### Project 2

This KoaJS API was designed to track information about teams, players and most importantly ticket sales in the NBA. Since there are so many players being traded in the NBA and so many fans come and watch NBA games in-person, It is important to keep track of all of that data. This API allows the user access to the database in a controlled manner. For example NBA team general managers would like to keep track of which player is playing in what team and executives of the NBA would also like to keep track of ticket sales to determine if their business is going up or down so specific methods were created for them to access that. Teams would also like to use this API to print out information about their sold tickets. This also includes the type of ticket it is, for when a fan does decide to buy a ticket with a certain price they may get certain benefits while at the game due to the cost of the ticket. Not only that but general managers would also like to see how much they are paying their players as a reflection of their value/skill to the team (positions the players can play). Same goes for coaches in how many people they are coaching to determine their value/skill as a coach. The API allows for the creation/deletion of new Teams and Stadiums for future franchise expansion. As well as updating a player's weight since NBA players have a fluctuating weight.

## **DELETE:**

1) <u>Path Name:</u> /api/v1/stadium/deleteStadium/DiegoCenter

curl -X DELETE http://localhost:8066/api/v1/stadium/deleteStadium/DiegoCenter

Description: Deletes Stadium by name

```
}[drivera@blue project2]$ curl -XGET http://localhost:8066/api/v1/stadium
         "name": "Barclays Center",
         "zip_code": "11217",
         "state": "NY",
"city": "Brooklyn",
"street_name": "620 Atlantic Ave"
        "name": "Chase Center",
"zip_code": "94158",
"state": "CA",
"city": "San Francisco",
"street_name": "1 Warriors Way"
         "name": "Crypto.com Arena",
"zip_code": "90015",
"state": "CA",
"city": "Los Angeles",
"street_name": "1111 S Figueroa St"
        "name": "DiegoCenter",
"zip_code": "95492",
"state": "CA",
"city": "Windsor",
"street_name": "something"
        "name": "Fiserv Forum",
"zip_code": "53203",
"state": "WI",
"city": "Milwuakee",
"street_name": "1111 Vel R. Phillips Ave"
         "name": "Footprint Center",
         "zip_code": "85004",
"state": "AZ",
"city": "Pheonix",
"street_name": "201 E Jefferson St"
        "name": "Madison Square Garden",
"zip_code": "10001",
"state": "NY",
"city": "New York City",
"street_name": "4 Pennsylvania Plaza"
     },
{
         "name": "TD Garden",
"zip_code": "02114",
         "state": "MA",
"city": "Boston",
"street_name": "100 Legends Way"
][drivera@blue project2]$
```

```
[drivera@blue project2]$ curl —X DELETE http://localhost:8066/api/v1/stadium/deleteStadium/DiegoCenter
[drivera@blue project2]$ curl —X GET  http://localhost:8066/api/v1/stadium
          "name": "Barclays Center",
"zip_code": "11217",
"state": "NY",
"city": "Brooklyn",
"street_name": "620 Atlantic Ave"
         "name": "Chase Center",
"zip_code": "94158",
"state": "CA",
"city": "San Francisco",
"street_name": "1 Warriors Way"
         "name": "Crypto.com Arena",
"zip_code": "90015",
"state": "CA",
"city": "Los Angeles",
"street_name": "1111 S Figueroa St"
         "name": "Fiserv Forum",
"zip_code": "53203",
"state": "WI",
"city": "Milwuakee",
"street_name": "1111 Vel R. Phillips Ave"
          "name": "Footprint Center",
          "zip_code": "85004",
"state": "AZ",
"city": "Pheonix",
          "street_name": "201 E Jefferson St"
         "name": "Madison Square Garden",
"zip_code": "10001",
"state": "NY",
"city": "New York City",
"street_name": "4 Pennsylvania Plaza"
          "name": "TD Garden", "zip_code": "02114",
         "state": "MA",
"city": "Boston",
"street_name": "100 Legends Way"
][drivera@blue project2]$
```

