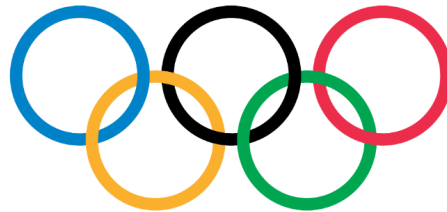# Milestone 2

Our objective is to craft an immersive experience where visualization serves as both an educational instrument and a window into the Olympic legacy.

Our **website** is structured as follows :

- **Home page** :

This page would show the location where the Olympic Games took place. By clicking on a city and selecting what year you are interested in it would send you to more information about the event at the **Olympics** page.
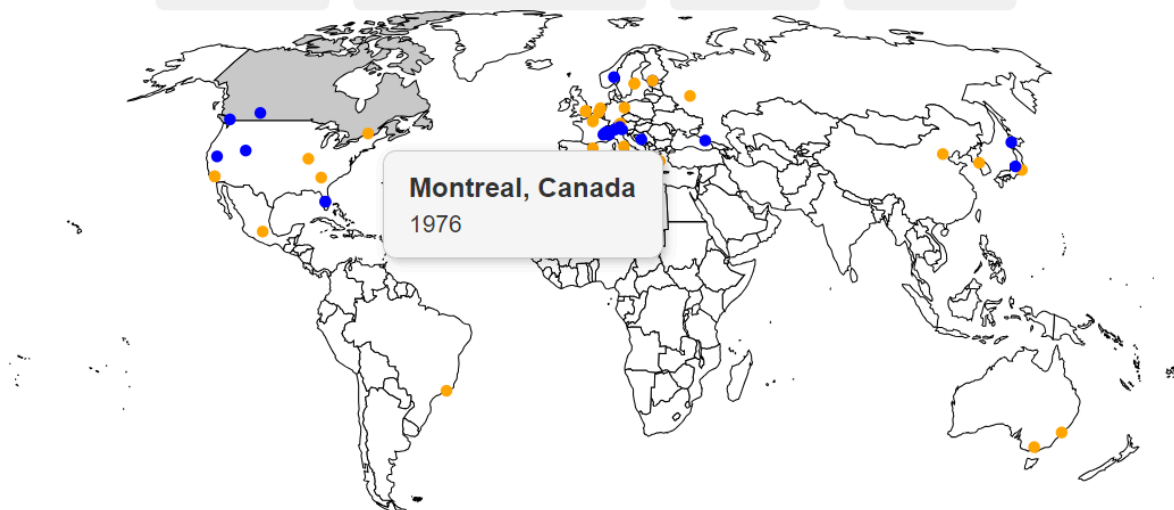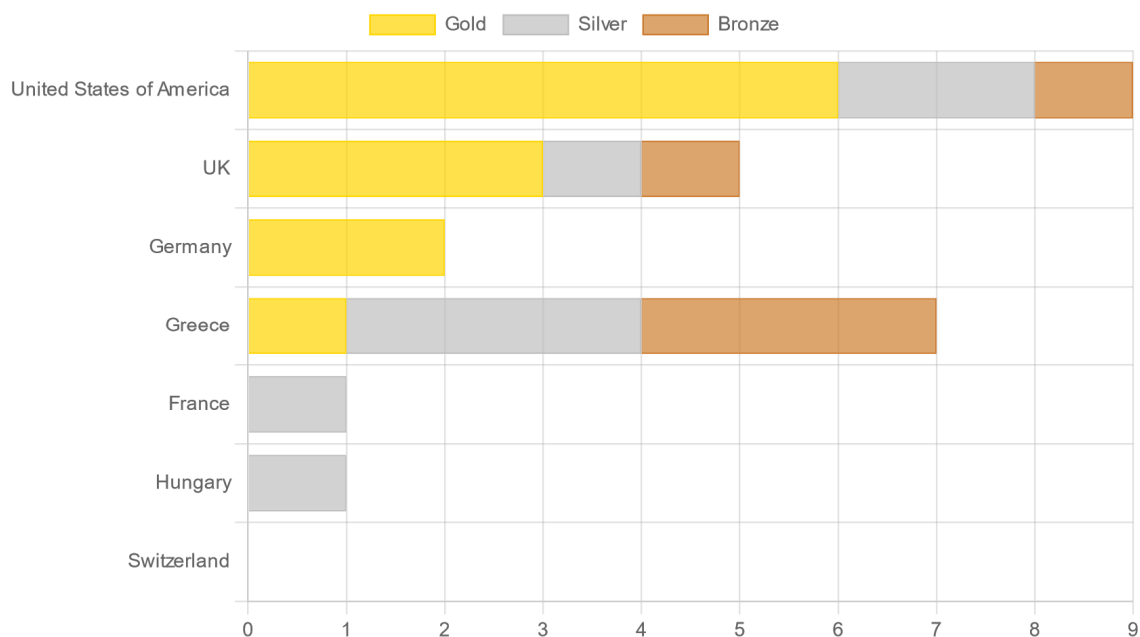
- **Olympics page** :

This page presents key data on a country's performance in a particular Olympic Games, such as a visualization of medal distribution. Additionally, it provides results by discipline and simulations of select main events. For athletics and swimming, the current world records at the time of the Games are included. Currently, the website only features simulations of world records for the Men's 100m in athletics and the 50m Freestyle in swimming, with plans to incorporate final event simulations for other disciplines in the future.

