Team X

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Changes made:

The (min, max) constraints for following 3 relationships have been changed :-

- Player in *Player-> Plays for -> Team*
  Player can play exactly for one team, so we changed max to 1.
- Team in *Player -> Playing for -> Team -> Playing in -> Match -> Played in -> Stadium scored the goal*
  It is not necessary that a Team scores a goal at all, so the min is 0.
- Match in *Player -> Playing for -> Team -> Playing in -> Match -> Played in -> Stadium scored the goal*
  It is not necessary that a single goal is scored in a match, so the min is 0.

The ER diagram has been attached below (a rotated version has been attached on the next page).

Entity-Relationship Diagram

Entities: Coaches, Team, Stadium, Spectators, Match, Players, Referee

Coaches attributes: Last Name, Middle Name, First Name, Name, Experience, Gender

Stadium attributes: Area, Street name, Building name, City, Address, Number of matches played, Name, Phone Number

Spectators attributes: Phone no, Name (First Name, Middle Name, Last Name)

Match attributes: Match ID, Date, Loser_id, Winner_id, Total goals

Team attributes: Score, Name, Wins, Losses, Draws

Players attributes: Jersey Number, Age, Total Goals, Date of Birth, Name (First Name, Middle Name, Last Name)

Referee attributes: Referee ID, Matches Judged, Name (First Name, Middle Name, Last Name)

Relationships and cardinalities:

- Coaches — Coaches — Team: (1, 1) ... (1, 1)
- Stadium — played in — Match: (0, n) ... (1, 1)
- Spectators — watches — Match: (1, n) ... (0, m)
- Team — goal scored — Match: (0, n) ... (0, n), No. of goals
- Stadium — goal scored: (0, n)
- Team — plays in — Match: (1, n) ... (2, 2)
- Team — plays for — Players: (5, n) ... (1, 1)
- Players — plays in — Match: (0, n) ... (10, m)
- Match — judges — Referee: (2,2) ... (0, n)
- Players — Is captain of — (captain (1, 1), subordinate (4, n))

Players specialization (d): Mid, Forward, Goalkeeper, Defence