John Olgin
CS 340

NBA Database Project

Overview Outline

This database will represent a simple listing of the overall structure of the National Basketball Association. It will depict the relationship between conferences, divisions, teams, and players and their specialties. An outline structure of my database would look roughly like this:

- Conferences
    - Divisions
        - Teams
            - Players
                - Specialty
                - Specialty
                - Specialty

A simple explanation of my database will be that conferences hold divisions, divisions hold teams, teams hold players, and players have specialties. The site will show the tables of each of these entities along with their relational ties to other entities (i.e. divisions will have a key that references which conference they are in). Note that my database will only include the starters for each team, therefore there will be 5 players initially placed on each team in this database.

Database Outline

Entities

Conferences

The first entity in my database will be the conference entity. The NBA is organized into 6 divisions, and these divisions are organized into two conferences. A conference is used to determine the regular season schedules of each team along with the playoff brackets at the end of the season. The only properties this entity will have are conference_name and conference_ID (conference_ID will be the primary key and is auto generated).

Division

Divisions are the second entity in my database. The NBA teams are placed into a division to help further decided who their regular season opponents are and whom they'll be competing with to get into the playoffs at the end of the season. The only properties the division will have are division_name, division_ID (division_ID is primary key auto), and conf_ID (foreign key references conference_ID from conference).

Teams

John Olgin
CS 340

Teams are the third entity in my database. Each team holds numerous players and each team of players competes to win the NBA championship every year. Teams are often seen as units in the NBA. The properties of a team are team_name, coach_name, city_name, team_ID (primary auto), and div_ID (foreign key references division_ID from division).

Players

Players are individual people who are part of each team. They usually have different abilities, positions, and experience. The properties of a player are first_name, last_name, number (jersey number), height_inches, position, player_id (primary key auto), t_ID (foreign key references team_ID from team).

Specialties

Specialties are abilities that each player is known for either on their team or within the NBA in general. Each player has different abilities and are usually very good at a few things while weaker at others. This entity will hold a few different specialties that are popular around the league (i.e. passer). Each specialty will have the properties type and specialty_ID (primary key auto).

Relationships

Conference-Division

Each division has a conference that it belongs to. A division doesn't have to belong to a conference, but it can only belong to one at maximum. A conference can have multiple divisions, but doesn't require any. For this reason, a division will have a foreign key (conf_ID) that references the conference entity primary key (conference_ID).

Division-Team

Each team has a division that it belongs to. A team doesn't have to belong to a division, but it can only belong to one at maximum. A division can have multiple teams belonging to it at once, but doesn't require any. For this reason, a team will have a foreign key (div_ID) that references the division entity primary key (division_ID).

