

The FIFA Story

Phase 2

Daksh (2022101068)

Jay (2021101035)

Kritika (2021101125)

1 Introduction

We are supposed to work on any 2 of the visualisations as mentioned in the proposal doc ie. Phase 1 of this project.

Proceeding ahead with visuals that help us understand information regarding the previous years datasets as well as making different analysis of strategies & analysis of a couple of selected players based on their filed movements too.

We are intending to build the project as a story-line for FIFA that builds on a plot and finally climaxes into a conclusion, which is without doubt one of many!

2 Dataset Description

The dataset chosen has 3 different subsets in it. There are 3 csv files within, namely:

- **World Cup Matches** : *contains columns for WC matches with datapoints like year, date-time, stage, stadium, city, home team, away team, goals for both teams, win conditions if any, half time scores, referees, round IDs and initials for both teams*
- **World Cup Players** : *it is about data related to all the players who have ever participated in the WC with columns like round ID, match ID, team they belong to, their coach, line-up, shirt number, player name, position and event*
- **World Cups** : *this is about the world cups that have been conducted containing info like the year, host country, WC winner of that year, runners-up, third & fourth place positions, goals scored, qualified teams, matches played, attendance*

2.1 Important sections of Data

There are a few important sections of the data sets that will be used more often as they contain more valuable & meaningful info than other parts.

Those are as follows:

- WC Matches details like which match had which winner and at what stage
- Year based data will have more importance as many visualisations can be based on the timeline of FIFA
- Data containing goals scored and attendance for each match are also important as they will provide valuable insights about the nature & popularity of the sport across the different nations
- Relatively, other sections like details about the referees for each match and ground conditions etc. are less important

3 Visualisations & Why

3.1 Visualisation 1 - Choropleth Map

In general, choropleth maps are one of the most effective visualisations and to have them on our side, feasible in accordance with the data such that a meaningful interpretation is realised, makes it a powerful tool overall.

3.1.1 Benefits

- Spatial Data : Showcasing how a particular variable or statistic varies across geographical regions. Clear visual representation of spatial patterns and trends
- Accessibility : They are easy to understand for viewers with varying levels of data literacy
- Integration : They can be combined with other map elements for richer visualizations

3.1.2 Why used here ?

Right of the bat, in FIFA story-telling, we start with the choropleth which shows the world map with all the countries. Hovering over them unveils info about that country's statistics regarding FIFA (till 2014)

eg. *FIFA cups won till 2014, name of the country, etc.*

Although, we are going to add more information to the same.

eg. *total FIFA participated-in by that country and number of FIFA hosted hitherto.*

This choropleth is to give info as below:

- A very quick and brief introduction to all the readers as to which all countries are the most prime participants of FIFA
- Which all countries have not been able to qualify **at all** till date
- Those countries which have been actively hosting the WC over the years
- It also helps realising that some **regions** across the world prefer the sport more than others leading to lesser participation

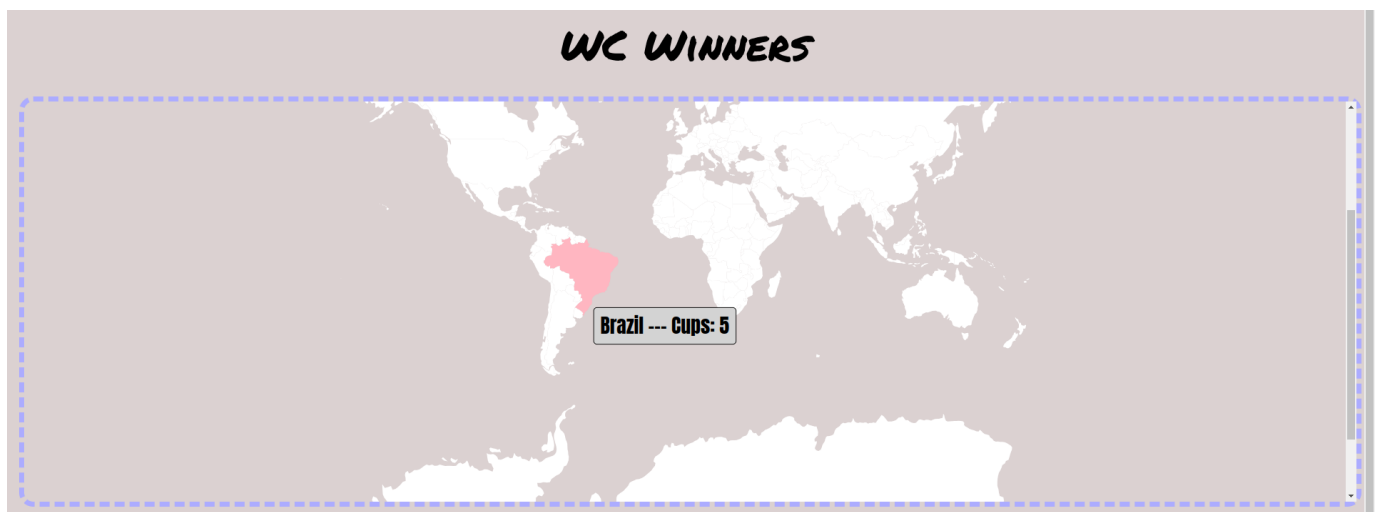


Figure 1: Choropleth Vis

There are some more features that are going to be added in the upcoming phases also. We are moving step by step and planning to develop the base first with even better features added on top of them gradually with the progress that we make.

