

# **DATABASE MANAGEMENT SYSTEM**



## **MS-IT Summer Internship PC649**

Under Supervision of Prof. P M JAT

Team Members:-

Yash Solanki : 202112028 | Jay Savani : 202112078

Jenish Dhanani : 202112106

## Database Title: Cricket Management System (CMS).

- **About Cricket Management System:**

- ✓ CMS (Cricket Management System) Database based on various information about the various teams participating in the World Cup, in which all the major Teams participates. It also provides information about the various players, participations of tournament. Other Information like Umpire's records, Coach records, Match's Records are Included in CMS Database.

- **Project Description:**

The project includes a complete database of World Cup game involving cricket, with coaches and umpires managing the game with a brief demonstration on data management program including all the entities mentioned below.

The Schema will provide following entities with complete data information of the according cricket statistics. The information is available team wise and player wise.

- Team
- Players
- Scorecard
- Played
- Umpire
- Umpired by
- Scored
- Coach
- Matches

By entering the data of each unit, we can get other details like team, player, coach, umpire which are related to the matches, In addition, we get more information about the total number of teams in the match, the total wickets, and the runs scored, the order of the teams after the match and the CMS. And the winning team is also announced.

The advantage of this database project is very useful for cricket match broadcasters to get information quickly. In addition, for cricket lovers who are very interested in cricket statistics and also for cricketers

and children to understand easily. In other words, we manage the data of the Cricket World Cup, which is played at a world level...

- **Data Requirements:**

- 1. Team:**

This particular entity contains many attributes like team id (*Where Team id is Primary key with not null attribute*), team rank, team name, group name, number of wins, number of losses, number of draws, number of bowlers, number of batsmen. Mentioned attributes are given different data type as per their data storage.

- 2. Players:**

The players entity has player id primary key (Where team id references TEAM, no of world cup and further more).

- 3. Matches:**

The Matches will contain like match id, match date, match time of match sorted by team with different attributes.

- 4. Batsman:**

This entity has different type of attributes as Name, Number of sixes hit, Number of Fours hit, the batting average, and the total runs scored. All of these attributes are of the data type number.

- 5. Umpire:**

This entity will show name of the umpire, id of the umpire and in which the umpire will do his job and all about the entity and more.

- 6. Bowler:**

It is same as Batsman entity which also includes number of wickets and economy and data about bowler like type of bowler and more information related to bowler entity.

- 7. Coaches:**

This particular entity types with a foreign key, Team ID, which is a primary key of entity type, Team. It has a primary key, Coach ID, of data type varchar. It also has another attribute of data type varchar, Name.

- This way we include Other Entities Data like **Captain, Umpired By, Acknowledgement, Score** and so on...

**Following are sample queries, the system is expected to answer:**

- 1). List of all team name, captain, coach, wicket keeper, umpire.
- 2). Retrieve the umpire id and umpire name who umpire for date '01-11-2011'.
- 3). Enter any one valid jersey number and get player information.
- 4). Display the name of the bowler who has taken hattrick.
- 5). Display the name of the bowler who have highest bowling wickets.
- 6). Display the total sixer in the series.
- 7). Enter the valid information of the name and date of the stadium and get the data of the losing team and the winning team.
- 8). List top five batsman highest scored in the Tournaments.
- 9). Retrieve Name of top five bowler of the Tournaments.
- 10). Enter the name of anyone valid team and get the name of it's captain.
- 11). Number of players who got out in '0' runs.
- 12). Display the Team whose players have batting average  $\leq 60$ .
- 13). Display the Team whose players didn't have batting average  $\geq 60$ .