

10/10
good

Brenna Starkey & Luke Mason
Dr. Bowers
CPSC 321: PRJ5
Due: 3 November 2020

PRJ5 Write-Up

How Queries Will Be Used (also listed in script):

1. Gets all users that are admin
2. Gets all teams above a specific win value
3. Gets all games that are in a certain date range
4. Gets all leagues that are a certain gender
5. Gets all leagues that are a certain level
6. Gets all names on a specific team
7. Gets all users that aren't on a team
8. Gets all the teams in a specific tournament
9. Gets all the teams in a specific league
10. Gets all the wins and losses of all the teams in a league
11. Counts all the games a specific team has played
12. Counts all the times two specific teams have played each other
13. Gets all the rules for every league and put it into another table
14. Gets all sports that have a specific max-player minimum

Outputs

+-----+-----+	
Name	GU_ID
+-----+-----+	
Luke Mason	123456
Brenna Starkey	54013911
+-----+-----+	

2 rows in set (0.0161 sec)
Query OK, 0 rows affected (0.0208 sec)

+-----+-----+		
Team Name	wins	losses
+-----+-----+		
Team 3	6	1
The Rockets	5	4
+-----+-----+		

2 rows in set (0.0164 sec)
Query OK, 0 rows affected (0.0119 sec)

+-----+-----+		
team_one	team_two	date_of_game
+-----+-----+		
Team 1	Team 3	2020-10-24 07:30:00
Team 2	Team 1	2020-10-24 08:00:00
The Rockets	Laker Nation	2020-10-27 09:15:00
+-----+-----+		

3 rows in set (0.0163 sec)
Query OK, 0 rows affected (0.0149 sec)

+-----+-----+			
league_ID	league_level	sport	gender
+-----+-----+			
103	Advanced	Softball	Female

```

+-----+-----+-----+-----+
1 row in set (0.0159 sec)
Query OK, 0 rows affected (0.0150 sec)
+-----+-----+-----+-----+
| league_ID | league_level | sport      | gender |
+-----+-----+-----+-----+
|         101 | Beginner    | Basketball | Coed   |
+-----+-----+-----+-----+
1 row in set (0.0163 sec)
Query OK, 0 rows affected (0.0168 sec)
+-----+-----+
| Captain      | Team Name |
+-----+-----+
| Luke Mason   | Team 1    |
| Brenna Starkey | Team 1    |
+-----+-----+
2 rows in set (0.0111 sec)
Query OK, 0 rows affected (0.0155 sec)
+-----+-----+
| Name          | GU_ID |
+-----+-----+
| Sam McCloughan | 224771 |
| Cullen McEachern | 333288 |
| Yacine Guermali | 888372 |
+-----+-----+
3 rows in set (0.0181 sec)
Query OK, 0 rows affected (0.0131 sec)
+-----+-----+
| team_n | tourney_n |
+-----+-----+
| Team 1 | Basketball Tournament |
| Team 2 | Basketball Tournament |
+-----+-----+
2 rows in set (0.0161 sec)
Query OK, 0 rows affected (0.0157 sec)
+-----+-----+
| team_n | league_ID |
+-----+-----+
| Team 1 |         101 |
| Team 2 |         101 |
+-----+-----+
2 rows in set (0.0162 sec)
Query OK, 0 rows affected (0.0155 sec)
+-----+-----+-----+-----+-----+
| team_n | wins | losses | ties | league_ID |
+-----+-----+-----+-----+-----+
| Team 1 |    4 |      0 |    1 |         101 |
| Team 2 |    1 |      0 |    3 |         101 |
+-----+-----+-----+-----+-----+

```

2 rows in set (0.0161 sec)
Query OK, 0 rows affected (0.0190 sec)

team_n	COUNT(*)
Ballers	16

1 row in set (0.0160 sec)
Query OK, 0 rows affected (0.0164 sec)

team_n	team_n	COUNT(*)
Ballers	Team 1	16

1 row in set (0.0154 sec)
Query OK, 0 rows affected (0.0164 sec)

league_ID	rule
101	No Club Players
102	NULL
103	Experienced players only

3 rows in set (0.0154 sec)
Query OK, 0 rows affected (0.0151 sec)

