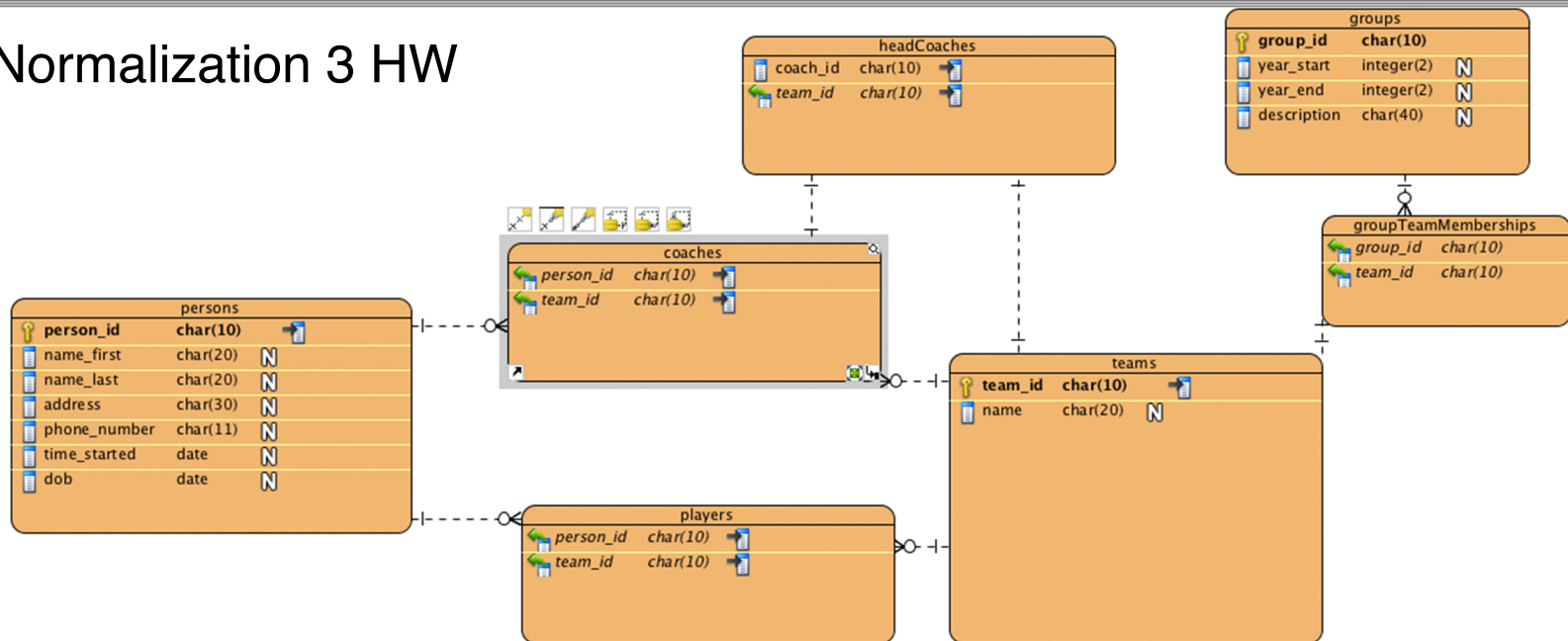


Normalization 3 HW



Functional Dependencies

In “persons” table, attributes ‘name_first’, ‘name_last”, ‘address’, ‘phone_number’, ‘time_started’, and ‘dob’ are dependent on ‘person_id’ (primary_key) for relation R.

In “teams” table, attribute ‘name’ is dependent on ‘team_id’ (primary_key) for relation R.

In “groups” table, attributes ‘year_first’, ‘year_last”, and ‘description’ are dependent on ‘group_id’ (primary_key) for relation R.

3NF

The database is in 3NF because every non-key attribute provides information about the key, the whole key, and nothing but the key. It also also meets the needs of 1NF (a group of data may not contain a repating group of data) and 2NF (there must not be any partial dependency of any column on primary key).

View

```
CREATE VIEW "Teams in the 10-14 agegroup" AS
SELECT teams.name
FROM teams
INNER JOIN groupTeamMemberships
ON teams.team_id = groupTeamMemberships.team_id
WHERE groupTeamMemberships.group_id = 1;
```