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Normalization 3

Functional Dependencies:

People

Pid \rightarrow FN

Pid \rightarrow LN

Pid \rightarrow address

Pid \rightarrow Phnum

Coaches

Pid \rightarrow CFn

Pid \rightarrow CLn

Pid \rightarrow Caddress

Pid \rightarrow CPN

Pid \rightarrow NumYrs

Players

Pid \rightarrow PFN

Pid \rightarrow PLN

Pid \rightarrow Paddress

Pid \rightarrow PPhnum

Age Group

Agid \rightarrow MinAge

Agid \rightarrow MaxAge

Agid \rightarrow GName

Teams

Tid \rightarrow Pid

Tid \rightarrow TName

Tid \rightarrow Agid

Tid→Mid

Tid→Upid

Tid→Cid

For the data to be in third normal form it must follow certain restriction from the previous normalization form so it can ultimately be in third normal form. All data must be unique, therefore all of the data must be unique within the table and or tables. Then the data must be in second normal form meaning that the non prime attribute is dependent on any proper subset of any candidate key of the table. Finally for it to be in third normal the data must obey the two previous forms and the data must follow the rule that every non-prime attribute is non transitively dependent on every super key of R. Example in every 3rd normal form relational database you must have functional dependencies. If the FD are true than your data is in 3rd normal form.

Throughout the database each table has its own specific unique id, which allows us to make our data unique as well as make it easier to identify our data. Therefore in order to make the data unique on each row you must implement a pid, allowing the data to be unique in each row. Each functional dependency represent the relationship that every non key attribute is transitively dependent on the super key. In order for every database to be in 3rd normal form you must have functional dependencies that are consistent with your keys and attributes.

View:

10-14 Age Group View

CREATE VIEW Teams10to14!

AS SELECT teams.TName AS "Team Name"

FROM Teams, Age_Groups

WHERE teams.agid = Age_Group.agid

AND Age_Group.GName = 'Ten to Fourteen';