Sports Engine: Part 2

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Main Project Idea:
Sports page for sports fans to view teams and players from various sports.

Approach:
- Create OLAP version of the database using star schema design.

- Create the warehouse database by extracting from the production database and load the warehouse table

```
33  INSERT INTO dwsports.team SELECT team_id, team_name FROM sports.team;
34  INSERT INTO dwsports.division SELECT division_id, division_name FROM sports.division;
35  INSERT INTO dwsports.sports SELECT sport_id, sport_name, sport_description FROM sports.sports;
36  INSERT INTO dwsports.player
37        (team_id, division_id, sport_id, player_id, player_name, player_position)
38     SELECT a.team_id, b.division_id, c.sport_id, d.player_id,
39     concat( trim(d.player_first_name), ' ', trim(d.player_last_name)),
40     d.player_position
41        FROM sports.team a, sports.division b, sports.sports c, sports.player d, sports.team_members e
42     WHERE a.division_id = b.division_id AND a.team_id = e.team_id  AND e.player_id = d.player_id AND a.sport_id = c.sport_id;
43
44
```

- Create views in the warehouse database to make the database easier to use for an OLAP user

```
8   -- Number of players for each team
9   CREATE VIEW TEAM_PLAYERS_COUNT AS
10  SELECT t.team_id, t.team_name, COUNT(p.player_id) AS number_of_players
11  FROM player p, team t
12  WHERE p.team_id = t.team_id
13  GROUP BY t.team_id, t.team_name;
14
```

Potential Users:
- Users (sports fans)

System-wide interactions:
- Users:
    - Navigate and view sports, divisions, teams, and players

*Tables and their properties:*

- Sports - **Dimension Table**
    - Sport_id (primary key)
    - Sport_name
    - sport_description

- Team - **Dimension Table**
    - Team_id (primary key)
    - Team_name

- Player - **Fact Table**
    - Team_id (foreign key)
    - Sport_id (foreign key)
    - Division_id (foreign key)
    - Player_id
    - Player_name
    - Player_position

- Division - **Dimension Table**
    - Division_id (primary key)
    - Division_name