league_ID	sport
101	Basketball
102	Football
103	Softball

```
/* Name: Brenna Starkey & Luke Mason
Date: October 20, 2020
File: proj5.sql
Class: CPSC 321, Bowers
Description: */
```

```
SET sql_mode = STRICT_ALL_TABLES;
```

```
DROP TABLE IF EXISTS results, schedule, userOnTeam,teamInLeague, teamInTournamen
t, tournament, team, user, league;
```

```
-- User entity
CREATE TABLE user(
GU_ID INT UNSIGNED,
user_n VARCHAR(60),
is_admin BOOLEAN,
PRIMARY KEY(GU_ID)
);
```

```
-- Team entity
CREATE TABLE team(
team_n VARCHAR(60),
wins INT UNSIGNED,
losses INT UNSIGNED,
ties INT UNSIGNED,
sportsmanship_rating INT UNSIGNED,
PRIMARY KEY (team_n)
);
```

```
-- Tournament entity
CREATE TABLE tournament(
tourney_n VARCHAR(60),
tourney_date DATETIME,
PRIMARY KEY (tourney_n)
);
```

```
-- Schedule of games entity to be played
CREATE TABLE schedule (
team_one VARCHAR(60),
team_two VARCHAR(60),
date_of_game DATETIME,
game_location VARCHAR(60),
PRIMARY KEY (team_one, team_two, date_of_game),
FOREIGN KEY (team_one) REFERENCES team (team_n),
FOREIGN KEY (team_two) REFERENCES team (team_n)
);
```

```
-- League entity that teams can join
CREATE TABLE league (
league_ID INT UNSIGNED,
rule VARCHAR(60),
max_players INT UNSIGNED,
league_level VARCHAR(60),
gender VARCHAR(60),
sport VARCHAR(60),
PRIMARY KEY (league_ID)
);
```

```
-- Results of games that are played
CREATE TABLE results (
```

```

team_one VARCHAR(60),
team_two VARCHAR(60),
date_of_game DATETIME,
team_one_score INT,
team_two_score INT,
PRIMARY KEY (team_one, team_two, date_of_game),
FOREIGN KEY (team_one, team_two, date_of_game)
REFERENCES schedule(team_one, team_two, date_of_game)
);

```

-- User on team relational table

```

CREATE TABLE userOnTeam (
GU_ID INT UNSIGNED,
team_n VARCHAR(60),
is_captain BOOLEAN,
PRIMARY KEY (GU_ID),
FOREIGN KEY (GU_ID) REFERENCES user(GU_ID),
FOREIGN KEY (team_n) REFERENCES team(team_n)
);

```

-- Team in tournament relational table

```

CREATE TABLE teamInTournament (
team_n VARCHAR(60),
tourney_n VARCHAR(60),
PRIMARY KEY (team_n, tourney_n),
FOREIGN KEY (team_n) REFERENCES team(team_n),
FOREIGN KEY (tourney_n) REFERENCES tournament(tourney_n)
);

```

-- Team in league relational table

```

CREATE TABLE teamInLeague (
team_n VARCHAR(60),
league_ID INT UNSIGNED,
PRIMARY KEY (team_n),
FOREIGN KEY (team_n) REFERENCES team(team_n),
FOREIGN KEY (league_ID) REFERENCES league(league_ID)
);

```

-- Insert Statements

-- User

```

INSERT INTO user VALUES (54013911, 'Brenna Starkey', 1), (123456, 'Luke Mason',
1),
(753293, 'Shawn Bowers', 0), (324313, 'Grace Tompkins', 0), (6583928, 'Anna Keny
on', 0),
(637562, 'Sophie Landers', 0), (233901, 'Mia Scelfo', 0), (727349, 'Kerynica Key
es', 0),
(129402, 'Ben Hogan', 0), (324628, 'Bob Smith', 0), (392017, 'Alice Anders', 0),
(345921, 'Dan Humphrey', 0), (952619, 'Andrew Ray', 0), (888372, 'Yacine Guermal
i', 0),
(333288, 'Cullen McEachern', 0), (224771, 'Sam McCloughan', 0);

```

-- Team

```

INSERT INTO team VALUES ('Team 1', 4, 0, 1, 4), ('Team 2', 1, 0, 3, 3),
('Team 3', 6, 1, 0, 3), ('The Rockets', 5, 4, 2, 4), ('Laker Nation', 2, 2, 0, 5
),
('Sluggers', 1, 2, 0, 4), ('Lightning Bolts', 0, 4, 0, 3), ('Ballers', 3, 3, 0,
4),
('Big Cats', 4, 4, 0, 3), ('Tiger Kings', 3, 2, 0, 2);

