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CMPT308: Lab 9 Normalization Three

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1. Functional dependencies:

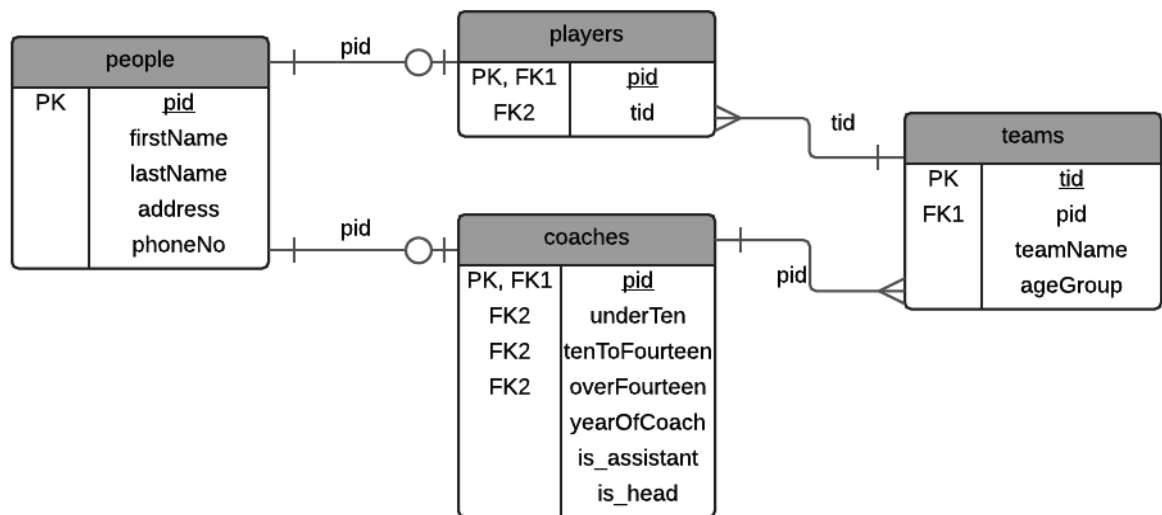
People: (pid)  $\rightarrow$  firstName, lastName, address, phoneNo

Players: (pid)  $\rightarrow$  tid

Coaches: (pid)  $\rightarrow$  underTen, tenToFourteen, overFourteen, yearOfCoach, is\_assistant, is\_head

Teams: (tid)  $\rightarrow$  pid, teamName, ageGroup

2. ER Diagram:



3. This database is in BCNF because it follows third normal form and there are no interior transitive dependencies. The information within each table of this database does not have an attribute that is dependent on more than one key; in other words, any potential redundancy has been removed from these tables. This makes the information inside the database more reliable, organized, and reduces the chance of error.