

1. Identify and document all functional dependencies.

AID is an Age Group ID

PID is a Players ID

TID is a Team ID

ZIP is a Zip Code

HCID is a Head Coach ID

ZIP → (city, stateProvince, country)

PID → (firstName, lastName, address, phoneNumber, ZIP)

(PID, TID) → age

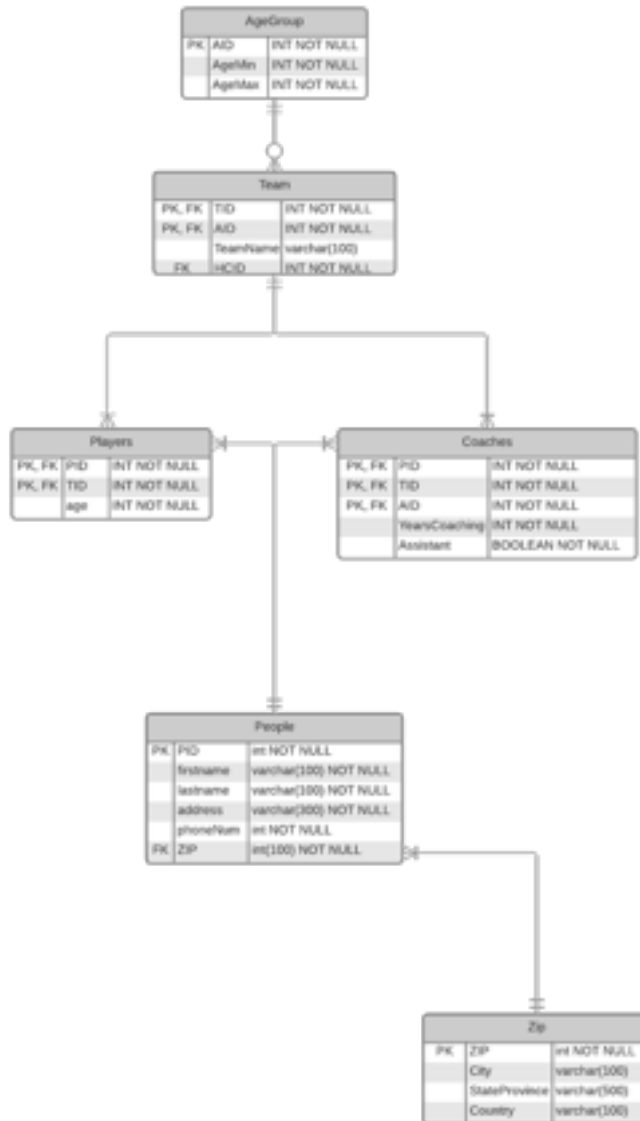
(AID, TID) → (teamName, HCID)

(AID, PID, TID) → (YearsCoaching, Assistant)

2. Draw a fully annotated E/R diagram that illustrates the Platonic ideal of beautiful and correct relational database design.

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MutiatAlagbala | April 12, 2016



3. Convince me that your database is in 3NF (or even better, in Boyce-Codd Normal Form).

The database is in first normal Form because none of the elements will be stored as unstructured data. The database is in second normal form because there are no partial key dependencies and it is in first normal form. The database is in third normal form because there are no non-key attributes in any table dependent on more than one key in a table and it is in second normal form. The database is in Boyce Codd normal form because there are no interior transitive dependencies. Every non-key attribute is linked to one primary key or composite primary key. Every element is dependent on its table's key the whole key and nothing but the key so help me Codd. : - )