

Milestone 2

Our visualization aims at presenting the previous head-to-head records of the World Cup teams, the information of each team and each player in the context of upcoming 2022 World Cup. Besides, we are willing to tell you a story of Chinese football. You can follow the latest state of our website via [\[link\]](#)

Sketches of the final visualization

In our website, four separate tabs will be contained. The first “Statistics” tab will be composed of 30 national football teams data. More specifically, the current status of each team, as well as each players’ data will be visualized here. Comparisons between different two teams are also provided, including their relationship among wins, draws and losses, the players abilities in the same position of their teams. The second tab “Story Telling” is designed to display the history of Chinese football, the current situation and our expectations for future. In addition, we provide you with “Process Book” and “About Us” sections to help you keep in touch with the progress of our project and our team member information.

In the first tab "Statistics", you will see the dark flags of 30 teams, and when your mouse hovers over the flags, the colors of the flags will lighten.

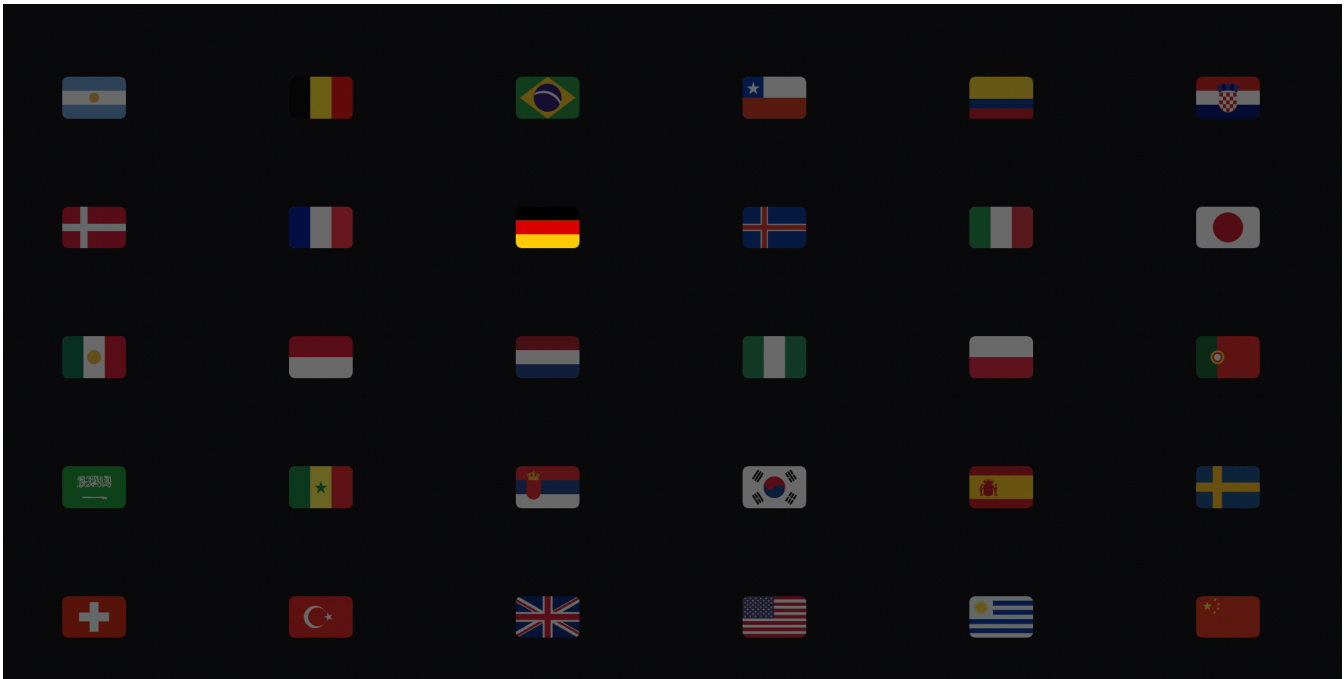


Fig1. Mouse hovering over the German flag in the real website

When you select a team, it will jump to a football pitch on the left of your screen and its historical records against different teams on the right.

You can choose from different formations, with yellow dots representing players.

