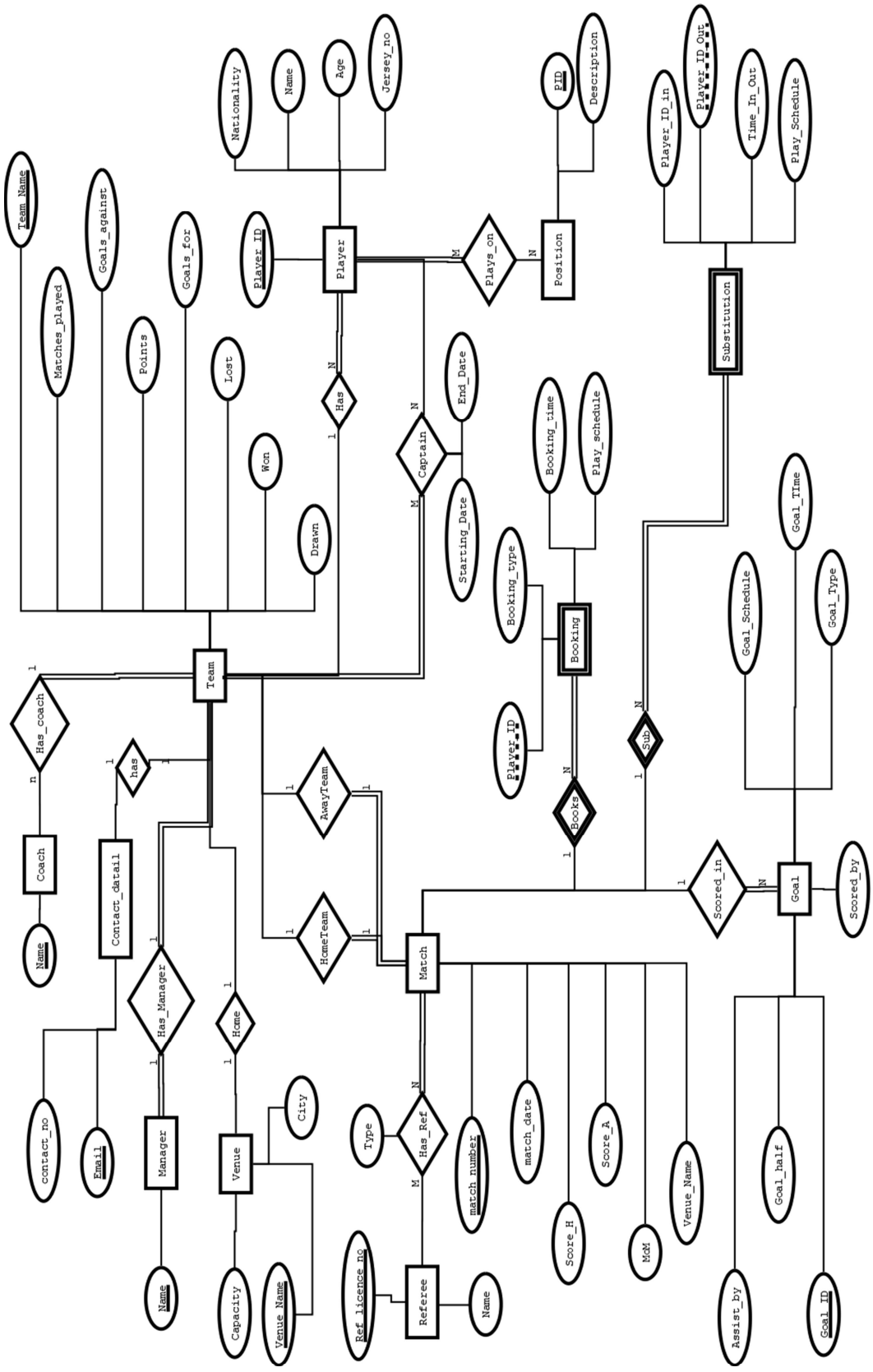
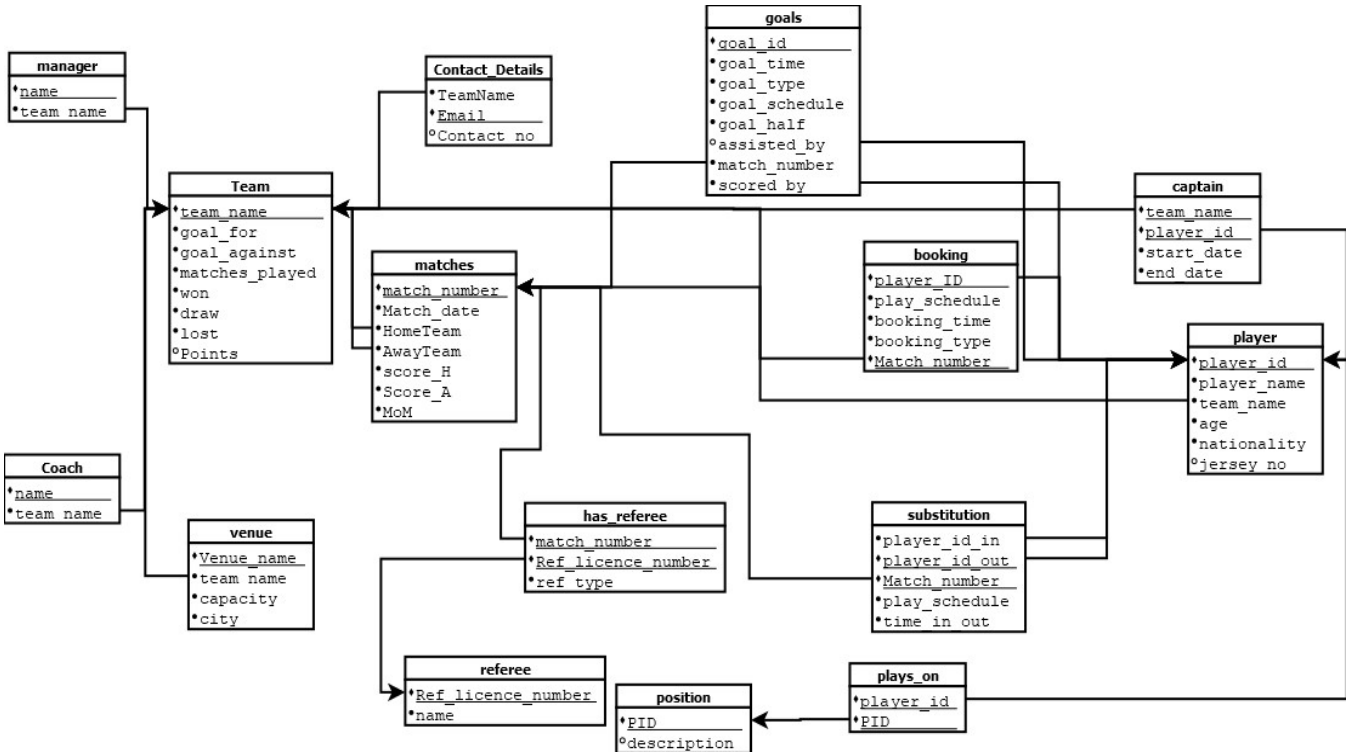
ER MODEL


