SPORTSTATS – CAPSTONE PROJECT

Data Analysis Project Report

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Questions to answer

- What was the athletes' age distribution?

- What was the medals' distribution among teams?

- Which country had the most athletes?

- Which sport/event had the most participants?

Hypotheses

- There are more male than female athletes.

- Most athletes are less than 30 years old.

- Countries had similar numbers of medals.

- Countries had similar numbers of athletes.

- The sport with the most participants is Athletics.

Approach

- The teams, medals, age and gender columns in the main table 'Athlete events' are the priority for analysis as they enable the identification of patterns and relationships within data.

- Important relationships to be explored are mainly between teams' regions and medals to measure a country's overall performance.

- I used bar graphs, scatter graphs and histograms to visualize the data.
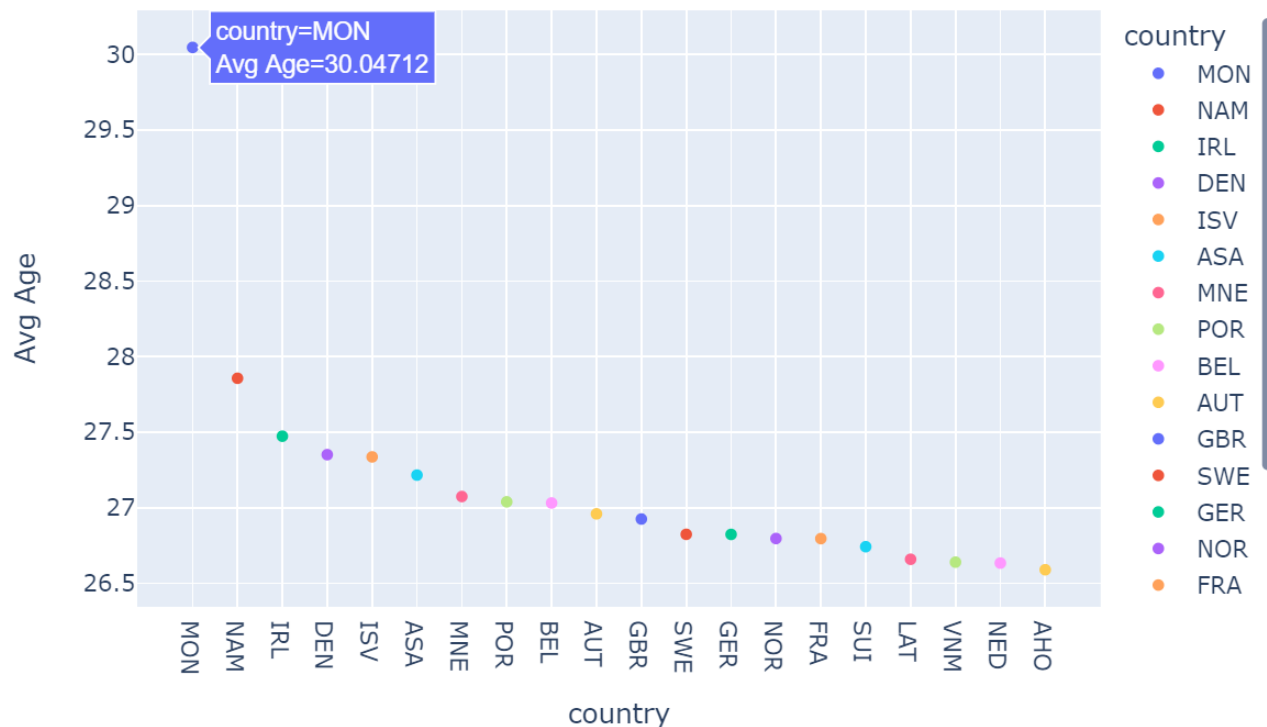
# Findings – Gender