Team-Player

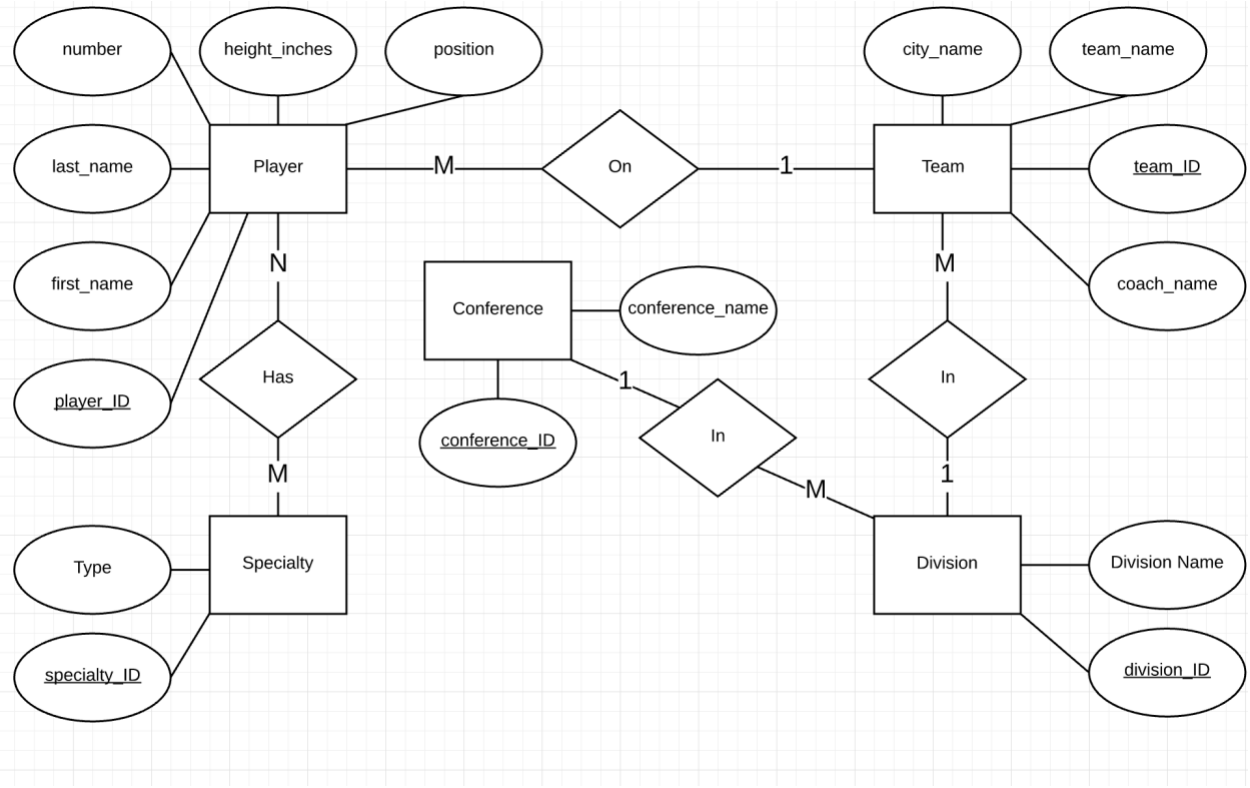
Each player belongs to a team in the NBA. A player doesn't have to belong to a team, but it can only belong to one at maximum. A team can have multiple players belonging to it at once,

but doesn't require any. For this reason, a player will have a foreign key (t_ID) that references the team entity primary key (team_ID).

Player-Specialty

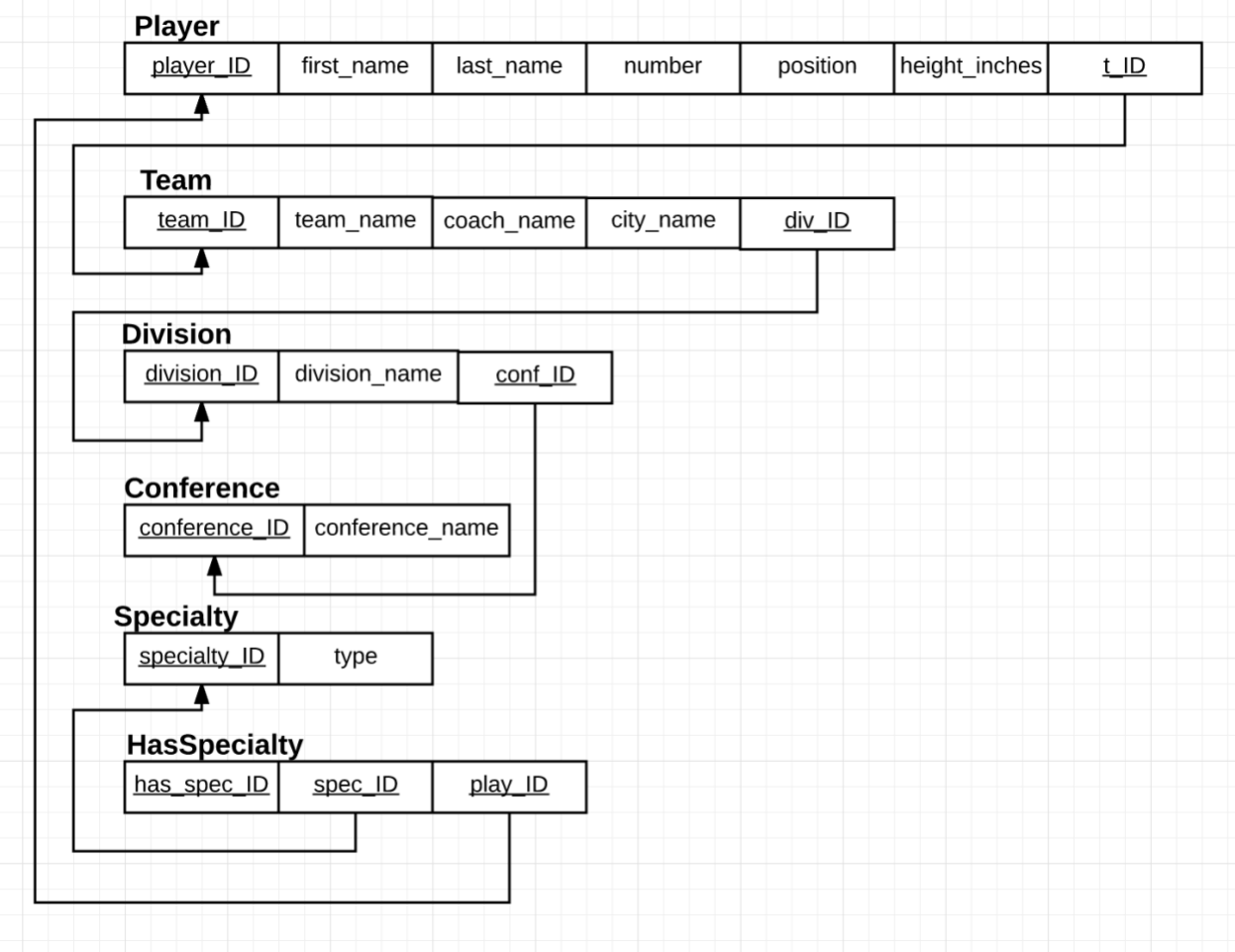
As stated before, each player has multiple abilities and specialties they excel at. These are usually the things their team expects them to do regularly and with precision. Neither entity requires the other to be present for it to exist. Each player can have multiple specialties and each specialty can belong to multiple players (many-to-many). For this reason, there will be a has_specialty table that holds these relationships so they're properly represented. The table will have two foreign keys (play_ID, spec_ID) that reference the player entity primary key (player_id) and specialty entity primary key (specialty_ID), respectively. It will also have it's own primary key (has_spec_ID) to be referred by.

