

# 1 Visualisation 1: World map

The main component of our project consists of visualizing the main information of the countries. The idea is to be able to click on each country and display general statistics such as the number of medals the country has won and the most decorated athlete (which is the athlete who has won the most medals) of the country. The user should also be able to switch between seasons (games of winter or summer). Thus, world map statistics must adapt to the season.

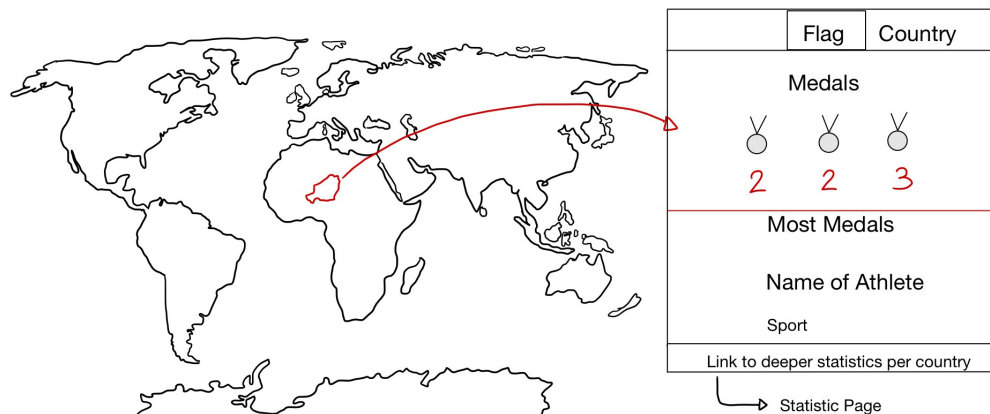


Figure 1: Sketch of the Map World Visualization

The figure 1 shows a global view of the world map and the associated panel on the right describing the clicked country. We have already implemented the main components of the information panel. Furthermore we want to allow the user to have the possibility to learn more about the country by providing a link at the end of the panel which redirect to the second visualization (2).

As future implementation, we aim to add a small button labeled 'Hosts' on the right side. When users click on this button, it will display all the countries that have hosted the Olympic Games, with each hosting country highlighted. Additionally, the year of the Olympic Games hosted by each country will be shown. This desired feature is sketch in Figure 2.

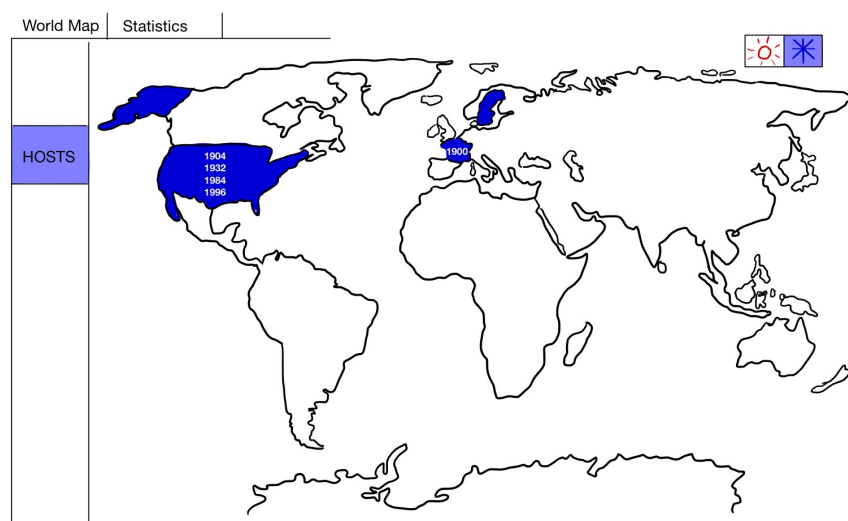


Figure 2: Future Implementation with hosts highlighted

### 1.1 Needed lectures

- Lecture 4: Data (useful for linking data to JS animations)
- Lecture 5: Interactions, Views (Choice of Color, Information Hierarchization)
- Lecture 8: Maps, Practical Maps

