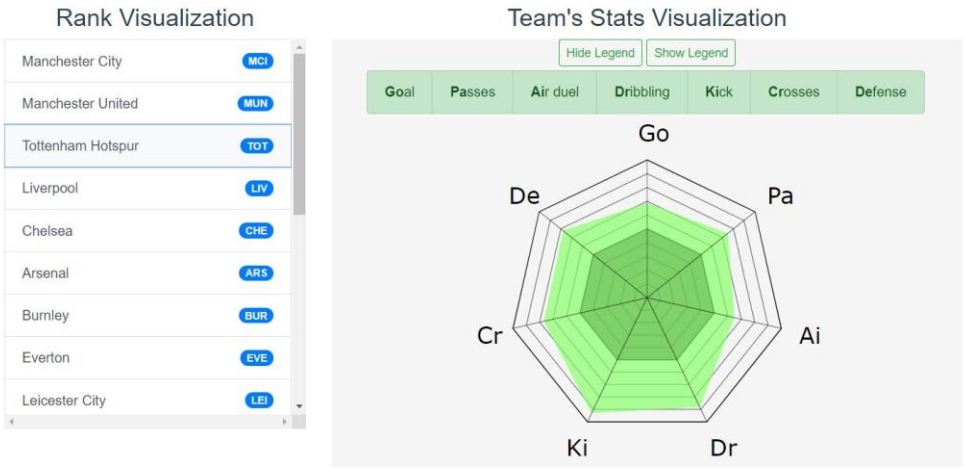
Report Visual Analytics

Visualizzazione squadre



This visualization, based on dimension selected, has the scope to help the team manager to check what are the problem related to his team.

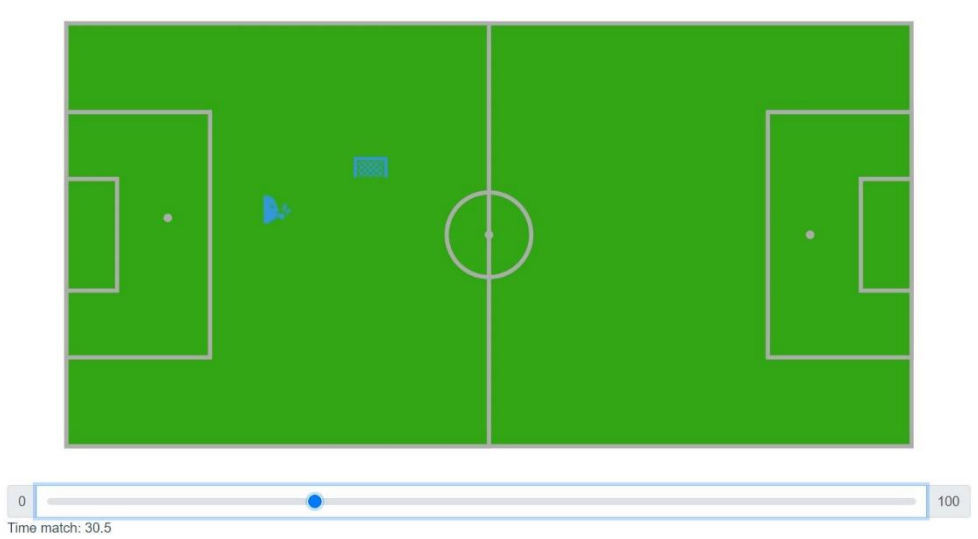
In particular, in the first part of visualization there is the possibility to shift between club team (and all the major leauges available from data) or national team. The gray area of the radar chart indicates 50% of the total, for viewing this graph the Vue.js Radar component was used.

Once the team manager finds his team, he could check his team's stats and understand those skills that are needed to improve. In the second part of the visualization instead is possible to check, regarding different measures, the screen-shot of all the contender inside the same league. The measure considered are: Goal, Number of Passes, Air Duel, Number of Foul, Dribbling, Corner, Cross, Defense.

The data are precomputed inside Anaconda, for each team has been extracted all the metrics available inside the visualization: the reason is not to overload the client side.

Then an interpolation has been applied in order to have all the metrics between values 0 and 100, so that it was possible to compare the teams between them.