ER Diagram



John Olgin
CS 340

Schema



Data Definition Queries

This creates the table for the player entity.

```
CREATE TABLE player(
player_id INT NOT NULL AUTO_INCREMENT,
first_name VARCHAR(255) NOT NULL,
last_name VARCHAR(255) NOT NULL,
number INT NOT NULL,
height_inches INT NOT NULL,
position VARCHAR(255) NOT NULL,
t_ID INT,
```

```
PRIMARY KEY (player_id),
FOREIGN KEY (t_ID) REFERENCES team(team_ID)
);
```

This creates the table for the team entity.

```
CREATE TABLE team(
team_ID INT NOT NULL AUTO_INCREMENT,
team_name VARCHAR(255) NOT NULL,
coach_name VARCHAR(255) NOT NULL,
city_name VARCHAR(255) NOT NULL,
div_ID INT,
PRIMARY KEY (team_ID),
FOREIGN KEY (div_ID) REFERENCES division(division_ID)
);
```

This creates the table for the division entity.

```
CREATE TABLE division(
division_ID INT NOT NULL AUTO_INCREMENT,
division_name VARCHAR(255) NOT NULL,
conf_ID INT,
PRIMARY KEY (division_ID),
FOREIGN KEY (conf_ID) REFERENCES conference(conference_ID)
);
```

This creates the table for the conference entity.

```
CREATE TABLE conference(
conference_ID INT NOT NULL AUTO_INCREMENT,
conference_name VARCHAR(255) NOT NULL,
PRIMARY KEY (conference_ID)
);
```

This creates the table for the specialty entity.

```
CREATE TABLE specialty(
specialty_ID INT NOT NULL AUTO_INCREMENT,
type VARCHAR(255) NOT NULL,
PRIMARY KEY (specialty_ID)
);
```

This creates the table for the player-specialty relationship.

```
CREATE TABLE has_specialty(
has_spec_ID INT NOT NULL AUTO_INCREMENT,
spec_ID INT NOT NULL,
play_ID INT NOT NULL,
PRIMARY KEY (has_spec_ID),
FOREIGN KEY (spec_ID) REFERENCES specialty(specialty_ID),
FOREIGN KEY (play_ID) REFERENCES player(player_ID)
);
```

John Olgin
CS 340

This fills the conference entity table

INSERT INTO conference (conference_name)
VALUES ("East"),("West");

