





Name: Broadcast Team

Description: The team responsible for transmitting the game on TV.

- **name:** VarChar(80), the name of the broadcasting team
- **teamSize:** Integer, the number of teams members in the team
- **cameraType:** VarChar(40), the camera equipment used by the operator
- **micType:** VarChar(40), the microphone equipment used by the commentator
- **productionSoftware:** VarChar(40), the software used by the production crew to broadcast the game
- **FKTeamName:** VarChar(40), the name of an NBA franchise
- **Foreign Key:** FKTeamName references Franchise(teamName)

~~**Name:** Camera Operator~~

~~**Description:** An operator of the cameras which broadcast the game~~

- ~~● **Camera_Type:** VarChar(40), the camera equipment used by the operator~~
- ~~● **FKTeamName:** Integer, the unique ID number for an employee~~
- ~~● **Foreign Key:** FKTeamName references Broadcast Team(FKTeamName)~~

Name: Coach

Description: Person responsible for creating strategies and instructing players

- **Experience:** Integer, the number of year a coach has been a coach
- **FKEmployeeID:** Integer, the unique ID number for an employee
- **Foreign Key:** FKEmployeeID references Employee(employeeID)

~~**Name:** Commentator~~

~~**Description:** Person responsible for providing live commentary of a game.~~

- ~~● **Mic_Type:** VarChar(40), the microphone equipment used by the commentator~~
- ~~● **FKTeamName:** Integer, the unique ID number for an employee~~
- ~~● **Foreign Key:** FKTeamName references Broadcast Team(FKTeamName)~~

Name: Company

Description: The company that sponsors franchises.

- **Name:** VarChar(80), name of the sponsor company.
- **SponsorshipAmount:** Integer, the amount of sponsorship money to a franchise
- **TaxID:** Integer, the tax id of the company
- **Primary Key:** taxID

Name: Employee

Description: The person that will be employed by a franchise or the NBA.

- **dateOfBirth:** Date, the date the employee was born.
- **employeeID:** Integer, the unique ID number for an employee
- **name:** Compound attribute, legal name consisting of first and last name
 - **firstName:** VarChar(40), the legal first name of an employee
 - **lastName:** VarChar(40), the legal last name of an employee
- **sex:** VarChar(6), the gender of the employee
- **FKNBATaxID:** Integer, the tax id number of the NBA.
- **FKTeamName:** VarChar(40), the name of an NBA franchise
- **Primary Key:** EmployeeID
- **Foreign Key:** FKTeamName references Franchise(teamName)
- **Foreign Key:** FKNBATaxID references NBA(taxID)

Name: Franchise

Description: The team competing in the NBA.

- **Location:** Compound attribute, location of an NBA franchise consisting of city and state
 - **city:** VarChar(40), the city that the NBA franchise is located in
 - **state:** VarChar(40), the state that the NBA franchise is located in
- **numChampionships:** Integer, the number of championships won by an NBA franchise
- **teamName:** VarChar(40), The unique name of the NBA franchise
- **FKNBATaxID:** Integer, the tax id number of the NBA.
- **Primary Key:** Team_Name
- **Foreign Key:** FKNBATaxID references NBA(taxID)

Name: NBA

Description: The league which comprises the franchises and by which the tournament will be played.

- **taxID:** Integer, the tax id number of the NBA.
- **Primary Key:** taxID

Name: Owner

Description: A person that owns an NBA franchise and has control over who is hired.

- **OwnershipYears:** Integer, the number of years the owner has maintained ownership of a franchise
- **FKEmployeeID:** Integer, the unique ID number for an employee
- **Foreign Key:** FKEmployeeID references Employee(employeeID)

Name: Player

Description: Person that is part of a franchise and plays in games.

- **Height:** Integer, the height of a player in inches
- **Rating:** Integer, the rating of a player, out of 99
- **Rings:** Integer, the number of rings a player has
- **FKEmployeeID:** Integer, the unique ID number for an employee
- **Foreign Key:** FKEmployeeID references Employee(employeeID)

Name: ~~Production Crew~~

Description: ~~Group of people responsible for filming, editing, commentating, and broadcasting an NBA game.~~

- ~~**Production_Software:** VarChar(40), the software used by the production crew to broadcast the game~~
- ~~**FKTeamName:** Integer, the unique ID number for an employee~~
- ~~**Foreign Key:** FKTeamName references Broadcast Team(FKTeamName)~~

Name: Referee

Description: Person responsible for inspecting equipment before the game, enforcing rules of the game in real-time.

- **Number_of_games:** Integer, the number of games a referee officiates
- **FKEmployeeID:** Integer, the unique ID number for an employee
- **Foreign Key:** FKEmployeeID references Employee(employeeID)

Name: Season Pass

Description: A subscription that gives access to live and on-demand games on their phones and TVs.

