Database Logical Schema Translated From ER Diagram

Legend

- PRIMARY KEY = **Bold**
- FOREIGN KEY = *Italics*
- PRIMARY KEY and FOREIGN KEY = ***Bold Italics***

Schemas

Division

Division(**divisionName**: VARCHAR(10))

```
CREATE TABLE `Division` (
    `divisionName` VARCHAR(10),
    PRIMARY KEY (`divisionName`)
);
```

Venue

Venue(**venueName**: VARCHAR(30), **city**: VARCHAR(30), address: VARCHAR(50))

```
CREATE TABLE `Venue` (
    `venueName` VARCHAR(30),
    `city` VARCHAR(30),
    `address` VARCHAR(50),
    PRIMARY KEY (`venueName`, `city`)
);
```

NBATeam_BelongsTo

NBATeam_BelongsTo(**abbreviation**: CHAR(3), city: VARCHAR(30), teamName: VARCHAR(30), *divisionName*: VARCHAR(10))

- *divisionName* NOT NULL
- *divisionName* REFERENCES Division

```
CREATE TABLE `NBATeam_BelongsTo` (
    `abbreviation` CHAR(3),
    `city` VARCHAR(30),
    `teamName` VARCHAR(30),
    `divisionName` VARCHAR(10) NOT NULL,
    PRIMARY KEY (`abbreviation`),
    FOREIGN KEY (`divisionName`) REFERENCES `Division` (`divisionName`)
);
```

NBAPlayer_PlaysFor

NBAPlayer_PlaysFor(**number**: INT, position: CHAR(2), firstName: VARCHAR(30), lastName: VAR-CHAR(30), height: INT, weight: INT, draftYear: YEAR(4), *team*: CHAR(3))

- *team* NOT NULL
- *team* REFERENCES NBATeam_BelongsTo(**abbreviation**) ON DELETE CASCADE
- height in inches
- weight in pounds

```sql
CREATE TABLE `NBAPlayer_PlaysFor` (
    `number` INT,
    `position` CHAR(2),
    `firstName` VARCHAR(30),
    `lastName` VARCHAR(30),
    `height` INT,
    `weight` INT,
    `draftYear` YEAR(4),
    `team` CHAR(3) NOT NULL,
    PRIMARY KEY (`number`, `team`),
    FOREIGN KEY (`team`) REFERENCES `NBATeam_BelongsTo` (`abbreviation`)
        ON DELETE CASCADE
);
```

NBAStaff_WorksFor

NBAStaff_WorksFor(**firstName**: VARCHAR(30), **lastName**: VARCHAR(30), job: VARCHAR(30), *team*: CHAR(3))

- *team* NOT NULL
- *team* REFERENCES NBATeam_BelongsTo(**abbreviation**) ON DELETE CASCADE

```sql
CREATE TABLE `NBAStaff_WorksFor` (
    `firstName` VARCHAR(30),
    `lastName` VARCHAR(30),
    `job` VARCHAR(30),
    `team` CHAR(3) NOT NULL,
    PRIMARY KEY (`firstname`, `lastname`, `team`),
    FOREIGN KEY (`team`) REFERENCES `NBATeam_BelongsTo` (`abbreviation`)
        ON DELETE CASCADE
);
```

Sponsor_Endorses

Sponsor_Endorses(**company**: VARCHAR(30), *team*: CHAR(3))

- *team* NOT NULL
- *team* REFERENCES NBATeam_BelongsTo(**abbreviation**) ON DELETE CASCADE

```
CREATE TABLE `Sponsor_Endorses` (
    `company` VARCHAR(30),
    `team` CHAR(3) NOT NULL,
    PRIMARY KEY (`company`, `team`),
    FOREIGN KEY (`team`) REFERENCES `NBATeam_BelongsTo` (`abbreviation`)
        ON DELETE CASCADE
);
```

NBAGame_Plays_PlayedAt

NBAGame_Plays_PlayedAt(**gameDate**: DATE, homeScore: INT, awayScore: INT, ***homeTeam***: CHAR(3), ***awayTeam***: CHAR(3), *venueName*: VARCHAR(30), *city*: VARCHAR(30))

- ***homeTeam*** NOT NULL
- ***awayTeam*** NOT NULL
- *venueName* NOT NULL
- *city* NOT NULL
- ***homeTeam*** REFERENCES NBATeam_BelongsTo(**abbreviation**) ON DELETE CASCADE
- ***awayTeam*** REFERENCES NBATeam_BelongsTo(**abbreviation**) ON DELETE CASCADE
- *venueName* REFERENCES Venue
- *city* REFERENCES Venue

```
CREATE TABLE `NBAGame_Plays_PlayedAt` (
    `gameDate` DATE,
    `homeScore` INT,
    `awayScore` INT,
    `homeTeam` CHAR(3) NOT NULL,
    `awayTeam` CHAR(3) NOT NULL,
    `venueName` VARCHAR(30) NOT NULL,
    `city` VARCHAR(30) NOT NULL,
    PRIMARY KEY (`gameDate`, `homeTeam`, `awayTeam`),
    FOREIGN KEY (`homeTeam`) REFERENCES `NBATeam_BelongsTo` (`abbreviation`)
        ON DELETE CASCADE,
    FOREIGN KEY (`awayTeam`) REFERENCES `NBATeam_BelongsTo` (`abbreviation`)
        ON DELETE CASCADE,
    FOREIGN KEY (`venueName`, `city`) REFERENCES `Venue` (`venueName`,`city`)
);
```

NBAReferee

NBAReferee(**number**: INT, firstName: VARCHAR(30), lastName: VARCHAR(30))

```
CREATE TABLE `NBAReferee` (
    `number` INT,
    `firstName` VARCHAR(30),
    `lastName` VARCHAR(30),
    PRIMARY KEY (`number`)
);
```

Referees

Referees(***refNumber***: INT, ***gameDate***: DATE, ***homeTeam***: CHAR(3), ***awayTeam***: CHAR(3))

- ***refNumber*** REFERENCES NBAReferee(**number**)
- ***gameDate***, ***homeTeam***, ***awayTeam*** REFERENCES NBAGame_Plays_PlayedAt(**gameDate**, ***homeTeam***, ***awayTeam***)

```sql
CREATE TABLE `Referees` (
    `refNumber` INT,
    `gameDate` DATE,
    `homeTeam` CHAR(3),
    `awayTeam` CHAR(3),
    PRIMARY KEY (`refNumber`, `gameDate`, `homeTeam`, `awayTeam`),
    FOREIGN KEY (`refNumber`) REFERENCES `NBAReferee` (`number`),
    FOREIGN KEY (`gameDate`, `homeTeam`, `awayTeam`)
        REFERENCES `NBAGame_Plays_PlayedAt` (`gameDate`, `homeTeam`, `awayTeam`)
);
```