**Schema**
**a) Table Definition**

| Table Name | Schema |
|---|---|
| Tournament | Tournament(<u>Name</u>: varchar, <u>Start_date</u>: date, End_date: date, Format: varchar, **Venue_name**: varchar, **Venue_city**: varchar, **Sponsor_ID**: int, **Winning_team**: int) |
| Match | Match(<u>Number:</u> int, Start_time: time, Stage: varchar, Score: int, Rounds: int, **Team1:** int, **Team2:** int, **Winner:** int, **<u>Tournament_Name</u>**: varchar, **<u>Tournament_Start_date</u>**: date) |
| Commentator | Commentator(<u>ID</u>: int, First_Name: varchar, Last_Name: varchar, Country: varchar) |
| Commentates | Commentates(**<u>Tournament_Name</u>**: varchar, **<u>Tournament_Start_date</u>**: date, **<u>Commentator_ID</u>**: int) |
| Broadcaster | Broadcaster(<u>ID</u>: int, Organization: varchar) |
| Broadcasts | Broadcasts(**<u>Tournament_Name</u>**: varchar, **<u>Tournament_Start_date</u>**: date, **<u>Broadcaster_ID</u>**: int) |
| Venue | Venue(<u>Name:</u> varchar, <u>City:</u> varchar, Country: varchar, Capacity: int) |
| Sponsor | Sponsor(<u>ID:</u> int, Name: varchar) |
| Team | Team(<u>ID:</u> int, Organization: varchar, Name: varchar, Country: varchar) |
| Coach | Coach(<u>ID:</u> int, First_name: varchar, Last_name: varchar, Country: varchar, Join_date: date, Years_experience: int, **Team_ID:** int) |
| BusinessMember | BusinessMember(<u>ID:</u> int, First_name: varchar, Last_name: varchar, Country: varchar, Join_date: date, Role: varchar, **Team_ID:** int) |
| Player | Player(<u>ID:</u> int, First_name: varchar, Last_name: varchar, Country: varchar, Join_date: date, Ranking: int, **Team_ID:** int) |

**b) Keys and Constraints**

| | Primary Key | Candidate Key | Foreign Key | Constraints |
|---|---|---|---|---|
| **Tournament** | (Name, Start_date) | (Name, Start_date) | Venue_name, Venue_city, Sponsor_ID, Winning_team | **Not null =** End_date, Format |

| | | | | Misc:<br>End_date<br>>=<br>Start_date |
|---|---|---|---|---|
| **Match** | (Number,<br>Tournament_Name,<br>Tournament_Start_date) | (Number,<br>Tournament_Name,<br>Tournament_Start_date) | Team1, Team2, Winner,<br>Tournament_Name,<br>Tournament_Start_date | **Not null =**<br>Stage,<br>Rounds |
| **Commentator** | ID | ID | n/a | **Not null =**<br>First_name,<br>Last_name |
| **Commentates** | (Tournament_Name,<br>Tournament_Start_date,<br>Commentator_ID) | (Tournament_Name,<br>Tournament_Start_date,<br>Commentator_ID) | Tournament_Name,<br>Tournament_Start_date,<br>Commentator_ID | n/a |
| **Broadcaster** | ID | ID | n/a | **Not null =**<br>Organizatio<br>n |
| **Broadcasts** | (Tournament_Name,<br>Tournament_Start_date,<br>Broadcaster_ID) | (Tournament_Name,<br>Tournament_Start_date,<br>Broadcaster_ID) | Tournament_Name,<br>Tournament_Start_date,<br>Broadcaster_ID | n/a |
| **Venue** | (Name, City) | (Name, City) | n/a | **Not null =**<br>Country |
| **Sponsor** | ID | ID | n/a | **Not null =**<br>Name |
| **Team** | ID | ID, Name | n/a | **Not null =**<br>Organizatio<br>n, Name<br><br>**Unique =**<br>Organizatio<br>n, Name,<br>Country |
| **Coach** | ID | ID | Team_ID | **Not null =**<br>First_name,<br>Last_name,<br>Join_date,<br>Country,<br>Years_expe<br>rience,<br>Team_ID |
| **Business<br>Member** | ID | ID | Team_ID | **Not null =**<br>First_name,<br>Last_name, |

|  |  |  |  | Country, Join_date, Role, Team_ID |
|---|---|---|---|---|
| **Player** | ID | ID, Ranking | Team_ID | **Not null =** First_name, Last_name, Join_date, Country, Ranking, Team_ID <br><br> **Unique =** Ranking |