Data Vizualization Sample

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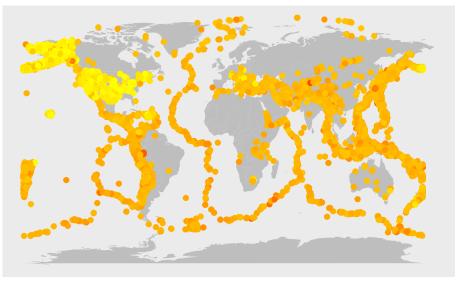
2024-11-18

This document shows some extents made possible with the help of R programming in data visualization.

Showing Location of Earthquakes around the World.

The dots represent the colors, while the colors represent the magnitude of the earthquakes; the redder an earthquake is, the greater it's magnitude. The plot can also show regions colored by specific criteria.

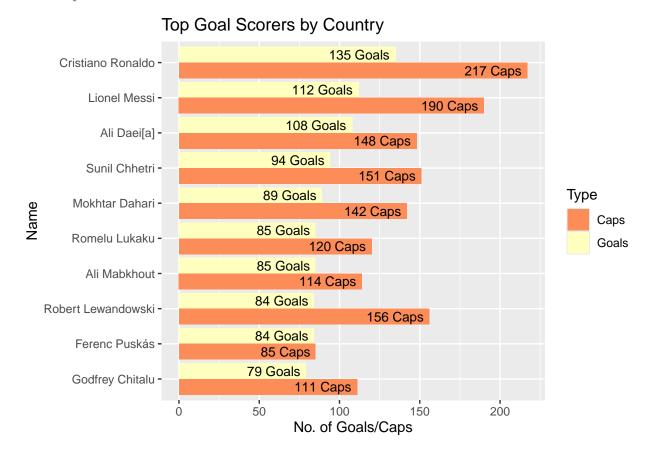
Earthquakes around the World in 2024 (Jan to Sep)





Producing Bar Diagram Using Web Data

Now we use data from the internet to make our plots. We get the data on most goal scorers in soccer by country from Wikipedia. The function html_table() from rvest makes the task very effortless.



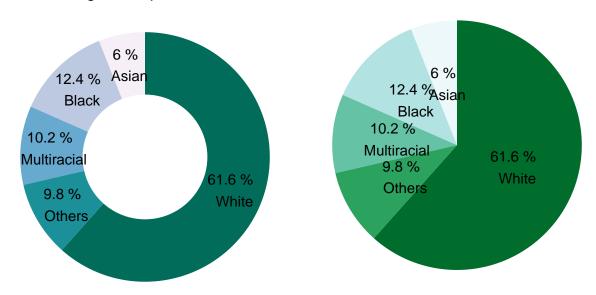
Interpretation of the Chart

From the chart, it becomes evident that Cristiano Ronaldo scored the highest number of goals, totaling 135. The plot also shows he is the one having played the maximum number of matches (217 caps). The adjacent bars reveal how the number of goals compare with number of caps. It becomes immediately clear that Ference Puskas gets the credit of the highest scoring rate (84 goals in 85 matches). As a consequence, we may in fact need to plot the scoring rate to see the best performers.

Showing Proportion of People on a Donut/Pie Chart

This is a nicer alternative to Pie Chart, both showing percentage or part of whole.

Races among US Population



Interpretation of the Charts

The plots reveal that most people in USA belong to White race, Black people come second among other. The Asians constitute least number of people.

Methods Used in The Document

The charts in this documents and the document itself are generated within R programming language with the help of Rmarkdown. You can see the source code of this document along with the codes of the chart here (CLICK to see).

An updated (if any) version of this file available here