This fills the division entity table

INSERT INTO division (division_name, conf_ID)
VALUES ("Atlantic", 1), ("Central", 1), ("Southeast", 1), ("Northwest", 2), ("Pacific", 2), ("Southwest", 2);

This fills the team entity table

INSERT INTO team (team_name, coach_name, city_name, div_ID)
VALUES ("Celtics", "Brad Stevens", "Boston", 1), ("Raptors", "Dwane Casey", "Toronto", 1), ("76ers", "Brett Brown", "Philadelphia", 1), ("Knicks", "Jeff Hornacek", "New York", 1), ("Nets", "Kenny Atkinson", "Brooklyn", 1), ("Pistons", "Stan Van Gundy", "Detroit", 2), ("Cavaliers", "Tyron Lue", "Cavaliers", 2), ("Pacers", "Nate McMillan", "Indiana", 2), ("Bucks", "Jason Kidd", "Milwaukee", 2), ("Bulls", "Fred Hoiberg", "Chicago", 2), ("Wizards", "Scott Brooks", "Washington", 3), ("Heat", "Erik Spoelstra", "Miami", 3), ("Hornets", "Steve Clifford", "Charlotte", 3), ("Magic", "Frank Vogel", "Orlando", 3), ("Hawks", "Mike Budenholzer", "Atlanta", 3), ("Trail Blazers", "Terry Stotts", "Portland", 4), ("Timberwolves", "Tom Thibodeau", "Minnesota", 4), ("Nuggest", "Michael Malone", "Denver", 4), ("Jazz", "Quin Snyder", "Utah", 4), ("Thunder", "Billy Donovan", "Oklahoma City", 4), ("Warriors", "Steve Kerr", "Golden State", 5), ("Clippers", "Doc Rivers", "Los Angeles", 5), ("Lakers", "Luke Walton", "Los Angeles", 5), ("Suns", "Jay Triano", "Phoenix", 5), ("Kings", "Dave Joerger", "Sacramento", 5), ("Rockets", "Mike D'Antoni", "Houston", 6), ("Spurs", "Gregg Popovich", "San Antonio", 6), ("Pelicans", "Alvin Gentry", "New Orleans", 6), ("Grizzlies", "J.B. Bickerstaff", "Memphis", 6), ("Mavericks", "Rick Carlisle", "Dallas", 6);

This fills the specialty entity table

INSERT INTO specialty (type)
VALUES ("3-point shooter"), ("mid range shooter"), ("rim finisher"), ("passer"), ("lockdown defender"), ("role player"), ("shot blocker"), ("shot creator");

This fills the player entity table

INSERT INTO player (first_name, last_name, number, height_inches, position, t_ID)
VALUES ("Kyrie", "Irving", 11, 75, "PG", 1), ("Jaylon", "Brown", 7, 79, "SG", 1), ("Jason", "Tatum", 0, 80, "SF", 1), ("Marcus", "Morris", 13, 81, "PF", 1), ("Al", "Horford", 42, 82, "C", 1), ("Kyle", "Lowry", 7, 72, "PG", 2), ("DeMar", "DeRozan", 10, 79, "SG", 2), ("Norman", "Powell", 24, 76, "SF", 2), ("Serge", "Ibaka", 9, 82, "PF", 2), ("Jonas", "Valanciunas", 17, 84, "C", 2), ("Ben", "Simmons", 25, 82, "PG", 3), ("JJ", "Redick", 17, 76, "SG", 3), ("Robert", "Covington", 33, 81, "SF", 3), ("Dario", "Saric", 9, 82, "SF", 3), ("Joel", "Embiid", 21, 84, "C", 3), ("Jarrett", "Jack", 55, 75, "PG", 4), ("Courtney", "Lee", 5, 77, "SG", 4), ("Tim", "Hardaway Jr.", 3, 78, "SF", 4),