Olympics

Medal Distribution

Select Year and Season: [1896 - Summer ⌄]

World Record Simulation

[Swimming] [Athletics]

To check the simulation you can access the website (may be broken)
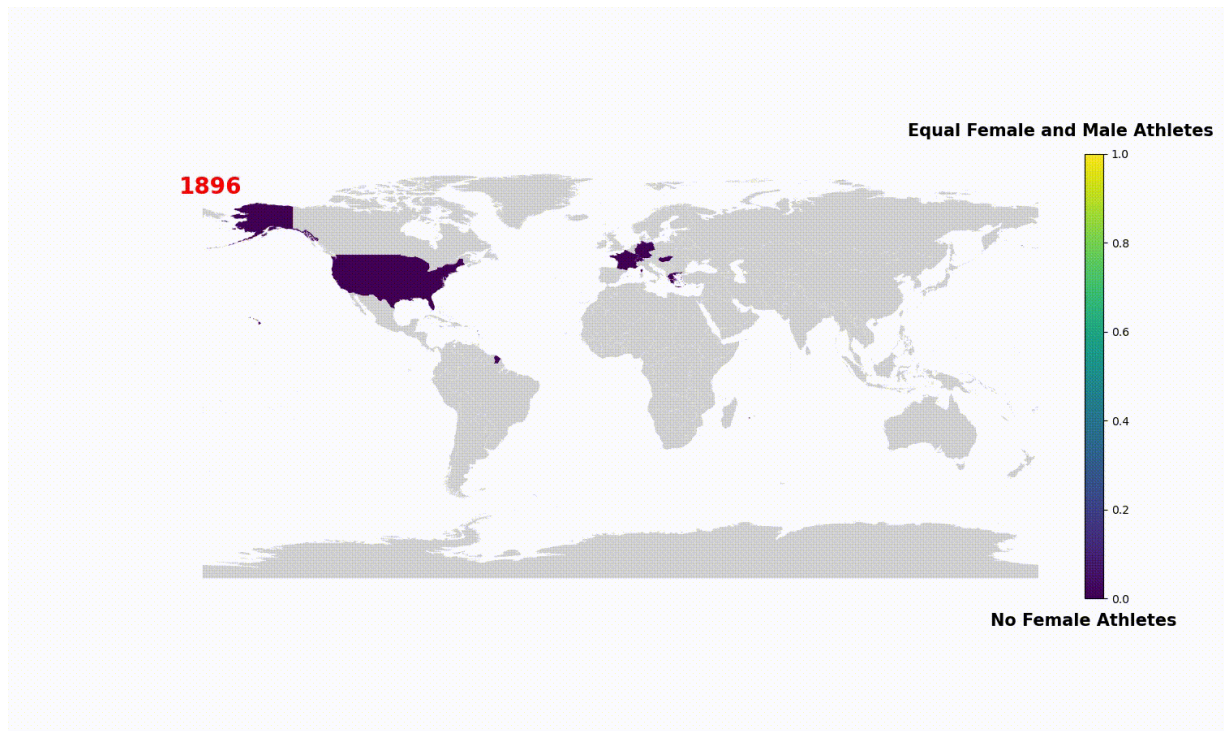
- **Disciplines page** :

This page would list what sport disciplines were present at a specific Olympics with small information about the discipline. By clicking on a discipline it would relocate the user to the olympics page to see the different results of the events of this specific sport. We intend here to display how disciplines have developed over time.

- **History page** :

Lastly, the "History" page offers a brief overview of the Olympic Games' history, delves into gender representation trends, and features a timeline with key facts and milestones from the Games.

Here is sketch of one of our visualizations, where we intend to display gender representation across all the countries and across the olympic games since 1886 :

Additional challenging ideas :

- Enrich our dataset by integrating additional datasets, allowing for a comprehensive analysis of overall performance trends and comparisons between the Winter and Summer Olympics.
- Explore the impact of global historical events, such as wars and crises, on the Olympic Games, focusing on how these events have influenced the Games without straying from the primary scope of Olympic history.
- Enhance the interactive world map by enabling mouse-controlled zoom on continents, displaying detailed Olympic information, visualizations, and animations about the main sports disciplines hosted in those regions.
- Display more information about performance and world records and compare if they occurred during the olympic games or world athletics championship.
- Enrich our website with fun facts about each Olympics.

Tools and lectures used :

- Introduction to D3.js (week 4)
- Interaction methods (week 5,6)
- Practical maps (week 9)
- Tabular data (week 12)
- Librairies : pandas, numpy, seaborn, geopandas, matplotlib (pyplot, colours, animation, etc.), ipython display, papa parse & pyproj.