2) Path Name: /api/v1/team/deleteTeam/0123456888

curl -X DELETE http://localhost:8066/api/v1/team/deleteTeam/0123456888

**Description:** Deletes team by ID

```
[drivera@blue project2]$ curl -X GET http://localhost:8066/api/v1/team
         "id": "0123456789",
"name": "Boston Celtics",
"logo": "Leprechaun",
"color": "Green"
         "id": "0123456888",
"name": "Raptors",
"logo": "Dino",
"color": "red"
     },
{
         "id": "0986123458",
"name": "New York Knicks",
"logo": "Basketball",
"color": "Orange"
         "id": "1029876678",
"name": "Los Angeles Lakers",
"logo": "Basketball",
"color": "Yellow"
     },
{
         "id": "1234987655",
"name": "Brooklyn Nets",
"logo": "Basketball",
"color": "Black"
         "id": "2001996030",
"name": "LA Clippers",
"logo": "Basketball",
"color": "Blue"
     },
{
         "id": "3409573490",
"name": "Milwuakee Bucks",
"logo": "Buck",
"color": "Green"
         "id": "3456781029",
"name": "Golden State Warriors",
"logo": "Bridge",
"color": "Blue"
         "id": "3459871029",
"name": "Pheonix Suns",
"logo": "Basketball",
"color": "Purple"
][drivera@blue project2]$
```

### POST:

1) Path Name: /api/v1/team/addTeam/0123456888/Raptors/Dino/red

curl -X POST -H 'Content-type: application/json' -d '{"id":0123456888},{"name":"Raptors"},{"logo":"Dino"},{"color":"red"}' http://localhost:8066/api/v1/team/addTeam/0123456888/Raptors/Dino/red

Description: Adds new team to the Team table

```
[drivera@blue project2]$ curl -X GET http://localhost:8066/api/v1/team
         "id": "0123456789",
"name": "Boston Celtics",
"logo": "Leprechaun",
"color": "Green"
         "id": "0986123458",
"name": "New York Knicks",
"logo": "Basketball",
"color": "Orange"
         "id": "1029876678",
"name": "Los Angeles Lakers",
"logo": "Basketball",
"color": "Yellow"
        "id": "1234987655",
"name": "Brooklyn Nets",
"logo": "Basketball",
"color": "Black"
         "id": "2001996030",
"name": "LA Clippers",
"logo": "Basketball",
"color": "Blue"
     },
{
         "id": "3409573490",
"name": "Milwuakee Bucks",
"logo": "Buck",
"color": "Green"
         "id": "3456781029",
"name": "Golden State Warriors",
"logo": "Bridge",
"color": "Blue"
         "id": "3459871029",
"name": "Pheonix Suns",
"logo": "Basketball",
"color": "Purple"
][drivera@blue project2]$
```

```
[drivera@blue project2]$ curl -X POST -H 'Content-type: application/json' -d '{"id":0123456888},{"name":"Raptors"},{"logo":"Dino"},{"color":"red"}' http://localhost:8066/api/v1/team/addTeam/0123456888/Raptors/Dino/red
curl: (6) Could not resolve host: application
{
    "fieldCount": 0,
    "affectedRows": 1,
    "insertId": 0,
    "serverStatus": 2,
    "warningCount": 0,
    "message": "',
    "protocol41": true,
    "changedRows": 0
}[drivera@blue project2]$
```

```
[drivera@blue project2]$ curl -X GET http://localhost:8066/api/v1/team
       "id": "0123456789",
       "name": "Boston Celtics",
"logo": "Leprechaun",
"color": "Green"
       "id": "0123456888",
       "name": "Raptors",
"logo": "Dino",
"color": "red"
      "id": "0986123458",
"name": "New York Knicks",
"logo": "Basketball",
"color": "Orange"
      "id": "1029876678",
"name": "Los Angeles Lakers",
"logo": "Basketball",
"color": "Yellow"
       "id": "1234987655"
       "name": "Brooklyn Nets",
"logo": "Basketball",
"color": "Black"
       "id": "2001996030",
       "name": "LA Clippers",
"logo": "Basketball",
"color": "Blue"
       "id": "3409573490",
"name": "Milwuakee Bucks",
"logo": "Buck",
"color": "Green"
       "id": "3456781029",
       "name": "Golden State Warriors",
"logo": "Bridge",
"color": "Blue"
       "id": "3459871029",
       "name": "Pheonix Suns",
       "logo": "Basketball",
"color": "Purple"
][drivera@blue project2]$
```

