CS-586 Introduction to Database Management Systems

Project – ER Diagram and Relational Schema

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Topic: - IPL Dataset

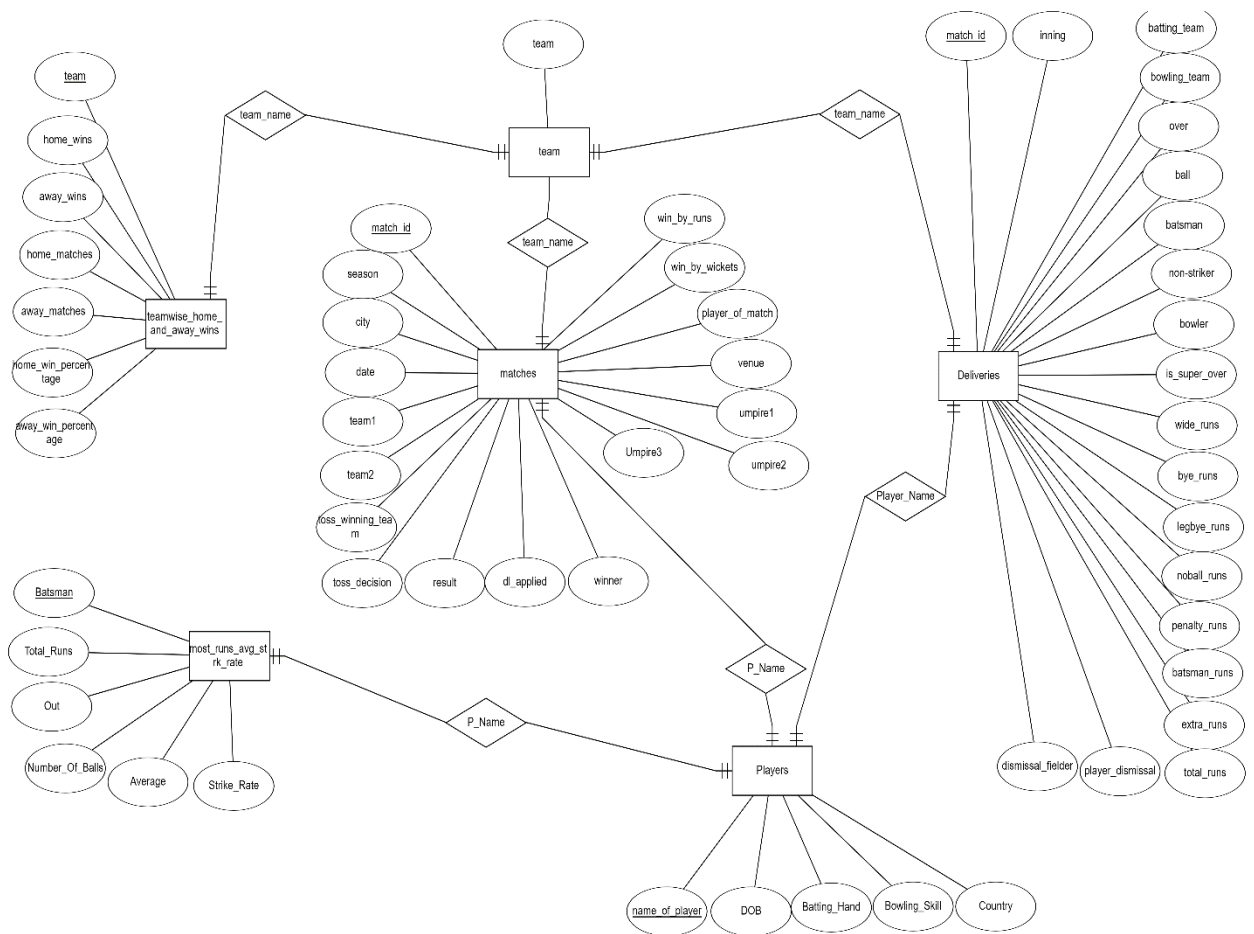The given dataset can be broadly classified in the following tables: -

1) Deliveries
2) Matches
3) Most_runs_average_strikerate
4) Players
5) Teams
6) Teamwise_home_and_away_wins