196564 male athletes

74522 female athletes
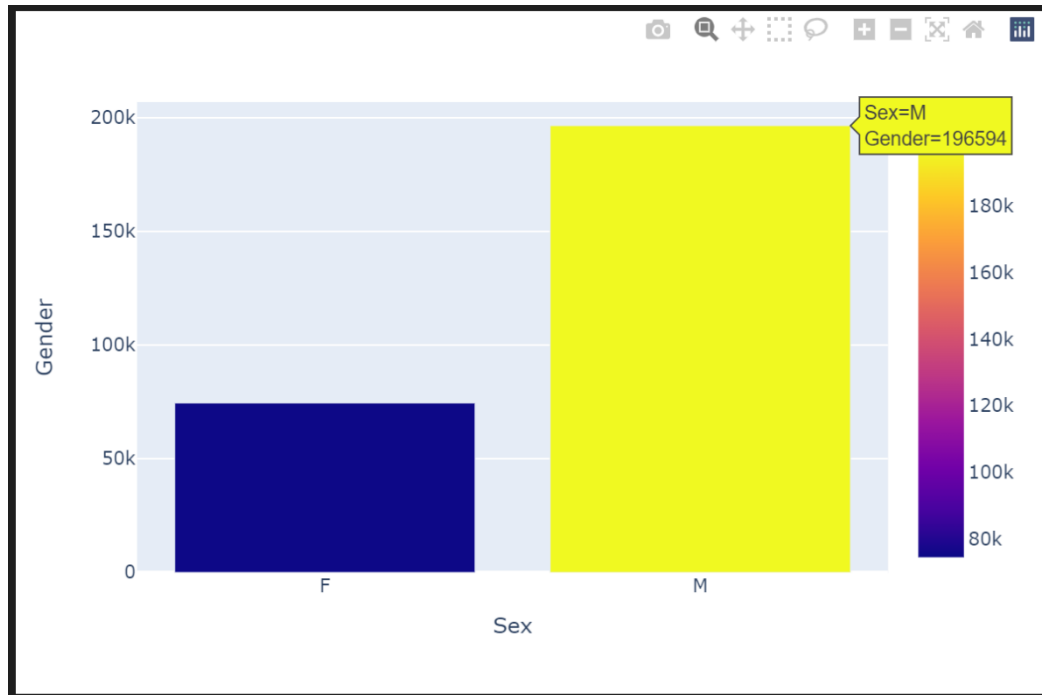
Findings – Average age distribution

Average ages per country. Monaco had the highest age average of 30.04 years old, and most countries had average ages between 25 and 30 years old