2) Path Name: /api/v1/stadium/addStadium/DiegoCenter/95492/CA/Windsor/something

curl -X POST -H 'Content-type: application/json' -d '{"name":"DiegoCenter"},{"zip\_code":95492},{"state":"CA"},{"city":"Windsor"},{"street\_name":"something"}'

localhost:8066/api/v1/stadium/addStadium/DiegoCenter/95492/CA/Windsor/something

Description: Adds a new stadium to the Stadium table

```
[drivera@blue project2]$ curl -X GET http://localhost:8066/api/v1/stadium
      "name": "Barclays Center",
       "zip_code": "11217",
      "state": "NY",
"city": "Brooklyn",
"street_name": "620 Atlantic Ave"
      "name": "Chase Center",
"zip_code": "94158",
"state": "CA",
"city": "San Francisco",
"street_name": "1 Warriors Way"
      "name": "Crypto.com Arena",
"zip_code": "90015",
"state": "CA",
"city": "Los Angeles",
"street_name": "1111 S Figueroa St"
      "name": "Fiserv Forum", "zip_code": "53203",
      "state": "WI",
"city": "Milwuakee",
"street_name": "1111 Vel R. Phillips Ave"
       "name": "Footprint Center",
      "zip_code": "85004",
"state": "AZ",
"city": "Pheonix",
"street_name": "201 E Jefferson St"
      "name": "Madison Square Garden", "zip_code": "10001",
      "state": "NY",
"city": "New York City",
"street_name": "4 Pennsylvania Plaza"
   },
{
      "name": "TD Garden",
"zip_code": "02114",
"state": "MA",
"city": "Boston",
"street_name": "100 Legends Way"
[drivera@blue project2]$
```

```
[drivera@blue project2]$ curl -X POST -H 'Content-type: application/json' -d '{"name":"DiegoCenter"},{"zip_code":95492},{"state":"CA"},{
    "city":"Windsor"},{"street_name":"something"}' localhost:8066/api/v1/stadium/addStadium/DiegoCenter/95492/CA/Windsor/something
    curl: (6) Could not resolve host: application
{
        "fieldCount": 0,
        "affectedRows": 1,
        "insertId": 0,
        "serverStatus": 2,
        "warningCount": 0,
        "message": "",
        "protocol41": true,
        "changedRows": 0
}{drivera@blue project2]$ |
```

```
}[drivera@blue project2]$ curl -XGET http://localhost:8066/api/v1/stadium
       "name": "Barclays Center",
       "zip code": "11217",
       "state": "NY",
"city": "Brooklyn",
"street_name": "620 Atlantic Ave"
      "name": "Chase Center",
"zip_code": "94158",
"state": "CA",
"city": "San Francisco",
"street_name": "1 Warriors Way"
       "name": "Crypto.com Arena",
"zip_code": "90015",
"state": "CA",
"city": "Los Angeles",
"street_name": "1111 S Figueroa St"
       "name": "DiegoCenter",
       "zip_code": "95492",
"state": "CA",
"city": "Windsor",
       "street_name": "something"
       "name": "Fiserv Forum",
"zip_code": "53203",
"state": "WI",
"city": "Milwuakee",
       "street_name": "1111 Vel R. Phillips Ave"
       "name": "Footprint Center",
       "zip_code": "85004",
"state": "AZ",
"city": "Pheonix",
       "street_name": "201 E Jefferson St"
       "name": "Madison Square Garden",
       "zip_code": "10001",
"state": "NY",
"city": "New York City",
"street_name": "4 Pennsylvania Plaza"
       "name": "TD Garden", "zip_code": "02114",
       "state": "MA",
"city": "Boston"
       "street_name": "100 Legends Way"
][drivera@blue project2]$
```

#### **PUT:**

1) Path Name: /api/v1/ticket/updateTicketPriceByTeamIdPlus1000/3409573490

curl -X PUT -H 'Content-type: application/json' -d '{"id":3409573490}' localhost:8066/api/v1/ticket/updateTicketPriceByTeamIdPlus1000/3409573490

**Description:** Updates Ticket Price increasing it by 1000\$

```
[drivera@blue project2]$ curl -X PUT -H 'Content-type: application/json' -d '{"id":3409573490}' localhost:8066/api/v1/ticket/updateTicketPriceByTeamIdPlus1000/3409573490
curl: (6) Could not resolve host: application
{
    "fieldCount": 0,
    "affectedRows": 3,
    "insertId": 0,
    "serverStatus": 2,
    "warningCount": 0,
    "message": "(Rows matched: 3 Changed: 3 Warnings: 0",
    "protocol41": true,
    "changedRows": 3
}[drivera@blue project2]$ curl -X GET http://localhost:8066/api/v1/ticket
{
    "id": "000000030379",
    "team_id": "3409573490",
    "price": "6000",
    "seat_number": "11"
}

{
    "id": "00243733090",
    "team_id": "0906123458",
    "price": "12000",
    "seat_number": "45"
},
    "id": "111132322",
    "team_id": "3409573490",
    "price": "1400",
    "seat_number": "888"
},
    "id": "2342320938",
    "team_id": "3459871029",
    "price": "900",
    "seat_number": "3459871029",
    "price": "900",
    "seat_number": "432"
},
},
```

