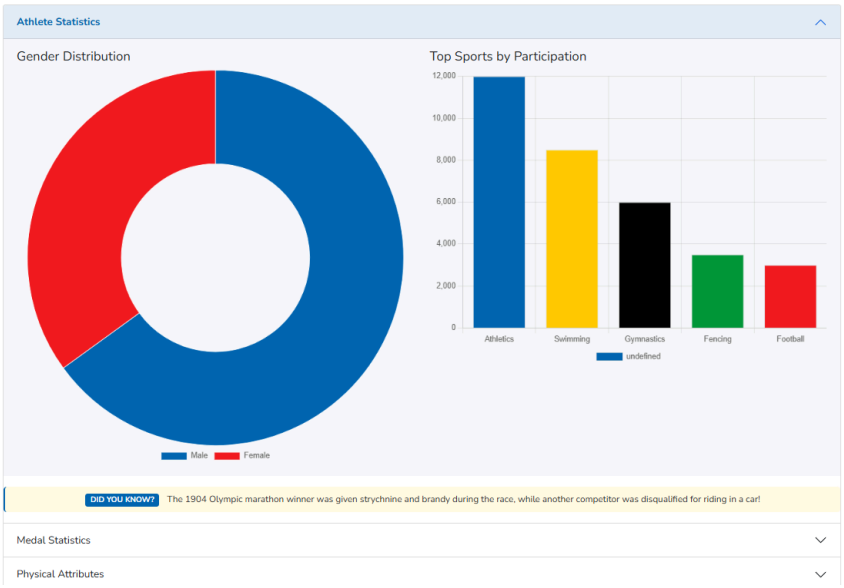
You can find the initial website here: https://com-480-data-visualization.github.io/DaViz/

(Include sketches of the visualization that you want to make in your final product)

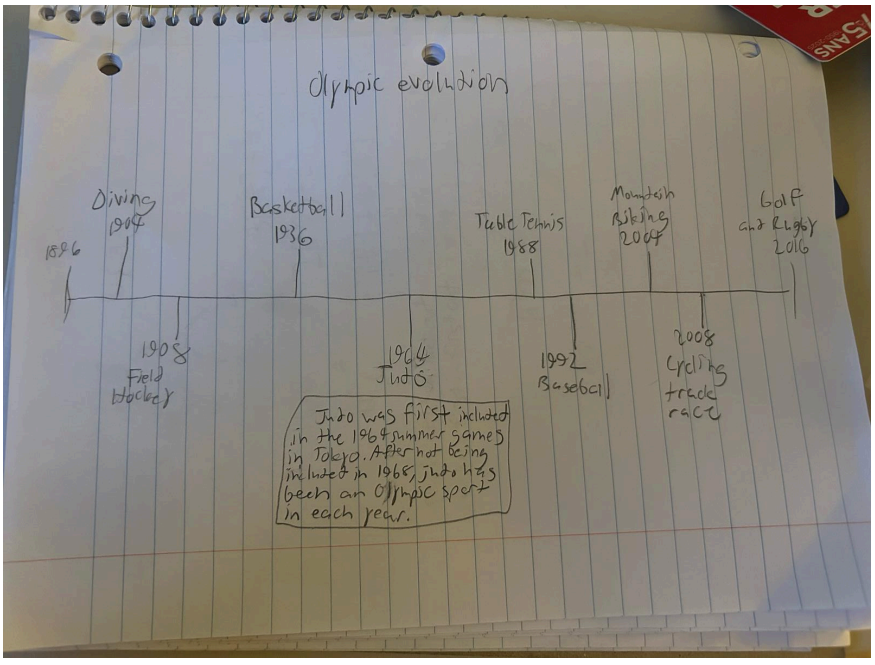
Sketches:

+ Visualization 1:

This section offers a snapshot of key statistics to highlight the richness of the Olympic dataset and uncover some interesting insights. A dropdown menu allows users to select different categories or metrics, each revealing an interactive chart, pie chart, etc. Users can hover over chart elements to view precise values, and bar charts support zooming in and out for a closer look at specific details. Also there is a small “Did you know” on the bottom of each section providing some fun facts about the Olympics. In the end, we want to give users a quick overview and spark curiosity.