## 2 Visualisation 2: treemap

The second objective of the project is to link the world map of the main page to a second page, displaying more powerful statistics. A first visualization will be a treemap. The tree map will first display the gender of the athletes for the selected country. By clicking on one gender, the treemap will zoom and the different sport categories (athletics, alpine ski, etc.) are displayed. When clicking on one of the fields, the zoom will be applied, and each event will be displayed. For instance the following sequence can be imagine:

- You are in the world map<sup>1</sup> and you click on Switzerland
- In the general panel (described in 1), you click on the link that sends you to the statistics page, where you see the described treemap.
- You click on "Men"
- You click then on "Alpine Ski"
- You see all the different discipline involoved in the category such as men slalom, men giant etc..

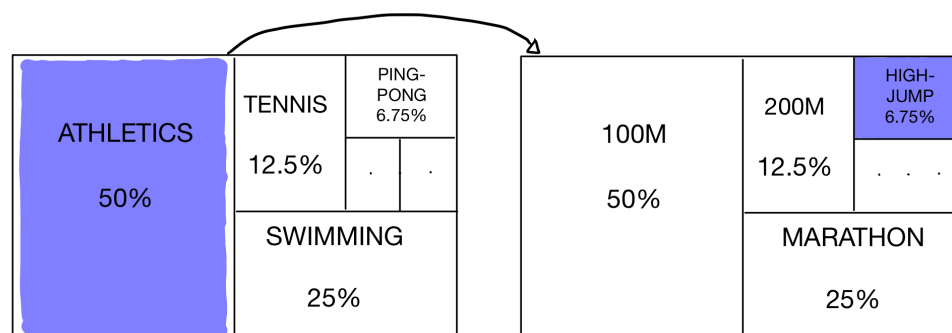


Figure 3: Sketch for the projected Treemap visualization

### 2.1 Needed lectures

- Lecture 4: Data (useful for linking data to JS animations)
- Lecture 5: Interactions and Views (Choice of Color, Information Hierarchization)
- Lecture 10: Graphs (useful for TreeMap)

## 3 Visualization 3: Wheel diagram

The third visualization that is going to be implemented is a wheel diagram, which displays the stats of each game. This wheel will have several layer. These layers are:

1. Game edition (Beijing, Rio, etc)
2. Sport
3. Medals (Gold, Bronze, Silver)

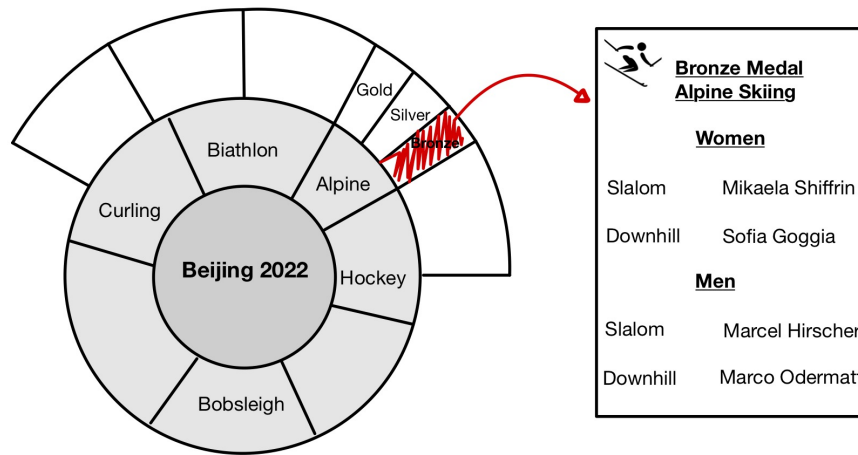


Figure 4: Future implementation of Wheel diagram

When the last layer of the wheel diagram is selected, a side panel will pop showing the winner name's of each medal for each event.

### 3.1 Needed lectures

- Lecture 4: Data (useful for linking data to JS animations)
- Lecture 5: Interactions and Views (Choice of Color, Information Hierarchization)
- Lecture 8: Tabular chart
- Lecture 11: Graphs (Radial Layout : Wheel Chart)