

1. Functional Dependencies:

People: $PID \rightarrow \text{firstname, lastname, phoneNum, address, city, state}$

Coaches: $PID \rightarrow \text{yearsCoaching}$

Players: $PID \rightarrow \text{DOB}$

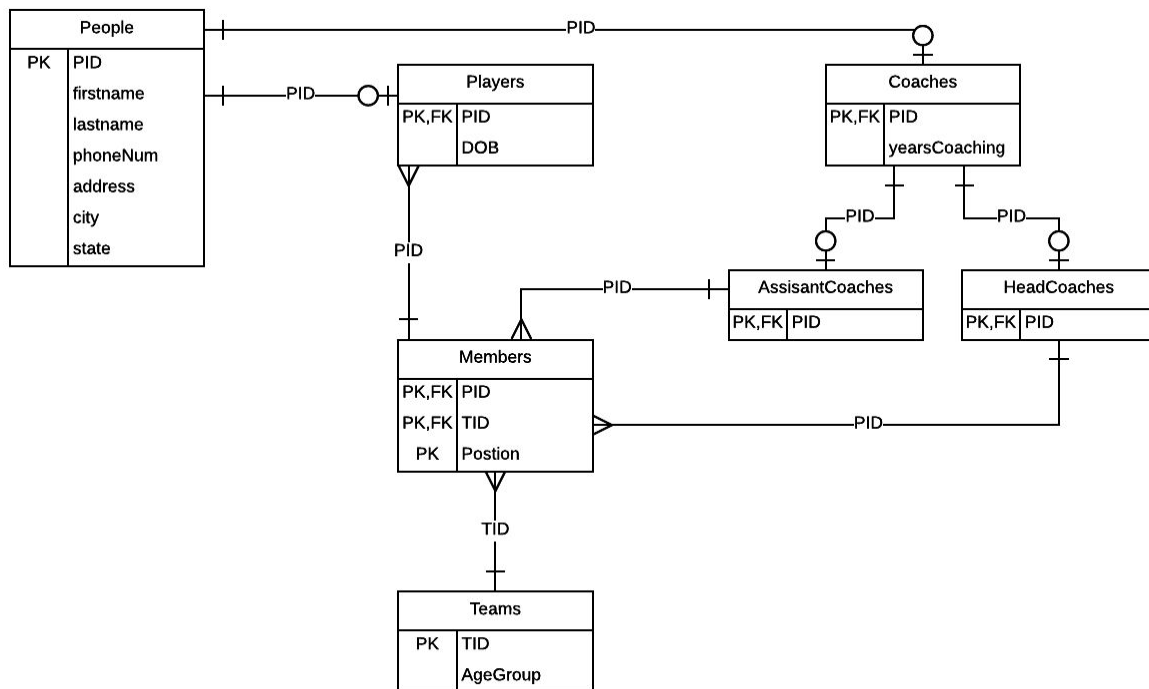
Teams: $TID \rightarrow \text{AgeGroup}$

AssisantCoaches: no functional dependencies

HeadCoaches: no functional dependencies

Members: no functional dependencies

2.



3. This is in 3rd normal form because it is in 2nd normal form and it has no multiple dependencies. No multiple dependencies exist because non-primary keys only have one determinant. In the case of Members table where we have a composite primary key, it still works because there are no functional dependencies in the table. The database is in 2nd normal form because it is in 1st normal form and has no partial dependencies. No Partial dependencies exist because for each table, any non-key attribute is only dependent on the primary key. It is in 1st normal form because the data in each table is atomic and can not be broken down anymore.

This database is also in BCNF because it is in 3rd normal form as explained above and there are no multiple dependencies involving candidate keys.