("Kristaps", "Porzingis", 6, 87, "PF", 4), ("Enes", "Kanter", 00, 83, "C", 4), ("D'Angelo", "Russell", 1, 77, "PG", 5), ("Allen", "Crabbe", 33, 78, "SG", 5), ("DeMarre", "Carroll", 9, 80, "SF", 5), ("Rondae", "Hollis-Jefferson", 24, 79, "PF", 5), ("Tyler", "Zeller", 44, 84, "C", 5), ("Reggie", "Jackson", 1, 75, "PG", 6), ("Avery", "Bradley", 22, 74, "SG", 6), ("Stanley", "Johnson", 7, 79, "SF", 6), ("Tobias", "Harris", 34, 79, "PF", 6), ("Andre", "Drummond", 0, 83, "C", 6), ("Derrick", "Rose", 1, 75, "PG", 7), ("J.R.", "Smith", 5, 78, "SG", 7), ("LeBron", "James", 23, 80, "SF", 7), ("Jae", "Crowder", 99, 78, "PF", 7), ("Kevin", "Love", 0, 82, "C", 7), ("Darren", "Collison", 2, 74, "PG", 8), ("Victor", "Oladipo", 4, 76, "SG", 8), ("Bojan", "Bogdanovic", 44, 80, "SF", 8), ("Thaddeus", "Young", 21, 80, "PF", 8), ("Myles", "Turner", 33, 83, "C", 8), ("Eric", "Bledsoe", 6, 73, "PG", 9), ("Tony", "Snell", 21, 79, "SG", 9), ("Khris", "Middleton", 22, 80, "SF", 9), ("Giannis", "Antetokounmpo", 34, 83, "PF", 9), ("John", "Henson", 31, 83, "C", 9), ("Kris", "Dunn", 32, 76, "PG", 10), ("Zach", "LaVine", 8, 77, "SG", 10), ("David", "Nwaba", 11, 76, "SF", 10), ("Lauri", "Markkanen", 24, 84, "PF", 10), ("Robin", "Lopez", 42, 84, "C", 10), ("John", "Wall", 2, 76, "PG", 11), ("Bradley", "Beal", 6, 77, "SG", 11), ("Otto", "Porter Jr.", 22, 80, "SF", 11), ("Markieff", "Morris", 5, 82, "PF", 11), ("Marcin", "Gortat", 13, 83, "C", 11), ("Goran", "Dragic", 7, 75, "PG", 12), ("Dion", "Waiters", 11, 76, "SG", 12), ("Josh", "Richardson", 0, 78, "SF", 12), ("Justise", "Winslow", 20, 79, "PF", 12), ("Hassan", "Whiteside", 21, 84, "C", 12), ("Kemba", "Walker", 15, 73, "PG", 13), ("Nicolas", "Batum", 5, 80, "SG", 13), ("Michael", "Kidd-Gilchrist", 14, 79, "SF", 13), ("Marvin", "Williams", 2, 81, "PF", 13), ("Dwight", "Howard", 12, 83, "C", 13), ("Elfrid", "Payton", 2, 76, "PG", 14), ("Terrence", "Ross", 31, 79, "SG", 14), ("Evan", "Fournier", 10, 79, "SF", 14), ("Aaron", "Gordon", 00, 81, "PF", 14), ("Nikola", "Vucevic", 9, 84, "C", 14), ("Dennis", "Shroder", 17, 73, "PG", 15), ("Kent", "Bazemore", 24, 77, "SG", 15), ("Taurean", "Prince", 12, 80, "SF", 15), ("Luke", "Babbitt", 8, 81, "PF", 15), ("Dewayne", "Dedmon", 14, 84, "C", 15), ("Damian", "Lillard", 0, 75, "PG", 16), ("C.J.", "McCollum", 3, 75, "SG", 16), ("Pat", "Connaughton", 5, 77, "SF", 16), ("Al-Farouq", "Aminu", 8, 81, "PF", 16), ("Jusuf", "Nurkic", 27, 84, "C", 16), ("Jeff", "Teague", 0, 74, "PG", 17), ("Andrew", "Wiggins", 22, 80, "SG", 17), ("Jimmy", "Butler", 23, 80, "SF", 17), ("Taj", "Gibson", 67, 81, "PF", 17), ("Karl-Anthony", "Towns", 32, 84, "C", 17), ("Jamal", "Murray", 27, 76, "PG", 18), ("Gary", "Harris", 14, 76, "SG", 18), ("Wilson", "Chandler", 21, 81, "SF", 18), ("Paul", "Milsap", 4, 80, "PF", 18), ("Nikola", "Jokic", 15, 82, "C", 18), ("Ricky", "Rubio", 3, 76, "PG", 19), ("Donovan", "Mitchell", 45, 75, "SG", 19), ("Joe", "Ingles", 2, 80, "SF", 19), ("Derrick", "Favors", 15, 82, "PF", 19), ("Rudy", "Gobert", 27, 85, "C", 19), ("Russell", "Westbrook", 0, 75, "PG", 20), ("Andre", "Roberson", 21, 79, "SG", 20), ("Paul", "George", 13, 81, "SF", 20), ("Carmelo", "Anthony", 7, 80, "PF", 20), ("Steven", "Adams", 12, 84, "C", 20), ("Stephen", "Curry", 30, 75, "PG", 21), ("Klay", "Thompson", 11, 79, "SG", 21), ("Kevin", "Durant", 35, 81, "SF", 21), ("Draymond", "Green", 23, 79, "PF", 21), ("Zaza", "Pachulia", 27, 83, "C", 21), ("Austin", "Rivers", 25, 76, "PG", 22), ("Lou", "Williams", 23, 73, "SG", 22), ("Danilo", "Gallinari", 8, 80, "SF", 22), ("Blake", "Griffin", 32, 80, "PF", 22), ("DeAndre", "Jordan", 6, 83, "C", 22), ("Lonzo", "Ball", 2, 78, "PG", 23), ("Kentavious", "Caldwell-Pope", 1, 77, "SG", 23), ("Brandon", "Ingram", 14, 81, "SF", 23), ("Kyle", "Kuzma", 0, 81, "PF", 23), ("Brook", "Lopez", 11, 84, "C", 23), ("Tyler", "Ulis", 8, 70, "PG", 24), ("Devin", "Booker", 1, 78, "SG", 24), ("T.J.", "Warren", 12, 80, "SF", 24), ("Marquese", "Chriss", 0, 82, "PF", 24), ("Tyson", "Chandler", 4, 85, "C", 24), ("De'Aaron", "Fox", 5, 75, "PG", 25), ("George", "Hill", 3, 75, "SG", 25), ("Garrett", "Temple", 17, 78, "SF", 25), ("Skai", "Labissiere", 7, 83, "PF", 25), ("Zach", "Randolph", 50, 81, "C", 25), ("Chris", "Paul", 3, 72, "PG", 26), ("James", "Harden", 13, 77, "SG", 26), ("Trevor", "Ariza", 1, 80, "SF", 26), ("Ryan", "Anderson", 33, 82, "PF", 26), ("Clint", "Capela", 15, 82, "C", 26), ("Tony", "Parker", 9, 74, "PG",

