

- League has three age groups [Team-AgeGroup]
- Age groups are under 10, 10 – 14, and over 14---- [Team-AgeGroup]
- Each team plays in exactly one age group-----
- A player can only play on one team [Team-AgeGroup]
- A team consists of many players, one or more assistant coaches, and one head coach [Teams]Strongest entity
- We have first and last names addresses and phone numbers for all players and coaches[People]Weak entity
- Need to know, numbers of years for coaches[Coaches]
- A coach can coach for several teams as long as they are in different age groups {yet a head coach is a head coach!} [HeadCoach] [AssistCoach]
For functionality, we should understand a “**Vast Coach**” concept; therefore a unique head coach is accommodated by a team of assistant coaches with separate expertise!

1.) Function Dependencies:

People entity:

- LastName-FirstName and Team-AgeGroup are functionally dependent on Address and PhoneNumber

Players entity:

- PlayerName and Team-AgeGroup are functionally dependent on LastName-FirstName and Team-AgeGroup of the People table
- Team-AgeGroup is functionally dependent on PlayerName

Coaches entity:

- CoachesName and Team-AgeGroup are functionally dependent on LastName-FirstName and Team-AgeGroup of the People table
- YearsCoaching is functionally dependent on CoachesName

HeadCoach entity:

- HeadCoach and Team-AgeGroup are functionally dependent on LastName-FirstName and Team-AgeGroup of the People table
- Team-AgeGroup is functionally dependent on HeadCoach

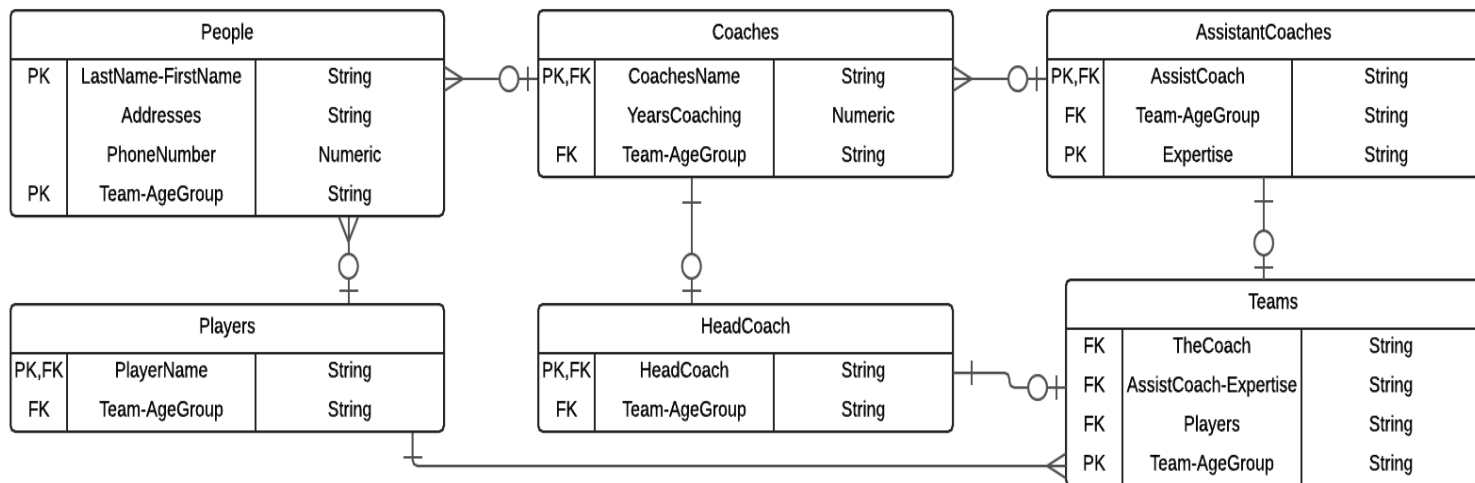
AssistCoaches entity:

- AssistCoach and Team-AgeGroup are functionally dependent on LastName-FirstName and Team-AgeGroup of the People table
- Team-AgeGroup are functionally dependent on AssistCoach and Expertise

Teams entity:

- TheCoach is functionally dependent on HeadCoach of the Head coach table
- AssistCoach-Expertise is functional dependent on AssistCoach and Expertise of the AssistantCoaches table
- Players is functionally dependent on PlayerName of the Players table

2.) E/R Diagram For Belters Little League Sports Alliance



3.) Is this 3NF?

Yes sir! For one, there are composite primary keys for “Best assessed” relation between tables to diminish redundancy and also name anomaly; thus being (BCNF or 3.5NF). Yet we have also evicted Assist coach anomaly by invoking an attribute of expertise per assistant, and utilizing that for serial process of the vast amount of said assistant coaches.