New features as already discussed above will include different shades of colors used for number of times participated in World Cups as well as the tool-tip also showing the number of times that country has hosted a WC.

Further, we may also go on adding some basic bar chart related to some other parts of the dataset. Those will be brainstormed together in the later stages.

3.2 Visualisation 2 - Race Chart

3.2.1 Benefits

- *Engagement & Dynamism* : Unlike static bar charts, bar races capture attention with their animation. Bars extending and retracting based on data values create a visually dynamic experience, encouraging viewers to actively engage with the data
- *Comparison across time* : Bar races facilitate comparison between categories within the same time-frame. By observing the relative positions and movements of bars throughout the animation, viewers can understand how different categories compare and how their values change over time
- *Space optimization* : Bar races excel at displaying data for many categories within a limited space. Compared to static bar charts with numerous bars, the race format avoids cluttering the visualization, making it suitable for datasets with a large number of categories
- *Highlighting trends & changes* : The race format effectively reveals how data points evolve over time. Viewers can easily see which categories (represented by bars) are rising or falling in value, making it ideal for identifying trends, shifts in dominance and outliers

3.2.2 Why used here ?

Just after having a brief intro to FIFA and its prime focus nations over all these years in the previously shown choropleth, we move the viewer to the next visualisation which dives a little deeper into the world of Football as a sport.

We start talking about goals here and that it indirectly gives us many other interpretations as well. The racing bar chart is about how many goals each country is scoring in each FIFA championship and how do these bars progress across the time in years.

It helps us in interpreting the following:

- Which country has been leading in goal scoring the majority of time
- By controlling the speed and movement of the race bars, we can analyse each and every FIFA and the top 12 goal scoring nations till then and see how certain trends over the globe could have affected the goals
- Racing creates a sense of aesthetic competition in the user's perception about how each country is progressing in goal scoring. Sometimes, as simple as this plot might also create an Adrenaline rush for 2 closely competing nations across time
- We can analyse if after a certain FIFA year, some particular countries might have made significant progress or fell off pretty hard depending on probably some drastic changes made in their playing styles or players themselves

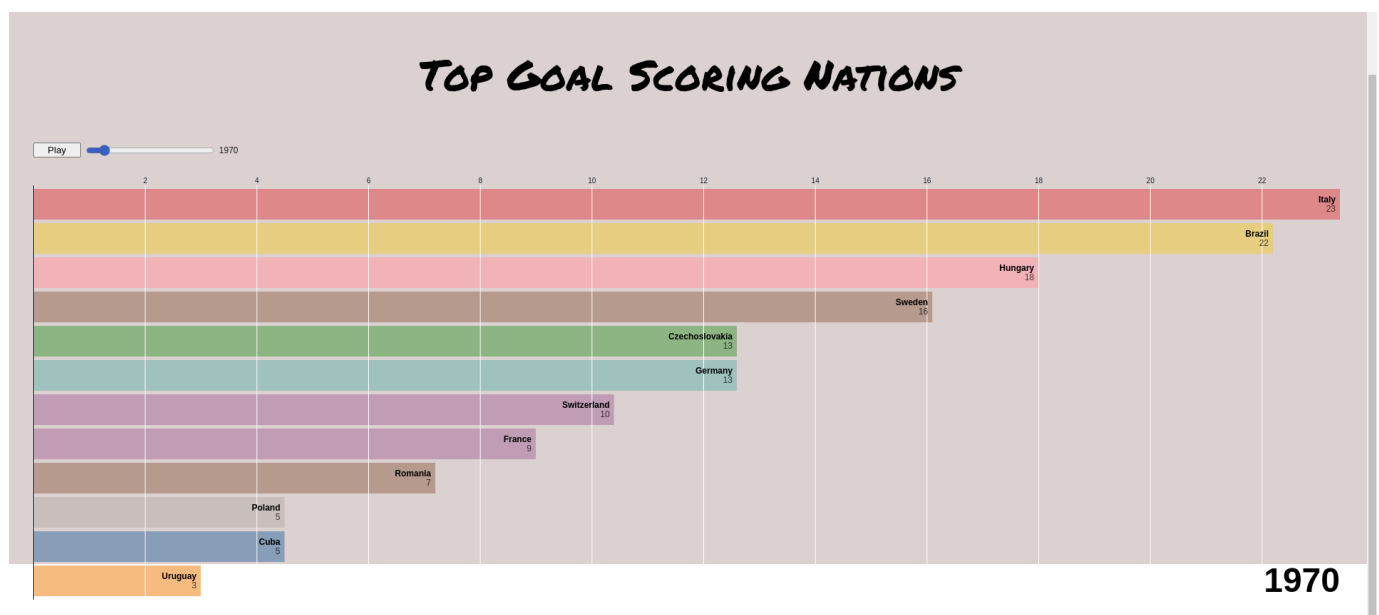


Figure 2: Race Chart Vis

4 Links

4.1 Link to the Website

LINK : https://daxvshah11.github.io/the_FIFA_Story/

4.2 Link to the Video

LINK : <https://youtu.be/LzvhaWta5Q4>

4.3 Link to the GitHub Codebase

LINK : https://github.com/Daxvshah11/the_FIFA_Story