+ Visualization 2:



In this section, we created an interactive timeline that traces the history of the Olympic Games from 1896 to 2016. The timeline highlights each Olympic year and marks when new sports or events were added. Users can hover over any year or event label to reveal additional information — including

brief descriptions about the sport's background, how it became part of the Games, and whether it was later removed from the Olympic program. This timeline offers both a clear chronological overview and meaningful context, helping users understand how the Olympics have evolved over time.

+ Visualization 3:

In this section, users can explore Olympic data through an interactive world map designed to be both informative and visually engaging. The map serves as a central element of the project, allowing users to click on any country to access a detailed set of statistics about its Olympic history — such as the number of participants, medals won, and top-performing sports. A dropdown menu provides further control, letting users choose specific metrics to focus on (e.g. only gold medals, or results from a specific sport). There is also an option to filter the data by year, so users can explore how a country's performance has changed over time.

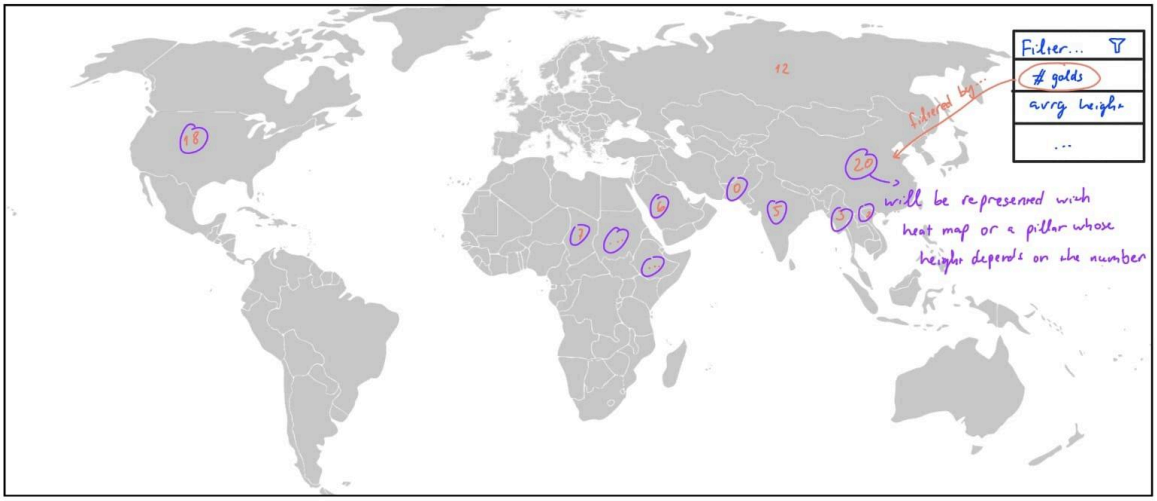
To enhance interactivity and user experience, the map includes a hover preview feature: when a user hovers over a country, a small tooltip appears showing quick facts like total medal count and most successful sport. This allows users to get a quick overview without needing to click, encouraging easy and intuitive exploration.

In addition, a color-coded heatmap layer visually highlights differences between countries based on the selected metric. For example, countries with more medals could appear in darker shades, while those with fewer or no medals appear lighter. This color gradient makes it easier to spot patterns and compare countries at a glance, enriching the storytelling aspect of the visualization.

Together, these interactive features are designed to make the data feel more alive and to help users dive deeper into the global history of the Olympic Games in an intuitive and enjoyable way.