Findings - Medals

The medals per Team shows a very clear yet expected relationship between the number of athletes per Team and the total medals.
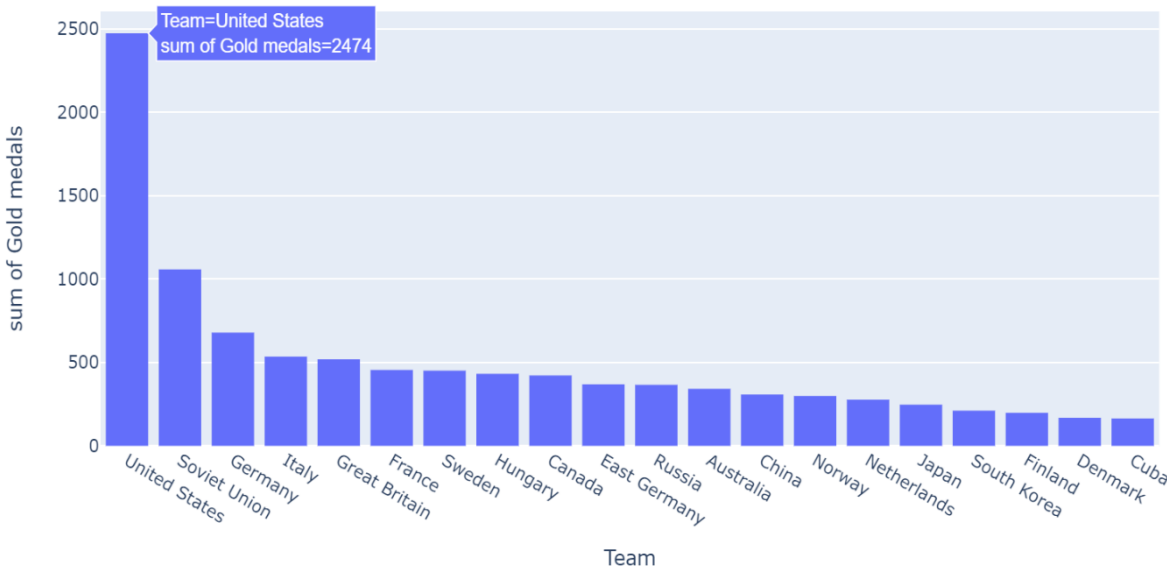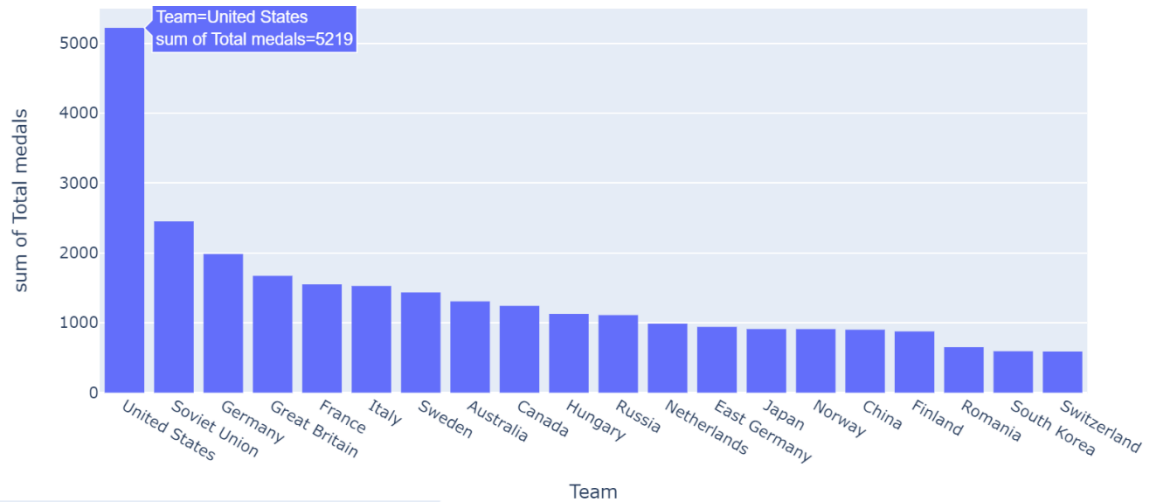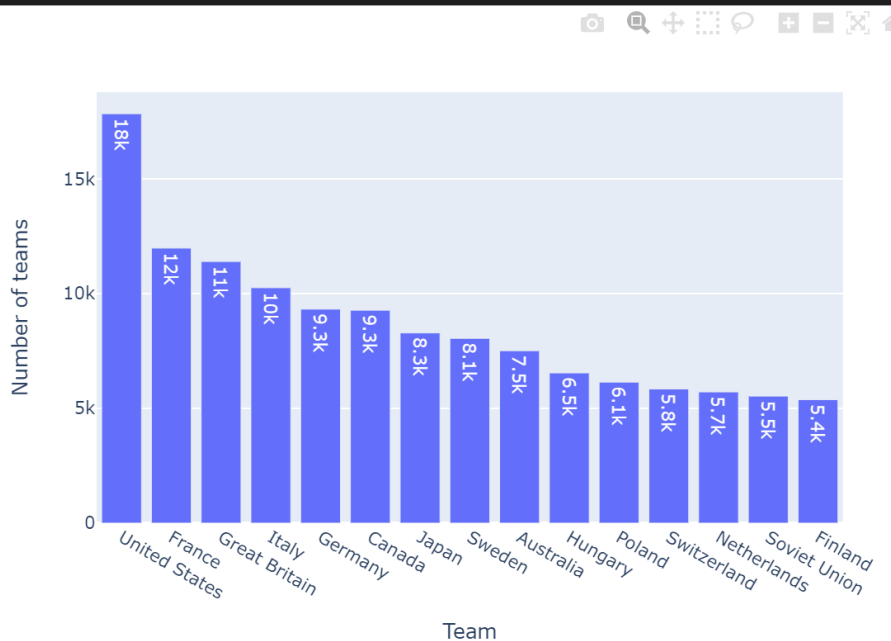

