Project Phase 3

TOPIC – Cricket League Management System

Modifications made in Phase 1 document –

Updated the cardinality constraints and other details in phase 1 according to the comments.

Updated the data requirement of **Team** entity.

Modifications made in Phase 2 EER diagram –

1. Updated the **Role** attribute.
2. Changed the teams playing attribute from single to composite in **Match** entity.
3. Changed **Name** attribute of the entities to **PName**(Players)**, TName**(Teams)**, SName**(Stadium)**, FName**(Fans)

**Candidate Keys**

Assumptions:

1. Names and DOB of each player is different.
2. Each Stadium has a unique name.

Candidate Keys for the Entities are as follows –

1. Players: ID (primary key), {P.Name, DOB} (considering the names and dob of players are different)
2. Team: TeamID (primary key), T.Name, Captain
3. Fans: SeatNum (primary key), {SeatNum, email}
4. Stadium: StadiumID (primary key), S.Name
5. Match: MatchID (primary key)

**Functional Dependencies**

1. Players
2. ID**→** {Runs, Wicket, P.Name, DOB, Role, TeamID}
3. {P.Name, DOB} **→** {ID,Runs, Wicket, Role, TeamID }
4. Team
5. TeamID**→** {T.Name, Captain}
6. T.Name **→** {TeamID, Captain}
7. Captain **→ {**TeamID, T.Name}
8. Fans
9. Seatnum **→** {Age, F.Name}
10. Stadium  
    (a) StadiumID **→** {TotalTicketPrice, S.Name, SeatCapacity, SoldTickets}
11. S.Name **→ {**TotalTicketPrice, StadiumID, SeatCapacity, SoldTickets}
12. Match:
13. MatchID**→** {Time, Winner, Team1, Team2, StadiumID, Location}
14. Relations:
15. Seatnum → {Email}
16. {ID, TeamID, MatchID} **→** Date

**EER to Relation Mapping**

**A diagram of a team

Description automatically generated**

**Team Members**

Aniket Gadekar

Harshada Padwal

Rahul Rajaraman

Shruti Borge