Group 1 Information Visualization Report

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# INTRODUCTION

How do the countries that participated in the Olympic Games stand against each other concerning the medals they achieved through the years? Do countries with a greater population also get more medals? How do these standings evolve over time and how do they accumulate in a certain amount of years?

We knew there was data to answer how many medals a country scored for a certain sport in a certain year, and we did find a solution that did that, on the Internet. But we wanted to go a bit further and be able to make comparisons, not just for one sport, not just for one year at a time, and not just counting one or all kinds of medals. So we went further and now we could know, as an example, if Russia had more or less gold and silver medals than the Soviet Union.

We also thought of seeing how many medals each country “owned”. That is, for example, how many medals Germany had scored, plus medals Germans playing for other teams scored, minus the ones foreigners playing for Germany scored. Unfortunately, we couldn’t find the nationalities of a big amount of athletes, so we decided to leave this feature alone.

The first tasks we proposed to support were, then:

* Browse – display the countries with the most gold medalists in total in a given year.
* Identify – show the country with the most medalists in a sport of all time.
* Locate – show the position of a country in the overall standings.
* Explore – using the coefficient medals/population (derivative variable), display the countries with the highest coefficient.
* Compare – show the medals each country won.

Our initial thought of showing statistics for “all time” was also changed to a “span of years”, where we chose the minimum and maximum years, making our visualization more flexible.

# RELATED WORKs

When we found our main dataset containing the medal standings, we had only a vague idea of what to do: display bubbles for each country over a few rows, sorted by number of medals.

Then we came across a solution somewhat similar to what we ended up with:

<http://www.nytimes.com/interactive/2008/08/04/sports/olympics/20080804_MEDALCOUNT_MAP.html?_r=0>

We liked most of what we saw, but as we said before, we wanted to go that step further.

The main problems with this solution we found were a few and we wanted to correct most of them in our solution:

* It’s difficult to find a country, even if we know its location in the world, since the bubbles are all jumbled together and are not related to a world map.
* It settled for only the amount of medals in a year and didn’t allow for side-by-side comparisons.

We drew some inspiration from this solution’s bubbles, and the rest of our solution came from our own thoughts.

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# ACKNOWLEDGMENTS

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