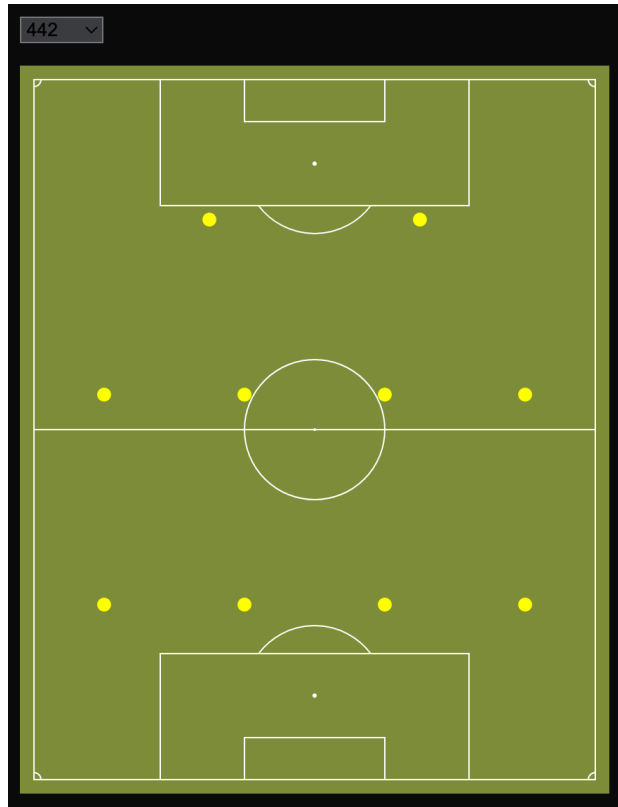
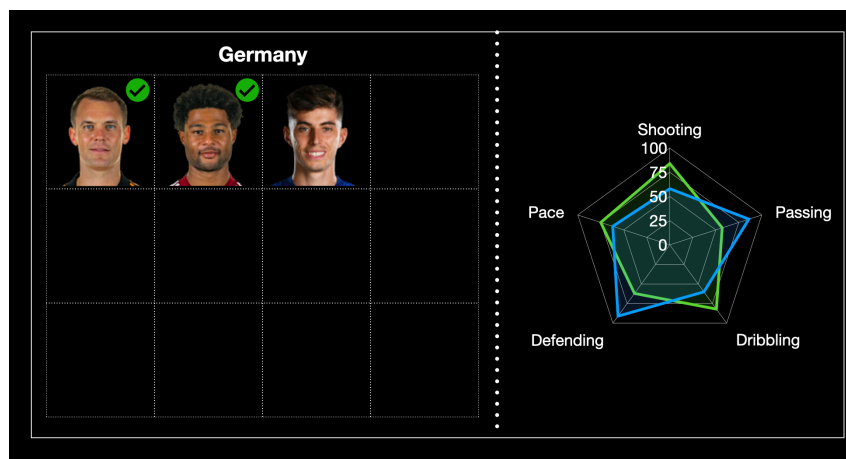


Fig. 2 Football pitch with different formations in the real webpage

It will also show this team's player list below the pitch, and you can select two of the players to compare. The overall style is shown in Figure3, with the list of players on the left and a comparison chart of the players' abilities in various aspects on the right.

If you choose two teams, you will have two player lists. And you can choose two players from each team to compare like we show in Figure 4.



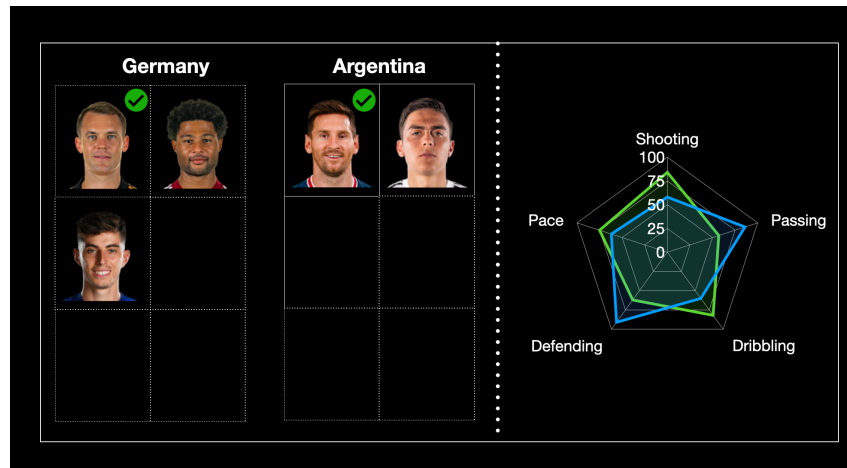


Fig. 3 Sketch of comparison of two players in the same team (left)

Fig. 4 Sketch of comparison of two players from two different teams (right)

In the section of player list, you can see their photos, ability value, position, jersey number and salary. The image below is the real effect we made in the website, it will replace the left part in the two sketches above.

