Milestone 2: Project Goal

Jingran Su, Yueqing Shen, Zhenyu Zhu
Data Visualization (COM-480)

1. Introduction

The principal intention of our project is to create an integrated platform for European soccer lovers to explore by visualizing the data of European soccer events from season 2008 to season 2016. The platform is proposed to clearly show the soccer events happened in 11 regions in the listed 8 seasons.

The visualization will involve 3 layers and will be divided into two main parts: **fundamental information** and **supplementary creative information** which will be placed on two different layers. The visualization components are listed as follows: a "global" map of 11 participating regions, 11 individual maps of each region, a score table, a selectable season timebox, and marks on the regional map corresponding to each team. The "global" map serves as an entrance to the country which users want to explore for further detailed information. The individual maps of each region along with the marks of each team will help users to get a clear idea of the location of each club. The score table will change according to the season selected. This part will be further demonstrated in Sections 2: **Minimal Viable Product**.

In addition to these fundamental information, other interesting factors will also be added into the supplementary with respect to the team players. If the users are curious about the relationship between team performance and figure statistics of team players, herein we provide another layer containing figure statistics of team players which will be found in detail in Section 3: **Additional interactivity and creativity**.

The project is designed to facilitate users' exploration from three points of view: historical perspective, team perspective and player perspective. From these different sights, users can really have an insightful discovery when exploring the data. For instance, the rise and fall of the teams can be indicators of interesting historical events or great revolution of a country.

2. Minimal Viable Product

In order to better illustrate the idea of our website, herein we provide a sketch **(Fig. 1)** showing the three layers we would like to construct in our website. On the left, there is a "global" map in the first layer used as a navigator to the country that users are interested in. By clicking a certain region on the map, a corresponding individual map of the selected region will be at your fingertip. Here in the layer 2, the users can explore the data from a historical perspective by choosing different seasons in the selectable box above. The score table of the selected year will be presented with the fundamental information which includes the geographical location, points (Pts), play (P), Win/Draw/Lose (W/D/L), goals scored/goals against (GS/GA) of each team, where users can view the events from a team perspective.

The marks on different areas in the individual map can guide users to the layer 3 where detailed information on team players lies by clicking on the name of the team in the floating box. The users

can obtain player information such as the average weight, height, age and even preferred foot of players participating in the selected season. Meanwhile, on layer 3, we will also post the star player of the team in the season from a comprehensive evaluation of factors such as FIFA scores and performance.

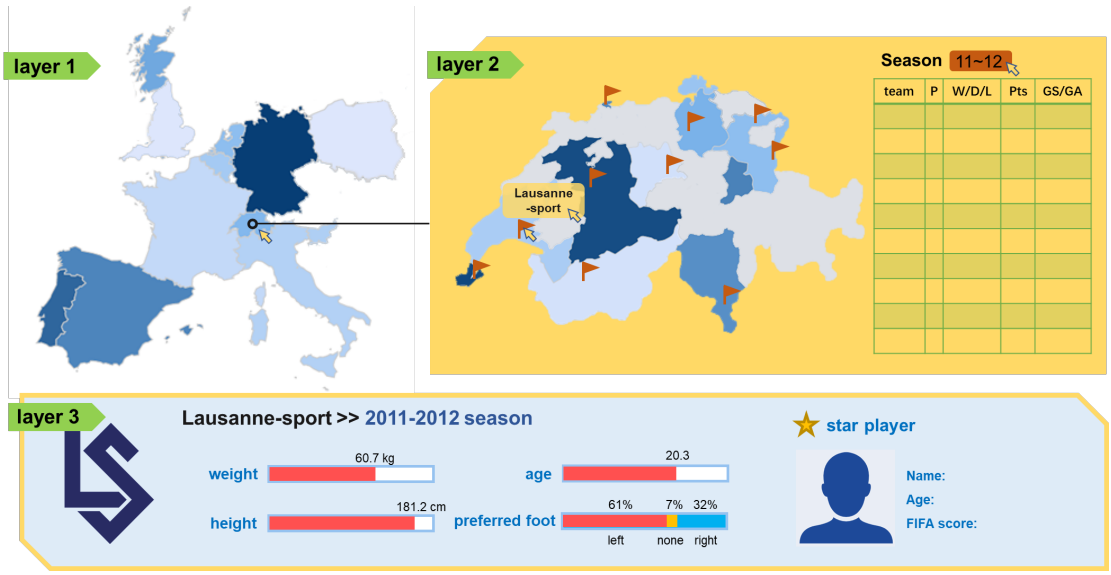

Fig. 1 Proposed website after visualization

3. Additional interactivity and creativity

In order to provide the users with more interactivity and creativity, more efforts will be made on website design and creative data analysis. First, the regions on the map will appear in light color when selected compared to the darker color when unselected to involve the users more interactively. Moreover, when the cursor is placed over the flag mark on the regions, there will be a floating box with the team's name for more convenient searching.

Moreover, we plan to involve more interesting blocks if there's still time for both interactivity and creativity. For those who are superfans of some famous players and are concerned about how the lineup of players affect the game results, we can extract the information of players from the original dataset to rank and evaluate. The weight, height, age and goals of a player can also be taken into consideration to give a "competitiveness" score. Users can enjoy more interactions by choosing and matching players into groups to have "virtual competition" and get a prediction of the results of the game.

4. Tools and lectures needed

Lectures about interactions and maps will be needed while the interactive map is proposed to be realized by d3js. Other tools for the rest of the interactions will also be involved such as filtering and brush.