- **year:** Integer, the year the season pass is valid for.
- **FKTaxID:** Integer, the tax ID for the service
- **Foreign Key:** FKTaxID references Service(TaxID)

Name: Season Ticket

Description: A collection of tickets to enter a venue to watch a game live

- **teamName:** VarChar(40), the name of the team that the season ticket belongs to.
- **FKTaxID:** Integer, the tax ID for the service
- **Foreign Key:** FKTaxID references Service(TaxID)

Name: Seasons

Description: A collection of regular season and postseason games that are played to determine the champion.

- **Finals:** Boolean, whether the current game is the championship game
- **Game:** Compound Attribute, a match between two teams/franchises
 - **GameDate:** Date, the date that the game is played
 - **GameID:** Integer, the id number of the game in the season.
 - **Team1Name:** VarChar(40), name of first team in the match
 - **Team2Name:** VarChar(40), name of second team in the match
- **Playoffs:** Boolean, whether the current game is a playoff game
- **Season_Num:** Integer, chronological order identifying each NBA season
- **Year:** Integer, the calendar year that the season is being played in.
- **FKNBATaxID:** Integer, the tax ID for the NBA.
- **Primary Key:** Season_Nim
- **Foreign Key:** FKTaxID references NBA(TaxID)

Name: Service

Description: A method of televising NBA games.

- **price:** Integer, the cost of buying one service.
- **taxID:** Integer, the tax ID for the service
- **FKNBATaxID:** Integer, the tax ID for the service
- **Primary Key:** TaxID
- **Foreign Key:** FKNBATaxID references NBA(taxID)

Name: Sponsors

Description: Company sponsors a franchise

- **FkTax:** Integer, the tax ID for the service
- **FkTeam:** varChar(40), the unique name of the NBA franchise
- **Foreign Key:** FkTax references company(taxID)
- **Foreign Key:** FkTeam references franchise(teamName)

Name: Staff

Description: A person employed by a franchise other than player or coach.

- **Role:** Role- VarChar(80), the role the staff is doing
- **FKEmployeeID:** Integer, the unique ID number for an employee
- **Foreign Key:** FKEmployeeID references Employee(employeeID)

Name: Streaming Service

Description: An online provider of NBA game streams that are available on a yearly plan.

- **streamPlatform:** VarChar(40), the name of the streaming service where fans can watch games.
- **FKTaxID:** Integer, the tax ID for the service
- **Foreign Key:** FKTaxID references Service(TaxID)

Entity Dictionary

Entity: Broadcast Team

- **Description:**
 - The team responsible for transmitting the game on TV.
- **Attributes:**
 - cameraType: VarChar(40), the camera equipment used by the operator
 - name: VarChar(80), the name of the broadcasting team
 - micType: VarChar(40), the microphone equipment used by the commentator
 - productionSoftware: VarChar(40), the software used by the production crew to broadcast the game
 - teamSize: Integer, the number of teams members in the team
 - Primary Key: teamName, inherits from Franchise

~~Entity: Camera Operator~~

- ~~● **Description:**
 - An operator of the cameras which broadcast the game~~
- ~~● **Attributes:**
 - Camera_Type: VarChar(40), the camera equipment used by the operator
 - Primary Key: teamName, inherits from Franchise~~

Entity: Coach

- **Description:**
 - Person responsible for creating strategies and instructing players.
- **Attributes:**
 - Experience: Integer, the number of year a coach has been a coach
 - Primary Key: employeeID, inherits from Employee

~~Entity: Commentator~~

- ~~● **Description:**
 - Person responsible for providing live commentary of a game.~~
- ~~● **Attributes:**
 - Mic_Type: VarChar(40), the microphone equipment used by the commentator
 - Primary Key: teamName, inherits from Franchise~~

Entity: Company

- **Description:**
 - The company that sponsors many franchises

- **Attributes:**
 - name: VarChar(80), name of the sponsor company.
 - sponsorshipAmount: Integer, the amount of sponsorship money to a franchise
 - taxID: Integer, the tax id of the company
 - Primary Key: taxID

Entity: Employee

- **Description:**
 - The person that will be employed by a franchise or the NBA league
- **Attributes:**
 - Date_Of_Birth: Date, the date of birth of an employee
 - employeeID: Integer, the unique ID number for an employee
 - Name: Compound attribute, legal name consisting of first and last name
 - First: VarChar(40), the legal first name of an employee
 - Last: VarChar(40), the legal last name of an employee
 - Sex: VarChar(6), the gender of the employee
 - Primary Key: employeeID

Entity: Franchise

- **Description:**
 - The team competing in the NBA.
- **Attributes:**
 - Location: Compound attribute, the location of the NBA franchise consisting of a city and state
 - City: VarChar(40), the city that the NBA franchise is located in
 - State: VarChar(40), the state that the NBA franchise is located in
 - Num_Championships: Integer, the number of championships won by an NBA franchise
 - Team_Name: The unique name of the NBA franchise
 - Primary Key: Team_Name

