

Assignment 2 Proposal

Dataset

I collected Season 2021-2022's football team statistics from kaggle. The datasets are:

- 2021-2022 UEFA Champions League(UCL) and English Premier League(EPL) Players Data
- 2021-2022 EPL & Spain La Liga & Italy Series A Teams Data

Players data contains statistics including players attacking(shooting, dribbling, offsides, etc.), defending(tackles, header, etc.), distribution(passing, crossing, etc) behaviours.

Teams data contains statistics of teams goal and assist(actual and expected), pass, distance covered, fouls, red/yellow cards records.

Background & What I plan to do

In European football area, UEFA Champions League are absolutely the best cup competition(from quality & rating & profit), while these years, teams in England seems dominate teams in Spain, Italy & German in performances.

Can we find reasons behind using players & teams statistics? Are their advices for teams in Spain & Italy to improve themselves in tactics or in signing? (I omit German League because of their 50+1 policy restrict their signing).

I plan to use the dashboard to visualize players behaviors last season, finding the outstanding players in different positions last season, and display whether they have some features in common(like passing habits, distance cover, etc.).

For teams data, I want to visualize tactical characteristics for teams in England & Spain & Italy. Also, matching whether there is suitable players that fits Spain & Italy teams' tactics or can make up their deficiencies.

Story I plan to tell

1. A summary of last season's UEFA Champions League, showing players who performed best in different positions.
2. Data visualization for last season's Premier League players data, compare it with champions leagues, finding whether there are similarity & differences between two competitions, trying to find the trend in current football.
3. For Italy and Spanish team, analyze their tactical, help them finding potential suitable signings.

So I plan to show last season's European football players summary in the best cup competition(UCL) and best national league(EPL).

For Spain and Italy, the quality of leagues are falling, is this because teams tactic? Or is it because they lack good signings? For each team, what signings may fit their tactics most or can improve their behaviors.

Target Audience

All football fans who want to see a summary of last seasons European football data or want to see if there are trends in current football.

Spanish & Italy football fans who are interested in their teams tactics, or which potential signing fits the teams tactics, or what aspects can their teams improve.

Similar visualisations

Many companies in Europe use data to analyze players & teams performances, some with data visulization, for example:

- Whoscored (eg: <https://www.whoscored.com/Teams/52/Statistics/Spain-Real-Madrid>)
- Enetplse (eg: <https://epanel.enetsites.com/widgets?sport=soccer>)
- Opta (eg: <https://www.statsperform.com/team-performance/football-performance/match-analysis/>)

Some visulization in other sport, like golf: <https://shiny.rstudio.com/gallery/masters.html>

Medium to develop

A Shiny app.

Wireframe (drawn using draw.io)

European football data visualization (Season 2021-2022)

http://

Players Stat

- UCL
- EPL
- Compare

Teams Stat

- EPL
- La Liga
- Serie A

Signing Suggestions:

- La Liga
- Serie A

Players Statistics: UEFC Championship League

Attacking

Defence

Distribution

Goalkeeping

Shooting:

Dribbling:

Expect Goals:

Expect Assist:

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http://

Players Stat
- UCL
- EPL
- Compare

Teams Stat
- EPL
- La Liga
- Serie A

Signing
Suggestions:
- La Liga
- Serie A

Teams Statistics: English Premier League

Single Team Stat

West Ham United

Total Teams

Goals

Passing:

Distance cover:

Foul:

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http://

Players Stat
- UCL
- EPL
- Compare

Teams Stat
- EPL
- La Liga
- Serie A

Signing
Suggestions:
- La Liga
- Serie A

Suggestions for teams: La Liga

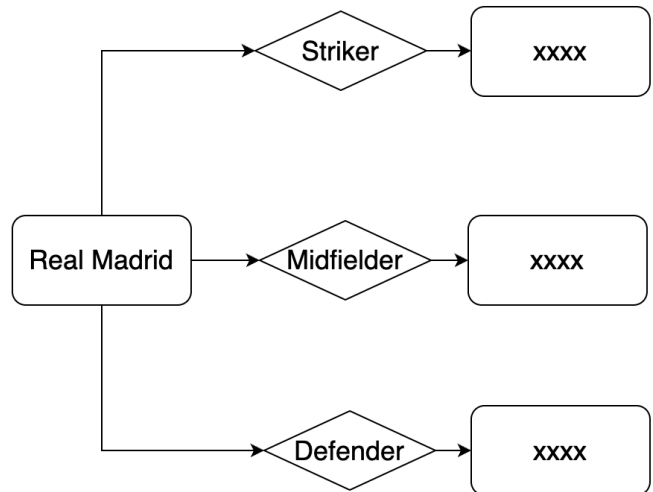
Select Team

Real Madrid

Team data in hexagon

Tactical weak & strong points

Suitable Signings:



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