1. **Index**

   - **Generated from**: Typically automatically generated as a unique identifier for each row of data in the dataset.
   - **Explanation**: The index acts as a unique identifier for each row, representing a specific record (e.g., a specific player's match performance).

2. **Player**

   - **Generated from**: The player's name is directly taken from the dataset.
   - **Explanation**: The name of the player whose data is being recorded.

3. **# (Jersey Number)**

   - **Generated from**: The player's jersey number is recorded from the dataset.
   - **Explanation**: The player's jersey number on the field.

4. **Nation**

   - **Generated from**: The country the player represents is recorded from the dataset.
   - **Explanation**: The player's nationality or country of representation.

5. **Pos (Position)**

   - **Generated from**: The position in which the player plays (e.g., Forward, Midfielder, Defender, Goalkeeper).
   - **Explanation**: The player's position on the field.

6. **Age**

   - **Generated from**: The player's age, usually calculated based on the player's birthdate.
   - **Explanation**: The player's age.

7. **Min (Minutes Played)**

   - **Generated from**: The total number of minutes the player played during the match.
   - **Explanation**: The total number of minutes the player was on the field.

8. **Gls (Goals Scored)**

   - **Generated from**: The total number of goals scored by the player during the match.
   - **Explanation**: The number of goals the player scored in the match.

9. **Ast (Assists)**

   - **Generated from**: The number of assists the player provided during the match.
   - **Explanation**: The number of assists (passes leading to goals) the player made.

10. **PK (Penalty Goals)**

    - **Generated from**: The number of goals scored from penalties.
    - **Explanation**: The goals scored from penalty kicks.

11. **PKatt (Penalty Kick Attempts)**

    - **Generated from**: The number of penalty kicks the player attempted during the match.
    - **Explanation**: The total number of penalties the player tried to take.

12. **Sh (Shots Taken)**

    - **Generated from**: The total number of shots the player attempted.
    - **Explanation**: The total number of shots on goal taken by the player during the match.

13. **SoT (Shots on Target)**

    - **Generated from**: The number of shots on target the player took.
    - **Explanation**: The number of shots that were on target, meaning they would have scored if not blocked or saved.

14. **CrdY (Yellow Cards)**

    - **Generated from**: The number of yellow cards the player received.
    - **Explanation**: The total yellow cards issued to the player during the match.

15. **CrdR (Red Cards)**

    - **Generated from**: The number of red cards the player received.
    - **Explanation**: The total number of red cards the player was issued during the match.

16. **Touches**

    - **Generated from**: The total number of times the player touched the ball.
    - **Explanation**: The number of times the player made contact with the ball during the match.

**17. Tkl (Tackles)**

- **Generated from**: The number of tackles the player made.
- **Explanation**: The total number of successful tackles the player completed.

**18. Int (Interceptions)**

- **Generated from**: The number of interceptions the player made.
- **Explanation**: The number of times the player intercepted the ball from an opponent.

**19. Blocks**

- **Generated from**: The number of shots or passes blocked by the player.
- **Explanation**: The total number of defensive actions where the player blocked the ball to prevent a goal or assist.

**20. xG (Expected Goals)**

- **Generated from**: A statistical model that calculates the probability of a shot resulting in a goal, based on factors like shot location, angle, and type.
- **Explanation**: The expected goals value, which represents the quality of chances created by the player.

**21. npxG (Non-Penalty Expected Goals)**

- **Generated from**: Similar to xG but excluding penalties.
- **Explanation**: The expected goals without considering penalty kicks.

**22. xAG (Expected Assists)**

- **Generated from**: A statistical model that calculates the probability that a player's pass leads to a goal, based on factors like pass type, distance, and positioning.
- **Explanation**: The expected assists, which represents the likelihood of a player's pass leading to a goal.

**23. SCA (Shot-Creating Actions)**

- **Generated from**: The number of actions (passes, dribbles, etc.) that lead to a shot being taken.
- **Explanation**: A count of the actions a player made that directly led to a shot on goal.

### 24. GCA (Goal-Creating Actions)

- **Generated from**: The number of actions that directly lead to a goal being scored.
- **Explanation**: A count of the actions a player made that directly contributed to a goal being scored.

### 25. Cmp_x (Completed Passes)

- **Generated from**: The total number of successful passes made by the player.
- **Explanation**: The number of passes successfully completed by the player.

### 26. Att_x (Attempted Passes)

- **Generated from**: The total number of passes attempted by the player.
- **Explanation**: The total number of passes made by the player, regardless of whether they were successful.

