

# Project Scoping

## English Premier League 2024/25 Player and Team Performance Analysis

### Business Problem

The English Premier League is one of the most competitive and popular football leagues in the world. Millions of people watch it every week, following their favourite teams and players closely. Each season, the league produces a huge amount of data, from goals and assists to tackles, passes, and saves.

However, this data is not always easy to understand or use. Many fans want to know which players perform best, how their team is improving, and what areas need more work. The best way to answer these questions is through data analysis that turns numbers into clear insights.

This project will focus on the 2024/25 Premier League season, analysing real statistics to understand player and team performance. The goal is to highlight who performed well, how teams compared, and what factors influenced the final league table, including why some teams achieved success and others were relegated.

### Business Impact

This analysis will help EPL fans follow their teams and favourite players more closely, using real numbers instead of opinions. It will show which players stand out in attack, defence, and creativity, and how their performances affect team success.

Coaches, analysts, and scouts can also benefit from this data to spot top performers and areas that need improvement. For football content creators, it provides accurate statistics to support discussions, rankings, and season reviews.

Overall, this project makes EPL data easier to understand and helps everyone, from fans to professionals, see the game from a new, data-driven point of view.

### Dataset(s)

English Premier League - Player Stats - 24/25

**Strengths:** The data contains 562 players with a rich set of 53 statistical features, offering deep insights into offensive, defensive, passing, goalkeeping, and possession-related metrics.

**Weaknesses:** The dataset only focuses on one season and includes player statistics without match details, like opponents or minutes played. Some factors that affect performance, such as injuries or team tactics, are not included.

## Methods

### Variables and comparisons

- Compare performance across positions and teams

### Explore relationships between:

- Goals and assists by player and team
- Shots and goals by player and team
- Expected goals (xG) and actual goals by player and team
- Passes and successful passes by player and team
- Goals and assists by minutes played to show efficiency
- Tackles, interceptions, and clearances by team
- Saves, high claims, and punches by goalkeepers
- Aerial duels won, ground duels won, tackles, interceptions, clearances by defenders
- Carries and through balls by player and team

## Dashboard

The dashboard will show the best players and teams based on different performance metrics, allowing users to explore and compare results according to their preferences. Fans will be able to select the best player in each position and build their ideal formation for the EPL 2024/25 season.

## Milestones

- Identify characteristics of variables
- Find additional datasets (if needed)
- Clean data
- Create visualisations
- Show relationships between variables
- Create dashboard
- Write the final report

## Timeline

Week	Tasks
Week 1	<ul style="list-style-type: none"><li>• Explore the initial dataset and understand the available variables</li><li>• Clean and prepare data for analysis</li><li>• Identify key characteristics of variables (e.g., offensive, defensive)</li><li>• Plan the analysis scope and envision the final dashboard</li></ul>
Week 2	<ul style="list-style-type: none"><li>• Create visualisations to show relationships between player and team performance metrics</li><li>• Perform comparisons across players, teams, and positions</li><li>• Use tabulation and pivot tables for summary insights</li></ul>
Week 3	<ul style="list-style-type: none"><li>• Develop the interactive dashboard to display player and team insights</li><li>• Summarise findings and write the final project report</li></ul>