(see the sketch below on this visualization)

Choose a country:

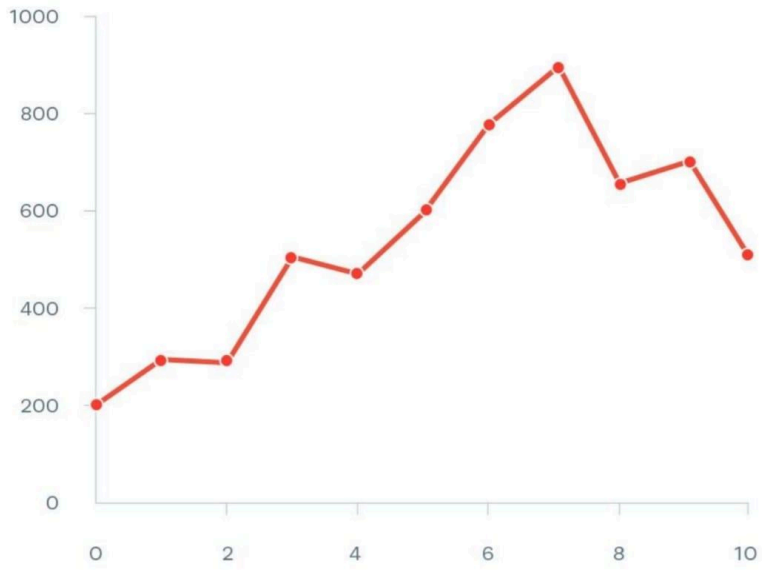


Country chosen: Switzerland 🇨🇭

Participates since: **1986** Total medals: **181** Total athletes: **532**

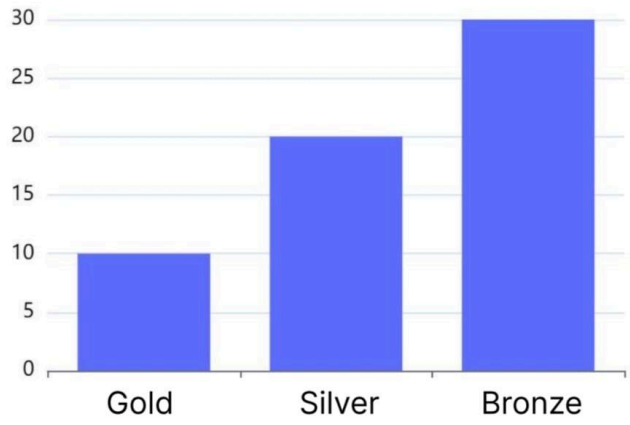
... ...

Summer games medal count over years:



Interactive chart:

Choose the year:



(List the tools that you will use for each visualization and which (past or future) lectures you will need.)

Tools:

- Chart.js: JavaScript library for data visualization, which supports eight chart types: bar, line, area, pie (doughnut), bubble, radar, polar, and scatter.
- D3.js: JavaScript library for producing dynamic, interactive data visualizations in web browsers.
- **Lectures**: on D3.js, Interactions, Map, Perception and Color

(Try to design a core visualization (minimal viable product) that will be required at the end.)

Design a core visualization (minimal viable product):

The interactive world map is the core visualization of our project, offering a dynamic way to explore Olympic data. By clicking on any country, users can view key statistics such as medals won, participants, and top sports. The map's hover preview and color-coded heatmap make it easy to compare countries at a glance, while the dropdown and year filter allow for deeper exploration. This map brings together geography, data, and interactivity, creating a user-friendly and engaging experience that ties the entire project together.

(Then list extra ideas (more creative or challenging) that will enhance the visualization but could be dropped without endangering the meaning of the project)

Future add-ons:

If we have extra time, there are a bunch of fun and interesting features we could add to make the site even more engaging. For example, we could include a time slider so users can explore stats by year, or add smooth animations and a dark/light mode toggle to make everything feel more polished. Stat-wise, it might be cool to show which countries are most efficient (like medals per participant), or compare how male and female participation has evolved over time. We could also highlight the top countries in each sport. The map itself could be upgraded with quick previews when hovering, or filters to focus on specific regions like continents. To make the experience more personal, we might show a famous athlete when someone clicks on a country, add a “Did you know?” section with random Olympic facts, or include a simple timeline of key Olympic events. One more idea would be to add a quiz or trivia section where users can test their knowledge about the Olympics — just for fun! None of these are required, but they’d definitely take the storytelling to the next level.