Project Report- DBMS Assignment 4

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Project Description

Our project is a database containing information about teams and players in IPL, with a graphical user interface built using JavaFX. The database consists of five tables, namely Team, Player, Stadium, Fixtures, and Points.

- Team contains information about team, such as unique team id, team name, captain and stadium. Primary key for this table is the team id, which can uniquely identify a team in the table.
- Player contains information about players in the tournament, such as player id, team, role in the team (as a batsman, bowler, or wicketkeeper), number of wickets taken and runs scored. Primary key in the table is player id.
- Stadium contains information about the stadium such as city, home team (the team for which this stadium is the home ground), and contact number. Primary key for this table is home team name.
- Fixture contains information about upcoming and played matches, their id, scheduled date, playing teams, stadium and result. Primary key for this table is fixture id.
- Points table is the scorecard for all teams containing team id, points, matches played, won and lost and net run rate. Primary key is team id for this table.

Relational Schema

Team(<u>id</u>,name,captain,stadium)
Player(<u>id</u>,name,team,role,wicket,runs)
Stadium(name,<u>hometeam</u>,city,contact)
Fixture(<u>id</u>,date,hometeam,awayteam,stadium,result)
Points(<u>id</u>,played,won,lost,runrate,points)

Simple queries

- 1. Display entire table input by user
- 2. Find runs and wickets corresponding to a player
- 3. Find fixtures corresponding to either of two teams
- 4. Show the team having least run rate in points table
- 5. Give stadium details of team name input by user
- 6. Give average runs and average wickets in the tournament

Complex Queries

- 1. Find all teams having number of wins greater than the value input by user
- 2. Print number of players in each team
- 3. Show stats of captains of all teams
- 4. Show top run scorer of team name input by user
- 5. Show fixtures in city name input by user
- 6. Show teams which have more wickets than value input by user