Soccer@KFUPM - Schema Description

Description of Relations (DATA Dictionary)

tournament

- tr_id – a unique ID for each tournament
- tr_name – the name of the tournament
- start_date – the start date of the tournament
- end_date – the end date of the tournament

venue

- venue_id – a unique ID for each venue
- venue_name – the name of the venue
- venue_status – the status of the venue
- venue_description – the ID of the fields where the venue is located and only those fields will be available which are in the soccer_fields table
- audience_capacity – the capacity of audience for each venue

team

- team_id – the ID for each team
- team_name - each team name

tournament_team

- team_id – the ID for each team
- tr_id - Each team is represented in a tournament which is referencing the tr_id column of tournament table
- team_group – the name of the group in which the team belongs
- match_played – how many matches a team played in group stage
- won – how many matches a team won
- draw – how many matches a team draws
- lost – how many matches a team lose
- goal_for – how many goals a team conceded

- goal_against – how many goals a team scored
- goal_diff – the difference of goal scored and goal conceded
- points – how many points a team achieved from their group stage matches
- group_position – in which position a team finished their group stage matches

person

- kfupm__id – the ID for each person particpating in the game
- name - each person name
- date_of_birth - each person birth date

playing_position

- position_id – a unique ID for each position where a player played
- position_desc – the name of the position where a player played

player

- player_id – a unique ID for each player
- jersey_no – the number which labeled on the jersey for each player
- position_to_play – the position where a player played, and the positions are
    referencing the position_id column of playing_position table

team_player

- player_id – a unique ID for each player
- team_id – the ID for each team a player plays in (note he can play in different teams
    for different tournaments)
- tr_id - referencing the tr_id column of tournament table

support

- support_type – match or team support type
- support _desc – the description of the support (example referee, coach etc.),

team_support

- support_id – person supporting the team in different roles

- team_id – the ID for each team a player plays in (note he can play in different teams for different tournaments)
- tr_id - referencing the tr_id column of tournament table
- support _type – the description of the support (example referee, coach etc.)

match_played

- match_no – the unique ID for a match
- play_stage – this indicates that in which stage a match is going on, i.e. G for Group stage, R for Round of 16 stage, Q for Quarter final stage, S for Semi Final stage, and F for Final
- play_date – date of the match played
- team_id1 – the ID for team 1 in the match
- team_id2 – the ID for team 2 in the match
- results – the result of the match, either win or draw or loss
- decided_by – how the result of the match has been decided, either N for by normally or P for by penalty shootout
- goal_score – score for the match
- venue_id – the venue where the match played
- audience – number of people watching the match
- player_of_match – the player who awarded the player of a particular match
- stop1_sec – how much stoppage time (in seconds) is added for the 1st half of play
- stop2_sec – how much stoppage time (in seconds) is added for the 2nd half of play

match_details

- match_no – unique number of the match
- team_id – the team which is one of the playing team
- win_lose – team either win or lose or drawn indicated by the character W, L, or D
- decided_by - how the result achieved by the team, indicated N for normal score or P for penalty shootout
- goal_score – how many goal scored by the team
- penalty_score – how many goal scored by the team in penalty shootout
- player_gk - the player who is keeping the goal for the team

match_support

- match_no – unique number of the match
- support_id – person supporting the match in different roles
- support _type – the description of the support (example referee, assistant referee etc.)

goal_details

- goal_id – the unique ID for each goal
- match_no – unique number of the match
- player_id - the ID of a player who is selected for the team for the tournament
- team_id – the ID of each team who are playing in the tournament
- goal_time – the time when the goal scored
- goal_type – the type of goal which came in normally indicated by N or own goal indicating by O and goal came from penalty indicated by P
- play_stage – the play stage in which goal scored, indicated by G for group stage, R for round of 16 stage, Q for quarter final stage, S for semifinal stage and F for final match
- goal_schedule – when the goal came, is it normal play session indicated by NT or in stoppage time indicated by ST or in extra time indicated by ET
- goal_half – in which half of match goal came

penalty_shootout

- kick_id – unique ID for each penalty kick
- match_no - the match_no which is referencing the match_no column of match_master table
- team_id – the ID of each team who is playing in the tournament
- player_id - the ID of a player of a team for the tournament
- score_goal – the flag Y if able to score the goal or N when not
- kick_no – the kick number for the kick of an individual match

player_booked

- match_no - unique match number
- team_id – the ID of each team who are playing in the tournament

- player_id - the ID of a player of a team for the tournament
- booking_time – the time when a player booked
- sent_off – the flag Y when a player sent off (red card)
- play_schedule – when a player booked, is it in normal play session indicated by NT or in stoppage time indicated by ST or in extra time indicated by ET
- play_half – in which half a player booked

player_in_out

- match_no - unique match number
- team_id – the ID of each team who are playing in the tournament
- player_id - the ID of a player of a team
- in_out – the flag I when a player came into the field or O when go out from the field
- time_in_out – when a player come into the field or go out from the field
- play_schedule – when a player come in or go out of the field, is it in normal play session indicated by NT or in stoppage time indicated by ST or in extra time indicated by ET
- play_half - in which half a player come in or go out

match_captain

- match_no - unique match number
- team_id – the ID of each team who are playing in the tournament
- player_captain - the player who represents as a captain for a team

penalty_gk

- match_no - unique match number
- team_id – the ID of each team who are playing in the tournament
- player_gk - the player who kept goal at the time of penalty shootout

Points to Note:
1. This solution may be used as a reference or full use in your implementation. If your schema covers all the requirements and supports your SQL queries better, you can use your schema in implementation.
2. Refer to the attached schema description/dictionary to understand the attributes and relations. Also add more data through insert statements to fully illustrate the PHASE 1 & 2 requirements.

3. This schema is designed with attributes (example kfupm_id) using simple data types to ensure focus on implementation.
4. You may use db-fiddle to test the entire script of SQL statements below (with any version of MySQL, PostGreSQL or SQLite provided by https://www.db-fiddle.com/).
5. If you are using this schema, you may add/modify/remove the relations to address redundancies, repetitions, mapping or semantic errors etc., that you may come across.