

## SB\_22.04.15 Documentation

Link to schema: <https://app.quickdatabasediagrams.com/#/d/cUL7EJ>

### 01.03. Soccer League

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To Rank a team by wins:

by number of goals, use the Goal relation, query by "seasonleaguemapID" and aggregate goals with TeamID

by number of match wins, use the Match relation, query by "seasonleaguemapID" and aggregate matchWinner, then sort

teams, goals, players, referees, matches, league, seasons

league, season, matches, goals, referees; players, teams

league/season: M/N

season/matches: 1/M

matches/goals: 1/M

e/ match has many goals; e/ goal is in one map

player/goals: 1/M, e/ player has >= 0 goals; e/ goal has 1 player

matches/referees: M/N (MatchRefereeMap)

e/ match has >= 1 referee; 1 referee involved in >= 1 match

e/ season has >= 1 league, e/ league is found in >= 1 season

e/ league has >= 1 match, e/ match is distinct

e/ match has >= 0 goals, e/ goal has 1 match

team/player: M/N, players can be traded therefore:

SeasonRoster:

match

### Season

| Field           | Description | Type        | Default | Other |
|-----------------|-------------|-------------|---------|-------|
| seasonPointer   |             | smallserial |         | PK    |
| seasonStartTime |             | timestampz  |         |       |
| seasonEndTime   |             | timestampz  |         |       |

### League

| Field         | Description | Type        | Default | Other |
|---------------|-------------|-------------|---------|-------|
| leaguePointer |             | smallserial |         | PK    |
| leagueName    |             | text        |         |       |

### SeasonLeagueMap

| Field                  | Description       | Type     | Default | Other |
|------------------------|-------------------|----------|---------|-------|
| seasonleaguemapPointer | seasonID+leagueID | text     |         | PK    |
| seasonID               |                   | smallint |         | FK    |
| leagueID               |                   | smallint |         | FK    |

### Match

| Field        | Description | Type      | Default | Other |
|--------------|-------------|-----------|---------|-------|
| matchPointer |             | bigserial |         | PK    |

| Field                  | Description  | Type       | Default | Other |
|------------------------|--|------------|---------|-------|
| seasonleaguemapPointer | although one may figure out season by start/end time | text       |         | FK    |
| matchWinner            |  | smallint   |         | FK    |
| matchTeam1             |  | smallint   |         | FK    |
| matchTeam2             |  | smallint   |         | FK    |
| matchStartTime         |  | timestampz |         |       |
| matchEndTime           |  | timestampz |         |       |
| matchLocation          |  | text       |         |       |
| matchVenue             |  | text       |         |       |

## MatchRefereeMap

| Field                  | Description | Type      | Default | Other |
|------------------------|-------------|-----------|---------|-------|
| matchrefereemapPointer |             | bigserial |         | PK    |
| matchID                |             | serial    |         | FK    |
| refereeID              |             | serial    |         | FK    |

## Referee

| Field          | Description | Type   | Default | Other |
|----------------|-------------|--------|---------|-------|
| refereePointer |             | serial |         | PK    |
| refereeName    |             | text   |         |       |

## Goals

| Field             | Description  | Type       | Default | Other |
|-------------------|--|------------|---------|-------|
| goalPointer       | some string concat of seasonID+leagueID+matchID+timeScored | text       |         | PK    |
| seasonleaguemapID | derivative of seasonID+leagueID                            | text       |         | FK    |
| matchID           |  | bigint     |         | FK    |
| teamID            |  | smallint   |         | FK    |
| playerID          |  | uuid       |         | FK    |
| timeScored        |  | timestampz |         |       |

## Team

| Field       | Description | Type        | Default | Other |
|-------------|-------------|-------------|---------|-------|
| teamPointer |             | smallserial |         | PK    |
| teamName    |             | text        |         |       |

## Roster

if a player trade is made, the player will get another roster entry for the same seasonleagueID

| Field          | Description   | Type       | Default | Other |
|----------------|---|------------|---------|-------|
| rosterPointer  | string concat of<br>seasonID+leagueID+teamID+playerID | text       |         | PK    |
| seasonleagueID |   | text       |         | FK    |
| teamID         |   | smallint   |         | FK    |
| playerID       |   | uuid       |         | FK    |
| startTime      |   | timestampz |         |       |
| endTime        | nullable, if truthy => team<br>switch mid-season      | timestampz |         |       |

## Player

| Field         | Description | Type | Default | Other |
|---------------|-------------|------|---------|-------|
| playerPointer |             | uuid |         | PK    |
| playerName    |             | text |         |       |