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CMPT 308

November 13, 2013

### Normalization HW#3

#### **Functional Dependencies:**

##### **People:**

$Pid \rightarrow \text{firstName, lastName, dob, address}$

##### **Coaches:**

$cid \rightarrow pid, tid, startDate, endDate$

##### **headCoaches:**

$cid \rightarrow pid$

##### **assistantCoaches:**

$acid \rightarrow cid, pid$

##### **players:**

$pid \rightarrow aid, tid$

##### **ageGroups:**

$aid \rightarrow pid, startDate, endDate$

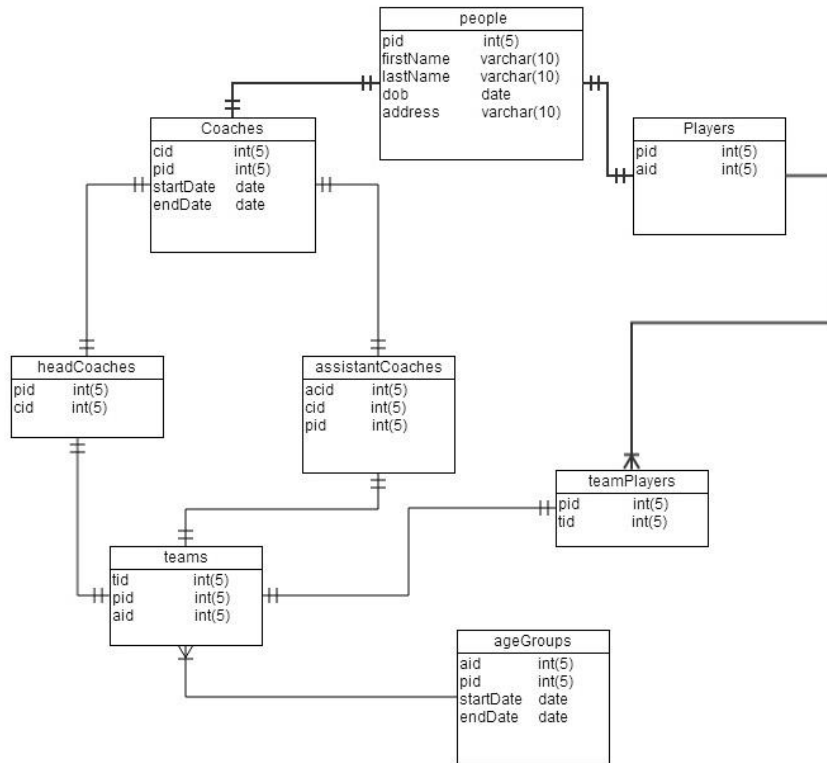
##### **teamPlayers:**

$pid-tid \rightarrow$

##### **teams:**

$tid \rightarrow pid, aid$

## E/R Diagram:



## Boyce-Codd Normal Form (3NF):

My database is third normal form because every attribute is associated with only one primary key. Also, each attribute describe the key, whole key, and nothing but the key. This database also meets first normal form which means that a group of data may not contain repeating data and it also meets second normal form because there isn't any partial dependencies of any column on a primary key.

## View:

```
CREATE VIEW groupTenToFourteen AS
(
  SELECT teams.tid As "Team Name", a.name AS "Age Group"
  FROM teams t, ageGroups
  WHERE t.aid = a.aid
  AND a.name = '10-14'
);
SELECT *
FROM groupTenToFourteen
```