1)

Functional Dependencies:

Address: **addressID** -→ [houseNumber, streetName, city, state]

People: **pid** -→ [firstName, lastName, addressID, phoneNumber]

AgeGroup: **agid** --> [Group]

Team: **tid** --> [teamName, agid]

Players: **pid** --> [tid, DOB]

Coaches: **pid** --> [yearsCoaching]

TeamCoach: (cid, tid, Role) --> [Empty Set]

3)

My database is definitely in 3NF, as all non-key attributes, as demonstrated by the functional dependencies, are dependent on the key, the whole key, and nothing but the key. To convince you even further, my database is in:

- 1NF since all attributes are atomic and each instance is guaranteed to be unique, with no repeating entries possible.
- 2NF since it is already in 1NF, and no partial key dependencies exist, as no attribute depends on part of a composite key (the only composite key table is TeamCoach, and only the empty set is functionally dependent on all of its PK's).

So, since my database is in both 1NF and 2NF, and no transitive dependencies exist, it must be in 3NF.

Even better, this database is also in BCNF. This is because all functional dependencies have a super key as their determinant. Better yet, each determinant is each table's primary key, so this is definitely in BCNF.