2) <u>Path Name:</u> /api/v1/ticket/updateTicketPriceByTeamIdMinus1000/3409573490

curl -X PUT -H 'Content-type: application/json' -d '{"id":3409573490}' localhost:8066/api/v1/ticket/updateTicketPriceByTeamIdMinus1000/3409573490

**Description:** Updates Ticket Price decreasing it by 1000\$

```
[drivera@blue project2]$ curl -X PUT -H 'Content-type: application/json' -d '{"id":3409573490}' localhost:8066/api/v1/ticket/updateTicket/briceByTeamIdMinus1000/3409573490
curl: (6) Could not resolve host: application
{
    "fieldCount": 0,
        "affectedRows": 3,
        "insertId": 0,
        "serverStatus": 2,
        "warningCount": 0,
        "message": "(Rows matched: 3 Changed: 3 Warnings: 0",
        "protocol41": true,
        "changedRows": 3
}{drivera@blue project2]$ curl -X GET http://localhost:8066/api/v1/ticket
{
        "di": "0000003379",
        "team_id": "3409573490",
        "price": "5000",
        "seat_number": "11"
        }
        ""team_id": "0986123458",
        "price": "12000",
        "seat_number": "45"
        }
        ""team_id": "3409573490",
        "price": "12000",
        "seat_number": "45"
        }
        ""team_id": "349973490",
        "price": "400",
        "seat_number": "888"
        }
        ""team_id": "349973490",
        "price": "4309",
        "seat_number": "888"
        }
        ""team_id": "349973490",
        "price": "4309",
        "pseat_number": "888"
        }
        ""team_id": "349973490",
        "pseat_number": "880"
        */
        "id": "2342320938",
        "team_id": "3499774029",
        "price": "4309",
        "seat_number": "432"
        }
    }
}
```

3) Path Name: /api/v1/player/updatePlayerWeight/220/1111222220

curl -X PUT -H 'Content-type: application/json' -d '{"weight\_lbs":220},{"id":1111222220}' localhost:8066/api/v1/player/updatePlayerWeight/220/1111222220

<u>Description:</u> Updates the weight of a player by ID. Can set weight to any realistic number

#### **GET:**

1) Path Name: /api/v1/coach/getCoaching\_num\_of\_players

### Description:

Lists all coaches who coach more than one player

```
[drivera@blue project2]$ curl -X GET http://localhost:8066/api/v1/coach/getCoaching_num_of_players
      "coach_id": "1124954879",
"name": "Monty Williams",
"coaching": 2
      "coach_id": "3425432434",
"name": "Darvin Ham",
"coaching": 2
      "coach_id": "4537592209",
"name": "Brett Siegel",
"coaching": 2
       "coach_id": "6598937297",
      "name": "Bruce Fraser",
"coaching": 3
      "coach_id": "6875949294",
"name": "Damon Stoudamire",
"coaching": 2
      "coach_id": "7486379202",
"name": "Steve Kerr",
"coaching": 3
      "coach_id": "7653090280",
"name": "Chris Jent",
"coaching": 2
      "coach_id": "9089749888",
"name": "Mike Budenholzer",
"coaching": 2
      "coach_id": "9385658783",
"name": "Tyronn Lue",
"coaching": 3
      "coach_id": "9978765954",
"name": "Steve Nash",
"coaching": 2
][drivera@blue project2]$
```

2) Path Name: /api/v1/team/getTeams\_soldout

curl -X GET http://localhost:8066/api/v1/team/getTeams\_soldout

# **Description:**

Lists all teams that sold out their stadium

3) Path Name: /api/v1/ticket/getUnsoldTickets

curl -X GET http://localhost:8066/api/v1/ticket/getUnsoldTickets

### **Description:**

Produces a scalar result of all tickets never sold (regardless of the team).. All teams unsold tickets in NBA

#### **Procedure:**

Path Name: /api/v1/fan/getFansTicketType

#### **Description:**

This procedure is used to neatly organize information for tickets that were bought by fans. Uses fn typeofticket within the procedure.

#### View:

Path Name: /api/v1/player/TopEarningPlayers

curl -X GET http://localhost:8066/api/v1/player/TopEarningPlayers

## **Description:**

This view is used to look at the top earning player in each team as long as they have a nickname.

## **Function:**

Path Name: /api/v1/ticket/TicketCalculator/10000

curl -X GET http://localhost:8066/api/v1/ticket/TicketCalculator/10000

## **Description:**

This function labels tickets by price to determine the benefits the fan will get during the game