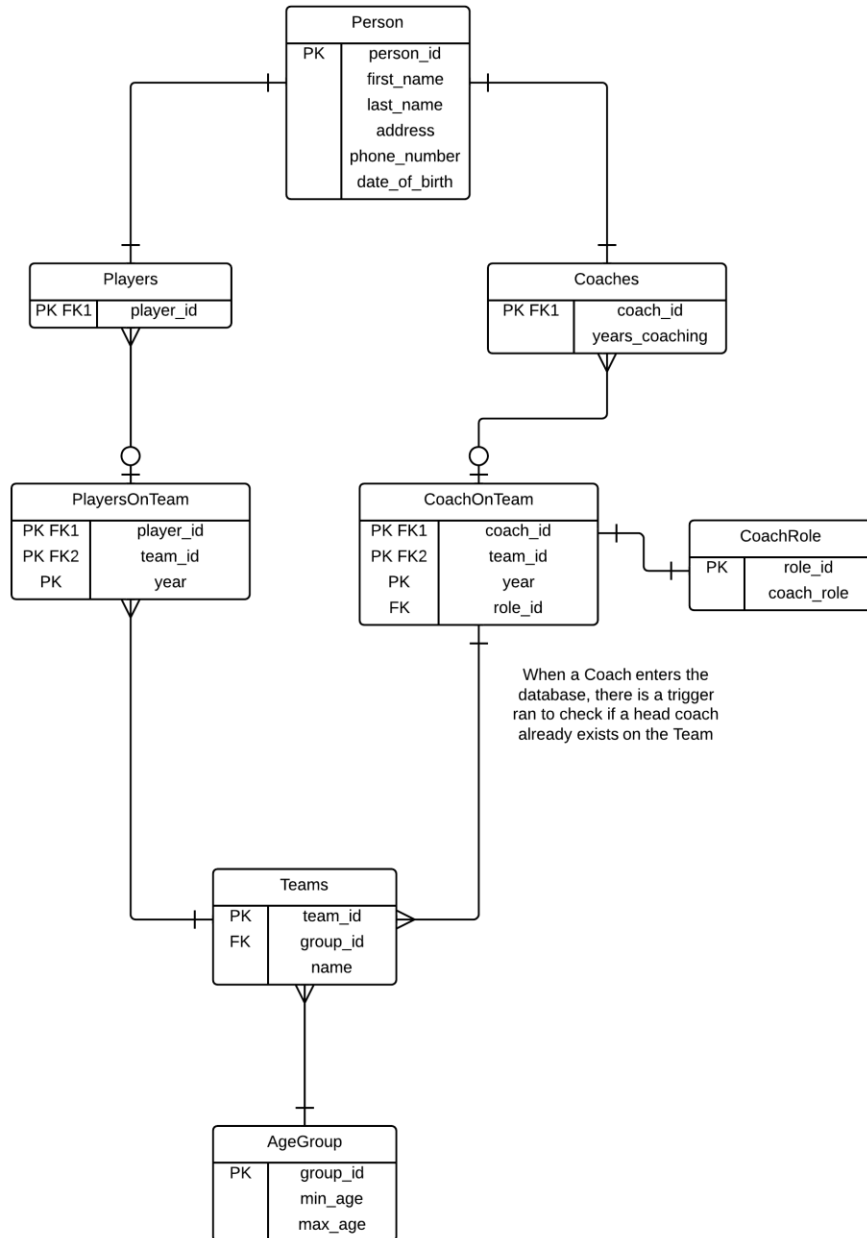


Matthew Musich
CMPT 308
Alan Labouseur
11/12/13
Normalization 3

ER Diagram:



Functional Dependencies:

Person: person_id → first_name, last_name, address, phone_number, date_of_birth

PlayersOnTeam: player_id, team_id → year

Coaches: coach_id → years_coaching

CoachesOnTeam: coach_id, team_id → year, role_id

CoachRole: role_id → coach_role

Teams: team_id → group_id, name

AgeGroup: group_id → minAge, maxAge

3NF:

The database is in third normal form because each table that contains more than one key has each dependency rely on both primary keys, there are no situations where an attribute depends solely on part of a composite based key. For example the table CoachOnTeam is in 3NF because A coach can be a head coach on one team and an assistant coach on another. The relation to CoachRole allows the role_id to be dependent on both primary keys of CoachOnTeam.

View:

```
CREATE VIEW Teams_in_10_to_14_age_group AS
  SELECT t.team_id, t.name
  FROM Teams t, AgeGroup a
  WHERE a.min_age = 10 AND
        a.max_age = 13 AND
        a.group_id = t.group_id;
```