### **27. Cmp%_x (Pass Completion %)**

- **Generated from**: The percentage of passes completed successfully out of all attempted passes.
- **Explanation**: The pass completion percentage, calculated as (Cmp_x / Att_x) * 100.

### 28. PrgP (Progressive Passes)

- **Generated from**: Passes that move the ball significantly forward, typically by a set number of yards.
- **Explanation**: The number of passes that significantly advance the ball towards the opponent's goal.

### 29. Carries

- **Generated from**: The number of times the player carried the ball forward.
- **Explanation**: The total number of times the player carried the ball to gain ground.

### 30. PrgC (Progressive Carries)

- **Generated from**: Carries that move the ball significantly forward.
- **Explanation**: The number of times the player moved the ball forward significantly with their dribbles.

31. **Att_x (Dribbles Attempted)**

- **Generated from**: The number of times the player attempted a dribble.
- **Explanation**: The number of dribbles attempted by the player.

32. **Succ (Dribbles Successful)**

- **Generated from**: The number of successful dribbles by the player.
- **Explanation**: The number of dribbles that successfully beat an opponent.

33. **SoTA (Shots on Target Against)**

- **Generated from**: The number of shots on target faced by the goalkeeper.
- **Explanation**: The number of shots on target the goalkeeper has faced.

34. **GA (Goals Against)**

- **Generated from**: The number of goals the goalkeeper has conceded.
- **Explanation**: The total goals the goalkeeper has conceded during the match.

35. **Saves**

- **Generated from**: The total number of saves made by the goalkeeper.
- **Explanation**: The total number of shots that the goalkeeper successfully saved.

36. **Save% (Save Percentage)**

- **Generated from**: The percentage of shots saved by the goalkeeper.
- **Explanation**: The save percentage, calculated as (Saves / (Shots on Target)) * 100.

37. **PSxG (Post-Shot Expected Goals)**

- **Generated from**: A measure of the quality of a goalkeeper's saves based on shot placement.
- **Explanation**: Expected goals value based on the location and quality of the shots faced by the goalkeeper.

38. **Cmp_y (Completed Goalkeeper Passes)**

- **Generated from**: The number of successful passes made by the goalkeeper.
- **Explanation**: The total number of passes successfully completed by the goalkeeper.

### 39. Att_y (Attempted Goalkeeper Passes)

- **Generated from**: The total number of passes attempted by the goalkeeper.
- **Explanation**: The total number of passes attempted by the goalkeeper.

### **40. Cmp%_y (Goalkeeper Pass Completion %)**

- **Generated from**: The pass completion percentage for the goalkeeper.
- **Explanation**: The percentage of successful passes out of all passes attempted by the goalkeeper.

### 41. Att (GK) (Goal Kicks Attempted)

- **Generated from**: The number of goal kicks attempted by the goalkeeper.
- **Explanation**: The total number of goal kicks taken by the goalkeeper.

### 42. Thr (Goalkeeper Throws)

- **Generated from**: The total number of throws made by the goalkeeper.
- **Explanation**: The total number of throws made by the goalkeeper to restart play.

### 43. Launch% (Goalkeeper Launch Percentage)

- **Generated from**: The percentage of long passes attempted by the goalkeeper.
- **Explanation**: The percentage of passes from the goalkeeper that are long, typically aiming to distribute the ball quickly.

### 44. AvgLen (Average Pass Length)

- **Generated from**: The average distance covered by passes made by the player or goalkeeper.
- **Explanation**: The average length of passes made.

### 45. Opp (Opponent Pressures)

- **Generated from**: The number of times the opponent put pressure on the player.
- **Explanation**: The total number of times the opponent applied defensive pressure.

### 46. Stp (Successful Pressures)

- **Generated from**: The number of successful defensive pressures applied by the player.

- **Explanation**: The number of times the player successfully pressured an opponent into losing possession.

**47. Stp% (Successful Pressure %)**

- **Generated from**: The percentage of successful pressures made by the player.
- **Explanation**: The percentage of successful pressures, calculated as (Stp / Opp) * 100.

**48. #OPA (Opponent Offensive Actions)**

- **Generated from**: The number of offensive actions made by the opponent.
- **Explanation**: The total number of offensive actions (e.g., dribbles, passes) made by the opponent.

**49. AvgDist (Average Distance Covered)**

- **Generated from**: The average distance covered by the player during the match.
- **Explanation**: The average distance the player ran during the game.

**50. Home**

- **Generated from**: A manually added column indicating if the game is a home game.
- **Explanation**: A flag indicating whether the player's team is playing at home (usually `1` for home and `0` for away).

**51. Game_id**

- **Generated from**: A unique identifier for the game, likely assigned by the code.
- **Explanation**: A unique identifier for the match in question.t