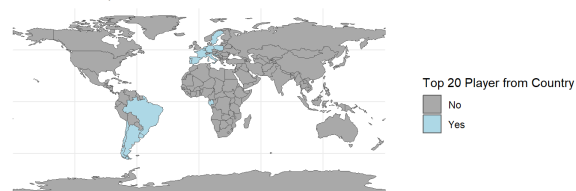
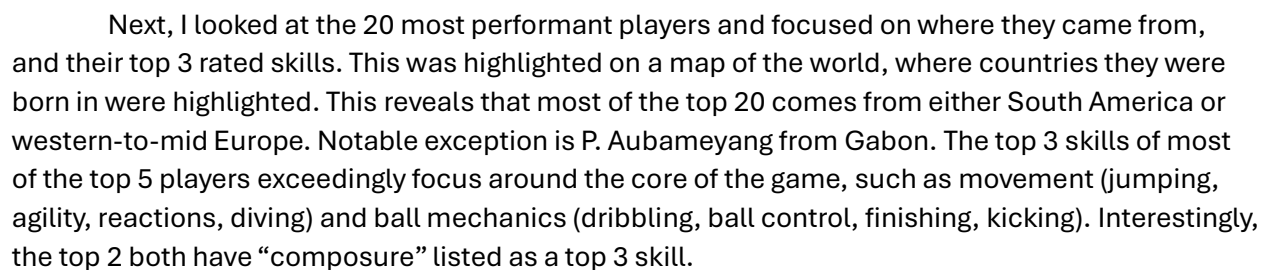
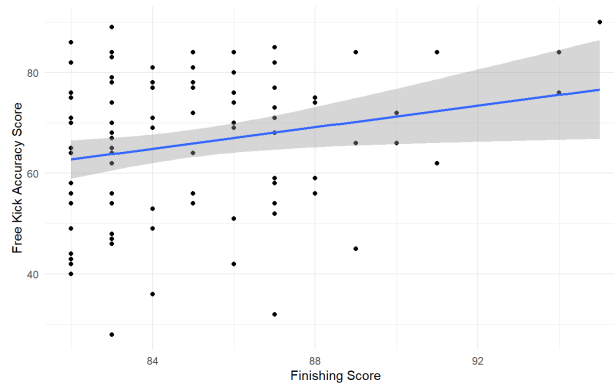


Data Visualization and Reproducible Research mini project 2

Firstly, I looked at the ages and overall performance scores of the 100 most performant players in the game (top 100 overall performance scores) and plotted the data. This revealed that a player's performance scores peak at an age of around 30-32. Using Plotly, I was able to make the plot detail the score, age and name of each player on the graph as a tooltip on mouse-over. This reveals that the top 2 performant players are Cristiano Ronaldo at an age of 32 and a score of 94, and Lionel Messi at age 30 with a score of 93. Tied for 3d place are 30-year olds L. Suarez and Neymar, and 31 year old M. Neuer, with a score of 92.



Lastly, I looked at the assigned Free-Kick accuracy scores and "finishing" scores, where "finishing" in soccer/football is the ability to score goals. I plotted the 100 most performant players for finishing scores by their finishing and accuracy scores, along with the free-kick accuracy score as a function of the finishing score. I found that there is a slight increase in free-kick accuracy as the finishing score increases, which makes sense, as scoring goals often involves kicking the ball at the net.



I did not have any immediate ideas for exactly which charts I wished to make, but I wanted to focus on the top players in the game both due to the sheer number of players (17,000+) and the allure of evaluating the best in the game. Happily, the data itself was already cleaned and organized. To use the world map, I had to rename the "nationality" column to "Name\_long," as this is what the shapeframe uses to identify country names, and use a left-join to combine the football data to the world map.

This data could tell the "story" of the top football players in the league, as EA is using real players to build their rosters. The data could be presented alongside the football culture in their local regions (South America and Europe), and how the players progress as they grow older and hit their 30's, along with the most important skills that got them to their place at the top of the game.

I applied the principles of data visualization and design by keeping everything legible and readable, and choosing colors to maximize the highlighting effect of countries on the world map while keeping things aesthetically pleasing.