

Step 1:

Strong Entities

Player

<u>PlayerID</u>	First_name	Last_name	<u>Team_name</u>	Position	Date_Of_Birth
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Tournament

<u>Tournament_ID</u>	Tournament_Season	Tournament_Name	Tournament_Location	Tournament_Winner
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Games

<u>Game_ID</u>	<u>Umpire_License</u>	Location_ID T	<u>Tournament_ID</u>	Team_1	Team_2	Time_Duration	Date_Of_Match	Game_Round	Alt_Match_Date
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Events

<u>Event_ID</u>	<u>Games_ID</u>	Type_oF_Event	Event_Type
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Teams

Team_origin	<u>Coach_ID</u>	Team_Captain	Team_name
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Coaches

<u>Coach_ID</u>	Position	<u>Team_Name</u>	Gender	ending_date	starting_date	Experience
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Umpire

<u>Umpire_Liscense</u>	Umpire_name	<u>Tournament_ID</u>	Experience	Umpire_Age
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Event_Fouls

<u>ID</u>	Foul_Committer	Card_Issued
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Event_Substitution

<u>ID</u>	Position	Player_off	Player_on
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Event_Hits

<u>ID</u>	<u>Player ID</u>	Type_of_hit	intercepted
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Event_Shots

<u>ID</u>	Shot_saved	Intercepted	Assisted	Field_Goal	Penalty	Shot_taker
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Event_Corner

<u>ID</u>	<u>Player_id</u>	Type of corner	Goal_scored	intercepted
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Step 2:

Weak Entities

Player_Stats

<u>Player_ID</u>	Player_rating	Total_goals	Total_Assists
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Game_Stats

<u>Games_ID</u>	Short_Corners	Own_goals	Extra_Time	Long_Corners	Free_Hits	Penalties	Game_Loser	Game_Winner
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Step 3:

Mapping Binary 1-to-1

Teams

Team_origin	<u>Coach_ID</u>	Team_Captain	Team_name
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Coaches

<u>Coach_ID</u>	Position	<u>Team_Name</u>	Gender	ending_date	starting_date	Experience
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Player

<u>PlayerID</u>	First_name	Last_name	<u>Team_name</u>	Position	Date_Of_Birth
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Player_Stats

<u>Player_ID</u>	Player_rating	Total_goals	Total_Assists
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Games

<u>Game_ID</u>	<u>Umpire_License</u>	Location_ID T	<u>Tournament_ID</u>	Team_1	Team_2	Time_Duration	Date_Of_Match	Game_Round	Alt_Match_Date
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Game_Stats

<u>Games_ID</u>	Short_Corners	Own_goals	Extra_Time	Long_Corners	Free_Hits	Penalties	Game_Loser	Game_Winner
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Step 4:

Binary 1-to-N

Umpire

<u>Umpire_Liscence</u>	Umpire_name	<u>Tournament_ID</u>	Experience	Umpire_Age
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Tournament

<u>Tournament_ID</u>	Tournament_Season	Tournament_Name	Tournament_Location	Tournament_Winner
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Games

<u>Game_ID</u>	<u>Umpire_Liscence</u>	Location_ID	<u>Tournament_ID</u>	Team_1	Team_2	Time_Duration	Date_Of_Match	Game_Round	Alt_Match_Date
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Events

<u>Event_ID</u>	<u>Games_ID</u>	Type_oF_Event	Event_Type
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Step 5:

Binary M-to-N

Tournament

<u>Tournament_ID</u>	Tournament_Season	Tournament_Name	Tournament_Location	Tournament_Winner
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Player

<u>PlayerID</u>	First_name	Last_name	<u>Team_name</u>	Position	Date_Of_Birth
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Step 6:

Multivalued Attributes

Tournament

<u>TournamentID</u>	Tournament_Season	Tournament_Name	Tournament_Location	Tournament_Winner
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Tour_Location

<u>TournamentID</u>	Tournament_Location	Tournament_Season
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Step 7:

N-ary relationships

(These are relationships that have more than 1-way relationships)

Tournament

<u>TournamentID</u>	Tournament_Season	Tournament_Name	Tournament_Location	Tournament_Winner
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Games

<u>Game_ID</u>	<u>Umpire_License</u>	Location_ID	<u>Tournament_ID</u>	Team_1	Team_2	Time_Duration	Date_Of_Match	Game_Round	Alt_Match_Date
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Teams

Team_origin	<u>Coach_ID</u>	Team_Captain	Team_name
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Player

<u>PlayerID</u>	First_name	Last_name	<u>Team_name</u>	Position	Date_Of_Birth
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Coaches

<u>Coach_ID</u>	Position	<u>Team_Name</u>	Gender	ending_date	starting_date	Experience
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Umpire

<u>Umpire_Liscence</u>	Umpire_name	<u>Tournament_ID</u>	Experience	Umpire_Age
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Events

<u>Event_ID</u>	<u>Games_ID</u>	Type_oF_Event	Event_Type
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Game_Stats

<u>Games_ID</u>	Short_Corners	Own_goals	Extra_Time	Long_Corners	Free_Hits	Penalties	Game_Loser	Game_Winner
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Step 8:

Specialization/Generalization

Type 1 (A) has been used.

Remember to explain why we used disjoint, and not union, or overlapping

Even if we wanted to use union (since its a combo of disjoint and overlapping, we cant because of overlapping its inclusive or and not exclusive or)

Events

<u>Event_ID</u>	<u>Games_ID</u>	Type_oF_Event	Event_Type
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Event_Fouls

<u>ID</u>	Foul_Committer	Card_Issued
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Event_Substitution

<u>ID</u>	Position	Player_off	Player_on
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Event_Hits

<u>ID</u>	<u>Player ID</u>	Type_of_hit	intercepted
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Event_Shots

<u>ID</u>	Shot_saved	Intercepted	Assisted	Field_Goal	Penalty	Shot_taker
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Event_Corner

<u>ID</u>	<u>Player_id</u>	Type of corner	Goal_scored	intercepted
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