27), ("Danny", "Green", 22, 78, "SG", 27), ("Kawhi", "Leonard", 2, 79, "SF", 27), ("Lamarcus", "Aldridge", 12, 83, "PF", 27), ("Pau", "Gasol", 16, 84, "C", 27), ("Rajon", "Rondo", 9, 73, "PG", 28), ("Jrue", "Holiday", 11, 76, "SG", 28), ("Dante", "Cunningham", 33, 80, "SF", 28), ("Anthony", "Davis", 23, 82, "PF", 28), ("DeMarcus", "Cousins", 0, 83, "C", 28), ("Mike", "Conley", 11, 73, "PG", 29), ("James", "Ennis", 8, 79, "SG", 29), ("Dillon", "Brooks", 24, 78, "SF", 29), ("JaMychal", "Green", 0, 81, "PF", 29), ("Marc", "Gasol", 33, 85, "C", 29), ("Dennis", "Smith Jr.", 1, 75, "PG", 30), ("Seth", "Curry", 30, 64, "SG", 30), ("Wesley", "Matthews", 23, 77, "SF", 30), ("Harrison", "Barnes", 40, 80, "PF", 30), ("Dirk", "Nowitzki", 41, 84, "C", 30);

This fills the player specialty entity table

INSERT INTO has_specialty (spec_ID, play_ID)
VALUES (1, 1), (2, 1), (3, 1), (4, 1), (8, 1);