```

```

-- Tournament
INSERT INTO tournament VALUES ('Basketball Tournament', 20201020080000), ('Soccer Tournament', 20201020080000),
('World Cup', 20201203073000), ('Softball Tournament', 20201108103000);

-- Schedule
INSERT INTO schedule VALUES ('Team 1', 'Team 3', 20201024073000, 'McCarthy'),
('Team 2', 'Team 1', 20201024080000, 'Rudolf Fitness Center'), ('The Rockets', 'Laker Nation', 20201027091500, 'Rudolf Fitness Center'), ('Sluggers', 'Lightning Bolts', 20201113120000, 'Mulligan Field'),
('Tiger Kings', 'Big Cats', 20201114123000, 'Mulligan Field'), ('Ballers', 'Team 1', 20201221083000, 'McCarthy'),
('Team 1', 'Team 3', 20201113042500, 'Rudolf Fitness Center'), ('Ballers', 'Team 1', 20201225083000, 'McCarthy');

-- League
INSERT INTO league VALUES (101, 'No Club Players', 10, 'Beginner', 'Coed', 'Basketball'),
(102, NULL, 15, 'Intermediate', 'Male', 'Football'), (103, 'Experienced players only', 15, 'Advanced', 'Female', 'Softball');

-- Results
INSERT INTO results VALUES ('Team 1', 'Team 3', 20201024073000, 24, 30), ('Team 2', 'Team 1', 20201024080000, 45, 40),
('The Rockets', 'Laker Nation', 20201027091500, 36, 38), ('Sluggers', 'Lightning Bolts', 20201113120000, 38, 38),
('Tiger Kings', 'Big Cats', 20201114123000, 40, 41), ('Ballers', 'Team 1', 20201225083000, 23, 35),
('Ballers', 'Team 1', 20201221083000, 34, 45), ('Team 1', 'Team 3', 20201113042500, 50, 51);

-- User on Team
INSERT INTO userOnTeam VALUES (54013911, 'Team 1', 1), (123456, 'Team 1', 0), (753293, 'Team 2', 1),
(324313, 'Team 3', 0), (6583928, 'Team 3', 1), (637562, 'Team 3', 0), (233901, 'Team 3', 0),
(727349, 'The Rockets', 1), (129402, 'The Rockets', 0), (324628, 'Laker Nation', 0),
(392017, 'Laker Nation', 1), (345921, 'Lightning Bolts', 0), (952619, 'Ballers', 1);

-- Team in Tournament
INSERT INTO teamInTournament VALUES ('Team 1', 'Basketball Tournament'), ('Team 2', 'Basketball Tournament'),
('Team 3', 'Soccer Tournament');

-- Team in League
INSERT INTO teamInLeague VALUES ('Team 1', 101), ('Team 2', 101), ('Team 3', 103);

-- Query Statements
-- 1. Get all users that are admin
SELECT u.user_n AS 'Name', u.GU_ID
FROM user u
WHERE u.is_admin = 1;

-- 2. Get all teams above a specific win value

```

```

SELECT t.team_n AS 'Team Name', t.wins, t.losses
FROM team t
WHERE t.wins > 4;

-- 3. Get all games that are in a certain date range
SELECT s.team_one, s.team_two, s.date_of_game
FROM schedule s
WHERE s.date_of_game BETWEEN 20201001000000 AND 20201031235959;

-- 4. Get all leagues that are a certain gender
SELECT l.league_ID, l.league_level, l.sport, l.gender
FROM league l
WHERE l.gender = "Female";

-- 5. Get all leagues that are a certain level
SELECT l.league_ID, l.league_level, l.sport, l.gender
FROM league l
WHERE l.league_level = "Beginner";

-- 6. Get all names on a specific team
SELECT u1.user_n AS 'Captain', u2.team_n AS 'Team Name'
FROM user u1 JOIN userOnTeam u2 USING (GU_ID)
WHERE u2.team_n = "Team 1";

-- 7. Get all users that aren't on a team
(SELECT u1.user_n AS 'Name', u1.GU_ID
FROM user u1)
EXCEPT
(SELECT u1.user_n, u1.GU_ID
FROM user u1 JOIN userOnTeam u2 USING (GU_ID));

-- 8. Get all the teams in a specific tournament
SELECT t1.team_n, t1.tourney_n
FROM teamInTournament t1
WHERE t1.tourney_n = "Basketball Tournament";

-- 9. Get all the teams in a specific league
SELECT t1.team_n, l1.league_ID
FROM teamInLeague t1 JOIN league l1 USING (league_ID)
WHERE l1.league_ID = 101;

-- 10. Get all the wins and losses of all the teams in a league
SELECT t1.team_n, t1.wins, t1.losses, t1.ties, l1.league_ID
FROM team t1 JOIN teamInLeague l1 USING (team_n)
WHERE l1.league_ID = 101;

-- 11. Count all the games a specific team has played
SELECT t1.team_n, COUNT(*)
FROM team t1 JOIN schedule s1
WHERE t1.team_n = s1.team_one OR t1.team_n = s1.team_two;

-- 12. Count all the times two specific teams have played each other
SELECT t1.team_n, t2.team_n, COUNT(*)
FROM schedule s1, team t1, team t2
WHERE (t1.team_n = s1.team_one AND t2.team_n = s1.team_two) OR
      (t1.team_n = s1.team_two AND t2.team_n = s1.team_one);

-- 13. Get all the rules for every league and put it into another table
SELECT l1.league_ID, l1.rule
FROM league l1;

```

```
-- 14. Get all sports that have a specific max-player minimum
SELECT l1.league_ID, l1.sport
FROM league l1
WHERE l1.max_players > 5;
```