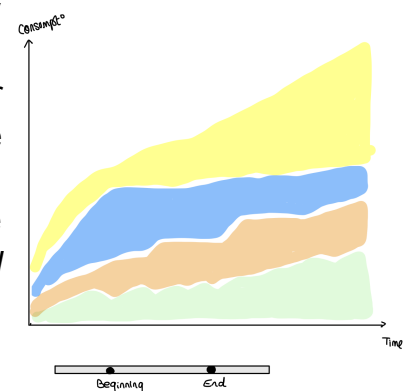
Tools and lectures: We will use *treemap()* from *D3.js* as seen [here](#). This kind of plot is mentioned in the lectures *interactions and views* and *graph visualization*.



2.2. Overall pollution over time

Description: We will represent the temporal evolution of the main categories of environmental impact: water consumption, energy consumption, greenhouse gas emission and land use. Those categories are evaluated in general, not only for fashion. The idea is to be able to select the interval of time that is displayed.

Tools and lectures: Animated transitions when moving the interval of time are explained in the lecture *Interactions and*



views. The lecture *Tabular data* also gives insights about this type of chart.

Extra: With a bar on top, the user can select and unselect the wanted categories to see on the plot.

2.3. Pollution components of fashion

Description: Here we focus on the previous 4 categories but with the textile point of view. When selecting one of the sections from this t-shirt, additional information about the selected category will pop up.

Tools and lectures: We will use SVG path to create the t-shirt (lecture *Basic web development*) and the lecture *Interactions and views* to create a semantic zooming on each category.



2.4. CO2 production and water consumption for a cotton T-shirt

Description: The idea is to have two stacked bar charts shaped as a T-shirt. The water consumption plot will be shown with the water section from the previous sketch (2.3) and the CO2 one under the greenhouse gas selection. They show the impact of each step of a cotton t-shirt production on the corresponding resource. It will quantify which steps are important to take into account to improve our environmental impact.

Tools and lectures: We will use SVG path to create the t-shirt (lecture *Basic web development*).



2.5. Pollution by type of fabric

Description: The environmental impact changes a lot depending on the tissue. Thus, this sketch aims to visualize if there are more sustainable textiles than others. Each textile from our list will be represented with a star plot.

Tools and lectures: We will use D3 and find inspiration in the starPlot() function made by Kevin Schaul in this [github](#).

Extra: We want to add an all button that once selected will provide a bar chart with the repartition by textile according to one environmental impact category.