This fills the player specialty entity table

INSERT INTO has_specialty (spec_ID, play_ID)
VALUES (6, 2), (6, 3), (3, 4), (5, 4), (6, 4), (3, 5), (7, 5), (2, 5), (1, 6), (2, 6), (4, 6), (8, 6), (2, 7), (3, 7), (6, 8), (3, 9), (5, 9), (6, 9), (3, 10), (7, 10), (2, 11), (3, 11), (4, 11), (8, 11), (1, 12), (2, 12), (6, 12), (6, 13), (6, 14), (2, 15), (3, 15), (7, 15), (4, 16), (8, 16), (1, 17), (6, 17), (2, 18), (8, 18), (1, 19), (2, 19), (3, 19), (7, 19), (8, 19), (3, 20), (7, 20), (2, 21), (4, 21), (8, 21), (6, 22), (2, 23), (5, 23), (6, 23), (6, 24), (2, 25), (3, 25), (7, 25), (2, 26), (4, 26), (8, 26), (1, 27), (2, 27), (8, 27), (6, 28), (6, 29), (2, 30), (3, 30), (5, 30), (7, 30), (2, 31), (3, 31), (4, 31), (8, 31), (1, 32), (6, 32), (1, 33), (2, 33), (3, 33), (4, 33), (5, 33), (7, 33), (8, 33), (3, 34), (5, 34), (6, 34), (1, 35), (2, 35), (3, 35), (8, 35), (2, 36), (4, 36), (8, 36), (1, 37), (2, 37), (3, 37), (8, 37), (6, 38), (2, 39), (3, 39), (2, 40), (3, 40), (1, 41), (2, 41), (4, 41), (8, 41), (1, 42), (6, 42), (2, 43), (3, 43), (6, 43), (3, 44), (5, 44), (7, 44), (8, 44), (3, 45), (7, 45), (2, 46), (4, 46), (2, 47), (3, 47), (8, 47), (6, 48), (6, 49), (2, 50), (3, 50), (7, 50), (1, 51), (2, 51), (3, 51), (4, 51), (8, 51), (1, 52), (2, 52), (6, 52), (2, 54), (3, 54), (5, 54), (3, 55), (7, 55), (1, 56), (2, 56), (4, 56), (8, 56), (2, 57), (4, 57), (7, 57), (6, 58), (6, 59), (2, 60), (3, 60), (5, 60), (7, 60), (1, 61), (2, 61), (3, 61), (4, 61), (8, 61), (6, 62), (2, 63), (8, 63), (2, 64), (6, 64), (3, 65), (5, 65), (7, 65), (1, 66), (2, 66), (4, 66), (8, 66), (6, 67), (6, 68), (2, 69), (3, 69), (2, 70), (3, 70), (3, 71), (2, 71), (4, 71), (8, 71), (1, 72), (2, 72), (6, 72), (6, 73), (2, 74), (2, 75), (3, 75), (1, 76), (2, 76), (3, 76), (4, 76), (8, 76), (1, 77), (2, 77), (4, 77), (8, 77), (1, 78), (2, 78), (6, 78), (2, 79), (6, 79), (3, 80), (7, 80), (1, 81), (2, 81), (4, 81), (8, 81), (2, 82), (3, 82), (8, 82), (1, 83), (2, 83), (3, 83), (5, 83), (8, 83), (3, 84), (6, 84), (7, 84), (2, 85), (3, 85), (7, 85), (2, 86), (4, 86), (8, 86), (6, 87), (3, 88), (7, 88), (2, 89), (3, 89), (6, 89), (1, 90), (3, 90), (8, 90), (1, 91), (2, 91), (4, 91), (8, 91), (6, 92), (6, 93), (3, 94), (6, 94), (7, 94), (2, 95), (3, 95), (5, 95), (7, 95), (1, 96), (2, 96), (3, 96), (4, 96), (8, 96), (5, 97), (6, 97), (1, 98), (2, 98), (3, 98), (4, 98), (8, 98), (1, 99), (2, 99), (3, 99), (8, 99), (3, 100), (7, 100), (1, 101), (2, 101), (4, 101), (8, 101), (1, 102), (2, 102), (3, 102), (5, 102), (8, 102), (1, 103), (2, 103), (3, 103), (4, 103), (8, 103), (1, 104), (2, 104), (3, 104), (5, 104), (7, 104), (3, 105), (7, 105), (2, 106), (4, 106), (8, 106), (1, 107), (2, 107), (6, 107), (1, 108), (2, 108), (6, 108), (2, 109), (3, 109), (7, 109), (8, 109), (3, 110), (5, 110), (6, 110), (7, 110), (3, 111), (4, 111), (8, 111), (6, 112), (2, 113), (3, 113), (6, 113), (2, 114), (3, 114), (8, 114), (3, 115), (7, 115), (6, 116), (1, 117), (2, 117), (8, 117), (2, 118), (3, 118), (8, 118), (6, 119), (3, 120), (8, 120), (6, 121), (1, 122), (4, 122), (8, 122), (6, 123), (6, 124), (1, 125), (2, 125), (3, 125), (5, 125), (1, 126), (2, 126), (4, 126), (8, 126), (1, 127), (2, 127), (3, 127), (4, 127), (8, 127), (1, 128), (2, 128), (5, 128), (6, 128), (1, 129), (2, 129),

