Cricket League Management System

We run an international cricket league with teams playing matches and fans following along. We need to collect player info, ticket prices and schedules to increase the popularity of the tournament by generating revenues. Our problem is handling all this data effectively. Our current way of managing cricket data is causing problems. There's too much data to handle, and mistakes are creeping in. Hence, we are designing a simple database to capture all the information including Player's info, capacity of the stadiums, team's history of winning and losing among others.

Undoubtedly designing a database for a cricket league can become complex, so we have added some limitations:

- We are assuming that only 5 teams from the same continent are playing in the league.
- We are assuming that each team plays 4 matches followed by the final of the league.
- The match is being played for 20 overs only.
- We are only collecting the data of runs and wickets for batsmen and bowlers respectively.
- Irrespective of the age group of fans the price of tickets are fixed.
- Only one match per day is scheduled.

Data Requirements:

Players:

- Every player will have their own profile with personal information.

- Each of them will have specific roles (Batsman, Bowler, All-rounder).
- Each of them will have their own performance statistics (for batsmen - runs and bowlers - wickets and all rounders – both runs and wickets).

Teams:

- Every team will have a group of players that will compete with other teams.
- All teams will have their own profile with their name and logo.

Stadiums:

- Seat capacity of the stadium is measured.
- Revenue of the stadium is calculated based on the number of tickets sold.
- Ticket prices of each stadium are calculated.

Fans:

- Fans are categorized as adults or children.
- Home city of the fans are noted.

Match Schedule:

- Each match has a fixed date and a unique match number.
- Time of each match is taken.
- Teams taking part in each match are noted.

Business Goals:

1. At which stadium does the seating reach full capacity during games involving which teams?

2. We can figure out which time of the day is more preferred for scheduling the match.

3. We can figure out which day of the week is more preferred for scheduling the match.

4. Which stadium has generated the most revenue in the league?

5. Which batsman has scored the highest number of runs in the entire league?

6. Which bowler has taken the highest number of wickets in the entire league?