E-R Diagram for Warehouse Database
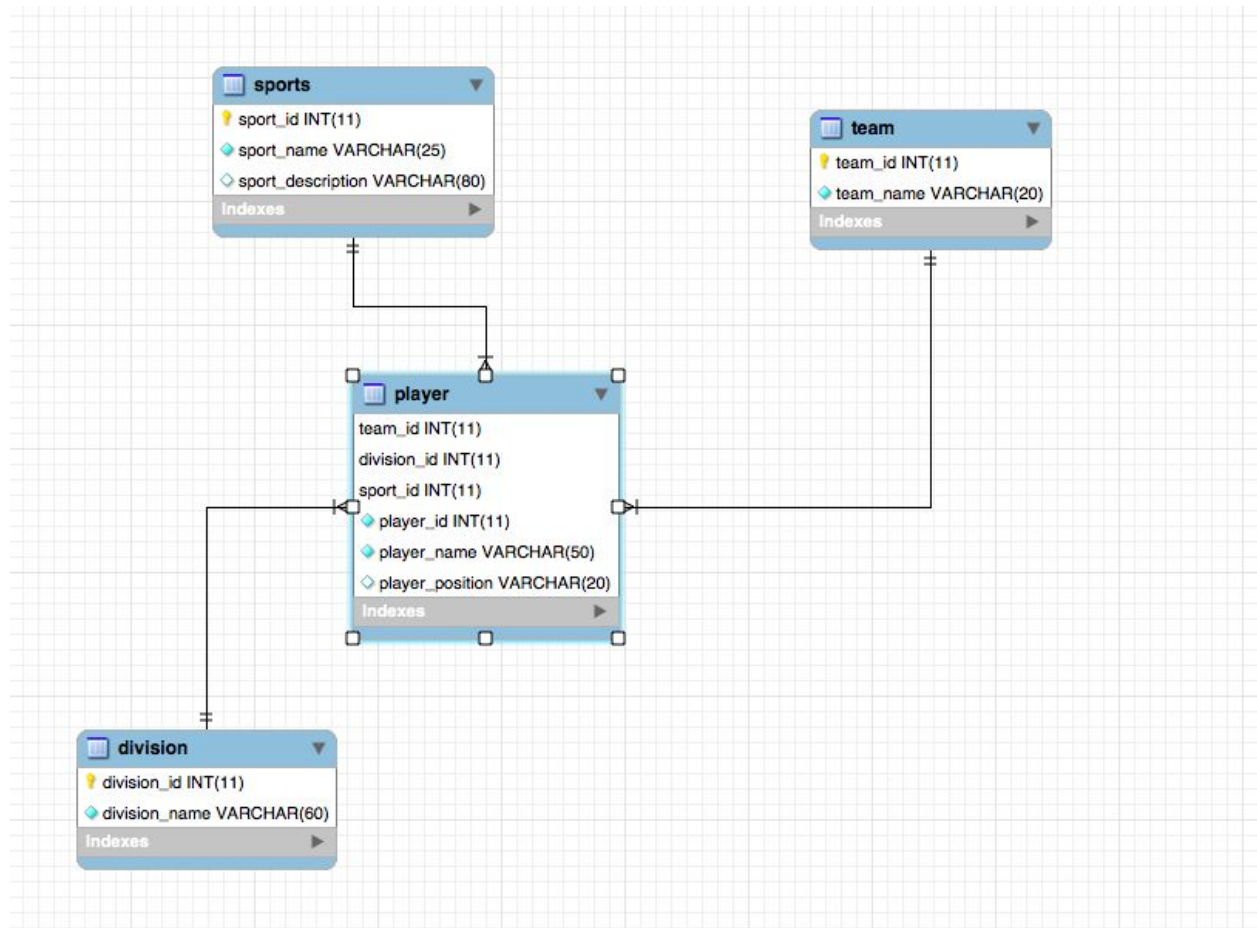
E-R Diagram for Warehouse Database with Views
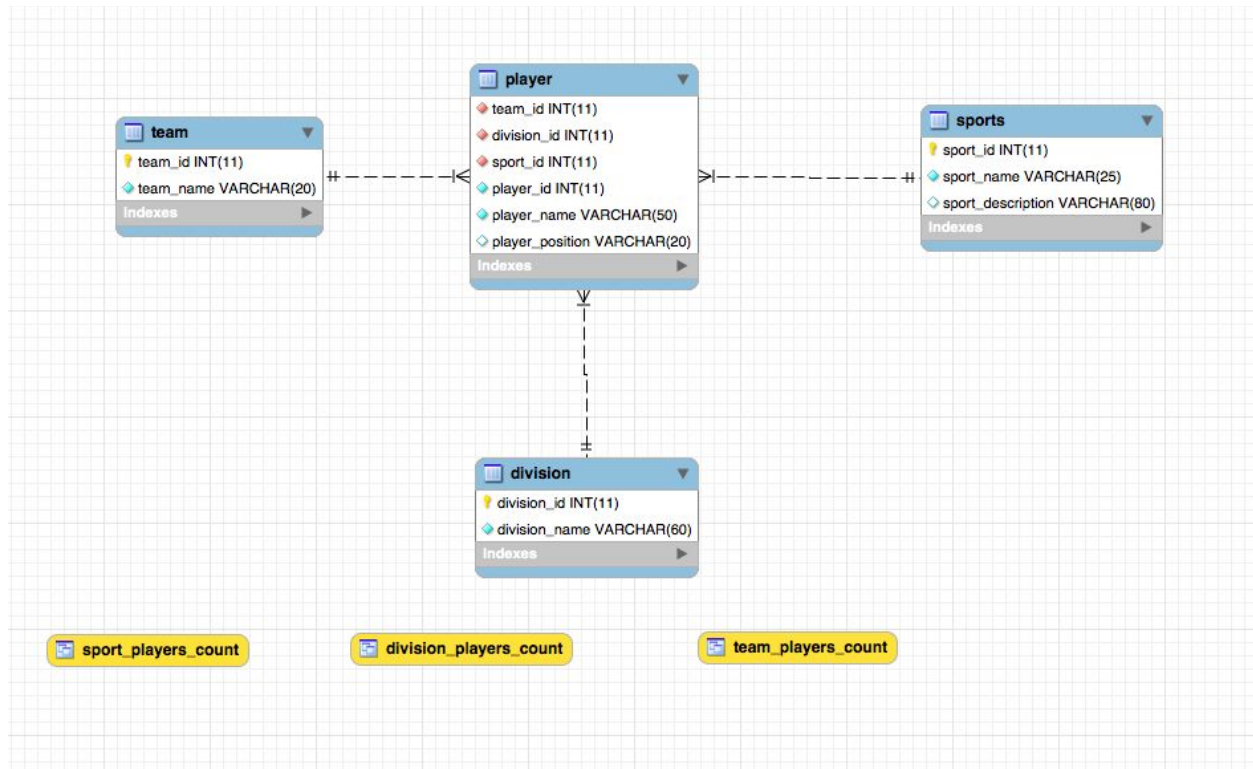
No necessary adjustments from instructor.