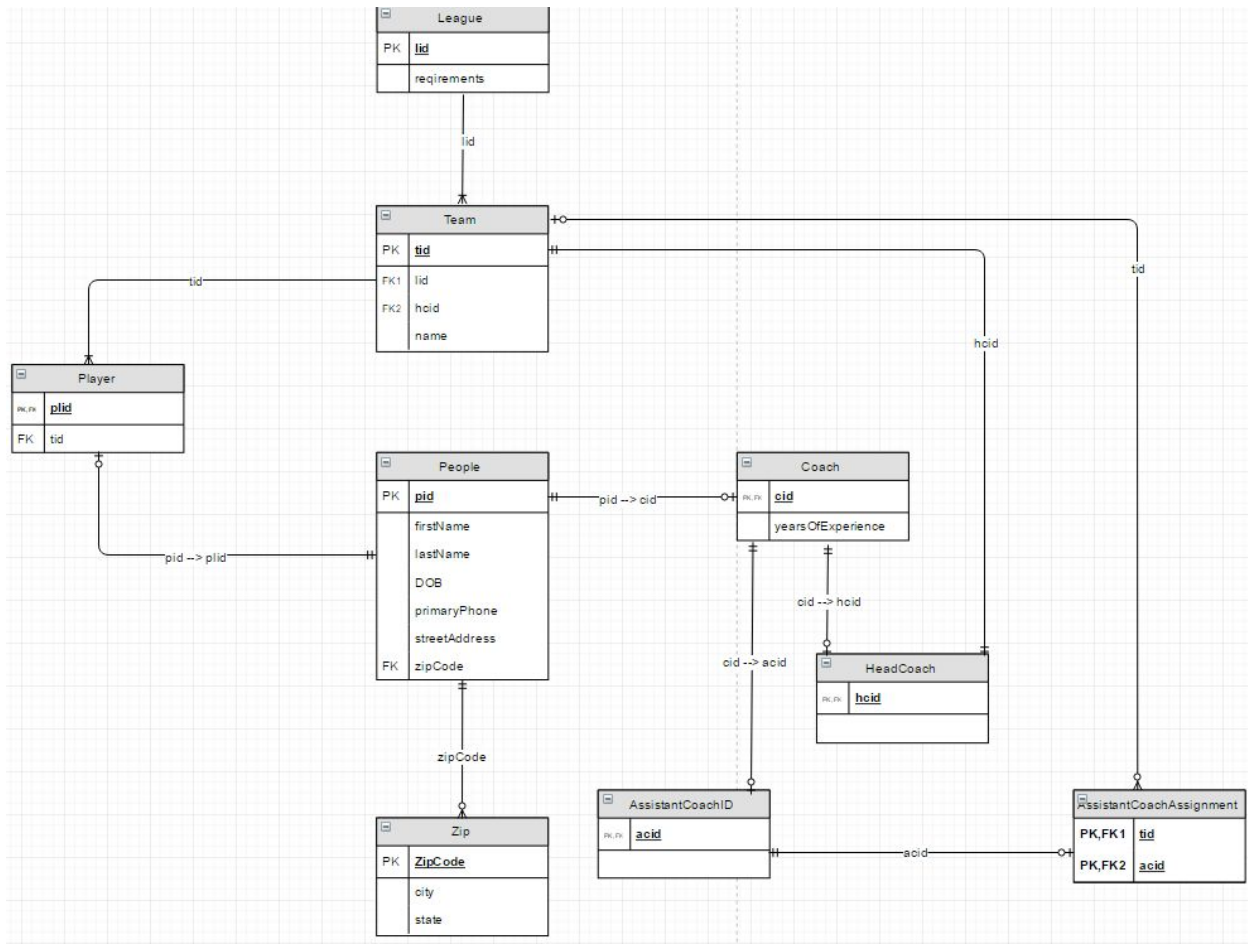Daniel Njoku
Database Management
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Normalization Three - ER Diagram

Functional Dependencies:
- **Players**
  - Pid → firstName, lastName, DOB, primaryPhone, streetAddress, zipCode
- **Zip**
  - zipCode → city, state
- **Team**
  - Tid → lid, hcid, name
- **League**
  - Lid → requirements
- **Player**
  - Plid → tid
- **Coach**
  - Cid → yearsOfExperience
- **Head Coach**
  - Hcid →
- **Assistant Coach**
  - Acid →
- **Assistant Coach Assignment**
  - Tid, acid →

3NF Explanation:

This database is in third normal form because it meets the standard necessary to qualify for first and second normal form. First normal form is achieved because there are no repeating groups throughout the table, there are separate tables for each set of stored data, and each row within the database can be identified by an unique primary key. The qualifications for second normal form are fulfilled because no sole attribute is dependant on candidate keys located on another table. Finally, third normal form is met because the database only contains columns that are non-transitively dependant on the primary keys. All non key attributes non-key attributes are functionally dependant on the primary keys. For example, each league's leagueID is dependant on it requirements, and each team's teamID is functionally dependant on the leagueID (each team can only participate in one league), headCoachID, and it's name.