Entity: NBA

- **Description:**
 - The league which comprises the franchises and by which the tournament will be played.
- **Attributes:**

- TaxID: Integer, the tax ID for the National Basketball Association
- Primary Key: TaxID

Entity: Owner

- **Description:**
 - A person that owns an NBA franchise and has control over who is hired.
- **Attributes:**
 - Ownership_years: Integer, the number of years the owner has maintained ownership of a franchise
 - Primary Key: employeeID, inherits from Employee

Entity: Player

- **Description:**
 - Person that is part of a franchise and plays in games.
- **Attributes:**
 - Height- Integer, the height of a player in inches
 - Rating- Integer, the rating of a player, out of 99
 - Rings- Integer, the number of rings a player has
 - Primary Key: employeeID, inherits from Employee

~~Entity: Production Crew~~

- ~~**Description:**~~
 - ~~Group of people responsible for filming, editing, commentating, and broadcasting an NBA game.~~
- ~~**Attributes:**~~
 - ~~Production_Software: VarChar(40), the software used by the production crew to broadcast the game~~
 - ~~Primary Key: teamName, inherits from Franchise~~

Entity: Referee

- **Description:**
 - Person responsible for inspecting equipment before the game, enforcing rules of the game in real-time.
- **Attributes:**
 - Number_of_games: Integer, the number of games a referee officiates
 - Primary Key: employeeID, inherits from Employee

Entity: Season Pass

- **Description:**
 - A subscription that gives access to live and on-demand games on their phones and TVs.
- **Attributes:**
 - year: Integer, the year the season pass is valid for.
 - Primary Key: TaxID, inherits from Service

Entity: Season Ticket

- **Description:**
 - A collection of tickets to enter a venue to watch a game live
- **Attributes:**
 - teamName: VarChar(40), the name of the team that the season ticket is for
 - Primary Key: TaxID, inherits from Service

Entity: Seasons

- **Description:**
 - A collection of regular season and postseason games that are played to determine the champion.
- **Attributes:**
 - Finals: Boolean, whether the current game is the championship game
 - Game: Compound Attribute, a match between two teams/franchises
 - gameDate: Date, the date that the game is played
 - GameID: Integer, the id number of the game in the season.
 - team1Name: VarChar(40), name of first team in the match
 - team2Name: VarChar(40), name of second team in the match
 - Playoffs: Boolean, whether the current game is a playoff game
 - Season_Num: Integer, chronological order identifying each NBA season
 - year: Integer, the calendar year that the season is being played in.
 - Primary Key: Season_Num

Entity: Service

- **Description:**
 - A method of televising NBA games.
- **Attributes:**
 - Price: Integer, the cost of buying one service.
 - TaxID: Integer, the tax ID for the service

- Primary Key: TaxID

Entity: Staff

- **Description:**
 - A person employed by a franchise other than player or coach.
- **Attributes:**
 - Role- VarChar(80), the role the staff is doing
 - Primary Key: employeeID, inherits from Employee

Entity: Streaming Service

- **Description:**
 - An online provider of NBA game streams that are available on a yearly plan.
- **Attributes:**
 - streamPlatform: VarChar(40), the name of the streaming service where fans can watch games.
 - Primary Key: TaxID, inherits from Service

Relationship Dictionary

Relationship: Consists Of

- **Description:**
 - The NBA consists of many franchises. All of the franchises make up the NBA.
- **Entities:** Franchise, NBA
- **Cardinality:** M:1 (Many to 1)
- **Participation:** Partial to Partial

Relationship: Contracts

- **Description:**
 - The NBA has a contract with a service provider. The service provider is contracted by the NBA.
- **Entities:** NBA, Service
- **Cardinality:** M:1 (Many to 1)
- **Participation:** Partial to Partial

Relationship: Fran_Employs

- **Description:**
 - The franchise employs an employee. The employees are employed by the NBA.
- **Entities:** Employee, Franchise
- **Cardinality:** M:1 (Many to 1)
- **Participation:** Partial to Partial

Relationship: Hosts

- **Description:**
 - The NBA hosts many seasons. Each season is hosted by the NBA.
- **Entities:** NBA, Seasons
- **Cardinality:** M:1 (Many to 1)
- **Participation:** Partial to Partial

Relationship: NBA_Employs

- **Description:**
 - The NBA employs an employee. The employees are employed by the NBA.
- **Entities:** Employee, NBA
- **Cardinality:** M:1 (Many to 1)
- **Participation:** Partial to Partial

Relationship: Sponsors

- **Description:**
 - A company sponsors a franchise. A franchise is sponsored by a company.
- **Entities:** Company, Franchise
- **Cardinality:** M:N (Many to Many)
- **Participation:** Partial to Partial

Relationship: Televises

- **Description:**
 - The broadcasting team televises/transmits the game.
- **Entities:** Broadcasting Team, Franchise
- **Cardinality:** M:1 (Many to 1)
- **Participation:** Total Participation to Partial