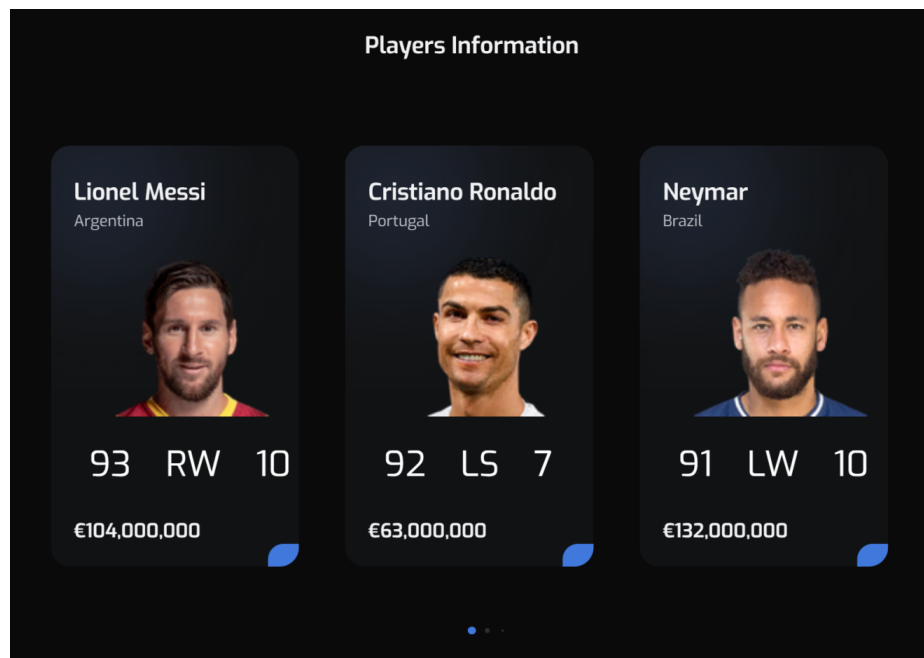


Fig. 5 List of players information in the real webpage

Tools used for each visualization

(lecture mentioned)

We will use lectures 2 and 3 for the javascript aspect, lectures 4 and 5 as a guide on the d3.js library and database manipulation and lecture 7 for the general design of the website. Also, specifically for the Map tab, we will use lecture 8 to select and implement the ideal map and lecture 6 to inform our color scale usage. Finally for the Story-Telling tab, we'll use lecture 13 to help with our storytelling.

The different libraries we will use are D3.js and JQuery for most implementations, ScrollMagic to improve the flow of the storytelling in the "Story Telling" tab, and Leaflet in order to implement the choropleth map

Independent pieces implementation

Core visualization

The focus of our visualization is mainly on the first tab of our websites. In this part, 30 national team icons will be displayed for you to choose. After your selection, you will be directed to the corresponding information page of your selected team, where the specific team information will be shown, including the records against teams from other countries and team formations. You can select different formations of the team, and by clicking on the corresponding position, the player information on that position will also be displayed.

What's more, during the process of displaying the specific team information, it's possible for you to select the other country if you wish to compare these two teams. In this case, a comparative structure is developed to contrast the statistics of two teams. Two different lists of players from these two teams will be shown. After selecting two players from each team in the same position, the corresponding data of them will be visualized at the same time.

Extra ideas enhancing visualization

1. A more complex version of results history for nations competing in the world cup with [expected effect](https://public.tableau.com/app/profile/simon.beaumont/viz/FIFAWorldCup-ResultsHistory/FIFAWorldCup-ResultsHistory)(<https://public.tableau.com/app/profile/simon.beaumont/viz/FIFAWorldCup-ResultsHistory/FIFAWorldCup-ResultsHistory>)
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