Visualizzazione partita



This view shows the data related to a single match. It was designed for a TV viewer or for football programs. It is therefore necessary to select two teams (in the case of a club championship) or directly a match (in the case of national teams). In the first case, in fact, every team has played against every other team, while in the case of Europeans or the World Cup, not all teams compete against each other.

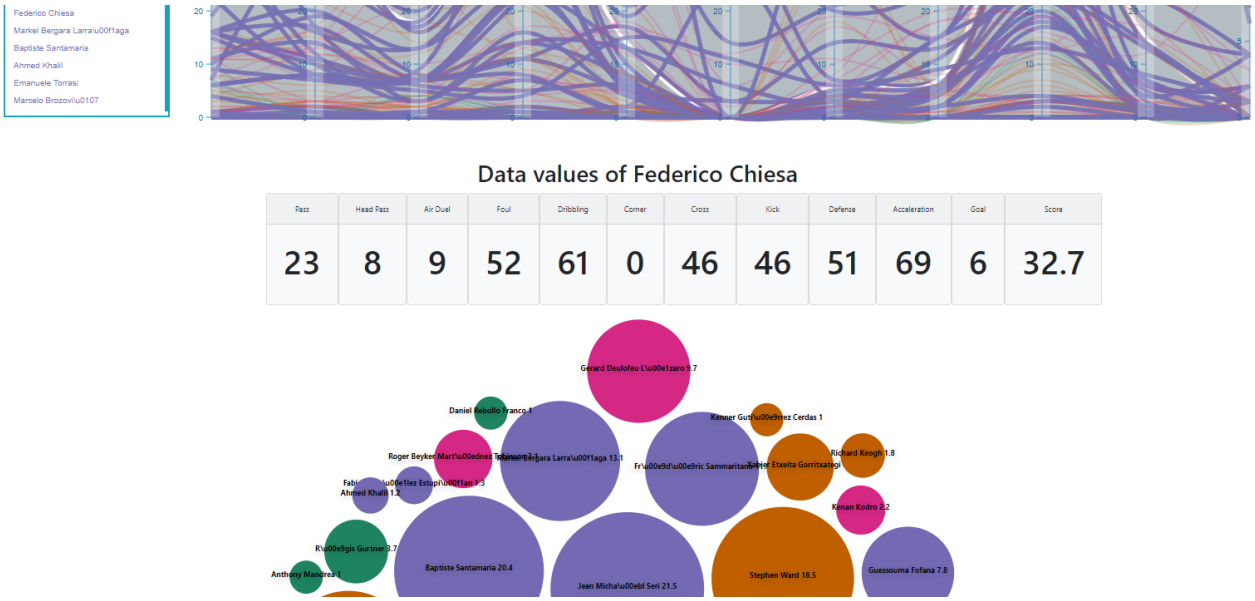
Once the match has been selected, it is possible to view the information on the match in the upper right-hand tab. In the second part it appears the lineup of the match, and the substitutions made.

For each player, goals, own goals, substitutions, yellow and red cards are displayed. Different colors were used to ensure that in addition to the symbol, the color also indicated the type of event.

Finally, in the final part it is possible to scroll a cursor indicating the time of the game, and consequently display some events that occurred during the game: corners, offsides, fouls and shots. The colors in this case relate to the two teams: red for the home team and blue for the away team. The soccer field was designed with the d3 library.

Not all events are displayed, as the files containing all the events would have been too large for a fetch executed on page loading (whereas matches and events are very large files). In particular the file events have been filtered with a python script, eliminating many secondary events.

Visualizzazione partita



This visualization, based on measure selected, has the scope to help the D.S. manager to check what are the football player that have a certain skill. In particular this is for market reasons, because every D.S. has the possibility to check what are the players that the team need. The Crossfilter library was used to filter the data

In the first part of the visualization there is the table in which we have all the possible measure over which we can filter players, with a list that let the viewer see who the players in that specific measures' ranges are.

Clicking over a name inside the list will render on card on bottom the exact values of the player in all the measures.

In the second part of visualization there is also the bubble chart which display all players in different size of bubbles based on player score (precomputed). This has the aim to improve in a visual way the research of the best player inside all the other obtained by the list. In the visualization there are 4 kinds of colours based on role: GoalKeeper, Defense, Midfielder, Forward.

There is a limit of 50 players shown in the list and in the bubble chart due to display problems. In fact, if the range of the selected values is very wide, the number of players shown would be very large.