If comparing by gold medals only, the order changes significantly with the exception of Germany which remains in 3rd place.
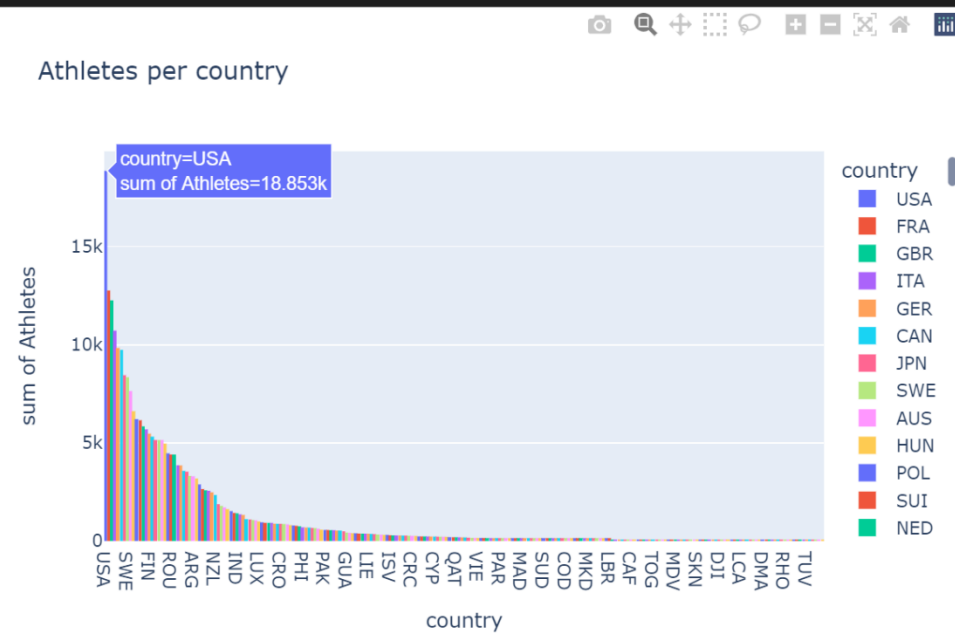
Findings – Number of Athletes

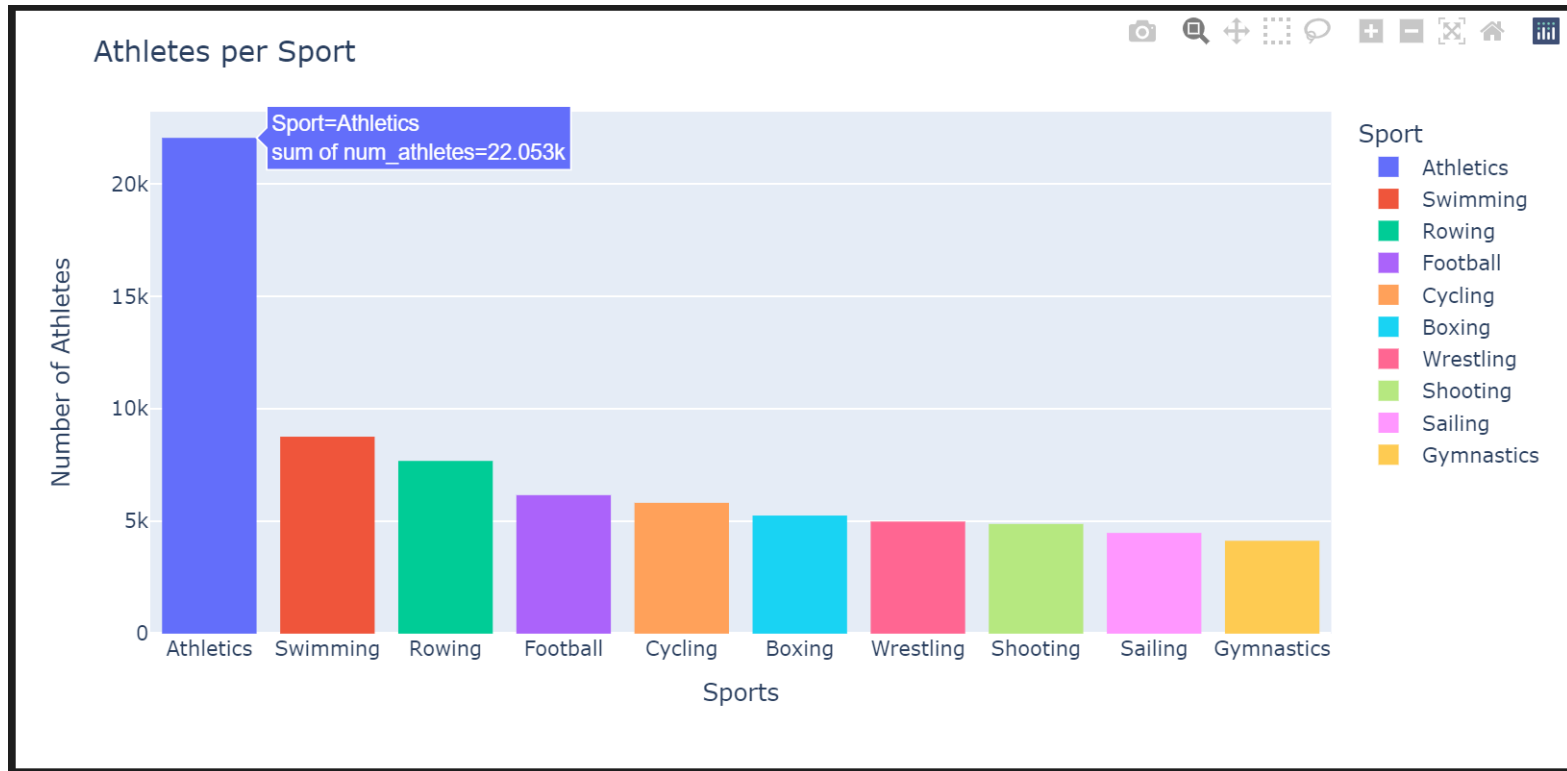Athletes per team. | Athletes per country.

USA had the most athletes participating by a large margin, and the overall number of athletes was very unevenly distributed among countries.

Findings – Most played sport

Result of Hypotheses

- There are indeed many more male athletes compared to female. 196564 male, 74522 female.

- The age distributions varies very slightly among most countries. Most athletes were between 25 and 30 years old.

- The number of athletes per country varied greatly from 18853 athletes all the way to 1.

- USA had the most athletes participants overall, the most athletes per team, as well the most medals and gold medals.

- Finally, the sport with the most participants was Athletics by a large margin, followed by Swimming, Rowing and Football.

Recommendations

- The National Olympic Committee from each country should advocate for gender equality and encourage more female athletes to participate

- More international participation should be encouraged as well, USA has by far the most participants while certain countries are missing.

- Other disciplines and/or categories could be introduced to allow older/younger participants to take part in the Olympics as most participants are unlikely to be eligible past 30 years old.