# HOSPITAL DATABASE DESIGN DCUMENT

Version 1.0

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#### Narrative:

The soccer league administrator wants to create a database to track teams, players, coaches, matches, fields, vendors, referees, and sponsors.

Reports include: match scores and results, player stats, referee assignments, team rosters, field and team sponsors, vendor types and field assignments, and coach assignments.

The league is made up of teams with one or more sponsors that are on the uniforms. Sponsors can support more than one team; team may not have more than one sponsor at a time. Sponsorships are tracked by season.

Each team consists of players. No player belongs to more than one team during a season. Player is assigned a player ID. Player's name, address, parent contact name, player phone number, parent phone number, parent email, DOB and age. Team has a designated captain who is a player. Players are registered to teams following a draft. Can play for one team one season and for a different team the next.

Teams play in matches. Match designated by Match ID and has a scheduled date. Goals and wins/losses are recorded.

Three referees are assigned per match, one head(H) and two linesman(L). The league records Referee ID, first and last name, address, phone number, contact email. New referees are assigned to experienced referees as mentors. Not all experienced referees are mentors, mentors can have more than one referee.

Matches take place on fields. Sponsors support fields with banners, can support more than one field, can have more than one banner. League records the name and address (street, city, state, zip) of fields. Fields host multiple matches. Some fields are closed with no matches for certain periods.

Vendors sell items at specific fields. Each field has several vendors. League tracks vendor assignments by season. Records vendor name, phone number, vendor type. Some vendors offer multiple types of services (food, beverage, clothing, soccer supplies, other).

Coaches are tracked, can be assigned to more than one team, one role per team. Roles are head coach (HC), assistant (AC), volunteer (VC). Teams can have multiple coaches, one role at a time may be assigned to a single coach. Assignments are based on season

#### Requirements (actors and roles):

<u>Teams:</u> The league consists of teams, teams consist of platers. teams have one or more sponsors whose names appear on the team uniforms. Teams have a designated captain from among the players

<u>Players:</u> assigned to a team after the draft, can play for a different team the next season.

<u>Coaches:</u> The league tracks coaches who are assigned to teams.

Matches: teams play in matches on specific dates at soccer fields, the league records results.

Fields: Matches take place on fields. Sponsors can support fields by placing banners

<u>Vendors</u>: Vendors sell items at specific fields.

<u>Referees:</u> three referees are assigned to each match based on position. Each new referee is assigned to one experienced referee as a mentor Sponsors

#### Entities:

- Teams
- Players
- Coaches
- Matches
- Fields
- Vendors
- Referees
- Sponsors

## Entities with nested attributes:

- Teams
  - o Captain
- Players
  - o PlayerID
  - o Team
  - o Name
  - o Address
  - o Parent contact
  - o Player phone #
  - o Parent phone #
  - o Parent email #
  - o DOB
  - o [age]
  - o Performance (Minuets played, goals scored, penalties)
- Coaches
  - o Name
  - o Role
  - {HC, AC, VC}
- Matches
  - o MatchID
  - o Scheduled Date
  - o Goals scored (team 1, team 2)
  - o W/L result
- Fields
  - o Name
  - Address (street, city, state, zip)
- Vendors
  - o Name
  - Service type
  - o {food, beverage, clothing, soccer suppliers, and other items}
- Referees
  - o RefID
  - o Name (first and last)
  - o Address
  - o Phone number
  - Contact email
- Sponsors
  - o SponsorName

## Business rules: specific roles/database design:

<u>Teams</u>: Teams have one or more sponsors.

<u>Players:</u> Belong to only one team per season, can play for a different team the next season

Coaches: Can be assigned to more than one team, has one role per assignment.

Matches: Matches occur on a single field at a time.

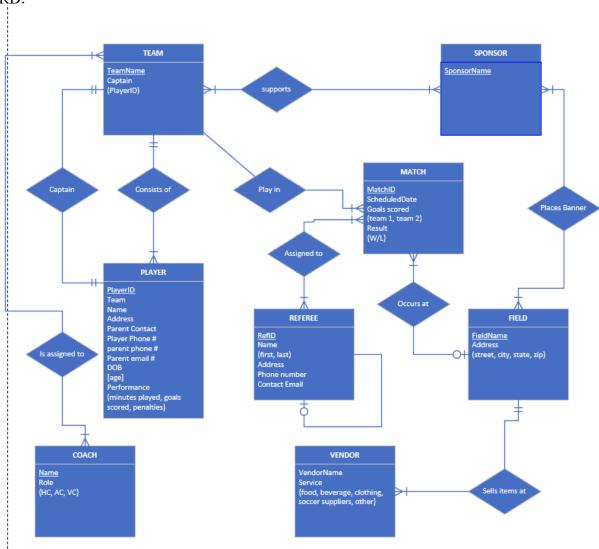
<u>Fields:</u> sponsors can support more than one field; fields can have more than one banner, and host multiple matches throughout the season. Some fields are closed with no matches.

Vendors: There are several vendors at every field.

Referees: (One head(H) and two linesmen (L)). When mentors are assigned: not all of the experienced referees serve as mentors, but those that do can mentor more than one new referee.

<u>Sponsors:</u> Sponsors can support more than one team, and a team may have more than one sponsor. Tracked by season.

# ERD:



# EERD:

