

Dependencies:

People: pid→firstName, lastName, streetAddress, zipCode,

phoneNumber, birthdate, email

Zipcode: zipcode \rightarrow city, state

Players: $pid \rightarrow tid$, age Coaches: pid, $cid \rightarrow$

Assistant_Coach: pid → tid, numYears

Age_Groups: gid \rightarrow name, name, minAge, maxAge

Teams: tid→gid, name, cid, tname

3NF:

This relation is in third normal form because every non-key attributes depend on the whole key and nothing but the key, so help me cod. The people, zipcode, players, teams, and age groups tables all have one primary key, so all non-key attributes rely solely on it. Every entry into the people table is assigned at pid; it doesn't matter if they are a coach or a player. Within the player table, pid is the primary key with the foreign key being tid, so a simple group by query will select every team member. There can only be one head coach per team, but more than one assistant coach is allowed, and are assigned a tid along with their pid for easy querying. The team table is assigned a primary key of tid and has the foreign keys of gid and cid. Gid refences the age group table that has the allowed minimum and maximum ages for players on each team. Each table is in 3NF, so the database is in 3NF.

View for 10-14 age:

CREATE VIEW TeamsIn10To14AgeGroup as SELECT t.tid, t.Name FROM Teams t, Age_Groups age WHERE age.minAge = 10 And age.maxAge = 14 And age.GID = t.GID;