

Information Visualization

CHECKPOINT I: Visualization Proposal

G01-A

1. Domain

We have a big amount of data regarding the victories and podium positions of athletes in various sports, throughout the editions of the Olympic Games. We want to give that data some meaning that makes sense to the human eye, to learn things such as which countries are best at certain sports and how they compare, in general, over the years.

2. Dataset

We collected a spread sheet with thousands of entries, containing podium finishes of athletes in each Olympic sport, and the country they represented, from the first edition of the Olympic Games in 1896 until 2008. The original chunk of data was obtained from a spread sheet made available in an article by The Guardian. We may also relate the amount of medallists a country has to its population (only since 1960), using another spread sheet on the World Bank website.

Article: <http://www.theguardian.com/sport/datablog/2012/jun/25/olympic-medal-winner-list-data#data>

Olympics: https://docs.google.com/spreadsheets/d/1zeeZQzFoHE2j_ZrqDkVJK9eF7OH1yvg75c8S-aBcxaU/edit

Population: <http://data.worldbank.org/indicator/SP.POP.TOTL?page=6>

3. Tasks to be supported

- 1 – Browse – display the countries with the most gold medallists in total in a given year.
- 2 – Identify – show the country with the most medallists in Judo of all time.
- 3 – Locate – show the position of the country in the overall standings.
- 4 – Explore – using the derivative variable $n^{\circ}\text{medallists}/n^{\circ}\text{population}$, display the countries with the highest coefficient.
- 5 – Compare – show the medals each country won.

4. Example Questions (matching the supported tasks)

- 1 – What countries had the most gold medallists in the first games, in 1896?
- 2 – What country has the most medallists in Judo?
- 3 – What are the standings of the USSR in 1964?
- 4 – See the countries with the most medallists per capita in 2008.
- 5 – How do the USSR and Russia's cumulative scores compare?

5. Data Sample

(from “all_medallists.csv”):

City	Year	Sport	Discipline	Athlete	NO	Gender	Event	Event_gender	Medal
Athens	1896	Aquatics	Swimming	HAJOS, Alfred	HUN	Men	100m freestyle	M	Gold
Athens	1896	Aquatics	Swimming	HERSCHMANN, Otto	AUT	Men	100m freestyle	M	Silver
Athens	1896	Aquatics	Swimming	DRIVAS, Dimitrios	GRE	Men	100m freestyle for sailors	M	Bronze
Athens	1896	Aquatics	Swimming	MALOKONIS, Ioannis	GRE	Men	100m freestyle for sailors	M	Gold
Athens	1896	Aquatics	Swimming	CHASAPIS, Spiridon	GRE	Men	100m freestyle for sailors	M	Silver
Athens	1896	Aquatics	Swimming	CHOROPHAS, Efsthios	GRE	Men	1200m freestyle	M	Bronze
Athens	1896	Aquatics	Swimming	HAJOS, Alfred	HUN	Men	1200m freestyle	M	Gold

(from “population.csv”):

Country Name	Country Code	Indicator Name	Indicator Code	1960	1961	1962	1963	1964	1965	1966	1
Aruba	ABW	Population, total	SP.POP.TOTL	54208	55435	56226	56697	57029	57360	57712	