These tables are majorly connected through these two attributes:-
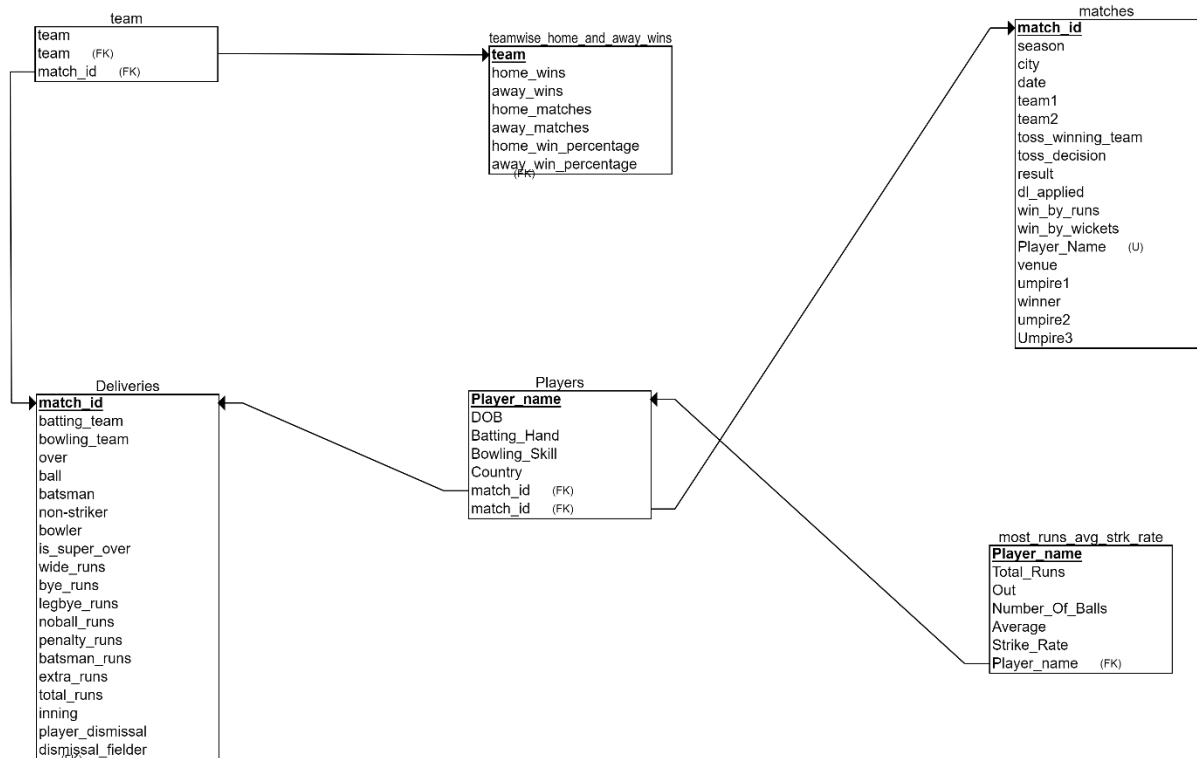
1) Team name
2) Player_name

These two attributes form unique combinations which can be used to access all the information in all the tables given above

This can be seen from the ER diagram given below: -

The ER diagram identifies all the relationships between the tables.

The relational schema for the tables is given below: -

team
team
team (FK)
match_id (FK)

teamwise_home_and_away_wins
<u>**team**</u>
home_wins
away_wins
home_matches
away_matches
home_win_percentage
away_win_percentage
(FK)

matches
<u>**match_id**</u>
season
city
date
team1
team2
toss_winning_team
toss_decision
result
dl_applied
win_by_runs
win_by_wickets
Player_Name (U)
venue
umpire1
winner
umpire2
Umpire3

Deliveries
<u>**match_id**</u>
batting_team
bowling_team
over
ball
batsman
non-striker
bowler
is_super_over
wide_runs
bye_runs
legbye_runs
noball_runs
penalty_runs
batsman_runs
extra_runs
total_runs
inning
player_dismissal
dismissal_fielder
(FK)

Players
<u>**Player_name**</u>
DOB
Batting_Hand
Bowling_Skill
Country
match_id (FK)
match_id (FK)

most_runs_avg_strk_rate
<u>**Player_name**</u>
Total_Runs
Out
Number_Of_Balls
Average
Strike_Rate
Player_name (FK)

In the relational schema, the primary keys are underlined and the Foreign keys are marked as (FK) in the tables.

The different relations can also be seen through the arrows directed from and to the connecting and connected tables.