(6, 129), (3, 130), (8, 130), (1, 131), (2, 131), (3, 131), (4, 131), (8, 131), (1, 132), (2, 132), (5, 132), (1, 133), (2, 133), (3, 133), (5, 133), (7, 133), (8, 133), (2, 134), (3, 134), (8, 134), (2, 135), (3, 135), (7, 135), (2, 136), (4, 136), (8, 136), (6, 137), (6, 138), (2, 139), (3, 139), (5, 139), (7, 139), (8, 139), (1, 140), (2, 140), (3, 140), (5, 140), (7, 140), (8, 140), (1, 141), (2, 141), (4, 141), (8, 141), (6, 142), (6, 143), (6, 144), (1, 145), (2, 145), (3, 145), (7, 145), (6, 146), (6, 147), (1, 148), (2, 148), (6, 148), (1, 149), (2, 149), (3, 149), (8, 149), (1, 150), (2, 150), (3, 150), (7, 150), (8, 150);

Data Manipulation Queries

*******NOTE: I have bracketed anything that was determined by the user on the webpage via text boxes, drop down menus, etc.*******

SELECT * FROM conference;

SELECT * FROM division;

SELECT * FROM team;

SELECT * FROM player;

SELECT * FROM specialty;

This query was used to create the player specialty table by showing only the players names and their type of specialty. I joined the has_specialty table only where the player foreign key matched the primary player key. I then joined the specialty table only where the has_specialty foreign key referencing the specialty primary key matched the specialty primary key. I then ordered by player ID to group each player together with all of his specialties.

```
SELECT first_name, last_name, type, player_id, specialty_ID, has_spec_ID
FROM player
JOIN has_specialty ON play_ID = player_id
JOIN specialty ON spec_ID = specialty_ID
ORDER BY player_id ASC;
```

**Add conference
INSERT INTO conference SET conference_name=[conference_name];

SELECT * FROM conference WHERE conference_name=[conference_name];

John Olgin
CS 340

**Add division
INSERT INTO division SET division_name=[division_name];

SELECT * FROM division WHERE division_name=[division_name];

**Add team
INSERT INTO team SET team_name=[team_name] coach_name=[coach_name] city_name=[city_name] div_ID=[division_ID];

SELECT * FROM team WHERE team_name=[team_name];

**Add player
INSERT INTO player SET first_name=[first_name] last_name=[last_name] number=[number] height_inches=[height_inches] position=[position];

SELECT * FROM player WHERE first_name=[first_name] last_name=[last_name];

** Add specialty
INSERT INTO specialty SET type=[type];

SELECT * FROM specialty WHERE type=[type];

**Add player specialty relationship
INSERT INTO has_specialty SET play_ID=[player_id] spec_ID=[specialty_ID];

SELECT * FROM has_specialty;

**Remove division
DELETE FROM division WHERE division_id=[division_ID];

**Remove player specialty relationship
DELETE FROM has_specialty WHERE has_spec_ID=[has_spec_ID];

**Change division's conference
UPDATE division SET conf_ID=[conference_ID] WHERE division_id=[division_ID];

**Change team's division
UPDATE team SET div_ID=[division_ID] WHERE team_id=[team_ID];

**Change player's team
UPDATE player SET t_ID=[team_ID] WHERE player_id=[player_ID];

John Olgin
CS 340

**Search for a team filtering by division
SELECT team_name FROM team WHERE team_name=[team_name] AND div_ID =[division_ID];

**Search for a player filtering by team
SELECT first_name, last_name, position FROM player WHERE first_name=[first_name] AND last_name =[last_name] AND t_ID=[t_ID];

**Change player specialty
UPDATE has_specialty SET spec_ID=[spec_ID] WHERE has_spec_ID=[has_spec_ID];