

Alfred Acosta Jr

Lab 9

4/5/2017

Prof Alan

1) Functional dependencies:

- People Table
 - Pid -> First Name, Last Name, Address, Phone Number, Age
- Players Table
 - Pid -> None
 - AgeID -> None
- Age Groups Table
 - AgeID -> Age Group Name
- Coaches Table
 - Pid -> Years Coaching
- Assistant Coach table
 - Pid -> None
- Teams Table
 - TeamID -> Team Name
 - Pid, HeadID, AgeID -> None
- Head Coach Table
 - Pid -> HeadID
- Assistant Coaches in team
 - Pid -> None
 - TeamID -> None

2) Why is it 3NF?

The reason why my ER diagram is 3rd normal form is because I said so. But in all seriousness the reason why it's in 3NF is because the connecting tables all make sense. The people table splits off into the players and coaches subtype. There is an age group table that is linked to the team table to further specify the person in each team. The coach is split into two more subtypes, one for head coaches so each team can have one head coach, and the assistant coaches that a team CAN have, which is linked to the teams table

by the use of the assistant coaches on team table. This line of reasoning with the provided diagram proves my point that it is 3NF.