Team_Name
Matches_played
Goals_against
Points
Goals_for
Lost
Won
Drawn
Nationality
Name
Age
Jersey_no
Player_ID
Player
Has
Captain
End_Date
Starting_Date
Plays_on
PID
Description
Position
Player_ID_in
Player_ID_out
Time_In_Out
Play_Schedule
Substitution
Booking_time
Play_schedule
Booking_type
Booking
Player_ID
Books
Sub
Goal_Schedule
Goal_TIme
Goal_Type
Team
Has_coach
Coach
Name
has
Contact_datail
contact_no
Email
Has_Manager
Manager
Name
Home
Venue
Capacity
City
Venue_Name
AwayTeam
HomeTeam
Match
Type
Has_Ref
match_number
Referee
Ref_licence_no
Name
match_date
Score_A
Score_H
MoM
Venue_Name
Scored_in
Goal
Scored_by
Goal_half
Assist_by
Goal_ID

RELATIONAL MODEL



Functional Dependencies

1) Manager
    - Manager_name-> team_name

    Since the determinant of the only FD that holds on this relation is its primary key, this relation is in BCNF form.

2) Team
    - Team_name -> matches_played
    - Team_name ->won
    - Team_name ->draw
    - Team_name ->lost
    - Team_name ->goals_for
    - Team_name ->goals_against
    - Team_name ->points

    Since the determinant of every FD that holds on this relation is its primary key,this relation is in BCNF form.

3) Coach
    - Coach_name -> team_name

    Since the determinant of the only FD that holds on this relation is its primary key,this relation is in BCNF form.

4) Venue
    - Venue_name -> team_name (home ground)
    - Venue_name -> capacity
    - Venue_name -> city

    Since the determinant of every FD that holds on this relation is its primary key,this relation is in BCNF form.

5) Match
    - Match_number ->date
    - Match_number ->mom
    - Match_number ->home_team
    - Match_number ->away_team
    - Match_number ->score_a
    - Match_number ->score_h

    Since the determinant of every FD that holds on this relation is its primary key,this relation is in BCNF form.

6) Referee
    - Ref_licence_no -> name

    Since the determinant of the only FD that holds on this relation is its primary key,this relation is in BCNF form.

7) Goals
    - Goal_id->goal_schedule
    - Goal_id ->goal_time
    - Goal_id ->goal_type
    - Goal_id -> goal_half
    - Goal_id ->assisted_by
    - Goal_id -> match_number
    - Goal_id ->scored_by

    Since the determinant of every FD that holds on this relation is its primary key,this relation is in BCNF form.

8) Player

- Player_id->name
- Player_id-> jersey_no
- Player_id->nationality
- Player_id->age
- Player_id->team_name

Since the determinant of every FD that holds on this relation is its primary key,this relation is in BCNF form.

9) Position

- Pid->description

Since the determinant of the only FD that holds on this relation is its primary key,this relation is in BCNF form.

10) Captain

- {player_id, team_id } -> start_date
- {player_id, team_id } -> end_date

Since the determinant of every FD that holds on this relation is its primary key,this relation is in BCNF form.

11) Booking

- {match_number,player_id} ->booking_time
- {match_number,player_id} -> booking_type
- {match_number,player_id} ->play_schedule

Since the determinant of every FD that holds on this relation is its primary key,this relation is in BCNF form.

12) Substitution

- {player_id_out,match_number} -> play_schedule
- {player_id_out,match_number} -> time_in_out
- {player_id_out,match_number} -> player_id_in

Since the determinant of every FD that holds on this relation is its primary key,this relation is in BCNF form.

13) Has referee

- {match_number, ref_licence_no }-> type

Since the determinant of every FD that holds on this relation is its primary key,this relation is in BCNF form.

14) Contact_details

- Email -> team_name
- Email -> contact_number

Since the determinant of every FD that holds on this relation is its primary key,this relation is in BCNF form.

15) Plays_on

- No FDs are present.

Since it’s a 2-attribute relation (both of which are a part of the primary key), it is in BCNF form.