

Project Scenario Description

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Project Title

Indian Premier League (IPL) Database Management System

Scope of the Database

The IPL Database Management System aims to provide a structured and efficient way to store, retrieve, and analyze data related to the Indian Premier League. The database will serve multiple users, including fans, analysts, team managers, and Administrators, offering insights into player performances, team statistics, match details, and historical trends.

1.Objective

- Design and implement a database for IPL management.
- Store details of teams, players, matches, stadiums, and statistics.
- Provide analytics and reports for different stakeholders.

2.Application Users

- General Users (View match details, teams, and players)

- Team Managers (Manage team details, player acquisitions)
- Administrators (Manage IPL schedules, teams, and reports)

3.Use Cases

- General Users: View match schedules, team standings, player statistics, and historical data.
- Team Managers: Register players, manage squads, view team performance reports.
- Administrators: Manage the IPL season, schedule matches, oversee financial reports.

4.Reports

- For General Users: Match results, top players, points table, head-to-head stats.
- For Team Managers: Squad performance, player form, financial transactions.
- For Administrators: Revenue reports, match attendance, sponsorship earnings.

5.Data Requirements

1. Teams & Players

- Team details (e.g., name, owner, home ground, year of establishment)
- Captain , coach.
- Player details (e.g., name, nationality, role, batting/bowling style)
- Squad composition per season (which players played for which team in each season)

2. Matches , Results & Umpires

- Match schedule and results (e.g., date, time, venue, teams, winner)
- Player performances (e.g., runs scored, wickets taken, strike rate, economy rate)
- Umpires for particular matches

- Toss details (e.g., toss winner, decision to bat/bowl)

3. Venues

- Stadium details (e.g., name, city, seating capacity, pitch conditions)

4. Statistics & Records

- Individual player statistics (e.g., most runs, most wickets, highest score)
- Team statistics (e.g., most wins, highest total score, head-to-head records)
- Awards & milestones (e.g., Player of the Match, Player of the Tournament)

Tentative Purpose & Questions the Database Can Answer

- **Queries for General Users (Fans, Spectators)**

1. Find upcoming matches for a specific team.
2. View the current points table (team standings).
3. Get the top 5 run-scorers (Orange Cap race).
4. Get the top 5 wicket-takers (Purple Cap race).
5. Find head-to-head stats between two teams.
6. View details of a specific match (scorecard, winner, player of the match).
7. Get the list of players in a specific team.
8. Find the highest individual score in the season.
9. Find the best bowling figures in the season.
10. View team-wise highest and lowest scores in the season.

- **Queries for Team Managers (Franchise Owners, Coaches, Analysts)**

11. View the squad details for a particular season.
12. Get performance statistics of a specific player.
13. Find the best-performing batsman in the team.
14. Find the best-performing bowler in the team.
15. Get win/loss records of the team in a particular venue.
16. View financial transactions related to player salaries.

17. Find the most consistent performers in the team (based on average performance).
18. Get the list of injured or unavailable players.
19. View a summary of team performance across multiple seasons.
20. Find the most successful captain in IPL history

- **Queries for Administrators (IPL Organizers, Officials)**

21. View the complete match schedule for the season.
22. Get details of stadiums and their seating capacity.
23. Find the most-watched matches (based on viewership data).
24. Get reports on team-wise earnings from merchandise sales.
25. Find the total number of matches played in a specific stadium.
26. View umpire details and match records.
27. Get a list of controversial or disputed match decisions.